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NUDGE THEORY AND ALCOHOL POLICY

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Contents

Summary

- Nudge theory aims to understand human decision making in order to **optimise the outcomes from choices for decision makers**. The theory has become increasingly popular amongst public health policymakers in recent years

- The use of nudge theory in public policy has been criticised; concerns include that **nudge interventions frame their targets negatively, distracting attention from societal and economic drivers of harm**

- Research is yet to identify **how drivers such as the activities of multi-national producers of unhealthy commodities are framed** in nudge interventions

- Recent UK Government alcohol policy including **the One You campaign and low alcohol product initiatives have embodied nudge principles**. This report uses these policies to **examine how individuals and alcohol industry actors are framed within public health nudge policy interventions**

- A need to preserve choice and specific nudge strategies (eg norm-setting) were frequently referenced throughout these policies' materials and documentation

- The **public were framed as blameworthy for their own alcohol health problems**, with individuals' control over their own drinking emphasised, and failures to maintain control framed as shameful. This suggests a lack of understanding of or attention to the complexity of psychological factors in alcohol consumption

- **Alcohol industry figures were framed as reliable policy actors**, with any who engage in behaviour harmful to public health described as outliers

- This framing risks intensifying the clouding of economic or societal drivers of public health problems through nudge policies, as identified in prior research, and **might undermine support for better evidenced public health alcohol measures, such as pricing interventions**

Background

What is nudge theory?

Behavioural science has become an increasingly popular tool in the arsenal of policymakers in recent years (1). Popularised by Richard Thaler and Cass Sunstein through 'Nudge Theory' (2), behavioural science strategies have been embraced by successive recent UK governments, including the founding of the Behavioural Insights Team in 2010 by the then Conservative Prime Minister, David Cameron (3).

Nudge theory considers how outcomes may be improved for individuals by understanding and improving their decision-making. Where irrational decision-making processes can lead to choices counter to a person's best interests, nudge theory offers to correct this by identifying and exploiting those same irrational decision-making mechanisms in order to make the choices policymakers would prefer people make easier than the alternatives (2). In doing so, individual choice is preserved, but preferred choices are easier.

While some traditional economic theories have modelled the human decision maker as purely rational (4), nudge theory recognises that real life decisions are rarely made in this way. Individuals, Thaler and Sunstein explain (2), have two systems of thinking; the Automatic and the Reflective. The Reflective system handles slow, deductive thought and the Automatic system takes care of quick, unconscious decision making. To make such quick decisions, the Automatic system employs a number of time-saving strategies, and sometimes may lack the time to analyse all emotional or contextual components of the decision-making process. Here, decisions can be made based on faulty, quick calculations or may be unduly influenced by emotion and context that the Automatic system does not have time to process, and as such, may be counter to the person's best interests or personal goals.

Thaler and Sunstein propose a range of these systematic errors likely to arise in the Automatic system, outlined in Table 1. Nudge theory promises to improve decisions made by the Automatic system by understanding these systematic errors and designing choice architecture to '[alter] people's behaviour in a predictable way' (2).

Table 1: How some routes for error can be introduced into the Automatic System of thinking

Channel of error	How error occurs	Real world examples
Rules of thumb (heuristics) including anchoring, availability, representativeness (as outlined in (5))	A heuristic, or a rule of thumb, is a method used to make a difficult mental judgement more manageable.	Eg, representativeness; the hot hand fallacy of basketball is an example of this – people believe a player who has made a number of shots in a row is more likely to make their next shot.
Loss aversion	A loss is felt more acutely than a gain of the same magnitude. As such, fear of loss can keep individuals from changing behaviour.	People are willing to take out insurance at less favourable odds than they would place a bet.
Framing	Presentation of choices can affect decisions made, such as framing a choice in terms of potential losses instead of gains.	Telling people 90% of those who have a given medical procedure will live as opposed to that 10% of those who have it die, will affect the choices made.
Status quo bias (as outlined in (6))	Decision makers have a tendency to maintain current behaviour.	Pupils tend to choose the same seats in class each day without being asked.
Self-control	Choices made and stimuli presented when in a 'hot state' may be open to temptation.	Choices made about what to eat can be motivated by whether the person is hungry now or planning future consumption.
Peer influence	Individuals can be influenced by others' actions to change their own behaviour; either to fit with group or because they believe group behaviour is more likely to be correct.	Asking groups for responses to questions in the group instead of individually leads to greater consensus.
Optimism and overconfidence	Many overestimate their performance on tasks and can lead to underestimation of risk.	Asked to judge prospects for a hypothetical new business venture, respondents estimate likelihood of success as much higher when they imagine themselves running the business, as opposed to the average person.

Source: Thaler RH, Sunstein CR. Nudge: Improving decisions about health, wealth, and happiness. London: Penguin; 2009.

Based on this understanding of the human decision maker, Thaler and Sunstein offer six avenues to crafting effective nudges, including the use of default settings and to add feedback (see Table 2). The theory operates under a philosophy of liberal paternalism, which means individuals should have freedom to choose – no options should be restricted. Thaler and Sunstein therefore make clear that a 'nudge' can only be considered as such if it does not '[forbid]…or significantly [change] economic incentives' (2, p. 6). So, placing bottled water alongside soft drinks dispensers in a cafeteria in the hope of reducing sugary drinks consumption would be considered a nudge, whereas discontinuing the sale of soft drinks or raising their price against other drink options would not.

Table 2: How nudges are built, six approaches

Use of default settings	Default settings are more likely to be chosen for a variety of reasons including status quo bias. Preferred outcomes are more likely to be accepted if they are the default.	Default settings for software are more likely to be taken up than bespoke options.
Expect error	Incorporate prompts to redress for predicted errors of the Automatic System.	Warning lights in cars prompt oil changes and petrol stops before they are required.
Add in feedback mechanisms	Many errors arise from infrequently made choices, so incorporating feedback into choice systems will correct these errors sooner.	Digital photography incorporates feedback better than film photography because people see their photos straight away and can adjust before the moment being captured has passed.
Build in understanding	Translate incomprehensible information to aid decision makers.	Presenting megapixel information as picture size makes camera purchases simpler, as people can understand the difference easier.
Structure of complex choices	Complex choices invite greater use of heuristics; nudges can be made by restructuring choices to make decisions more manageable.	When house hunting, people eliminate some properties due to a certain attribute, eg floorspace.
Incentives	'…put the right incentives on the right people' (2, p. 97).	Presenting potential energy cost savings to homeowners might affect usage more than raising prices without notifying them until they received their bills.

Source: Thaler RH, Sunstein CR. Nudge: Improving decisions about health, wealth, and happiness. London: Penguin; 2009.

Nudge in action

Governments in the UK and beyond have embraced the principles of nudge across policy areas (7, 8). In 2010, The Institute for Government published the MINDSPACE framework, capturing 'nine of the most robust (non-coercive) influences on our behaviour…' in order to support the use of nudge in policy (9, p. 8).

Figure 1: MINDSPACE checklist of potential influences on our behaviour for use by policymakers considering behaviour change

Messenger	we are heavily influenced by who communicates information
Incentives	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	we are strongly influenced by what others do
Defaults	we 'go with the flow' of pre-set options
Salience	our attention is drawn to what is novel and seems relevant to us
Priming	our acts are often influenced by sub-conscious cues
Affect	our emotional associations can powerfully shape our actions
Commitments	we seek to be consistent with our public promises, and reciprocate acts
Ego	we act in ways that make us feel better about ourselves

Source: Dolan P, Hallsworth M, Halpern D, King D, Vlaev I. MINDSPACE: influencing behaviour for public policy. London: Cabinet Office and Institute for Government; 2010. p. 8

The report contributed to the set-up of the Behavioural Insights Team, launched in 2010 by then Prime Minister, David Cameron. The team (or the 'Nudge Unit' as they became known) emphasised the need for behavioural approaches alongside more traditional strategies in many areas of policy, including health (8). In 2012, the team went on to create a more user-friendly version of MINDSPACE for policymakers; the EAST framework (10). The EAST framework incorporates nudge strategies alongside other psychological approaches and suggests policymakers can encourage given behaviours through four main strategies: by making a behaviour easy, attractive, social and timely.

