# Analysis of the Paternalistic Justification of an Agenda Setting Public Health Policy: The Case of Tobacco Plain Packaging

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This article analyses the paternalistic justification of the world's first mandatory tobacco plain packaging policy, which came into force in Australia in 2012. The policy is setting international precedence, with a range of developed and developing countries planning and implementing similar policies. Understanding the paternalistic dimension of the policy is therefore of imminent international importance. The policy meets important ethical benchmarks such as respect for citizens' self-interests and protection of others against harm. However, plain packaging faces a number of ethical challenges: the policy is a controversial type of paternalism; it runs partially against the harm principle; and it fails to meet key operational criteria.

# Introduction

Tobacco consumption is the leading cause of preventable disease globally, causing an estimated 6 million premature deaths annually (Samet, 2013). Half of all persistent smokers will die from smoking-related diseases (Doll *et al.*, 1994; 2004).

One of the most innovative public health policies to encourage smoking cessation and preventing uptake is tobacco plain packaging (PA, 2011a), which was introduced first in Australia in 2012. Plain packaging involves two key aspects (see Figure 1): the removal of all promotional elements (e.g., logos, colours, graphics) from the pack and communication of verbal and visual health warnings covering most of the pack (PA, 2011a,b). Brand names and variants are allowed, but they must conform to a standardized typography. Although innovative and potentially effective (Chantler, 2014), plain packaging is ethically controversial because it is a paternalistic policy that clashes with the individual right to free choice and freedom from interference from the state, or so critics argue (Luik, 1998; Imperial Tobacco Australia, 2010; Basham, 2012; Basham and Luik,  $2012).^{1}$ 

A public policy is paternalistic insofar as it interferes with citizens' ability to choose or otherwise pursue their personal ends in their own best interest and without their consent (Dworkin, 2013). At the heart of paternalism lies a conflict between two values, both of which are

of foundational importance in liberal democracy: the value we place on individual freedom versus the value we place on promoting and protecting the welfare of others. When citizens voluntarily engage in courses of action that put at risk their own welfare (such as swimming in dangerous rivers, riding bikes without helmets or smoking), the question whether the state should intervene becomes imminent. This is the problem of paternalism.

Discussions of autonomy and paternalism are at the forefront of contemporary public health ethics (Jennings, 2009; Thaler and Sunstein, 2009; Dawson and Verweij, 2010; Ménard, 2010; Thomas and Buckmaster, 2010; Blumenthal-Barby, 2012; Grill and Fahlquist, 2012; Skipper, 2012; Barton, 2013; Blumenthal-Barby *et al.*, 2013; Conly, 2013a,b; Hakkarainen, 2013; Owens and Cribb, 2013; Resnik, 2014; Wardrope, 2015). As Dawson and Verweij (2010) notes, this discussion is clearly of relevance to the debate over plain packaging. However, the debate so far neglects the ethical question about paternalism and primarily focuses on issues of legality and whether plain packaging supports important behavioural and attitudinal public health aims.

The public health debate addresses three main themes: (i) reduction of the symbolic value of tobacco packaging (Wakefield *et al.*, 2012; Borland *et al.*, 2013; Ford *et al.*, 2013a; Moodie and MacKintosh, 2013; Scheffels and Sæbø, 2013); (ii) reinforcement of consumers' health attitude towards smoking, increased

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**Figure 1.** Plain cigarette packs. Prototype of plain cigarette packaging as mandated by The Tobacco Plain Packaging Act 2011 (PA, 2011a), which came into force December 2012 in Australia.

recall and perceived seriousness of health messages (Hammond et al., 2009; Munafò et al., 2011; Al-Hamdani, 2013; Maynard et al., 2013; Moodie and MacKintosh, 2013); (iii) evidence of behavioural change (e.g., attempts to quit, quit-line calls, reduced consumption; Moodie et al., 2012, 2013; Chantler, 2014; Maynard, 2014). For a systematic review of plain packaging conducted from a public health perspective, see Moodie et al. (2012, 2013). The legal dispute concerns two main issues: (i) infringement of intellectual property rights (Basham and Luik, 2011; Gleeson et al., 2012; Voon et al., 2012; Voon, 2013); and (ii) potential violation of constitutional rights to freedom of speech and freedom from state paternalism (Redish, 1996; Gostin, 2002; Hoefges, 2003; Bayer et al., 2012; Liberman, 2013).

This article extends the public health ethics discussion of paternalism to plain packaging. The main contribution is to analyse the extent to which tobacco plain packaging policy is ethically controversial: I interrogate the paternalistic dimension of tobacco plain packaging against key ethical criteria and make recommendations for how to improve the justification. The main unit of analysis is the Australian Tobacco Plain Packaging Act (PA, 2011a) and Bill (PA, 2011b). Understanding the ethical justification of this particular policy has never been more important: plain packaging is gaining significant international momentum and the Australian policy is setting a global precedent. The examples of international developments below are not a comprehensive overview of plain packaging policymaking globally. They are selected to provide a feeling of the rapid political developments in countries where governments have since decided to introduce plain packaging or where preparations to do so are highly advanced. Two examples of key developing countries are also included.

