

## Why a nudge is not enough: A social identity critique of governance by stealth

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**Abstract.** Policy makers can use four different modes of governance: ‘hierarchy’, ‘markets’, ‘networks’ and ‘persuasion’. In this article, it is argued that ‘nudging’ represents a distinct (fifth) mode of governance. The effectiveness of nudging as a means of bringing about lasting behaviour change is questioned and it is argued that evidence for its success ignores the facts that many successful nudges are not in fact nudges; that there are instances when nudges backfire; and that there may be ethical concerns associated with nudges. Instead, and in contrast to nudging, behaviour change is more likely to be enduring where it involves social identity change and norm internalisation. The article concludes by urging public policy scholars to engage with the social identity literature on ‘social influence’, and the idea that those promoting lasting behaviour change need to engage with people not as individual cognitive misers, but as members of groups whose norms they internalise and enact.

**Keywords:** modes of governance; nudging; persuasion; norms; social identity theory

### Introduction

Policy makers can use different modes of governance to achieve public policy goals (Héritier & Lehmkuhl 2008; Lowndes & Skelcher 1998; Treib et al. 2007). Public policy textbooks typically identify three such modes: ‘hierarchy’, ‘markets’ and ‘networks’. However, more recently it has been recognised that ‘*persuasion*’ represents a distinct (fourth) mode of governance (Bell et al. 2010; see also Anderson 1997). What makes this a distinct mode of governance is that it targets not the incentive structure, but people’s beliefs about the social world, thereby modifying their understanding of what represents their (personal and/or collective) best interests. Rather than promoting behaviour by instilling fear about penalties for non-compliance (*hierarchy*), tapping into people’s eagerness to maximise financial gains (*markets*) or allowing stakeholders to regulate and self-monitor (*networks*), this fourth mode of governance (*persuasion*) aims to transform people’s belief-system in such a way that the desired behaviour arises from new, deeply held convictions (Bell et al. 2010).

Persuasion is a ‘soft’, non-intrusive mode of governance, which can be used, for example, when trust in government regulation is low. One way in which governments have sought to persuade citizens is through ‘social marketing’ (Kotler & Zaltman 1971). The main problem, though, is that social marketing campaigns are costly, and this may explain why some governments have turned to a cheaper way of influencing behaviour: *nudging* (Thaler & Sunstein 2008). One government that has enthusiastically embraced ‘nudging-tactics’ is David Cameron’s coalition government in the United Kingdom. In 2010, the Cameron

Government created the Behavioural Insights Team (BIT), and appointed behavioural economist David Halpern as its Director. The BIT unit – sometimes dubbed ‘the nudge unit’ – has since argued for the use of nudges to promote healthier lifestyle choices, to increase tax compliance and to boost charitable giving (Jones et al. 2013).

Although nudging appears popular, the approach is not without its critics. For example, researchers have questioned the ethical aspects of using nudge tactics in contemporary neoliberal societies (Goodwin 2012; Hausman & Welch 2010; John et al. 2009; Jones et al. 2013; Leggett 2014; Pykett et al. 2011; Qizilbash 2011; Schnellenbach 2012). Among these researchers there is considerable consensus that nudges will prove insufficient to tackle Britain’s ‘wicked’ policy problems. Officials in the United Kingdom have expressed similar concerns. For example, Baroness Neuberger (Chair of the House of Lords Science and Technology Subcommittee) warned that government should not treat nudge tactics as a panacea (*BBC News*, 19 July 2011). Likewise, Lord Krebs (President of the British Science Festival) has warned that nudges are not a ‘magic bullet’ (*BBC News*, 6 September, 2012). More recent research examining the effectiveness of ‘nudge interventions’ using randomised control groups showed that such concerns are pertinent, giving rise to calls for complementary ‘think interventions’ that invite people to actively reflect and deliberate with other members of their group (Cotterill et al. 2012; John et al. 2011).

We agree with these critics, but argue that compelling social-psychological arguments against nudge tactics have so far been neglected. To shed light on these issues, it is useful to first unpack the concept of nudges further and to identify (known and less well-known) problems associated with nudge tactics. We propose that rather than embracing the nudge notion because alternatives are too costly, policy makers need to understand the different ways in which social influence is exerted and select the social influence tactic that in a particular social context leads to the most ethical, effective and lasting behavioural change. In some contexts that can mean that nudging is appropriate and sufficient, but in many other contexts it may mean that other social influence processes are better suited to bring about the desired behavioural change. In particular, we argue that heavy reliance on nudging may be limiting and may lead to the neglect of other social influence tactics that policy makers can deploy that may lead to more effective, ethical and lasting behavioural change.

In this article, we draw attention to these processes and discuss strategies informed by social psychological theory, and social identity theorizing in particular. We argue that engagement with this body of theory will help us to gain a deeper understanding of what will be required (from a social psychological perspective) to secure lasting behaviour change. From this perspective policy makers need to: target individuals as *social* beings; recognise that people are active agents who are aware of what others around them value; understand the importance of norm *internalisation*; and ensure interventions ‘work with’ existing social norms (rather than against them). Importantly, we argue that these social influence processes are based on different premises of the psychological nature of human beings. Specifically, whereas proponents of nudge tactics conceive of humans as fallible decision makers (as per the ‘bounded rationality’ model) and thus as benefitting from nudges (because they prevent erroneous decisions), we propose an approach which recognises that enduring behaviour change involves an identity-change process whereby people proactively choose to engage in behaviour that is perceived as identity-consistent and

therefore seen as ‘the right thing to do’. We argue that if policy makers are mindful of this, they are more likely to encourage effective and lasting change.

### **Nudging: A distinct ‘mode of governance’**

Our first argument is that ‘nudging’, with its behavioural economics and cognitive psychology underpinnings, represents a distinct (fifth) mode of governance. The cornerstone of this mode is a conception of humans as inefficient information-processors (‘cognitive misers’; after Fiske & Taylor 1984) who, in their quest to save precious mental resources, are prone to make erroneous decisions. This view has, in turn, encouraged an associated belief that policy makers can, and are entitled to, work with these propensities to achieve better outcomes. In practice, this is done by changing choice architecture in such a way that people gravitate intuitively or unthinkingly towards the option that yields more optimal outcomes, rather than by inviting people to reflect systematically on the merits of different courses of action (see also the ‘heuristic-systematic’ model of information-processing by Chaiken (1980) and Kahneman’s (2003) ‘map of bounded rationality’). While this notion is not new, and features prominently in popular books on commercial marketing (e.g., Bullock 2004; Key 1974; Packard 1957), the idea that governments should use nudges to influence the behaviour of citizens is novel. As Thaler and Sunstein (2008) show, governments are increasingly using covert (marketing) techniques to nudge citizens towards particular decisions. In these terms, Thaler and Sunstein define ‘a nudge’ as follows:

A Nudge . . . is any aspect of the choice architecture that alters people’s behaviour in a predictable way, without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. (Thaler & Sunstein 2008: 6)

Thaler and Sunstein’s broad definition enables them to treat a wide range of subtle interventions as nudges, some of which involve tapping into people’s sense of belonging to groups. They describe such interventions as ‘social nudges’:

If choice architects want to change behavior, and to do so with a nudge, they might simply inform people about what other people are doing. Sometimes the practices of others are surprising, and hence people are affected by learning what they are. (Thaler & Sunstein 2008: 71)

In this case, nudges are assumed to have their effect because people are sensitive to social norms and because they succumb to an inherent ‘herd mentality’. Here behaviour change is assumed to result from people’s propensity to *automatically* adopt others’ behaviour as an appropriate guide for own behaviour (e.g., through modelling, social learning and, at times, peer pressure). Here, too, then, we see reliance on a conception of humans as cognitive misers, who, when facing decisions, rely on heuristic cues (e.g., what others do) rather than on effortful, systematic and deliberative information-processing characterised

by the carefully weighing of pros and cons. Hausman and Welch (2010) draw attention to this conceptual underpinning in their alternative, and in our view more precise, definition of ‘nudges’:

Nudges are ways of influencing choice without limiting the choice set or making alternatives appreciably more costly in terms of time, trouble, social sanctions, and so forth. They are called for because of flaws in individual decision-making, and they work by making use of those flaws. (Hausman & Welch 2010: 126)

Consistent with Hausman and Welch (2010), we reserve the term ‘nudge’ for interventions that take human failings as a starting point (e.g., inertia, loss aversion and unthinking conformity). This definition covers the various interventions that can be classified in three distinct subcategories, each tapping into a different psychological human failing that leads people to fall back on automatic rather than systematic information-processing strategies and decision making. These are: nudges that tap into people’s propensity to choose options that demand the least (physical or intellectual) effort (i.e., the path of least resistance); nudges that tap into people’s propensity to conform or succumb to prevailing group norms and peer pressure; and interventions that harness people’s eagerness to identify with peer groups or valued groups that provide them with positive self-esteem.

For example, the introduction of a new income tax form which has been designed in such way the taxpayer will automatically enrol in a government-run scheme if they tick all the default options is a nudge seeking to tap into people’s tendency to choose the path of least resistance. However, a new-style electricity bill which provides consumers with information about average electricity consumption in their neighbourhood is a nudge seeking to tap into people’s propensity to conform (unthinkingly) to prevailing group norms. The example of road-signs picturing the Dallas Cowboys NFL team and the text ‘Don’t mess with Texas’ speaks to a belief that people’s behaviour can be influenced by appealing to their desire to belong to positively valued groups, and to behave in ways that protect the positive image of this group.

When considering these underlying psychological processes, it becomes clear not only that there is considerable room for conceptual clarification, but also that nudging and persuasion can be considered opposites: persuasion involves appeals to an individual’s ability to reason, digest new information and engage in systematic information processing (Chaiken 1980), and thereby to embrace different beliefs and preferences (Bell et al. 2010), whereas nudging involves attempts to influence behaviour in a way that *precludes* reflection about the pros and cons of alternative courses of action.

### **Nudging as an alternative behaviour change tool**

Social marketing has arguably become the instrument of choice for governments seeking to persuade citizens. However, behaviour change is often only secured when laws are introduced to back up social marketing campaigns. For example, in the 1990s, the Irish government ran a campaign encouraging people to re-use plastic bags. Yet this campaign only became effective when government imposed a tax, levied at the point of sale (Collins et al.

2003: 37). The main shortcoming of social-marketing campaigns – apparent to researchers for quite some time (Cialdini et al. 1991) – is that they often fail to bring about norm change. This can be attributed to a number of psychological factors. For example, psychologists discovered that shock tactics can render a message ineffective because recipients tend to focus more on developing psychological coping mechanisms to deal with their fears than on removing the actual danger (Witte & Allen 2000). Likewise, research has revealed that social marketing campaigns can be ineffective if a message inadvertently undermines personal self-esteem by stigmatising behaviour (Maio et al. 2007) or instilling a sense of shame and guilt (Brennan & Binney 2010).

Moreover, social marketing campaigns can trigger recalcitrant or defiant behaviour, especially if the message is perceived to come from an untrusted source, challenge ‘our identity’ and ‘our way of life’, or violate the recipient’s sense of agency and autonomy – a process Brehm (1966) referred to as ‘reactance’. When considering the limited success of social marketing campaigns, one can see why the British government embraced the idea of nudging citizens. However, the critical question, to which we will now turn, is whether this strategy is as effective as it is believed to be.

### *It works . . . but is it a nudge?*

According to Thaler and Benartzi (2004), it is possible to secure significant behavioural change with help of a nudge. They demonstrated that the number of employees enrolling in a retirement saving scheme can be increased with help of changes in choice architecture, and that employees are unlikely to opt out once they have signed-up. In our view this intervention can rightfully be labelled a successful nudge because, consistent with the definition presented earlier, choices are presented in such a way that reliance on an automatic mode of decision making leads to the most optimal solution for everyone involved. The problem with nudge success stories, though, is that they often feature interventions that, strictly speaking, are not nudges.

For example, in the United Kingdom, it was reported that Her Majesty’s Revenue and Customs (HMRC) managed to increase the number of people paying their income tax on time by 15 per cent through using a letter informing the addressees that most people in their postcode had already paid (*The Guardian*, 2 May 2013). According to this article, it is estimated the scheme could generate an extra £30 million if it were rolled out nationwide. In another example from the United Kingdom, the media reported that Her Majesty’s Court and Tribunal Services (HMCTS) conducted a successful trial using personalised text messages to remind people to pay their court fines. In this trial, the rate of people paying their fines increased from 5 to 33 per cent, and it is estimated that the intervention could generate £30million in extra revenue if rolled out nationally (*The Guardian*, 2 May 2013).

In both cases, however, it is unclear why these interventions were described as nudges. Recall that nudges are best conceived as choice-structure interventions designed to increase the chances of the ‘nudgee’ choosing the preferred option unthinkingly. We would argue that, in both cases, behaviour change was less the result of nudges than of well-understood persuasion techniques (see Turner 1991). Indeed, the success of these interventions may not have rested on altering the choice structure, but on the fact that both interventions involved appeals that made people aware, first, of socially normative and

acceptable behaviour (in this case, the fact that others in their community pay their bill on time), and second, that they are under the surveillance of an authority (in this case, HMCTS). Even though, according to Thaler and Sunstein (2008) nudging also includes informing ‘people about what other people are doing’, as we will outline below, this is hardly a new insight and has been at the heart of the classic social-psychological literature on social influence.