Table 3: The EAST framework developed by the Behavioural Insights Team to understand or influence behaviour change

Easy	Power of defaults
	Hassle factor
	Simplify messages
Attractive	Attract attention
	Rewards and sanctions
Social	Show most people perform desired behaviour
	Use power of networks
	Make a commitment to others
Timely	Prompt when people are likely to be most receptive
	Consider immediate costs and benefits
	Help people plan their responses to events

Source: Behavioural Insights Team. EAST: Four simple ways to apply behavioural insights. London: Behavioural Insight Team; 2014.

Nudge and alcohol: a promising mix?

Alcohol consumption causes a range of harms to the individual drinker and wider society. Alcohol use is linked to the increased risk of developing a range of serious health conditions, including many cancers, cardiovascular disease, strokes, liver disease, and unintentional injuries (11-13). In 2018, the UK registered 7,551 alcohol-specific deaths (14). Alcohol consumption has been linked to violent crime, including domestic violence, sexual assault, and murder (15-17). Alcohol use costs society an estimated £21-52 billion through absenteeism, presenteeism (when a worker is present but not performing to full capacity), unemployment, and premature death, and further costs to society including health care and criminal justice system costs (18).

The negative impacts of alcohol use may indicate alcohol policy is a suitable candidate for nudge interventions. One suggested application of nudge theory here is serving size – a powerful default for drinkers, especially in the on-trade. If the standard pint glass was shrunk to hold only 500ml, it is unlikely drinkers would take it upon themselves to drink the extra 68ml needed to make up this difference. Bovens notes how serving size may reduce peoples' alcohol intake in this way and discusses the introduction of alternatives to standard serving sizes (19). Moves towards this have been made; the *Licensing Act 2003* requires that on-trade outlets offer a small serving size of wine (125ml), and in 2011, it was announced that a broader range of serving sizes for the on-trade would be permitted, including the two-thirds pint, known as a 'schooner' (20).

The potential of these interventions is clearly seen by government. Indeed, ideas aligning with nudge theory have been present in government alcohol policy in the UK for some time. For example, the Coalition government (2010-2015) highlighted the importance of individual decision making in their 2010 Department of Health public health white paper (21). Many nudge theory ideas are visible in this paper, as Haydock notes:

> **The Coalition's public health white paper explained that 'all capable adults are responsible for these very personal choices' (HM Government, 2010: 23) while the public health minister at the time, Anne Milton (2010), expanded by stating: 'It is for individuals to take responsibility for their health .... However, the government can help people make better choices – for example, by providing information, advice and so on'. (22, pp. 268-269)**

The white paper also referenced a nudge theory framework – the Nuffield Ladder of Intervention (23). Nudge ideas similarly appeared in the *Public Health Responsibility Deal*. Launched in 2011, the deal represented a voluntary agreement between government, industry and the third sector, to address public health goals, including some relating to alcohol (24). Researchers have mapped the pledges contained in this agreement with many of the nudge interventions outlined, again, in the Nuffield Ladder of Intervention (25). The Coalition government's *2012 Alcohol Strategy* remained committed to individual choice in behaviour change. As well as identifying many stronger measures that fell outside nudge theory (such as minimum unit pricing and a ban on multibuys for alcohol), the strategy consistently emphasised the importance of individual and industry responsibility:

> **The rhetoric of responsibility identifies individual actors, whether drinkers or companies, as both cause of and potential solution to alcohol-related problems. The sheer weight of this rhetoric in the *2012 Strategy* is demonstrated by the fact that the words 'responsible', 'responsibility', 'irresponsible' and 'irresponsibility' appear 73 times in the 27 pages of text – averaging almost three mentions on each page. (22, p. 266)**

More recent examples of nudge strategies in government public health alcohol policy can be identified. Under the 2017 and 2019 Conservative governments, significant policy interventions on alcohol and public health have been introduced, although promised updates to the *2012 Alcohol Strategy* are yet to be made (eg 26). Existing and newly introduced policy activities relating to alcohol and health were outlined in the 2019 green paper, '*Advancing our health: prevention in the 2020s*' (27). These were:

- The Public Health England 'One You' public information campaign (for more information, see here)
- Inclusion of alcohol risk assessments provided in GP visits for over 40s
- A commitment for £6 million in funding to support the children of parents with alcohol dependence
- A collection of policy interventions intended 'to nudge the general drinking population towards lower strength [alcohol] alternatives' (27, p. 43) (for more information, see here).

Both the One You public information campaign and the low alcohol product initiatives include elements that could be considered to align with nudge theory. One You is a public information campaign delivered by Public Health England since 2016 (28), intended to '[help] adults across [England] avoid future diseases caused by modern lifestyles' (29). The initiative includes a health quiz for members of the public 'to identify where they can make small changes' (29), and a variety of apps, including the 'Drink Free Days' app, intended to track their progress on these changes, as well as providing information and advice (30).

It is apparent that the One You policy deploys interventions consistent with nudge theory. Thaler and Sunstein (2) suggest that where 'errors' of decision-making can arise from long lag times in outcomes (such as the long-term health implications of high-risk drinking), the inclusion of feedback mechanisms represent an opportunity to 'nudge' individual decisionmakers to modify choices. The One You health quiz provides such feedback. Similarly, commitments to have days without alcohol are made by drinkers through the 'Drink Free Days' app. These represent an opportunity to exploit individual decision makers' desire 'to be consistent with our public promises' – a 'nudge' identified by both the Behavioural Insights Team (10) and other nudge theorists (9, p. 8).

The collection of policy interventions intended 'to nudge the general drinking population towards lower strength [alcohol] alternatives' announced by the UK Government in their 2019 green paper included proposals to '[work] with industry to deliver a significant increase in the availability of alcohol-free and low-alcohol products' and to investigate whether altering the descriptors used on labels of low alcohol products in England could encourage changes in consumption (27, pp. 43-44).

Aside from the explicit reference to 'nudging' the public, there are aspects of these policy proposals that align with nudge theory. Seeking 'a significant increase in the availability of alcohol-free and low-alcohol products' looks to alter the options available to individual decision makers, without forbidding an option – a central tenet of Thaler and Sunstein's (2) work. It is also included in the

Nuffield Ladder of Intervention, suggesting policymakers 'enable choice' (23, p. 3). An increase in the proportion of low strength products on the market could also alter the 'default' option individuals regularly go for when making purchasing decisions. Altering defaults in this way has been incorporated in 'nudge' building frameworks MINDSPACE and EAST (9, 10).

Nudge and alcohol in practice: more harm than good?

Despite this uptake from policymakers, questions have been raised as to whether nudge strategies are appropriate policy solutions to address alcohol harm. Ethical concerns have been raised, and the effectiveness of these interventions when applied to alcohol use has been questioned. It is also possible that using only nudge-inspired strategies represents a substantial opportunity cost, taking up time, money, and space resources that could be occupied by better evidenced interventions such as price increases. Others have noted the limitations of these interventions in the face of competing nudge strategies from a better resourced industry (31). Finally, some have raised concerns that nudge interventions frame their targets negatively, distracting attention from societal and economic drivers of harm (32).

Ethical concerns

Some have suggested the use of nudge theory in public policy may represent 'covert coercion' (23, p. 6), an 'immoral' intervention 'however softly delivered…' (33). Thaler and Sunstein highlight, however, that it is not possible to avoid influencing choice altogether; as a choice architect, declining to act exerts its own influence on the decision-making process (2).