On 11 February 2014, New Zealand's plain packaging bill had its first reading (NZG, 2014). Later the same year, the Irish Government published a draft plain packaging legislation and pledged to become the first European country to introduce the policy (BBC, 2014). Also in 2014 following Chantler's (2014) review, the UK Government passed a plain packaging bill, which will come into force in May 2016 (Barber and Conway, 2014). In February 2015, the Norwegian government published a consultation on the proposal to introduce plain packaging (NG, 2015). In developing countries serious discussions to implement plain packaging are also taking place. Recently, the Indian High Court of Allahabad ordered the High Court of India to consider implementing tobacco plain packaging as part of a public interest litigation (PIL, 2013). In Latin America, Brazil's smoking legislation is very close to plain packaging (TLRC, 2014): All types of tobacco packaging must display verbal and visual health warnings appropriating 50% of the total size of the pack. With effect from 1 January 2016, a further 30% of the pack should be covered by verbal warnings.

# Plain Packaging and Paternalism

Following Dworkin (2013), I defined a public policy to be paternalistic insofar as it interferes with citizens' ability to choose or otherwise pursue their personal ends in their own best interest and without their consent. Paternalism thereby involves the substitution of the state's judgement for the citizen's to put limits on the individual's sphere of agency (e.g., limiting the engagement in potentially harmful courses of action such as boxing or smoking) (Dworkin, 2013). This definition is not normatively charged per se: it does not prescribe whether a given course of action, which falls under the definition, should be adopted or avoided (Grill, 2013). The rationale for adopting a non-normative definition of paternalism is 2-fold. First, the aim of the article is not to argue for or against plain packaging on grounds of paternalism, but to provide a balanced discussion of the extent to which various paternalistic dimensions of the policy are controversial. A normative concept would pre-empt the discussion. Secondly, Grill (2013) argues that adopting non-normative definitions of ethical and political concepts and principles provides for more constructive debates in that it is easier to clarify what disagreements are about and, thereby, potentially find solutions and pragmatic compromises.

At first, plain packaging appears not to be paternalistic. Although it is clearly designed to further citizens' long-term interests (i.e., good health) without their consent (i.e., the policy was introduced without explicit acceptance from those affected by the policy), it does not appear to interfere with citizens' ability to choose. The policy aims at making tobacco products less attractive, but does not restrict the undesirable behaviour: tobacco products are equally readily available. Furthermore, Barton (2013) argues that tobacco health warnings foster rather than undermine autonomy and thereby are non-paternalistic. The idea is that a desire's or preference's level of integration in the agent's self is relevant to an evaluation of the agent's degree of autonomy: the deeper the motivational construct is integrated in the self, the more autonomy conducive it is. Preferences to stop smoking are assumed to be deeper integrated in the self than compulsive desires to smoke. Tobacco health warnings, the argument goes, reinforce the ability to act autonomously by activating preferences to stop smoking, which are deeply embedded in the self. The argument is consistent with influential accounts of personal autonomy such as Frankfurt's hierarchical theory (Frankfurt, 1971, 1982; Buss, 2014). But in the case of plain packaging the argument is at odds with the empirical evidence: systematic reviews (Moodie et al., 2012, 2013) and evaluations of systematic reviews (Chantler, 2014) have not been able to evidence any sustained behavioural impact. A recent study found the main behavioural impact of the introduction of plain packaging in

Australia to be a significant increase in quit-line calls over a period of no more than 4 months (Young *et al.*, 2014). As of yet, plain packaging has been evidenced to reinforce the motivation to quit and quitting thoughts (Wakefield *et al.*, 2013), but not to translate this motivation into sustained action. By Barton's standards, the policy has not been evidenced so far to enhance autonomy. (See the section 'Operational Criteria/Efficacy' for an in-depth discussion of the empirical evidence on the causal efficacy of plain packaging.)

On interrogation, plain packaging involves at least three paternalistic measures. First, as Blumenthal-Barby (2012) argues, the mandatory use of visual health warnings is an intentional governmental measure to shape the preferences and behaviours of individual citizens in their own best interest without their consent. This clearly falls within the parameters of the definition of paternalism given above. Secondly, there are a significant number of consonant smokers (Haukkala et al., 2001) who knowingly and willingly consent to the potential harms of smoking and have no preference not to smoke. Forcing this group of smokers to the exposure of plain packaging is paternalistic, because the state overrules the citizens' personal judgments about their own best interests. Thirdly, marketing content is often an integral part of the product. Branded cigarettes communicate symbolic values (Hoek et al., 2012) and consumer culture research demonstrates the importance of such symbolic values in the development and expression of personal identity (Bahn, 1986; Belk, 1988; Arnould and Thompson, 2005). To the affected consumers, branded cigarette packs are not—as products—relevantly identical to plain cigarette packs. Plain packaging thereby does not only gain control over a stream of commercial information, but denies consumers access to purchase and consumption of a specific type of product. I elaborate on this argument in the next section's discussion of why plain packaging should be considered a form of strong paternalism.