### *It is a nudge . . . and it backfires*

As supermarket designers know, ‘pure’ choice architecture nudges (such as leading the customer onto a particular path which takes them past particular product groups in a particular order) can be effective over long periods of time as long as the customer remains unaware of the manipulation. However, findings in the ‘reactance’ literature suggest that, once they are aware, customers are likely to feel an urge to defy the system. The same can be expected to apply to pure choice architecture nudges used by policy makers.

For example, in November 2011, the United Kingdom Department of Work and Pensions (DWP) started asking jobseekers registering with their service to subject themselves to an online psychometric test called *My Strengths*. The aim was to boost applicants’ self-esteem, and to make them more optimistic about their capabilities and chances of finding employment. However, it subsequently came to light that this was a sham test, which generated exactly same profile every time, regardless of the jobseeker’s answers (*The Guardian*, 30 April 2013). Although DWP is yet to evaluate the effectiveness of this nudge, there is already evidence that this nudge backfired for, in this case, complaints were lodged with the Health and Care Professions Council by jobseekers objecting to the use of bogus tests and refusing to complete them (*The Guardian*, 6 May 2013).

To our knowledge, such reactance backlash stories are rare, which may be due to the fact that people have remained largely unaware of the ways in which they are being nudged. However, if we accept Thaler and Sunstein’s looser definition, and include ‘social nudges’ in our evaluation, then we find clearer evidence of backlash. For example, researchers examining the effectiveness of providing feedback to American households on their own and peers’ home electricity usage found that liberals started saving electricity (as expected), but that conservatives responded defiantly and actually increased electricity consumption (Costa & Kahn 2013). This example illustrates that ‘social nudges’ are not only more likely to be ‘found out’, but that they have considerable potential to trigger reactance – especially among those who are politically opposed to the intended outcomes. It is thus not surprising that nudges (however defined) often have only very modest impacts (Marteau et al. 2011) or no effect at all (Bronchetti et al. 2011), and that additional strategies are often needed to engage citizens and produce substantive change (John et al. 2011).

### **Ethical concerns: Who decides how and what to nudge?**

Although nudge tactics have their devotees, not everyone is quite so enthusiastic. For example, some question Thaler and Sunstein’s (2008) portrayal of nudging as harmless, well-intended libertarian-paternalism, arguing that nudges effectively coax people into

choices they might not have made had they been given the opportunity to reflect and deliberate (Hausman & Welch 2010; Qizilbash 2011). For these critics, nudging is ethically problematic because it precludes debate about what constitutes ‘the good life’ and allows ‘nudgers’ conceptions of well-being to override those of ‘nudgees’ (Qizilbash, 2011). Others dismiss nudging as an essentially conservative approach that extends the longevity of status-quo-reinforcing norms (Schnellenbach 2012), arguing that nudging to secure neoliberal goals raises fundamental issues about our conception of ‘free will’ (Jones et al. 2013; Pykett et al. 2011). Others accept that governments may at times want to resort to nudges but argue that it is important to retain necessary space for deliberation about issues of public concern (John et al. 2009).

What these critics share is concern about the elitist assumption that ‘ordinary people’ are prone to make erroneous decisions and that government experts know best what constitutes ‘the good life’. In many ways this echoes Frederick Taylor’s ideas about how to motivate workers, developed at the beginning of the last century (Taylor 1911). His ‘scientific management’ approach (typically referred to as ‘Taylorism’) offered a pessimistic perspective on ‘the natural state of workers in organisations’, suggesting that employees are inherently reluctant to exert themselves. Workers would only exert themselves, Taylor argued, when there is a clear prospect of significant gain, and management was hence conceived as an exercise in coaxing workers into particular behaviours through creation of the right incentive structure.

Although proponents of nudging and proponents of scientific management have different views about *how* to motivate people to contribute to collective goals (with the former arguing people can be nudged into the ‘right’ behaviour, and the latter suggesting material incentives and disincentives will do the trick), their views about the root cause of malfunctioning societies and organisations are similar: The first and most fundamental similarity concerns the attribution of failure to achieve relevant collective goals to pernicious, *individual-level* human propensities operating at a subconscious level. This narrow, individualistic conception of human behaviour – which informs conviction in both ‘scientific management’ and ‘nudging tactics’ – in turn paves the way for individualistic interventions that neglect the many social factors that shape individuals’ behaviour.

The second similarity in the two approaches relates to their pessimistic view of the ordinary person’s ability to *actively embrace* collective goals (i.e., to internalise and enact group norms), and the implicit assumption that ordinary humans are fallible, reluctant to exert themselves and prone to making bad decisions, at the same time that those in powerful positions (e.g., managers, policy makers, scientific experts) are considered less liable to succumb to such propensities. Indeed, it is this bleak conception of human nature that is used (albeit tacitly) to justify paternalistic interventions. Thaler and Sunstein argue that nudge tactics are ethically justifiable, and their justification boils down to the argument that, under liberal-paternalism, individuals retain choice. This may be true technically speaking. However, this defence no longer holds if we accept that nudges are often covert attempts to trick citizens into certain behaviours. Under that reading, nudging is an inherently elitist choice-limiting technique, used to achieve what those in positions of authority (politicians, policy makers and experts) consider positive public good outcomes. That being said, an important difference between early twentieth-century Taylorism and twenty-first-century nudging is that the governments in question not only have an elected mandate to

govern, but also an incentive to use scientific research evidence as a means of enhancing the effectiveness as well as the perceived legitimacy of nudge tactics. It should also not be forgotten that in contemporary society private corporations nudge citizens all the time, and in ways that benefit the corporation rather than the citizen. Here, then, we would simply note that these ethical issues constitute ‘unfinished business’, and we will instead continue to focus on the *effectiveness* of nudge tactics.

### **Taking a step back: Understanding lasting behaviour change**

We accept that there may be instances in which nudges prove effective. However, proponents of nudge tactics would in our view do well to lower their expectations. To appreciate this, we first need to understand the persuasion process and take on board insights that have emerged from social-psychological research into persuasion and social influence. In particular, we need to understand that: social influence is an inherently social process; people actively engage with norms and, at times, challenge and question their validity; for lasting behaviour change to occur, people need to internalise norms and use them as guides for their own behaviour; and policy makers should accept the reality and validity of social norms, and work with them rather than against them. These processes will be unpacked below. However, we will first provide a brief overview of the theoretical framework that we use to critique nudge tactics: the social identity approach.