Even if we accept that influence itself may not be unethical, covert influence may pose its own ethical problems. Hastings notes that while nudge interventions have potential to elicit desired behaviour change, their covert nature means there is no cognitive change. We are robbed of the 'critical and aware citizenry' needed to advocate for themselves on alcohol harm in future, to 'move from being passive consumers to become active citizens' (34, pp. 230-31). They suggest if the focus of action is only public behaviour, rather than public understanding, then this might pose a significant restriction on how the public are able to deploy their 'hard-earned and mandated human rights' (34, p. 230); they cite examples of public resistance to tobacco industry activity which would not have been possible without an informed public.

Effectiveness

As nudge theory recognises, decision makers are not completely rational. One factor that constrains decision-making ability is a person's 'cognitive limitations' – a model of decision-making that accounts for these is said to represent bounded rationality (35, p. 15). Alcohol is 'no ordinary commodity' (13), and so there are reasons we might consider decisions surrounding it suffer to a greater degree from these cognitive limitations. Decisions about which drinks to order in the on-trade are made in noisy bars, often ahead of a long queue, or in the off-trade, in busy supermarkets, with other priorities competing for attention. Potentially the most dramatic impact, though, comes from the cognitive limitations alcohol use itself places on a person through intoxication; the more intoxicated somebody is, the more distant rational decisions about further consumption may become.

Competing nudges

Thaler and Sunstein have noted choosing not to attempt to influence behaviour has an influence all of its own (2). If governments fail to act, industry figures may take on the role of the 'nudger'. Indeed, Halpern describes actors such as the tobacco industry as behavioural predators, who 'are busy persuading others to do things which are very much not in their interests and that they will probably regret.' (3, p. 312).

It is possible to fit many alcohol industry marketing strategies into the same nudge frameworks devised to promote positive behavioural change. The EAST framework notes that easier behaviours are more likely to be taken up (10); so, it would stand to reason that reducing barriers to alcohol purchase will increase sales. This is supported by research into supermarket placement for alcohol products; researchers found that end of aisle displays increased alcohol purchases by up to 46% (36). Such nudge-inspired sales tactics may also deepen health inequalities. An investigation by the Liverpool Echo found differences in the use of end of aisle displays between two branches of the supermarket chain, Tesco. The two stores explored, Toxteth and Woolton were just five miles apart, but in Toxteth – the more deprived area of the two – the store used significantly more end of aisle displays for alcohol; seven out of 43 in Toxteth compared to 1 out of 16 in Woolton (37).

Research has confirmed industry deployment of such nudge tactics. In their analysis of alcohol industry corporate social responsibility materials, Petticrew et al identified many instances of dark nudges (nudges deployed 'to change consumer behavior against their best interests') and sludges (exploiting 'cognitive biases to make behavior change more difficult') (31, p. 1). Discussing a particular nudge tactic, 'omission of relevant information, leading the reader to assume that they have been given complete information', Petticrew et al highlight how this is exploited in discussions of alcohol's carcinogenic qualities:

> **Mention of specific cancers is often omitted, particularly breast cancer and colorectal cancer (which the industry has been found to deny is causally associated with alcohol consumption), while other chronic diseases such as liver disease are included. [This] can also involve cherry-picking particular health outcomes (for example, by stating that alcohol consumption reduces the incidence of bladder cancer), while ignoring other negative outcomes (such as the increase in risk of other much more common cancers, in particular breast cancer and colorectal cancer). In one example, the Drinkaware Ireland infographic 'The Body' omits women entirely, showing only a man. (31, p. 17)**

All of this leads the authors to conclude that readers of these materials are '[exposed] to extensive misinformation from the [alcohol industry's] choice architects, in ways that benefit the AI and increase the risk of harm to consumers' (31, p. 30).

Taking up policy space

Policies inspired by nudge theory may make some headway in reducing alcohol-related harms, but they cannot be justified on this alone. If pursuing these policies prevents the use of a more effective policy, this must be considered. Indeed, discussing lobbying action from the National Federation of Retail Newsagents on the part of the tobacco industry, Rainford and Tinkler note that '…a focus on nudging may crowd out more promising initiatives that require legislation in order to assure compliance' (38).

Many proponents of nudge theory themselves recognise a need to enhance its action with additional policy measures. Halpern et al note that the effectiveness of nudge policies may be enhanced by additional non-nudge policies, such as taxation strategies (39), while Thaler and Sunstein suggest nudge should be used to enhance other policy interventions (2). However, it does not appear that nudge policies have been implemented in this way by recent UK governments. It has been suggested that nudge interventions gained popularity when they did, at least in part, because in highlighting an individual's decision making as the primary nexus for action, rather than structural factors shaping alcogenic or obesogenic environments (40, 41), these policies allow policymakers to avoid significant alcohol market interference (22). The *Public Health Responsibility Deal* (PHRD) and the *2012 Alcohol Strategy* were both criticized for this reason. While the Strategy contained proposals for measures such as minimum unit pricing and a ban on multibuys in supermarkets, these measures were never enacted nationwide, leaving only nudge-based elements such as voluntary industry measures in place (42). The PHRD was widely criticised for pursuing 'initiatives known to have limited efficacy in reducing alcohol-related harm', and many questioned the reliance on voluntary-industry action, noting that where such pledges were said to have been met, they were not to the 'letter and/or spirit of the pledges' (24, p. 2).

Designated driver campaigns provide another example of this. Designated drive campaigns encourage groups socialising in the on-trade to assign driving duties to one member of their group, sometimes in exchange for an incentive, eg free or discounted soft drinks. There has been industry involvement in recent years with the drink-driving arm of Department for Transport's THINK! Road safety scheme:

> **…commercial partners can provide in context incentives or 'nudges' to help influence behaviour. For example, current partners, Coca-Cola, provide free soft drinks for designated drivers, and Johnnie Walker reward drinkers with free or discounted journeys home, in return for taking a pledge to never drink and drive. (43, p. 12)**

Such schemes have been assessed and found to be limited in their effectiveness. A systematic review of a variety of designated driver schemes found 'no significant change in self-reported drinking and driving or riding with a drink-driver' (44, p. 67). Campaigns such as these may take the place of meaningful action. DeJong and Wallack suggest that:

> **…the focus on this strategy…has distracted many public health advocates and policymakers from the bigger and more important jobs of increasing public awareness of the social, environmental, and economic factors that influence alcohol consumption and promoting debate on legislation and other public policy solutions to alcohol-impaired driving. (45, p. 429)**

How does nudge frame policy subjects?

Framing describes a process by which 'some aspects of a perceived reality' are selected and made 'more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described' (46, p. 52). Some have suggested nudge policies – through their focus on the individual – frame policy subjects in negative ways. Wilby outlines this:

> **The premise is that if people act against their own best interests – by using drugs, eating junk, failing to save or taking out loans they can't repay – it is because of their individual behavioural flaws, not because of poverty, inequality or lack of hope…[Nudge] argues that there's nothing wrong with markets, only with people, and the state's role is to make people fit for markets, not the other way about. (47)**

More than this, though, it has been demonstrated that the content of public health nudge policies is framed in a way which actively obscures economic or societal drivers of public health problems. Examining the UK Government's 'Change4Life' anti-obesity campaign, Mulderrig (32) demonstrated that the campaign's materials represented '(northern, working class) lifestyles as delinquent', shifting responsibility for health harms away from societal and economic drivers, and onto individuals (32, p. 39).

However, research is yet to identify how the activities of multi-national producers of unhealthy commodities are also framed within these nudge interventions. If structural drivers, such as industry activity, are framed as inconsequential or even a positive force in improving public health, this could significantly impact public and political support for well-evidenced population wide interventions (eg raising alcohol prices (12)). This is a key gap in this literature. How are public and alcohol industry actors framed within public health nudge policy interventions?