## Types of Paternalism

I now classify the paternalistic nature of plain packaging according to the following distinctions: soft vs. hard; pure vs. impure; weak vs. strong paternalism. Soft, pure and weak paternalism are relatively non-controversial, whereas hard, impure and strong paternalism are controversial because they interfere more deeply with citizens' lives and ends. These distinctions are standard in philosophical discussions of paternalism. For a general overview of their use and common definitions, see Dworkin (2014). Crucially, the same

distinctions are also used in the paper 'Paternalism in Social Policy: When Is It Justifiable?' (Thomas and Buckmaster, 2010). That paper plays a special role because it is published by the Parliament of Australia and lead-authored by Matthew Thomas, who drafted the Tobacco Plain Packaging Bill 2011 (PA, 2011b). Thus, the definitions and justifications of different types of paternalism in Thomas and Buckmaster (2010) are directly linked to the general discussion of the justification of tobacco plain packaging, provided the Australian policy is taken as an international precedent. To obtain optimal alignment with the relevant body of policy documents, this paper adopts Thomas and Buckmaster's (2010) definitions.

# Soft vs. hard paternalism

A policy is paternalistic in the soft sense to the extent that it aims at protecting persons from harm to which they do not consent or to which they are involuntarily or unknowingly subject. Hard paternalism is the case when a policy interferes with personal decisions to voluntarily and knowledgeably engaging in courses of action, because they might cause personal harm. Hard paternalism requires extensive justification and is usually controversial, whereas soft paternalism is often acceptable without violating basic ethical values. In countries and regions such as Australia, USA and Europe where levels of media literacy are high and the average population is informed about the health impact of smoking, one can plausibly argue that smoking is a voluntary action the consequences of which people are fully aware. Plain packaging, the argument goes, therefore falls within the category of hard paternalism. This argument, however, does not take into account the element of addiction and other involuntary and unwanted features—notably social pressure (Vries et al., 1995) which may lead to smoking uptake. Recent North American and older Australian evidence suggests that, over time, the vast majority of smokers (69-75%) want to quit permanently (Mullins and Borland, 1996; CDCP, 2011). Moreover, most smokers have great difficulty in not smoking every day and experience prolonged withdrawal symptoms (Benowitz and Henningfield, 1994). Finally, smoking onset usually takes place in childhood or adolescence, with 9 of 10 smokers starting before age 18 (USDHHS, 2012). Although underage smokers often are aware of the dangers of smoking, they do not consider the long-term health consequences as being relevant (USDHHS, 2012). Their capability for rational, informed decision making is not fully developed and their decisions to smoke-although having knowledge of the health consequences at the time of smoking onset—therefore do not imply any consent to the foreseeable long-term harm. On these grounds it is reasonable to classify plain packaging as soft paternalism.

## Weak vs. strong paternalism

Weak paternalism interferes with people's ability to employ certain means to achieve an end, whereas strong paternalism interferes with the end per se.<sup>2</sup> Strong paternalism requires extensive justification and will in most cases be considered controversial. In one sense, it is obvious to describe plain packaging as weak paternalism, because the policy interferes with certain features and properties related to a given type of product without constraining consumers' access to the product. The end, to smoke, is still equally accessible. To provide an analogue, think of a supermarket that as part of a commitment to reduce its carbon footprint only provides and allows customers to use biodegradable carrier bags. This is not a form of strong paternalism because the intervention does not interfere with any course of action, but only influences the way in which a given type of action can be carried out. The conventional and biodegradable carrier bags are relevantly identical in terms of their core customer benefit (i.e., enabling convenient transportation of products from store to home).<sup>3</sup>

However, taking into account insights from consumer research on the role of branding in the construction and expression of self-identity and social belonging (Bahn, 1986; Belk, 1988; Arnould and Thompson, 2005; Hoek et al., 2012), plain packaging turns out to be a form of strong paternalism. There is ample evidence that tobacco brands reflect different lifestyles and symbolic appeals and that especially young consumers use branded tobacco packs as narrative material (Schembri, Merrilees and Kristiansen, 2010) to convey a desirable self-image (Moodie et al., 2012, 2013). The reasons for starting smoking in the first place and for choosing one brand of cigarettes over another are correlated with the symbolic and emotional values conveyed by the branded packs. Branded tobacco packs thereby play a crucial psycho-social role to many smokers, which is undermined by plain packs. To these smokers, the absence of the emotional and symbolic benefits means that branded packs and plain packs are not relevantly identical products. Plain packaging thus interferes with citizens' ends by denying access to a certain type of product with a unique set of symbolic benefits (branded cigarettes), which is relevantly different from other product types (e.g., plain cigarettes) within the same product category (cigarettes), because the other product types do not offer the desired symbolic benefits. Plain packaging is therefore a form of strong paternalism.

## Pure vs. impure paternalism

According to Dworkin (1972, 2014), a paternalistic policy qualifies as pure paternalism when the set of people affected by the policy is identical to the set of people that the policy seeks to benefit. Conversely, a paternalistic policy is impure when the set of people benefitting from the policy overlaps with the set of people being interfered with, but the two sets are not of the same size. Thomas and Buckmaster (2010: 16), who apply the Dworkinian definition to their discussion of paternalism in social policy, qualify the definition by explaining its relevance to the underpinning value of autonomy: pure interventions 'avoid interfering with the liberty of those not deemed to require protection'.