#### *The social identity approach*

The social identity approach (SIA) comprises two closely related theories: social identity theory (SIT: Tajfel & Turner 1979) and its spin-off self-categorization theory (SCT: Turner 1985; Turner et al. 1987). SIT was developed in an attempt to move away from individual-level explanations for collective phenomena such as intergroup conflict and cooperation. It aimed to provide a counterforce to those who saw collective behaviour as the mere sum of individuals’ behaviour within the collective (Allport 1924). Contrary to such individualistic approaches, SIT focuses on the relationship between self-definition, on the one hand, and norms, attitudes and behaviour, on the other. SIT distinguishes between behaviour motivated by individuals acting as individuals, and behaviour that is guided by group membership and group norms. From this perspective it is not so much the informational quality of a message that determines whether people will be responsive to it, but the *social identity* that it speaks to. This is because influence is primarily a means for people *who share the same collective concerns* to coordinate their actions. In practice, this means that people respond very differently to *the exact same message* as a function of whether or not it emerges from a source with whom they share social identity (i.e., an in-group member; Turner 1991). Accordingly, for a persuasive message to have its intended impact, it has to be articulated by someone who is representative of a relevant, valued in-group identity; and redefine the social identity in question in such a way that the desired behaviour becomes regarded as a defining feature of the in-group (‘who we are’) and its norms (‘what we do’). This brings us to four more specific characteristics that distinguish SIT from alternative perspectives on norms and social influence.

*Humans are not mere cognitive misers.* In our view, a central shortcoming of nudge tactics is its individualist conception of humans as ‘cognitive misers’ who are prone to succumb to (pernicious) propensities, such as inertia and a tendency to choose the path of least resistance. Certainly, humans have cognitive limitations and will use cues and heuristics to inform their judgements and behaviour in a range of situations. However, what the cognitive miser perspective overlooks is the fact that humans are social beings who derive meaning and direction from groups whose norms they embrace and enact, and who derive significant value – not only socially, but also intellectually – from identity-affirming behaviour. From a social identity perspective, the key to successful persuasion is the ability to find common identity-relevant ground, and to define (or redefine) that ground in such a way that new norms become accepted as an integral part of a (new) shared self-understanding. In other words, social influence, and persuasion more generally, involves tapping into social identity and using this as a basis for (re)defining the group’s shared self-understanding (see Turner 1991). From this perspective, being open to social influence from others (providing that they are perceived to share our collective interests in a given context) is not illogical or irrational, but the right and sensible thing to do.

We are not the first ones to draw attention to the importance of social identity and norms for persuasion. Since the 1980s, social marketing researchers have recognised the limitations of individual-level approaches, urging campaign developers to take stock of the fact that humans are *social* beings, who are subject to ‘peer pressure’ and ‘social influence’ (e.g., McLeroy et al. 1988). These ideas gained traction in subsequent years, resulting in growing interest in *ecological approaches* (Sallis et al. 2008) and attention to the interplay between personal and social factors (see also Brennan & Binney 2010; Maio et al. 2007; Witte & Allen 2000).

A further factor determining the effectiveness of social marketing is the need to understand intergroup (‘us’ versus ‘them’) dynamics because this will determine both who is perceived to have legitimate authority to prescribe group norms and who is not. This means that those who commission and develop social marketing campaigns may have good intentions but that if they are not regarded ‘one of us’, their messages are prone to backfire. For example, reactance was encountered in research showing that English housewives who smoked felt a stronger urge to smoke when exposed to health warnings on cigarette packages (Hyland & Birrell 1979). Likewise, researchers found that the persuasiveness of messages that urge young people to drive safely is compromised if the source of those messages is perceived to be an out-group member (McGarty et al. 1994). Similarly, African-Americans have been found to experience increased desire to engage in unhealthy eating behaviour to the extent that they see messages about healthy dieting to be the ‘propaganda’ of a white out-group (Oyserman et al. 2007). In all these cases reactance had not been anticipated, yet we now know that this process served to undermine the effectiveness of a whole host of public health campaigns (Dillard & Shen 2005; Grandpre et al. 2003; Henriksen et al. 2006; Rains & Turner 2007; see also Miller et al. 2006: 249).

*Norms as expressions of social identity.* In social identity theorising, norms are conceived of not as societal forces ‘out there’ interfering with an individual’s personal attitudes and preferences, but as expression and instantiations of social identity. Social influence, in turn, is conceived of not as undue ‘outsider influence’, but as receptiveness to the views of those

whom we regard as 'one of us'. Indeed, one of the more fundamental insights to emerge from this perspective is that social identification makes social influence possible (Turner 1991; see also Jetten et al. 1996).

Proponents of social norms marketing (Haines 1996; Perkins & Berkowitz 1986) offer a rather different perspective on this. According to this perspective, it is people's propensity to misjudge the attitudes and behaviours of their peers that enables peer pressure to grow stronger over time. More specifically, they argue that those who engage in deviant behaviour tend to overestimate the number of people sharing their norms – a process known as 'false consensus' (Ross et al. 1977). In contrast, those who behave in accordance with the prevailing norm tend to underestimate the number of people behaving in accordance with the actual norm – a pattern described in the literature as 'pluralistic ignorance' (Miller & McFarland 1991). Together, these processes are said to create a vicious 'spiral of silence' (Prentice & Miller 1996), with those representing the majority (who 'do the right thing' already) feeling increasingly marginalised (even though they represent the actual majority) while those representing the deviant minority feeling less and less in need to justify their deviant behaviour. This vicious cycle can be broken, so social norms marketing proponents argue, by providing citizens with accurate normative feedback since this will help those in the majority (who 'do the right thing' already) realise that their behaviour is socially acceptable, and help those in the minority (who fail to 'do the right thing') realise their behaviour is deviant and socially unacceptable.

These ideas have been tested in real-life settings, and considerable research evidence suggests that social norms marketing can be effective. For example, researchers have found that university students tend to overestimate alcohol consumption among their peers (which results in more modest drinkers consuming more than they would otherwise) and that presenting accurate information about average levels of alcohol consumption among college students reduces risky drinking (Haines 1996). The approach also proved effective in interventions aimed at reducing driving without a seatbelt (Linkenbach & Perkins 2003), and driving while intoxicated (Thombs et al. 1997).

While there is no shortage of social norm marketing success stories (for an overview, see Berkowitz 2004), it would in our view be wrong to overstate the case and forget that the approach also has its limitations. First, people have multiple, overlapping social identities, and the effectiveness of this approach thus depends in great measure on whether an intervention engages with the identity that is most salient for a given person (Borsari & Carey 2003). Second, the approach will obviously not work in situations where the majority behaves irresponsibly – where drawing attention to 'prevailing norms in society' would serve as an excuse for others to follow suit. Indeed, this would apply to many of the big challenges facing today's society. For example, a survey conducted by the Australian Institute of Health and Welfare found that 80.6 per cent of Australians over 14 years of age drink alcohol at levels that involve a risk of harm (AMA 2009). Likewise, research conducted in the United States revealed that America has a widespread 'hidden drinking problem', with Americans consuming alarmingly high levels of sugary soft drinks (Beverage Digest Fact Book 2008).