Methods

This work examined how public and alcohol industry actors are framed within public health nudge policy interventions deployed by UK governments since 2017. Text analysis – primarily thematic analysis and some supplementary discourse analysis – was used to examine policy documents and materials associated with the One You campaign and low alcohol product initiatives. These policies were examined to explore:

- First, whether the strategies they contain are explicitly framed as nudge interventions.
- Then, to understand how both public and industry actors are framed within them.

Data

The policies analysed – the One You campaign and low alcohol product initiatives – were chosen because initial inspection suggests they include elements which align with nudge theory (as outlined in the **Background** section). Further, between them, these policies cover activities of individuals and industry, allowing investigation of how both these kinds of actors are framed. This is purposive sampling (48) through an information-led strategy (49).

The data analysed in this report are the publicly available policy documentation and materials for each policy. This included pages from the One You campaign's 'Drink Free Days' app and website, and the government response to its consultation on low alcohol product labelling and subsequently published low alcohol product labelling guidelines – a corpus of n=60 documents in total. All documentation analysed is publicly available as this work is interested in how the public and other actors are framed within these documents to the public. All of the documentation analysed can be viewed at this link. Analysis was performed using NVivo 12 software (50).

Table 4: Corpus outline summarising the different documents analysed for the One You and low alcohol products policies

Policy	Document type	Unit and context	Inclusion criteria
One You	Drink Free Days app	App 'screens' (n=46)	App is responsive to data entered by user. Included here are screens where data has been entered for female, high-risk drinker, aged 30. All screens are included, as of July 2020.
	'Drink less' webpage	Individual web pages (n=9)	All web pages included, as of July 2020.
Low alcohol products	Documentation published by government associated with low alcohol product labelling	Government response to consultation on low alcohol product labelling Subsequently published low alcohol product labelling guidelines (n=2)	All government comments as well as summaries of consultation response evidence is included, as this is government presentation of others' evidence, and so is in some way framed by government also.

Text analysis

Qualitative text analysis was used to examine these documents and answer questions of framing. Qualitative text analysis offers a routinised and rigorous means of examining text sources and answering the research questions we wish to about them (51).

Text analysis is well suited to the questions we hope to answer here. These questions – how public and industry are framed within these policies – are of concern as this framing could impact public and policymaker support for well-evidenced population wide public health measures. It would be inappropriate to investigate these questions through interviews with or observation of policymakers – this might allow analysis of their intentions or understandings of the policy messages shared, but it is in the publicly-facing policy documentation and materials where this framing is eventually communicated to the public.

Thematic and discourse analysis

The specific kinds of qualitative text analysis used in the work are thematic analysis and discourse analysis. Thematic analysis is mainly used, and the understanding gained from this is supplemented with additional discourse analysis.

In thematic analysis, texts are closely read to '[identify] themes or patterns of cultural meaning' (52, p. 925). This begins first with a period of familiarisation (as recommended by Ritchie and Spencer (53)), where the materials to be analysed are reviewed at a very general level. Then, through close reading, basic themes are identified in the text – 'the most basic…theme that is derived from the textual data' (54, p. 388). Basic themes on their own make little sense, it is only when they are viewed in context together (54). This is the next step – 'by seeking commonalties, relationships, [and] overarching patterns', basic themes are brought together into organising themes (52, p. 926). Organising themes 'group the main ideas proposed by several Basic Themes' (54, p. 389), and are a stepping stone to understanding the texts overall. This is finally achieved by grouping several organising themes into a global theme. Global themes 'tell us what the texts as a whole are about' as well as giving 'a revealing interpretation of the texts' (54, p. 389).

To present these relationships to readers, the results from this analysis have been presented as thematic networks, comprised of these basic, organizing, and global themes (54).

Thematic analysis is a method used to extract explicit themes from texts, so this was supplemented with some discourse analysis elements to examine how any implicit dimensions of the texts might contribute to the framings of the public and industry actors (55). Discourse analysis offers a similarly routinised method for extracting meaning from texts, but unlike thematic analysis, it is focused on how implicit meaning is communicated through linguistic devices. Particularly relevant to this work is the use of the passive voice (56). This affects how agency is interpreted by readers (57), and so can offer detail of how items, like the public and industry, are framed to readers.

Results

Nudge interventions are central to these UK Government public health alcohol policies

Choice is emphasised

Throughout both the One You (OY) and low alcohol products (LAP) policy documentation, choice is a central theme. Choice is regularly referenced within One You, where experimentation is encouraged to find lower strength products – 'Experiment to find the brew for you!' (OY website). Similarly, it is suggested changes to low alcohol product descriptors might support a consumer to 'make an informed choice' (LAP documentation).

It is emphasised that industry practice is not regulated by legislation. Using legislation to govern industry practice – as opposed to less restrictive guidance – is described as 'a last resort' and the government's 'preference' to use 'guidance rather than legislation' to manage low alcohol product descriptors is emphasised (LAP documentation). As such choice is promoted not just for the individual drinker, but for the industry as well. This preservation of choice is also explicitly endorsed; government are described as holding a '[commitment] to the principle of increasing consumer choice' when discussing the pros and cons of the use of legislation to manage low alcohol product descriptors (LAP documentation).

Information provision as key policy activity

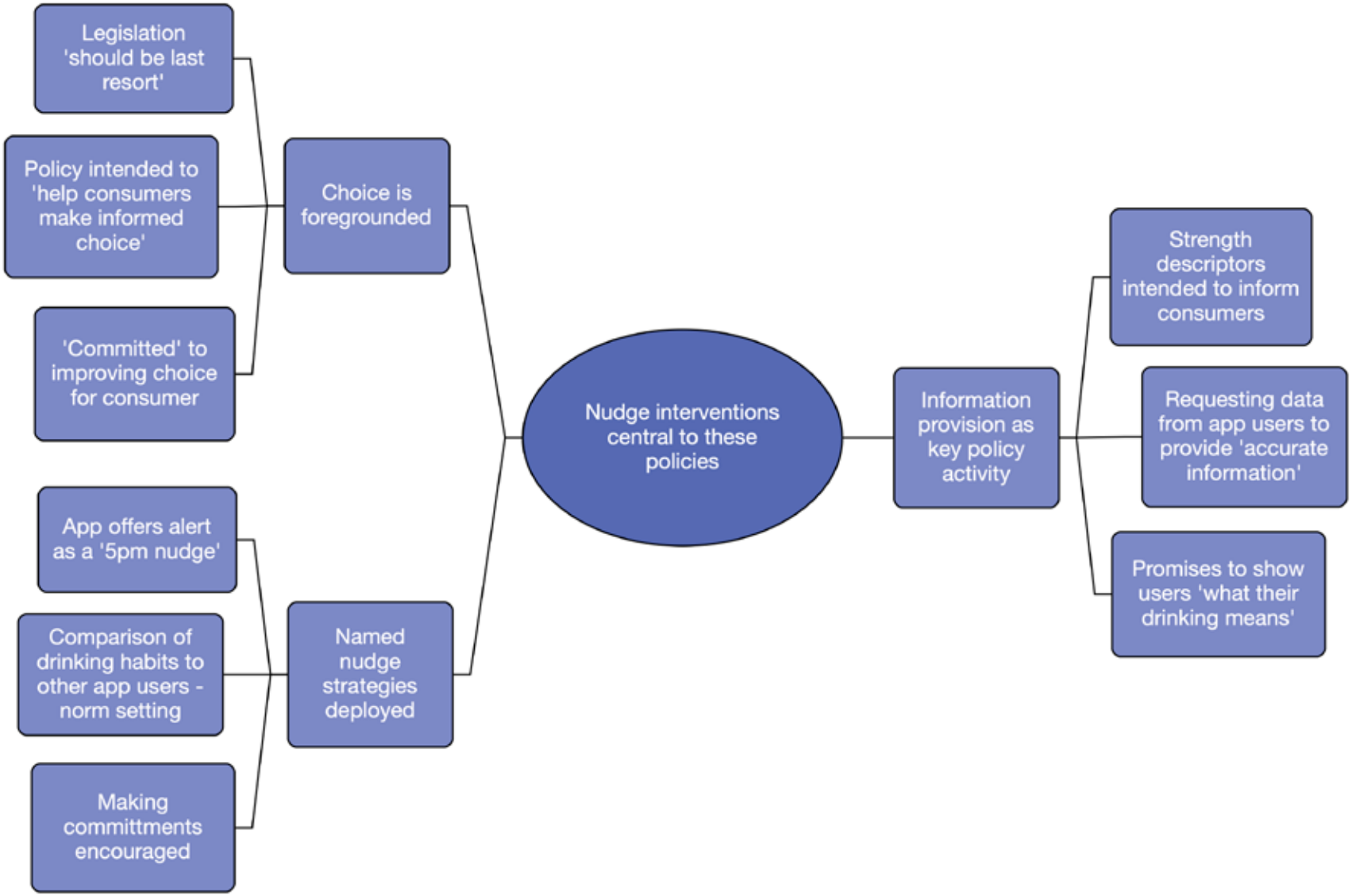
The discourses surrounding the One You campaign and low alcohol product initiatives emphasise information provision as a key policy activity. For example, app users are told 'we'll show you what your drinking means' and later, when data on gender is requested from users, this is justified in order to allow the app to present 'accurate information and advice'[1] (OY app). Similarly, the information provision capacity of low alcohol product descriptors is regularly raised through the documentation associated with this policy. One of the aims of the guidance produced to manage the use of these descriptors is said to be 'helping to inform consumers' (LAP documentation).