Pragmatically, the distinction between pure and impure paternalism should be presented as a spectrum. Assume that a paternalistic policy is impure, but that the set of affected people that should not be protected (e.g., those who knowingly and willingly consent to the harm) is very small (n = 5). The number of affected people who should be protected is significantly bigger (n = 1m). In such a scenario, for a policy to be impure seems like an irrelevant ethical consideration. To make the distinction between pure and impure paternalism ethically relevant, it is therefore reasonable to approach the distinction as a spectrum. A standard should then be set for when the size of the set of affected people that should not be protected is ethically relevant. Even though there is no agreement on a relevant cut-off point, it is reasonable to classify plain packaging as relevantly impure, because there are a significant number of consonant smokers (Haukkala et al., 2001). Assuming that the set of consonant smokers is identical to the number of smokers who do not want to quit, statistics from the USA and Australia indicate that roughly 25% of all smokers are consonant and Borland, 1996; CDCP, Consequently, plain packaging aims at protecting a very significant number of people against harm, to which they consent and from which they do not wish to be protected. It is therefore relevantly impure.

## **Individual Preferences**

Echoing Goodin (1995), Thomas and Buckmaster (2010, p. 10) argue that for a paternalistic policy to be justifiable it has to 'better respect a person's own preferences than the person might have done through his or her own actions or choices'. The rationale: individuals often are unable to act according to their own

preferences—not necessarily due to external constraints—but simply because they are unable to form effective motivations to act according to their own preferences. The idea is that if paternalistic policies empower citizens to form effective motivations to act on what is—to the targeted individuals—key preferences that would otherwise have been inactive, then such interventions are justified, because they better respect the values of the targeted individuals than they are able to on their own accord. This line of reasoning is highly relevant to plain packaging and motivates the following argument of empowerment: paternalistic anti-smoking policies are justified because they influence smokers wishing to stop to engage in effective cessation and thereby empower a large group of citizens to act on highly important preferences, which would otherwise have been inactive. Seeing that the majority of smokers want to quit (CDCP, 2011), this argument is justified in principle. In the practical policy context, however, the argument hinges on the behavioural efficacy of plain packaging, for which no studies have provided compelling evidence (Moodie et al., 2012, 2013; Chantler, 2014; Maynard, 2014). (See the section 'Operational Criteria/Efficacy' for an in-depth discussion of the empirical evidence on the causal efficacy of plain packaging.)

Goodin (1995) introduces the dimension of time into the evaluation of personal preferences. Some preferences enjoy existential primacy, because they are settled into one's self: they endure over various time-sections of one's life. For example, preferences to be a loving parent, loyal friend and reliable person are likely to endure from their emergence to the end of a person's life. Other preferences, such as wanting to be popular, climbing mountains and making a good career are likely to only endure over a limited span of time sections. Thomas and Buckmaster (2010) develop this observation into an argument, which has bearing on the justification of paternalist policies. Their idea is that present selves are short-sighted and thereby unable to adequately take into consideration aspects that will be crucial later in life. Especially young people are prone to make decisions that run counter to what will most likely be key preferences in their future selves. Most smokers, for instance, start young, and strong evidence shows that the decision to take up smoking is statistically at odds with the persons' future selves (most smokers regret starting). In terms of paternalism, policymakers should take into account the anticipated difference between the present and future selves of the targeted individuals. As Thomas and Buckmaster (2010: 11) suggest, 'the greater the distance between the present and the future selves, the less weight

should be given to decisions made by the present self'. On this ground, plain packaging paternalism is justified in interfering with the autonomy of young people, because the policy aims at preventing the targeted individuals from making decisions that are statistically at odds with core preferences in their future selves.

The extent to which future selves should be taken into account when legitimizing paternalistic interventions is subject to debate (Rizzo and Whitman, 2009). I propose two principle reasons why the preferences of future selves matter in this context. First, for an agent, A, at any given time, t, A's future self preferences, P, are superior to the preferences of A's contemporaneous self insofar as A at t makes a decision that will significantly limit A's freedom in the future in ways that A will disapprove of in light of P. This means that if the decisions that a person is about to take are likely to limit his or her future freedom in ways that the person will regret, then the state can justifiably interfere with that person's decisions. Smoking is often such a decision. The strongly addictive element means that the vast majority of smokers will find that in the future they will be unable to stop smoking although they have a strong desire to do so. Because smokers will almost certainly regret ever starting, smoking is an addiction that constrains the freedom of action of the future self in ways that are dangerous to the self. Intervening with the present self to protect the future self is thereby a freedom preserving measure with correlated positive health outcomes and therefore not paternalistically controversial. This argument unpacks Sen's (2007) speculation 'whether youthful smokers have an unqualified right to place their future selves in such bondage [i.e., addiction]'.