In other words, social norms marketing may work when there is a clear deviant minority to be brought back in line through education about the prevailing social norm, but they will fall short when large-scale behaviour change is needed to avoid a crisis. Indeed, awareness

of a series of alarming trends that researchers have uncovered in recent years (e.g., those pertaining to environmental and dietary behaviour) leads one to appreciate that addressing ‘wicked’ policy challenges involves targeting *majorities*, and the use of interventions that focus on broad constellations of harmful behaviours.

This brings us to what we consider the most fundamental shortcoming of the social norms approach, which is its focus on norm *adaptation*, rather than on norm *internalisation*. Proponents of this approach make two assumptions: that the majority behaves responsibly; and that people have an inclination to conform to the majority, and that this inclination can be tapped into by providing members of the deviant minority information about the actual norm. As discussed, this has worked in certain contexts. However, what should not be forgotten is that the behaviour change envisaged by social norm marketing campaigns is seen to be motivated by a rather superficial desire to ‘fit in’, rather than by the acquisition of new convictions (Bell et al. 2010).

What should also be remembered is the possibility that minorities may deviate from the majority for reasons other than a lack of high-quality information – including a deep-seated conviction that the majority is wrong and that they are right. An example of this might be found in the strident refusal of climate change sceptics to yield to the consensual wisdom of climate science (e.g., Hoggan et al. 2009). Resistance in this form pertains to meaningful differences in *identity*, *norms* and *values* – not just differences in information. Accordingly, in order to change the norms and behaviours of such minority groups, policy makers clearly need to do more than merely provide accurate normative information.

*Norm internalisation, rather than tricking people into conformity.* The insight that lasting behaviour change requires norm internalisation is not new, and can be traced back to classic studies in which social influence and conformity were conceived as ‘mere compliance’ with social group norms, rather than ‘private acceptance’ of new norms (Asch 1951; Sherif 1936). These studies showed, using laboratory experiments, that individuals sometimes tend to ‘betray’ their personal judgement when placed in groups that share a different judgement – even if the person’s own judgement was ostensibly accurate, while the group’s judgement was clearly inaccurate. Since then, many more studies have examined the ways in which people’s attitudes and behaviour are influenced by the (actual or imagined) presence of others, and there is now a large body of research on the social psychology of social norms, social influence and compliance. Although this literature has its shortcomings (Turner 1991), it has nonetheless yielded important insights. The main lesson to emerge is that ‘private acceptance’ and ‘norm internalisation’ can be regarded as hallmarks of genuine persuasion and prerequisites for lasting behaviour change. Indeed, from this perspective, ‘power’ and ‘influence’ are best regarded as alternatives: ‘One resorts to coercion when one cannot influence, and if one can influence one does not need power’ (Moscovici 1980, cited in Turner 1991: 85). In these terms, although nudges can be benign, harmless and well-intended, as an influence technique they are nonetheless predicated on belief in the practice of ‘power over people’ rather than ‘power through people’ (Turner 2005).

*Working with (rather than against) social norms.* Once we understand the identity-based nature of social influence, it becomes apparent that one can work with people’s identities and with the normative beliefs associated with these identities to help bring about attitude

and behaviour change. Certainly, it is far from easy to introduce new norms. However, if one is aware of the social identities that matter, and what normative behaviour is associated with these social identities, then one can build upon these conceptions and persuade people to behave in ways that are both identity consistent and norm consistent. Importantly, such influence attempts are ‘above board’, and because they rest on shared identity and shared understanding of norms to which a good group member will adhere, all parties will tend to perceive the influence attempt as both ethical and worth endorsing. Indeed, more generally one can argue that this is what is meant by the idea of good *leadership* (Haslam et al. 2011).

‘Peer education’ is a good example of the way in which policy makers can work *with* existing norms (Sloane & Zimmer 1993). This approach, developed to reduce unhealthy behaviour among university students, is now used in different jurisdictions, and by different government agencies (Milburn 1995; Newland & Treloar 2013). With roots in socialisation theory (Lindsey 1997), it works from the premise that a message is more persuasive if it comes from a person perceived to be similar, and facing similar concerns. This is why, so proponents of the theory argue, it is best to refrain from imposing new behavioural norms directly from the top down, and to instead enlist and educate opinion leaders and let *them* educate their peers.

The idea that behaviour can be changed most effectively if one relies on shared identity-based normative influence appears to be gaining ground. For example, it is clear from the British ‘*Let’s kick racism out of football*’ and Scottish ‘*Show racism the red card*’ campaigns that it can be effective to enlist high-profile white football players to urge football fans to refrain from racial verbal abuse (Jensen et al. 2010). Certainly it will remain important to be mindful of the political agenda and the ethical problems associated with particular campaigns (see Haslam 2014). However, it is also clear that because such identity-based behaviour change attempts are overt, many of these issues can be addressed more directly. For example, in peer education programmes, people are not being nudged into particular behaviours but persuaded to adopt new norms and behaviours as an integral part of ‘who we are’, ‘what we stand for’ and therefore ‘what we do’.

Social marketing, social norms marketing and peer education programmes are less likely to trigger reactance because they target attitudes and behaviour overtly. These overt approaches should therefore be more suitable for bringing about lasting behaviour change than nudging. However, as we will explain below, these programmes can be made even more potent and successful when they incorporate and build upon the notion that norm internalisation requires *social identity change*.

## **The success of identity-based behaviour change programmes**

At times, policy makers prove capable of ‘getting the community on board’ to turn passive citizens into engaged activists and secure lasting behaviour change without having to resort to coercive measures. For example, in 2006, the South East Queensland region of Eastern Australia experienced severe drought, raising concerns about potential water shortages. To remedy this, the Queensland Water Commission (QWC) launched the Target 140 campaign, which aimed to reduce average per capita water consumption from 180 to

140 litres per day. The campaign, which deployed a range of different (coercive and non-coercive) interventions, was successful and water consumption levels dropped to 129 litres a day. What was remarkable, though, was that consumption levels stayed below the 140 litres level even after the drought broke in 2009, and water restrictions were lifted (Walton & Hume 2011). This campaign was highly effective because it not only provided information, but also targeted people's identification as 'Queenslanders'. In this way it redefined what it meant to be a good Queenslander: a good Queenslander saves water, and is 'Water-Wise'.