Named nudge strategies are deployed

Many of the interventions outlined in the frameworks previously discussed (eg EAST (10)) are explicitly referenced in the policy documents and materials analysed. For example, norm setting strategies are regularly invoked. The One You app presents how 'you compare' to other drinkers in your gender and age group (OY app), and the campaign's website describes how 'millions took part in Dry January this year' (OY website) – clear instances of asking users to compare themselves to the norms of a wider public. The materials associated with this campaign also ask users to 'pledge to take a specific number of days off each week' and tells users that 'setting goals has been shown to help people…be more successful' (OY website) – making commitments in this way is a recognised 'nudge' intervention (eg (9)). The most explicitly invoked example of a nudge intervention came from the One You app, which offers users the opportunity to set up a '5pm nudge' to avoid drinking with friends. Ostensibly social norms and goal setting are used in other psychological frameworks, but they are also named as a key strategy in many nudge theory frameworks.

1 UK low risk drinking guidelines differ for men and women. See the UK Chief Medical Officers' Low Risk Drinking Guidelines for further information.

Figure 2: Thematic network demonstrating how nudge interventions are central to two UK Government public health alcohol policies, One You and low alcohol products initiatives



Figures 2, 3 and 4 shows how basic themes (at the edges) have been collated to form organising themes (the next layer in), which have in turn been drawn together to find global themes (at the centre).

In this analysis, under each organising theme are many more basic themes than are displayed in these diagrams – these diagrams show select examples.

For more detail on the methods employed in the work, please see the **Methods** section.

Public framed as blameworthy for own alcohol health problems

Public framed as responsible for drinking decisions

Within both the One You campaign and the low alcohol product initiatives, the public are framed as responsible for decisions relating to their drinking. When discussing drinking, individuals are described as being 'in charge', and asked to 'take control' (OY website). The theme of responsibility is extended further, as heavy drinking episodes are referred to as mistakes or accidents (OY website).

The responsibility assigned to the public is put into sharp relief within the low alcohol products documentation, where certain subsections of the population – such as pregnant people – are carved out as both particularly vulnerable to the harms of alcohol, but still framed as responsible for their use of such products and any negative outcomes:

> **…there are some religions where drinking of alcohol is forbidden, pregnant women need to know if the products they are using are safe to consume and not harmful, recovering alcoholics may need to avoid alcohol where it could become a gateway to drinking dependency, and drivers need a clear understanding that what they are drinking provides a safe limit. (LAP documentation)**

Indeed, only once throughout the documentation analysed is a need to 'protect the public' stated (LAP documentation) – in all other cases, the public is framed as responsible for themselves.

These themes of responsibility are further enhanced with elements identified in the discourse analysis. Throughout the One You materials, the public's drinking is consistently, with few exceptions, referred to in the active voice, foregrounding their agency – a clear signal to individuals that they are responsible for their own drinking (OY app and website).

Public framed as owning their drinking and bodily responses to this

Within the One You campaign materials particularly, the public are framed as 'owning' their drinking. Users are encouraged to find not just a balance but 'your balance' (OY app). Discourse analysis identifies many more elements which are assigned as 'owned' by drinkers in this way – their motivations and habits notably (OY app). Indeed, it is striking that the population's drinking is described in the collective – 'Taking Drink Free Days is a simple way to reduce the amount we drink' – only once throughout all campaign materials (OY app). More than this though, this ownership also extends to drinkers owning their bodies' response to alcohol. Website materials

feature discussion of how 'you' absorb alcohol and 'your' liver is personified as needing a break (OY website).

Correspondingly, drinkers are also assigned the power to personally reduce their risk of experiencing alcohol harms. The One You website encourages users to 'put themselves first and do something about their own health' and that to 'be healthier and reduce your risk' they should 'making better choices today' (OY website), while app users are told 'you could lower [the risk] if you drank a bit less' (OY app). The active formation of this sentence clearly places agency with the drinker, in a way an alternate formation would not.

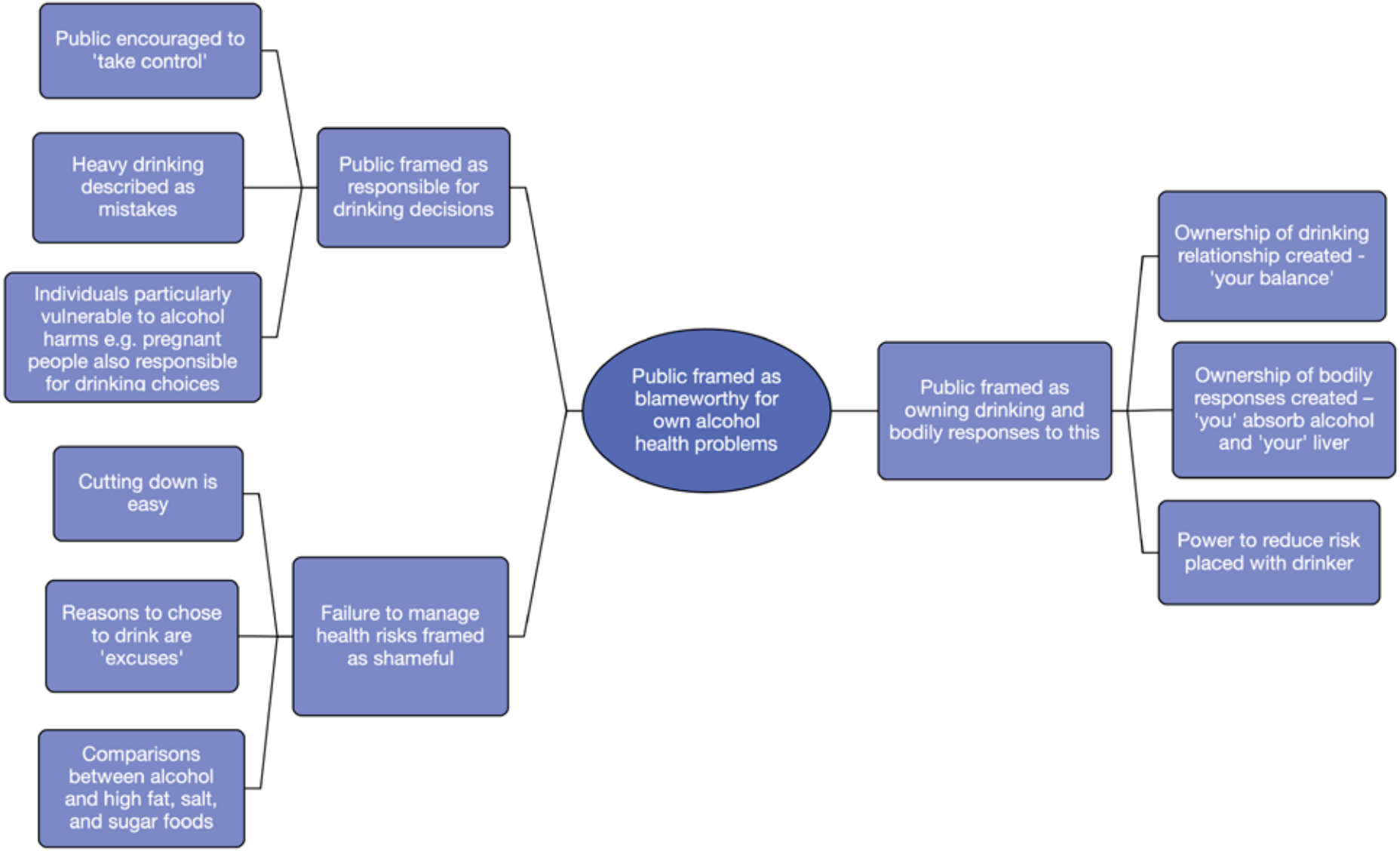
Failure to manage health risks framed as shameful