Secondly, the multiple selves approach in contemporary law argues that we have a legal right to live in accordance with our 'basic sense of self (Matsumura, 2014, p. 98)'. This means that legal decisions which one regrets at a later point in time under some circumstances should be re-assessed in light of the contemporaneous self's circumstances, experience and preferences (Matsumura, 2014). Applied to plain packaging, it is safe to say that for the majority of smokers, the decision to smoke causes a prolonged period of time during which a person cannot live in accordance with his/her basic sense of self insofar as involuntary addiction is a form of alienation from one's real self (Frankfurt, 1971, 1982).

## The Harm Principle

The justification of paternalist policies is closely linked to the harm principle, originally developed by John Stuart Mill in his treatise, On Liberty (Mill, 1859).<sup>4</sup>

The principle holds that states are allowed to interfere with the autonomy of individuals only to prevent harm to others. Intervening in individuals' lives on grounds they are engaged in immoral or self-harming behaviours is not justified insofar as these behaviours do not directly or indirectly cause harm to other people. Courses of action likely to cause harm to others are permitted insofar as the set of people expected to be in harm's way knowingly and willingly accept engaging in these courses of action (e.g., knowingly and willingly engaging in sports such as boxing that might incur both self-harm and other-harm).

One can smoke without harming others by ensuring that others are not exposed to second-hand smoke. Moreover, under some conditions, people may knowingly and willingly agree to be exposed to second-hand smoke (e.g., at a private party). However, the reality of second-hand smoking is not to be ignored. In a recent study involving data from 192 countries, Öberg et al. (2011) estimate the global health impact of second-hand smoke: in 2004, 40% of children, 33% of male and 35% of female non-smokers were exposed to second-hand smoke. In the same year, an estimated 603,000 deaths across the surveyed countries were attributable to second-hand smoke. Although a number of people exposed to second-hand smoke may knowingly and willingly accept the exposure (e.g., accepting exposure from a spouse smoking in their home), a significant number of adults are involuntarily exposed to second-hand smoke. Crucially, all children must be regarded as subjects of involuntary exposure (Frijters et al., 2011).

Plain packaging's relationship to the harm principle is thereby conflicted. Core to the public health justification of plain packaging is, on the one hand, to safeguard active smokers from direct harm following from their own actions and, on the other, to protect passive smokers from second-hand smoke. Protecting others against physical harm caused by second-hand smoke is clearly within the parameters of the harm principle. But protecting the tangible number of consonant smokers against harm is equally clearly in breach of the harm principle. The conclusion is therefore that plain packaging is only partially justified against the harm principle. Moreover, it should be noted that if smoking in the presence of children and non-consenting adults were to be banned, then legal smoking would not put others at risk. Under such circumstances, plain packaging would conflict with the harm principle and, on those grounds, be non-justifiable within a liberal-democratic framework.

# Irreversible, High Stake Decisions

Thomas and Buckmaster (2010) argue that paternalistic policies are justified if they address high stake, irreversible personal decisions. This criterion is obviously relevant to plain packaging. Goodin (1995) defines a high-stake decision as a choice that is likely to highly influence the agent's subsequent life conditions. Smoking is clearly a high-stake decision: each year 435,000 people in the USA die prematurely from smoking-related diseases, causing 1 in 5 deaths (Benowitz, 2010). Yet, opponents may argue that it is not the particular action (i.e., smoking one or two cigarettes at a limited number of special occasions), but the pattern of consumption (i.e., smoking three or more cigarettes each day over an extended period) that poses a health risk. Thus, smoking is not a high-risk decision per se: the risk is conditional on the nature of the decision, i.e. whether one decides to be a daily or social, occasional smoker. As plain packaging does not distinguish between the two types of decisions (occasional vs. daily smoking), occasional smokers are unduly paternalized. This further intensifies the extent to which plain packaging is an impure and thereby controversial form of paternalism. However, empirical evidence fundamentally contests this argument. One study (Russell, 1990) found that 'over 90% of teenagers who smoke 3-4 cigarettes are trapped into a career of regular smoking which typically lasts for some 30-40 years'. Consequently, decisions to smoke occasionally are in most cases high stake because they lead to sustained consumption over a large span of years.

To justify paternalistic intervention, the decision to smoke also needs to be irreversible. There are two different notions of irreversibility of decision. As was the case for high-stake decisions, Thomas and Buckmaster (2010) tie the notion of irreversibility of decision to addiction: a decision to act in a given way, P, is irreversible if the agent, upon his or her decision to do P, is likely to experience great difficulty in not doing P. On this definition the decision to smoke qualifies as irreversible because most people become addicted after a short period of daily consumption (Russell, 1990). This characterization nevertheless seems like a stretch in that each year many smokers successfully kick the habit, on their own accord or assisted by cessation services (Ranney et al., 2006; Chapman and Wakefield, 2013). The suggested definition of irreversibility of decision is not fit for purpose.

However, irreversibility of decision is not necessarily linked with compulsion or addiction: many actions are relevantly irreversible by virtue of their consequences rather than their motivational character. I suggest including the qualifier 'relevantly irreversible' because all actions are irreversible in the sense that what is done cannot be undone. In this context, I suggest the following definition of irreversibility of action: if A were to start smoking at some point in time,  $t_1$ , and continue consumption over a substantial period,  $t_1$ - $t_3$ , then it would have substantive negative health impact at a later point in time,  $t_4$ .