Another example, also from Australia, is the remarkably successful '*Slip-slop-slap*' and '*Sun-Smart*' campaigns launched by the Victorian Anti-Cancer Council in the 1980s. These campaigns urged citizens to protect themselves from the sun by 'slipping on a shirt, slopping on sun lotion and slapping on a hat'. The campaign brought about significant behaviour change and a significant reduction in the incidence of skin cancer (Montague et al. 2001). Here, too, the campaign appeared to have been effective because it spoke to, and led to a change in, people's self-understanding – with being *Sun-Smart* becoming regarded as a defining feature of what it means to be Australian.

There are other examples of campaigns securing lasting behaviour change by targeting and modifying shared self-understanding. For example, in Texas and Oklahoma, media campaigns were used to reduce littering, and the amount of littering on Texan highways is estimated to have fallen by 72 per cent between 1986 and 1990. As Grasmick et al. (1991) explain, these campaigns, entitled '*Don't lay that trash on Oklahoma*' and '*Don't mess with Texas*', were successful because they targeted citizens' sense of community pride directly and framed littering as the kind of behaviour 'true Texans' and 'true Oklahomans' consider unacceptable.

Interestingly, in all these examples, behaviour change occurred largely as a result of non-coercive measures that were introduced and sustained over a longer period of time. Indeed, in line with the social identity arguments we have presented, it appears that to secure lasting behaviour change it is necessary for people to embrace a new self-understanding, such that new norms become internalised as an integral part of the person's self-concept (Jetten et al. 2002; Sparks & Shepherd 1992; Terry et al. 1999). This hypothesis was tested quantitatively in research into tax compliance, which confirmed that social identification not only increases preparedness to cooperate with taxation authorities, but also the perceived fairness of taxes (Wenzel 2002). In sum, this body of research suggests that the key to lasting attitude and behaviour change is *social identity change*.

Nevertheless, we are not suggesting that social-identity-based approaches are easily implemented in practice, or themselves constitute a 'magic wand'. As already noted, such interventions can be expected to be more expensive than nudges – not least because they require prior research (e.g., identifying salient social identities, mapping existing norms, identifying those perceived to be legitimate 'prototypical' leaders; Haslam 2014). However, there is growing evidence from social identity research into tax compliance (Wenzel 2002), crowd control and policing (Reicher et al. 2007) and organisational commitment (Knight & Haslam 2010) that carefully planned identity-based interventions can produce lasting (identity-based) behaviour change that warrants greater upfront investment.

## Conclusion

More recently, it has been established that persuasion – defined as government targeting people’s underlying beliefs and preferences – represents a fourth distinct mode of governance (Bell et al. 2010; see also Anderson 1997), alongside hierarchy, markets and networks. The first argument advanced in this article is that nudging – defined as government tapping into people’s propensity to conform unthinkingly or to choose the path of least resistance – represents a further (fifth) distinct mode of governance. This mode of governance enables governments to ‘fly below the radar’, to influence behaviour covertly, and is in our view therefore best described as *governance by stealth*. What sets governance-by-stealth apart from governance-through-persuasion is that the former aims to achieve ‘public norm *compliance*’, while the latter operates with a view to achieving ‘private acceptance’ and ‘norm *internalisation*’.<sup>1</sup>

Elaborating on this analysis, we then used the social identity approach to develop two further claims about the *effectiveness* of different persuasion techniques. On the one hand, we argued that nudge tactics offer limited scope for securing lasting behaviour change because, under this approach, new norms are not internalised as an integral part of the ‘nudgee’s’ self-concept and old habits can thus be expected to reappear once the choice architecture that produces particular outcomes is no longer present. On the other hand, we argued that, in order to achieve lasting behaviour change, we need an approach which conceives of humans not as ‘cognitive misers’ who are prone to fall victim to ‘hard-wired’ pernicious propensities, but as social beings whose behaviour is influenced by the (imagined or actual) presence of others (Festinger 1953). In sum, what is needed to achieve lasting behaviour change is an approach that engages with humans as *social* beings, who try to make sense of the world they live in, and who look to others who they perceive as similar to themselves for meaningful forms of guidance.

As John et al. (2011) have shown, some challenges require more than a nudge and are best tackled using ‘think policies’ designed to actively engage people in collective deliberation about appropriate actions and outcomes. We agree. More specifically, on the basis of social identity theorising we argue that securing lasting behaviour change involves getting communities ‘on board’. In this view, social identities are not seen to constitute an inherent problem, but rather to be a potentially valuable resource that can be harnessed to promote the internalisation of new norms as an integral part of people’s shared self-definition. From this perspective, policy makers seeking to secure lasting behaviour change should strive to engage with people not as individuals, but as members of groups whose norms they internalise and enact, and appreciate that lasting normative and behaviour change requires *social identity change* and the internalisation of new norms as an integral part of a person’s social self-concept (Haslam 2004; Reicher et al. 2005).

In these terms, the key limitation of nudges is that they fail to fully engage with people’s *social* psychology. In particular, they fail to tap into people’s social identities – a resource that has the proven capacity to produce social change (Turner 2005). Certainly, there may be instances in which conventional modes of governance (hierarchy, markets, networks) can be deployed to secure positive outcomes, as well as occasions where the use of a scientifically tried-and-tested nudge can be justified. However, as Moseley and Stoker (2013) have shown, translating behavioural insights into practical policy interventions is far from

straightforward, especially when trying to tackle complex ‘wicked’ policy-problems (e.g., crime, obesity, diabetes, climate change), and requires further unpacking of the social psychological processes at work in such settings. On the basis of social identity theorising, we propose that rather than treating ‘framing’, ‘persuasion’ and ‘norm-creation’ as separate ‘soft’ intervention techniques, we need instead to recognise that lasting behaviour change requires the *internalisation* of new norms as an integral part of a person’s social self-concept – something that is generally achieved through *identity-based* leadership and persuasion (e.g., see Haslam et al. 2011).

We expect debate about this to continue. However, we are encouraged by what appears to be growing consensus about the need to lower our expectations of what nudges can deliver, and by growing support for the view that policy makers would be well advised to engage with people not as cognitive laggards, but as *social* beings whose behaviour is fundamentally and meaningfully driven by the groups to which they belong and by associated norms that they are motivated both to internalise and enact.

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## Note

1. As McKenzie-Mohr’s (2013) work on community-based social marketing illustrates, in practice, nudges and identity-based persuasion can be used alongside each other in a broader mix of interventions, and one could therefore question our choice to pit nudging against the social identity approach. However, we feel it is nonetheless important to contrast the two approaches conceptually, so as to underscore the fact that nudging and identity-based persuasion are based on radically different underlying assumptions about human behaviour and motivation.