Across all policy documents, the failure of members of the public to manage their health risks relating to alcohol is framed as shameful. This is first set up through descriptions of cutting down as easy. Reducing alcohol intake is described as only '[seeming] tricky' and simple solutions are presented, such as placing a post-it note on wine to remind a drinker not to finish the bottle – 'Just 1 glass!' (OY website). The behaviours drinkers are encouraged to curtail are also minimised – these are described as habits (OY website).

While offering choice to consumers and industry was framed as a central component to both to the One You and low alcohol products policies, when consumers acted on this and *took* the choice to drink, this was framed in a negative light. Reasons members of the public may drink are referred to as excuses – the One You app pointedly tells users that taking days off drinking is 'not an excuse to overdo it when you do drink' (OY app). On the One You website, it is stated that 'being healthier isn't just about "doing the right thing"' – this phrasing and the inclusion of 'just' here tells us that being healthy is, in part at least, about behaving 'right'. Further to this, comparisons between alcohol and high fat, salt, and sugar foods are repeatedly drawn. Amounts of alcohol consumed are described in terms of the numbers of chocolate bars this equates to, and drinkers are told to 'watch the calories', particularly 'empty calories' – this is a clear signifier for a nutritionally deficient food (OY app and website). While this may be an effective strategy to contextualise the calorie intake of drinking for readers, it could also serve to draw links between drinking and the highly stigmatised subjects of obesity or 'poor' diet (58).

This finding of the framing of a failure to manage health risks as shameful was supported by findings from discourse analysis. Whereas health risks previously discussed were individualised (how 'you' absorb alcohol and 'your' liver needs a break (OY website)), health improvements are collectivised. As the One You campaign describes, 'we all want the benefits that come with drinking less' and app and website users are positioned against a wider public who chose to 'do something about their own health' suggesting the blame lies with individuals who fail to achieve this (OY website).

Figure 3: Thematic network demonstrating public framed as blameworthy for own alcohol health problems



Alcohol industry figures framed as reliable policy actors

Alcohol industry figures framed as partners with government in alcohol policy

The importance of freedom of choice for industry actors is framed – as it is for the public – as central to the low alcohol products initiatives. There is a preference to govern the behaviour of industry with guidance, not legislation, and this is supported by a proposal that legislation would constrain businesses and stifle innovation. Indeed, the 'innovation' of industry is referred to multiple times (LAP documentation).

This freedom of choice is also presented alongside an implicit trust in industry actors. It is suggested that not only is it necessary for the government to 'support the alcohol and retail industries in marketing their products responsibly' but that 'industry will be expected to follow' any guidance (LAP documentation). This trust is extended further, as industry evidence on consumer positions is presented as accepted:

> **Department of Health and Social Care had received feedback from some industry representatives [that] 'dealcoholised' does not tend to resonate well with the public as a descriptor. (LAP documentation)**

There are also explicit examples presented of government working with industry figures under this policy initiative: '…alcohol industry representatives and public health officials [met] during the autumn of 2016 to discuss proposals' (LAP documentation). The trust towards industry from government is emphasised further as it is the public – rather than government – who are described as distrustful of industry actors: 'There may be concerns from the public that in the absence of legislation for descriptors the alcohol industry may create their own descriptors and apply these to a level beyond 1.2% ABV' (LAP documentation).

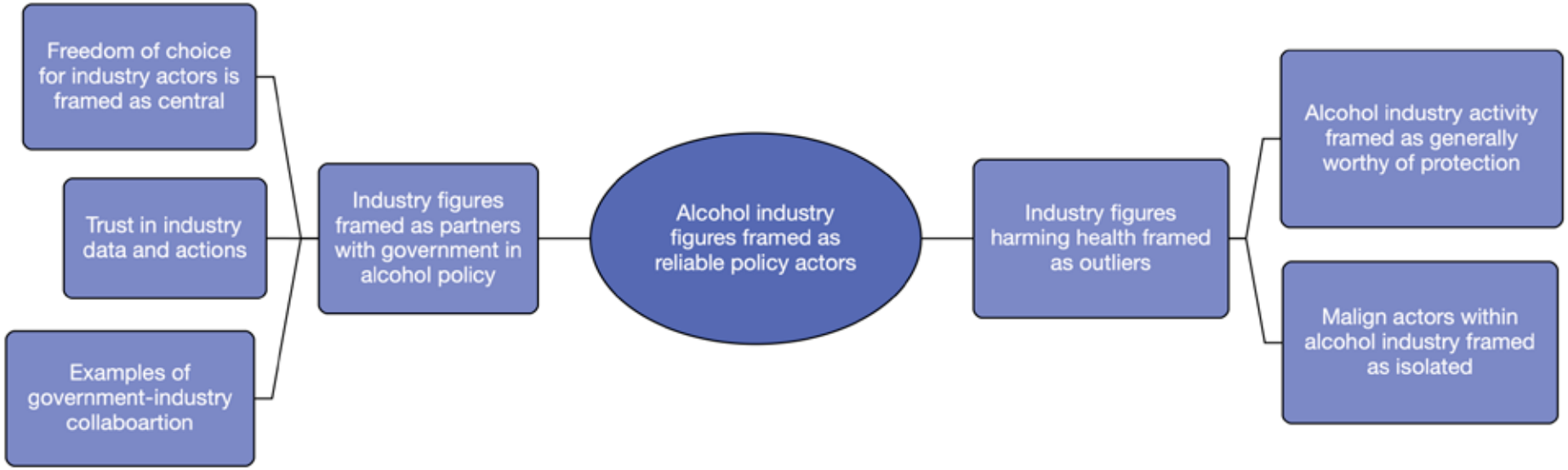
Industry figures behaving in ways that would harm health framed as outliers

Throughout the documentation, the activities of the alcohol industry are framed as generally worthy of protection. Industry are described as producing 'quality products' to which 'commercial disadvantage' should be avoided. It is even suggested that the industry should be encouraged 'to produce more low alcohol products' (LAP documentation).

In many cases, the industry is also framed as heterogenous – with some actors 'who favoured maintaining regulation and some that did not' (LAP documentation). This serves to set the scene for isolating some actors within industry as not worthy of the trust generally afforded, as previously outlined. This is taken a step further, with actors engaged in harmful activities within the alcohol industry framed as outliers – particularly, the potential of industry figures to misuse the flexibility of guidelines is posed as a risk only from 'certain brewers' (LAP documentation). This contrasts with descriptions of harmful drinking practices by members of the public, particularly a person underestimating how much they are drinking, which One You app users are told is 'very common' (One You app).