Although the substantive negative health impact of smoking is undisputable, one should exert caution when drawing conclusions as to whether smoking is an irreversible decision in the above sense. The reason being that stopping smoking—even after many years of smoking—has 'substantial immediate and long-term health benefits for smokers of all ages' (Edwards, 2004: 218). For smokers who quit before 35 years of age, life expectancy is the same as that for non-smokers. Quitting before 30 years of age reduces the risk of developing lung cancer by 90%. Moreover, the excess risk of death continues to decrease after cessation. Smoking thereby fails to meet both formulations of irreversibility of decision.

One objection to this argument is that the notion of irreversibility of decision does not apply to vulnerable social groups whose actual chances of quitting are slim. But that argument is unconvincing. First, a descriptive definition of what a certain type of decision is should not be constrained by normative considerations of its desirability or empirical observations of its probability. Secondly, that some social groups may find it harder to engage successfully in cessation and thereby more difficult to obtain the associated health benefits does not mean that these benefits do not apply to these groups, but only that they are less likely to obtain them.

In terms of the criterion of high stake, irreversible decisions, plain packaging is partly justified. On the one hand, smoking is most reasonably characterized as a high-stake decision, because it oftentimes leads to prolonged nicotine addiction, which, in turn, results in long-term smoking with serious harm to health as a consequence. On the other hand, the decision to start smoking is not relevantly irreversible in the sense that many smokers manage to quit and that cessation has immediate and long-term health benefits and in some cases almost reduces the risk of developing smoking-related diseases.

# **Operational Criteria**

While there may be consensus that a given type of paternalistic intervention, X, is justified *in theory*, it may

still be subject to debate whether a specific instance of X is justified in practice. The previous section outlined the theoretical conditions under which plain packaging paternalism is justifiable, whereas this section focuses on two practical requirements of justification. These operational criteria apply across a range of policy contexts and are thereby not uniquely relevant to the paternalistic justification of the policy. They merit discussion here because the practical implementation of paternalistic policies hinges upon them. The discussion is closely tailored to the context of plain packaging.

The first operational condition is a 2-fold criterion of efficacy: paternalistic public health policies should have demonstrable impact on the targeted behaviours (causal efficacy) and not produce significant adverse impact (unintended side effects). This criterion has recently been subject to discussion in terms of food and beverage public health policy (Conly, 2013a,b; Resnik, 2014). Second is the criterion of proportionality: this article introduces and defines the notions of means-end, material and relative proportionality. Means-end proportionality is about ensuring that public health policies interfere minimally with personal autonomy. Material proportionality concerns the justified use of threats and fear appeals in public health communications. Relative proportionality addresses the conditions under which it would be warranted for the state to extent tobacco plain packaging to other areas such as unhealthy food and alcohol.

#### Efficacy

Paternalistic policies should be effective in at least two different respects: causal efficacy and avoidance of unintended side effects.

#### Causal efficacy

Paternalistic interventions should have measurable positive impact by impeding unwanted behaviours and facilitating desired behaviours. On this dimension, the Plain Packaging Act is controversial. First, the main objectives of the Act (PA, 2011a: 3) are 'to improve public health by: (i) discouraging people from taking up smoking, or using tobacco products; and (ii) encouraging people to give up smoking, and stop using tobacco products'. The problem is that the objectives are framed such that they can be achieved without actually changing the targeted people's behaviour. A person can feel discouraged from engaging in a certain type of behaviour and yet still engage in that behaviour. To 'discourage' and 'encourage' refer to mental attitudes or dispositions that not necessarily translate into action. Thus, the Act can meet its objectives without ever changing actual behaviours. To pass the test of behavioural efficacy, the policy needs in the first place to adopt clear behavioural goals and devise a detailed methodology for measuring behavioural impact.

However, the key issue is that the behavioural evidence is weak. Research on plain packaging employs two different types of behavioural evidence: empirical and inferential. The empirical evidence falls in two main categories. On the one hand, the majority of empirical studies apply self-report methods where the behavioural impact of plain packaging is measured against participants' own reports of how much they smoke during a given intervention (Moodie et al., 2012, 2013). To take just one example, Moodie and MacKintosh (2013) asked participants to use plain packs and branded packs for 1 week each and then report differences in consumption. Self-report studies are vulnerable to self-report discrepancies such as under-reporting (false negatives) and over-reporting (false positives) (Krumpal, 2013). One of the key reasons is social desirability bias: participants have a significant tendency to produce false negatives when they perceive the reported behaviour to be socially unattractive, and false positives when the behaviour is assumed to be socially attractive in a relevant reference group (Krumpal, 2013). Social desirability bias has received extensive attention in tobacco research, but the findings are non-conclusive. Some studies find self-report to be a valid measure of tobacco consumption (Wong et al., 2012), whereas others document significant under-reporting (false negatives) (Kang et al., 2013).