## References

- Allport, G.W. (1924). The study of the undivided personality. *Journal of Abnormal and Social Psychology* 19(2): 132–141.
- Anderson, J.L. (1997). Governmental suasion: Refocusing the Lowi policy typology. *Policy Studies Journal* 25(2): 266–282.
- Asch, S.E. (1951). Effects of group pressure on the modification and distortion of judgements. In H. Guetzkow (ed.), *Groups, leadership and men*. Pittsburgh, PA: Carnegie Press.
- Australian Medical Association (AMA) (2009). Alcohol Use and Harms in Australia. Information Paper. Barton: Australian Medical Association.
- Bell, S. et al. (2010). Persuasion as governance: A state-centric relational perspective. *Public Administration* 88(3): 851–870.
- Berkowitz, A.D. (2004). *The social norms approach: Theory, research and annotated bibliography*. Washington, DC: Higher Education Center for Alcohol and Other Drug Abuse and Violence Prevention, US Department of Education.
- Beverage Digest (2008). *Fact book 2008: Statistical yearbook of non-alcoholic beverages*. Bedford Hills, NY: Beverage Digest.

- Borsari, B. & Carey, K.B. (2003). Descriptive and injunctive norms in college drinking: A meta-analytic integration. *Journal of Studies on Alcohol and Drugs* 64(3): 331–341.
- Brehm, J.W. (1966). *A theory of psychological reactance*. New York: Academic Press.
- Brennan, L. & Binney, W. (2010). Fear, guilt and shame appeals in social marketing. *Journal of Business Research* 63(2): 140–146.
- Bronchetti, E.T. et al. (2011). When a Nudge is Not Enough: Defaults and Saving among Low-income Tax Filers. NBER Working Paper 16887. Cambridge, MA: National Bureau of Economics Research.
- Bullock, A. (2004). *The secret sales pitch: An overview of subliminal advertising*. San Jose, CA: Norwich.
- Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology* 39(5): 752–766.
- Cialdini, R.B. et al. (1991). A focus theory of normative conduct. *Advances in Experimental Social Psychology* 24: 201–234.
- Collins, J. et al. (2003). *Carrots, sticks and sermons: Influencing public behaviour for environmental goals*. London: Demos.
- Costa, D.L. & Kahn, M.E. (2013). Energy conservation ‘nudges’ and environmentalist ideology: Evidence from a randomized residential electricity field experiment. *Journal of the European Economic Association* 11(3): 680–702.
- Cotterill, S. et al. (2012). Can nudging create the Big Society? Experiments in civic behaviour and implications for the voluntary and public sector. *Voluntary Sector Review* 3(2): 265–274.
- Dillard, J. & Shen, L. (2005). On the nature of reactance and its role in persuasive health communications. *Communication Monographs* 72(2): 144–168.
- Festinger, L. (1953). An analysis of compliant behavior. In M. Sherif & M.O. Wilson (eds), *Group relations at the crossroads*. New York: Harper.
- Fiske, S.T. & Taylor, S.E. (1984) *Social cognition*. Reading, MA: Addison Wesley.
- Goodwin, T. (2012). Why we should reject ‘nudge’. *Policy and Politics* 41(2): 159–182.
- Grandpre, J. et al. (2003). Adolescent reactance and anti-smoking campaigns: A theoretical approach. *Health Communication* 15(3): 349–366.
- Grasmick, H.G. et al. (1991). Shame and embarrassment as deterrents to non-compliance with the law: The case of an anti-littering campaign. *Environment and Behaviour* 23(2): 233–251.
- Haines, M.P. (1996). *A social norms approach to preventing binge drinking at colleges and universities*. Newton, MA: Higher Education Centre for Alcohol and Other Drug Prevention.
- Haslam, S.A. (2004). *Psychology in organizations*. London: Sage.
- Haslam, S.A. (2014). Making good theory practical: Five lessons for an applied social identity approach to challenges of organizational, health, and clinical psychology. *British Journal of Social Psychology* 53(1): 1–20.
- Haslam, S.A., Reicher, S.D. & Platow, M.J. (2011). *The new psychology of leadership: Identity, influence and power*. New York: Psychology Press.
- Hausman, D.M. & Welch, B. (2010). To nudge or not to nudge. *Journal of Political Philosophy* 18(1): 123–136.
- Henriksen, L. et al. (2006). Industry-sponsored anti-smoking ads and adolescent reactance: Test of a boomerang effect. *Tobacco Control* 15(1): 13–18.
- Héritier, A. & Lehmkuhl, D. (2008). The shadow of hierarchy and new modes of governance. *Journal of Public Policy* 28(1): 1–17.
- Hoggan, J., Littlemore, R.D. & Ball, T. (2009). *Climate cover-up: The crusade to deny global warming*. Vancouver: Greystone Books.
- Hyland, M. & Birrell, J. (1979). Government health warnings and the ‘boomerang’ effect. *Psychological Reports* 44(2): 643–647.
- Jensen, G. et al. (2010). Examining prejudice reduction theories in anti-racism initiatives. *International Journal of Non-Profit and Voluntary Sector Marketing* 15(2): 181–198.
- Jetten, J. et al. (1996). Intergroup norms and intergroup discrimination: Distinctive self-categorization and social identity effects. *Journal of Personality and Social Psychology* 71(6): 1222–1233.
- Jetten, J. et al. (2002). ‘We’re all individuals’: Group norms of individualism and collectivism, levels of identification and identity threat. *European Journal of Social Psychology* 32(2): 189–207.