This finding is supported through discourse analysis. When malign activity of industry is discussed, this often occurs in the passive voice (LAP documentation), limiting the framing of responsibility, and different to the almost universal use of the active voice used when discussing the actions of drinkers themselves.

Figure 4: Thematic network demonstrating alcohol industry figures framed as reliable policy actors



Conclusion and recommendations

This research demonstrated that nudge interventions were central to two UK Government public health alcohol policies in the period 2017 to present – the One You campaign and low alcohol product initiatives. As outlined in the **Background** section of this report, both policies appeared on initial inspection to include elements that could be considered to align with nudge theory, and this work confirmed through thematic analysis of policy documentation and materials that these can be considered to explicitly embrace nudge theory. This builds on previous research, which found nudge interventions have been deployed by UK governments to act on public health issues on many occasions in recent years (22, 32). The policies analysed in this work are two of four public health alcohol policies outlined in the 2019 green paper, '*Advancing our health: prevention in the 2020s*' (27). This suggests that we can consider nudge interventions to be a significant feature of UK Government public health alcohol policy since 2017 – despite debates surrounding the capacity of such interventions to improve public health (59). This finding supports calls from many civil society actors during this period for well-evidenced public health alcohol policy action, such as pricing, availability, and marketing controls (11, 12) – particularly in the context of rising levels of alcohol health harms (60).

Limitations of this research relate to the scope of this study. This research was conducted by a single investigator, and so it has not been possible to assess the reliability of the findings through coding decisions of multiple researchers. This has been addressed through multiple rounds of coding, and careful, reflexive consideration of the coding decisions made. Further, while the documents included represent a complete corpus of publicly available documentation for the two policies investigated, the reliability of these findings could be bolstered through an expanded – perhaps international – range of policies analysed.

This work identified that the public are framed as blameworthy for their own alcohol health problems within these policies. This chimes with the findings of previous research into the use of nudge in other public health areas (32). The One You public information campaign materials analysed contained no mention of any other potential driver of alcohol health harms other than personal decision-making. On-trade locations were mentioned only in the context of decisions regarding buying drinks in 'rounds' and choices between soft drinks and alcohol. Off-trade locations were not mentioned at all, even in so much as to prepare individuals for how this setting might affect their own decision making. Decision making around alcohol is known to be complex and an integration of capability, opportunity, and motivation (61), but such features are overlooked by this framing. The finding that the public are framed as blameworthy for their own alcohol health problems should be particularly concerning for policymakers, as this may reinforce the already high levels of stigma associated with experiences of alcohol use problems, and further entrench barriers to seeking support (62) face and reduce individuals' capability, opportunity, or motivation to change (61, 63).

Finally, the finding that alcohol industry actors are framed as reliable policy actors within nudge interventions is novel. While both the public and alcohol industry where discussed in the context of nudge interventions, it is only the public who are framed as to blame for the health harms caused by alcohol. Industry – like the public – are depicted as decision makers who should be encouraged and empowered to make decisions conducive to public health. However, there is a framing of implicit trust in the activities of the industry; unlike the public, whose mistakes are catalogued and even described as common, industry actor malfeasance is framed as out of character. This risks exacerbating the obfuscation of economic or societal drivers of public health problems that has been identified by others examining nudge in prior research (32).

There have been well-documented challenges to the implementation of evidence-based population-wide alcohol policy interventions, such as minimum unit pricing, over the past decade (42). Others have noted recent context of the highly individualistic neoliberal political landscape, and how this aligns with nudge interventions which direct action towards the individual decision maker (22). At the same time, the resources made available by central government to address alcohol harm have been substantially reduced in recent years (64).

We can recognise that for many public health policymakers and practitioners, low-cost nudge-style interventions may be a well-meaning solution to this resource deficit, in the absence of more substantial market intervention. However, these framings might undermine public support for well-evidenced public health measures addressing environmental and structural drivers of alcohol harm, such as pricing interventions (eg 12). There is also a risk that nudge framings perpetuate the stigma those with alcohol use problems already face (62). Policymakers, researchers, and civil society actors ought to resist over-reliance on nudge to avoid these framings, and advocate fiercely for a better-funded, evidence-led, more compassionate alcohol policy landscape.

Recommendations

Understanding of human decision making can provide insight into a great deal of behaviour which policymakers hope to act on. While nudge theory has applications within policy, it is clear that where it is applied, it should not be done so in isolation. Pursuing such policy at the expense of more definitive action such as legislation or regulation will be inadequate to address alcohol harm and will fail to prove cost-effective.

The World Health Organization's alcohol policy 'best buys' should remain the gold standard for action for policymakers (65, 66).

- Increase excise taxes on alcoholic beverages and consider pricing policies such as minimum pricing.
- Enact and enforce bans or comprehensive restrictions on exposure to alcohol advertising (across multiple types of media).
- Enact and enforce restrictions on the physical availability of retailed alcohol (eg, via reduced hours of sale).

References

1. Arno A, Thomas S. The efficacy of nudge theory strategies in influencing adult dietary behaviour: a systematic review and meta-analysis. BMC public health. 2016;16(1):676.
2. Thaler RH, Sunstein CR. Nudge: Improving decisions about health, wealth, and happiness. London: Penguin; 2009.
3. Halpern D. Inside the nudge unit: How small changes can make a big difference. New York: Random House; 2015.
4. Thaler RH. From homo economicus to homo sapiens. Journal of economic perspectives. 2000;14(1):133-41.
5. Tversky A, Kahneman D. Judgment under uncertainty: Heuristics and biases. science. 1974;185(4157):1124-31.
6. Samuelson W, Zeckhauser R. Status quo bias in decision making. Journal of risk and uncertainty. 1988;1(1):7-59.
7. Office of Science and Technology Policy. Implementation Guidance for Executive Order 13707: Using Behavioral Science Insights to Better Serve the American People. Washington D.C.: Office of Science and Technology Policy; 2016.
8. Behavioural Insights Team. The Behavioural Insights Team Update Report 2015-16. London: Behavioural Insights Team; 2016.
9. Dolan P, Hallsworth M, Halpern D, King D, Vlaev I. MINDSPACE: influencing behaviour for public policy. London: Cabinet Office and Institute for Government; 2010.
10. Behavioural Insights Team. EAST: Four simple ways to apply behavioural insights. London: Behavioural Insight Team; 2014.
11. Anderson W, Gilmore SI, Bauld L, Bellis M, Brown KA, Drummond C, et al. Health First: An evidence-based alcohol strategy for the UK. Stirling: University of Stirling; 2013.
12. Angus C, Holmes J, Pryce R, Meier P, Brennan A. Alcohol and cancer trends: Intervention Studies. London: University of Sheffield and Cancer Research UK; 2016.
13. Babor T, Caetano R, Casswell S, Edwards G, Giesbrecht N, Graham K, et al. Alcohol: no ordinary commodity: research and public policy. Oxford: Oxford University Press; 2003.
14. Office for National Statistics. Alcohol-specific deaths in the UK: registered in 2018. 2019.
15. World Health Organisation. Interpersonal violence and alcohol. Geneva: World Health Organisation; 2006.
16. Lipsey MW, Wilson DB, Cohen MA, Derzon JH. Is there a causal relationship between alcohol use and violence? In: Galanter M, editor. Recent developments in alcoholism. New York: Kluwer Academic Publishers; 2002. p. 245-82.
17. Abbey A, Zawacki T, Buck PO, Clinton AM, McAuslan P. Alcohol and sexual assault. Alcohol Research & Health. 2001;25(1):43.
18. Bhattacharya A. Splitting the Bill: Alcohol's Impact on the Economy. London: Institute of Alcohol Studies; 2017.
19. Bovens L. Nudging the pub: a change in choice architecture can help pub-goers drink less 2015 [cited 2020 26 November]. Available from: https://bit.ly/3mhV9Jt.
20. Gov.uk. Weights and measures: the law n.d. [cited 2020 26 November]. Available from: https://www.gov.uk/weights-measures-and-packaging-the-law/specified-quantities.
21. Department of Health. Healthy lives, healthy people: our strategy for public health in England. London: The Stationery Office; 2010.
22. Haydock W. The rise and fall of the 'nudge' of minimum unit pricing: The continuity of neoliberalism in alcohol policy in England. Critical Social Policy. 2014;34(2):260-79.
23. Local Government Association. Changing behaviours in public health: To nudge or to