There are counter measures, which can be used to validate self-report data in smoking interventions, most importantly biochemical validation such as urinary cotinine measurement (Wong et al., 2012; Kang et al., 2013) and smoking topography devices (Hammond et al., 2005; Maynard et al., 2014). No plain packaging studies have used biochemical validation. One plain packaging study (Maynard et al., 2014) has used handheld smoking typography devices, but this introduces another problem: Hammond et al. (2005) found that 58% of participants report that using the device changes their smoking behaviour. This countermeasure simply transfers the validity problem from self-reporting to another element of the research design. As it stands, the use of counter measures to minimize bias is underutilized and, when used, associated with the same type of validity problems they are supposed to solve. Perhaps this is why the Chantler review (2014: 48) explicitly dismisses the relevance of measuring exposure to minimize self-report bias. From a scientific point of view, this is nonetheless

disappointing. To increase validity, plain packaging research must invent other markers of validity, perhaps qualitative innovations such as other-reporting (e.g., partners or spouses counting the number of cigarettes consumed during times where they are normally together with the participant).<sup>5</sup>

On the other hand, there is a small set of studies that identify relevant behaviours that can be measured against objective quantitative data collected independently from any interaction with participants (Moodie et al., 2012, 2013). The most important study is Young et al. (2014) who found that the introduction of plain packaging in Australia 2012 led to a 78% increase in quit-line calls. This is indeed a relevant behavioural aim. However, the effect is not sustained over time and in April 2013 quit-line calls were at the same level as before the introduction of plain packaging. The effect lasted for no more than 4 months. Maynard (2014: 35) has conducted the first randomized controlled trial and interim findings suggest that 'results do not show reductions in smoking behaviour over the short term'. Maynard (2014: 35) qualifies that the impact of plain packaging on 'attitudes and experiences of smoking . . . may change behaviours more slowly over time'. However, this is a conjecture. The study protocol of the randomized controlled trial has just been published (Maynard et al., 2014), but the findings are currently under review (Maynard 2014). There are other types of behavioural studies in the area-e.g., eye-tracking (Maynard et al., 2013), experimental auctions (Thrasher et al., 2011) and Pavlovian to instrumental transfer studies (Hogarth et al., 2015)—but these do not address key confounding variables and are not sufficiently correlated with relevant behavioural outcomes such as reduced consumption or quit-line calls. These studies are therefore excluded in this analysis.

Inferential evidence lies at the heart of the Chantler Review's (2014: 40) conclusion that '... the introduction of standardised packaging . . . would be very likely over time to contribute to a modest but important reduction in smoking prevalence...'. In the absence of sufficiently strong empirical evidence for the behavioural efficacy of plain packaging, Chantler establishes the likely behavioural impact of the policy by reference to studies in other research areas. To bridge the gap between being motivated to stop smoking (which is a mental state that plain packaging is evidenced to produce) and actually stopping or reducing smoking (which is a behavioural change that plain packaging has not been evidenced to bring about), Chantler relies on research in social psychology and health behaviour. The referenced research (e.g., Sheeran, 2002; Webb and

Sheeran, 2006) finds a causal correlation between motivational states and actual courses of action such that a medium-to-large change in relevant health intention or motivation leads to a small-to-medium change in health behaviour. Against that background Chantler (2014) draws the conclusion that plain packaging over time will lead to smoking cessation and reduced consumption.

The problem is not that the relevant type of inference should not be used, but that it supports the opposite conclusion equally strongly. Recent research documents a very substantial intention-behaviour gap with respect to health behaviours that require strong motivation such as physical exercise (Rhodes and Bruijn, 2013). Rhodes and Dickau (2012) find that a medium size change in behavioural intention leads to an insignificant change in behaviour. They conclude that the impact of intentions on actual behaviour change may be below practical value.

There are no independent reasons why this competing body of research should be less compelling than the body of research on which Chantler is basing his inference. Consequently, the opposite conclusion that plain packaging is very likely to *not* lead to a significant reduction in consumption—because of the intention—behaviour gap—is equally justifiable.

One may argue that the lack of behavioural evidence is not necessarily a major problem. The Chantler Review (2014: 40) concludes that '... research cannot prove conclusively that a single intervention such as standardised packaging of tobacco products will reduce smoking prevalence'. The underpinning rationale seems to be that the behavioural dimension of public health policy should not necessarily be measured at the level of single policies (such as plain packaging). Rather, public health policy impact may be measured holistically such that what counts is the impact of a collection of policies (e.g., all anti-smoking policies and interventions) in a given domain (e.g., Australia) over a large span of time (e.g., 30 years).

There are two issues with this line of argument. First, even at the level of a single policy, the number of confounding variables makes it challenging—but not impossible—to measure behavioural impact. But at the holistic level over a very significant time span, the problem of confounding variables seems insurmountable. The main critique, however, is that ignoring the need to demonstrate behavioural impact of single public health policies conflicts with the predominant understanding and requirements of evidence-based public health policy. Brownson *et al.* (2009) outlines three core elements of evidence-based public health policy:

process, content and outcomes. Plain packaging performs strongly on the process dimension: the field employs many different scientific approaches (e.g., surveys, focus groups, interviews, eye-tracking, auctions) and interventions (e.g., participants alternating branded and plain packs over a period of time). But the policy does not perform well against the two other criteria. In terms of content, plain packaging has failed to identify policy elements that are likely to be effective. In terms of outcomes, the most robust studies find either that behavioural impact cannot be sustained over a reasonable time section (e.g., Young et al., 2014) or insignificant direct impact on consumption and cessation (Maynard, 2014). Moreover, the inferential evidence supports the conclusion that plain packaging is likely not to have any significant impact on smoking cessation or uptake.