- John, P. et al. (2009). Nudge nudge, think think: Two strategies for changing civic behaviour. *Political Quarterly* 80(3): 361–370.
- John, P. et al. (2011). *Nudge nudge, think think: Experimenting with ways to change civic behaviour*. London: Bloomsbury Academic.
- Jones, R. et al. (2013). Psychological governance and behaviour change. *Policy and Politics* 41(2): 159–182.
- Kahneman, D. (2003). Maps of bounded rationality: Psychology of behavioural economics. *American Economic Review* 93(5): 1449–1475.
- Key, W.B. (1974). *Subliminal seduction*. New York: Prentice-Hall.
- Knight, C. & Haslam, S.A. (2010). The relative merits of lean, enriched and empowered offices: An experimental examination of the impact of workspace management strategies on well-being and productivity. *Journal of Experimental Psychology: Applied* 16(2): 158–172.
- Kotler, P. & Zaltman, G. (1971). Social marketing: An approach to planned social change. *Journal of Marketing* 36: 3–12.
- Leggett, W. (2014). The politics of behaviour change: Nudge, neoliberalism and the state. *Policy and Politics* 42(1): 3–19.
- Lindsey, B.J. (1997). Peer education: A viewpoint and critique. *Journal of American College Health* 45(4): 187–189.
- Linkenbach, J. & Perkins, H.W. (2003). Most of Us Wear Seatbelts: The Processes and Outcomes of a 3-year State-wide Adult Seatbelt Campaign in Montana. Paper presented at the National Conference on the Social Norms Model, Boston, MA.
- Lowndes, V. & Skelcher, C. (1998). The dynamics of multi-organizational partnerships: An analysis of changing modes of governance. *Public Administration* 76(2): 313–333.
- Maio, G.B. et al. (2007). Social psychological factors in lifestyle change and their relevance to policy. *Social Issues and Policy Review* 1(1): 99–137.
- Marteau, T.M. et al. (2011). Judging nudging: Can nudging improve population health? *British Medical Journal* 342: 263–265.
- McGarty, C. et al. (1994). The effects of salient group memberships on persuasion. *Small Group Research* 25(2): 267–293.
- McKenzie-Mohr, D. (2013). *Fostering sustainable behaviour: An introduction to community-based social marketing*. London: New Society.
- McLeroy, K.R. et al. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly* 15(4): 351–377.
- Milburn, K. (1995). A critical review of peer education with young people, with special reference to sexual health. *Health Education Research* 10(4): 407–420.
- Miller C.M. et al. (2006). Identifying principal risk factors for the initiation of adolescent smoking behaviour: The significance of psychological reactance. *Health Communication* 19(3): 241–252.
- Miller, D.T. & McFarland, C. (1991). When social comparison goes awry: The case of pluralistic ignorance. In J. Suls and T. Wills (eds), *Social comparison: Contemporary theory and research*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Montague, M. et al. (2001). Slip! Slop! Slap! and Sunsmart, 1980–2000: Skin cancer control and 20 years of population-based campaigning. *Health Education and Behaviour* 28(3): 290–305.
- Moseley, A. & Stoker, G. (2013). Nudging citizens: Prospects and pitfalls confronting a new heuristic. *Resources, Conservation and Recycling* 79: 4–10.
- Newland, J. & Treloar, C. (2013). Peer education for people who inject drugs in New South Wales: Advantages, unanticipated benefits and challenges. *Drugs: Education, Prevention and Policy* 20(4): 304–311.
- Oyserman, D. et al. (2007). Identity-based motivation and health. *Journal of Personality and Social Psychology* 93(6): 1011–1027.
- Packard, V. (1957). *The hidden persuaders*. New York: David McKay.
- Perkins, H.W. & Berkowitz, A.D. (1986). Perceiving the community norms of alcohol use among students: Some research implications for campus alcohol education programming. *International Journal of the Addictions* 21(9–10): 961–976.

- Prentice, D.A. & Miller, D.T. (1996). Pluralistic ignorance and the perpetuation of social norms by unwitting actors. *Advances in Experimental Social Psychology* 28(1996): 161–209.
- Pykett, J. et al. (2011). Interventions in the political geography of ‘liberal paternalism’. *Political Geography* 30(6): 301–310.
- Qizilbash, M. (2011). Sudgen’s critique of Sen’s capability approach and the dangers of liberal paternalism. *International Review of Economics* 58(1): 21–42.
- Rains, S.A. & Turner, M.M. (2007). Psychological reactance and persuasive health communication: A test and extension of the intertwined model. *Human Communication Research* 33(2): 241–269.
- Reicher, S. et al. (2005). Social identity and the dynamics of leadership: Leaders and followers as collaborative agents in the transformation of social reality. *Leadership Quarterly* 16(4): 547–568.
- Reicher, S. et al. (2007). Knowledge-based public order policing: Principles and practice. *Policing* 26(4): 640–655.
- Ross, L. et al. (1977). The ‘false consensus effect’: An egocentric bias in social perception and attribution processes. *Journal of Experimental Social Psychology* 13(3): 279–301.
- Sallis, J.F. et al. (2008). Ecological models of health behavior. In K. Glanz, B.K. Rimer & K. Viswanath (eds), *Health behavior and health education: Theory, research and practice*. San Francisco, CA: Jossey-Bass.
- Schnellenbach, J. (2012). Nudges and norms: On the political economy of soft paternalism. *European Journal of Political Economy* 28(2): 266–277.
- Sherif, M. (1936). *The psychology of social norms*. New York: Harper.
- Sloane, B.C. & Zimmer, C.G. (1993). The power of peer education. *Journal of American College Health* 41(6): 241–245.
- Sparks, P. & Shepherd, R. (1992). Self-identity and the theory of planned behavior: Assessing the role of identification with ‘green consumerism’. *Social Psychology Quarterly* 55: 388–399.
- Tajfel, H. & Turner, J. (1979). An integrative theory of intergroup conflict. In W.G. Austin & S. Worchel (eds), *The social psychology of intergroup relations*. Monterey, CA: Brooks-Cole.
- Taylor, F.W. (1911). *The principles of scientific management*. New York: Harper.
- Terry, D.J. et al. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *British Journal of Social Psychology* 38(3): 225–244.
- Thaler, R. & Benartzi, S. (2004). Save more tomorrow™: Using behavioural economics to increase employee savings. *Journal of Political Economy* 112(1): 164–187.
- Thaler, R. & Sunstein, C. (2008). *Nudge: Improving decisions about health, wealth and happiness*. London: Penguin.
- Thombs, D.L. et al. (1997). Social context, perceived norms and drinking behaviour in young people. *Journal of Substance Abuse* 9: 257–267.
- Treib, O. et al. (2007). Modes of governance: Towards conceptual clarification. *Journal of European Public Policy* 14(1): 1–20.
- Turner, J.C. (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. *Advances in Group Processes* 2: 77–122.
- Turner, J.C. (1991). *Social influence*. Milton Keynes: Open University Press.
- Turner, J.C. (2005). Explaining the nature of power: A three-process theory. *European Journal of Social Psychology* 35(1): 1–22.
- Turner, J.C. et al. (1987). *Rediscovering the social group: A self-categorisation theory*. Oxford: Blackwell.
- Walton, A. & Hume, M. (2011). Creative positive habits in water conservation: The case of the Queensland Water Commission and the Target 140 campaign. *International Journal of Non-profit and Voluntary Sector Marketing* 16(3): 215–224.
- Wenzel, M. (2002). The impact of outcome orientation and justice concerns on tax compliance: The role of taxpayers’ identity. *Journal of Applied Psychology* 87(4): 629–645.
- Witte, K. & Allen, M. (2000). A meta-analysis of fear appeals: The extended parallel process model. *Health Education and Behaviour* 27(5): 608–632.

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