shove. London: Local Government Association; 2013.
24. Institute of Alcohol Studies. Dead on Arrival? Evaluating the Public health Responsibility Deal for Alcohol. London: Institute of Alcohol Studies; 2015.
25. Knai C, Petticrew M, Durand MA, Eastmure E, Mays N. Are the Public Health Responsibility Deal alcohol pledges likely to improve public health? An evidence synthesis. Addiction. 2015;110(8):1232-46.
26. Brine S. Hansard, HC Deb, 8 May 2018, c531. 2018.
27. HM Government. Advancing our health: prevention in the 2020s. London: HM Government; 2019.
28. Public Health England. PHE launches One You. 2016 [cited 2020 27 July]. Available from: https://www.gov.uk/government/news/phe-launches-one-you.
29. Public Health England. About One You n.d. [cited 2020 26 November]. Available from: https://bit.ly/3o3q9xe.
30. Public Health England. Our Apps n.d. [cited 2020 26 November]. Available from: https://www.nhs.uk/oneyou/apps/#days-off.
31. Petticrew M, Maani N, Pettigrew L, Rutter H, Van Schalkwyk MC. Dark nudges and sludge in big alcohol: behavioral economics, cognitive biases, and alcohol industry corporate social responsibility. The Milbank Quarterly. 2020.
32. Mulderrig J. Multimodal strategies of emotional governance: a critical analysis of 'nudge' tactics in health policy. Critical Discourse Studies. 2018;15(1):39-67.
33. Institute of Economic Affairs. An unhealthy nudge 2010 [cited 2020 26 November]. Available from: https://iea.org.uk/blog/an-unhealthy-nudge.
34. Hastings G. Rebels with a cause: the spiritual dimension of social marketing. Journal of Social Marketing. 2017.
35. Simon HA. Bounded rationality. In: Eatwell J, Milgate M, Newman P, editors. Utility and probability. London: Palgrave Macmillan; 1990. p. 15-8.
36. Nakamura R, Pechey R, Suhrcke M, Jebb SA, Marteau TM. Sales impact of displaying alcoholic and non-alcoholic beverages in end-of-aisle locations: An observational study. Social Science & Medicine. 2014;108:68-73.
37. Liverpool Echo. A Tale of Two Tescos: Why does Toxteth promote more alcohol than Woolton? 2017. Available from: https://bit.ly/3l9yeyx.
38. Rainford P, Tinkler J. Think before you nudge: the benefits and pitfalls of behavioural public policy 2011. Available from: http://blogs.lse.ac.uk/politicsandpolicy/nudge-designing-behavioural-public-policy/.
39. Halpern D, Bates C, Beales G, Heathfield A. Personal responsibility and changing behaviour: the state of knowledge and its implications for public policy. London: Cabinet Office; 2004.
40. Hill KM, Foxcroft DR, Pilling M. "Everything is telling you to drink": understanding the functional significance of alcogenic environments for young adult drinkers. Addiction Research & Theory. 2018;26(6):457-64.
41. Lake A, Townshend T. Obesogenic environments: exploring the built and food environments. The Journal of the Royal society for the Promotion of Health. 2006;126(6):262-7.
42. Institute of Alcohol Studies. Government reads last rites over alcohol strategy 2013 [cited 2020 26 November]. Available from: https://bit.ly/2HHI50T.
43. Department of Transport. THINK! campaign marketing plan 2015/16 & 16/17. London: Department of Transport; 2015.
44. Burton R, Henn C, Lavoie D, O'Connor R, Perkins C, Sweeney K, et al. The public health burden of alcohol and the effectiveness and cost-effectiveness of alcohol control policies: an evidence review. London: Public Health England; 2016.

45. DeJong W, Wallack L. Perspective: The Role of Designated Driver Programs in the Prevention of Alcohol-Impaired Driving: A Critical Reassessment. Health education quarterly. 1992;19(4):429-42.
46. Entman RM. Framing: Toward clarification of a fractured paradigm. Journal of communication. 1993;43(4):51-8.
47. Wilby P. The kindly words of Nudge are Cameron's ideal veneer 2010 [cited 2020 26 November]. Available from: https://bit.ly/33mQbDW.
48. Robinson OC. Sampling in interview-based qualitative research: A theoretical and practical guide. Qualitative research in psychology. 2014;11(1):25-41.
49. Flyvbjerg B. Five misunderstandings about case-study research. Qualitative inquiry. 2006;12(2):219-45.
50. QSR International. NVivo 12. 2019.
51. Kuckartz U. Qualitative text analysis: A guide to methods, practice and using software. London: Sage; 2014.
52. Mills AJ, Durepos G, Wiebe E. Encyclopedia of case study research. Thousand Oaks: Sage Publications; 2009.
53. Ritchie J, Spencer L. Qualitative data analysis for applied policy research. Analyzing qualitative data. Abingdon: Routledge; 2002. p. 187-208.
54. Attride-Stirling J. Thematic networks: an analytic tool for qualitative research. Qualitative research. 2001;1(3):385-405.
55. Dunn KC, Neumann IB. Undertaking discourse analysis for social research. Ann Arbor: University of Michigan Press; 2016.
56. Perlmutter DM, Postal PM, editors. Toward a universal characterization of passivization. Annual Meeting of the Berkeley Linguistics Society; 1977.
57. Billig M. The language of critical discourse analysis: The case of nominalization. Discourse & Society. 2008;19(6):783-800.
58. Puhl RM, Heuer CA. Obesity stigma: important considerations for public health. American journal of public health. 2010;100(6):1019-28.
59. Rayner G, Lang T. Is nudge an effective public health strategy to tackle obesity? No. Bmj. 2011;342.
60. Williams R, Aithal G, Alexander GJ, Allison M, Armstrong I, Aspinall R, et al. Unacceptable failures: the final report of the Lancet Commission into liver disease in the UK. The Lancet. 2020;395(10219):226-39.
61. Shorter G, Knowles N, Abdin S, Jenkinson E, Armitage C, T E. COVID-19 Public Health Road Map: Alcohol consumption. Leicester: British Psychological Society; 2020.
62. Schomerus G, Lucht M, Holzinger A, Matschinger H, Carta MG, Angermeyer MC. The stigma of alcohol dependence compared with other mental disorders: a review of population studies. Alcohol and alcoholism. 2011;46(2):105-12.
63. Stangl AL, Earnshaw VA, Logie CH, van Brakel W, Simbayi LC, Barré I, et al. The Health Stigma and Discrimination Framework: a global, crosscutting framework to inform research, intervention development, and policy on health-related stigmas. BMC medicine. 2019;17(1):31.
64. Alcohol Concern, Alcohol Research UK. The Hardest Hit: Addressing the Crisis in Alcohol Treatment Services. London: Alcohol Concern and Alcohol Research UK; 2018.
65. World Health Organization. From burden to "best buys": reducing the economic impact of non-communicable disease in low-and middle-income countries. Geneva: World Health Organization,; 2011.
66. World Health Organisation. WHO launches SAFER, a new alcohol control initiative 2018 [cited 2020 26 November]. Available from: https://www.who.int/substance_abuse/safer/en/.

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