#### Unintended side effects

Paternalistic interventions should not have significant unintended consequences that are likely to cancel out the obtained benefits. Opponents claim plain packaging to increase the production and import of counterfeit cigarettes, which contain even higher levels of harmful ingredients than legally produced and marketed cigarettes. This will further intensify the health challenges posed by tobacco consumption as well as pose a significant loss in legal corporate profits and government revenues (Imperial Tobacco Australia, 2010; Deloitte, 2011). This argument is speculative (Chantler, 2014) and key industry players admit that more research is needed to justify the claims (Deloitte, 2011).

However, one may expect the mandatory employment of fear appeals to cause a number of adverse, unintended side effects (Guttman and Salmon, 2004; Hastings et al., 2004; Thompson et al., 2009; Bell et al., 2010). In our case, stigmatization and victim blaming is of serious concern as Ford et al. (2013b) have found plain packaging to induce and intensify feelings of shame and disgust. Such feelings undermine self-efficacy beliefs (Baldwin et al., 2006), which is detrimental as self-efficacy beliefs are an important predictor of successful behaviour change such as smoking cessation (O'Leary, 1985; Bandura, 2010). Furthermore, one study found stigmatization as a tool of tobacco de-normalisation to exacerbate health inequalities by having counter-productive effects amongst disadvantaged smokers, who represent the majority of all smokers (Bell et al., 2010).

In terms of efficacy, plain packaging appears to be a controversial policy, for two main reasons. First is the lack of empirical evidence for the behavioural efficacy of the policy. Second is the justified expectation that the policy's use of fear appeals is likely to cause negative unintended consequences in the form of emotional harm (shame, disgust) and impaired self-efficacy beliefs, which impede the prospects of smoking cessation.

## Proportionality

The criterion of proportionality is relevant to the justification of paternalist policies. There are three types of proportionality involved in our discussion.

# Means-end proportionality

This criterion holds that a paternalistic policy must not employ means of intervention exceeding that which is necessary to obtain the desired benefits and levels of protection against harm. Put differently, paternalistic interventions are justified only if they involve the minimal level of liberty-interference necessary to obtain the desired benefit. This means that if there is a set, S, of possible measures, M<sub>1</sub>-M<sub>n</sub>, that could all lead to the desired benefit, X, then only the M which involves the minimal level of liberty-interference should be accepted. As of yet, there is no justification of plain packaging that directly addresses means-end proportionality. One of the anonymous reviewers of this article rightly observes that the criterion implies that plain packaging should be compared with other measures to reach a judgement of minimality or non-minimality of liberty-interference. That comparison does not turn out in favour of plain packaging, because there are plenty of other types of anti-smoking measures such as quit lines, nicotine replacement therapy (e.g., nicotine patches or nicotine gum) and counselling, which are based on active individual choice (non-paternalist) and can lead to the desired benefit (cessation or reduced consumption). A recent Cochrane review (Cahill et al., 2013) finds that especially nicotine replacement therapy is an effective means of managing withdrawal symptoms and substantially increases the chances of cessation.

### Material proportionality

This criterion means that communications warning consumers against a given product should be proportional to the expected negative impact likely to be incurred through normal consumption. Thus, depiction of product P (cigarettes) as a cause of X-type of disease (throat cancer) in y-state of progression (terminal) should be used as a mandatory health warning, only if average sustained consumption of P is likely to bring about X(y).<sup>6</sup> If the mandatory health warnings do not

correspond to the future state of affairs awaiting the average consumer, then the communication strategy integral to plain packaging is materially disproportionate.

Research on the efficacy of fear appeals and threat messages in public health communications underscores the importance of the criterion of material proportionality. The motivational and behavioural impact of fear appeals is conditional on the target audiences' perceived susceptibility to the threat (Peters et al., 2013). If perceived susceptibility is low, then fear appeals have insignificant or negative effect on intentions to act in accordance with the public health advice (Peters et al., 2013). Indeed, if low perceived susceptibility is combined with low perceived efficacy, then exaggerated fear messages may decrease the likelihood of the target adopting the desired behaviour and increase the likelihood of counter-behaviours (Peters et al., 2013). A recent study found that 80% of smokers exposed to graphical health warnings experienced behavioural reactance (Erceg-Hurn and Steed, 2011), which is a subjective counter-reaction to the perceived limitation or threatening of behavioural freedoms (Ruiter and Kok, 2005). Material proportionality ensures coherence between perceived susceptibility and the fear message and thereby decreases the likelihood of counter-agency and increases the likelihood of the target adopting the desired behaviour.

The key policy documents do not provide any evidence as to whether the health impact of average tobacco consumption corresponds to the health consequences, which must be depicted on the packs. Given the significant number of smokers who terminate (Chapman and Wakefield, 2013; Ranney *et al.*, 2006) and the substantive health improvements associated with cessation (Edwards, 2004), it has not been shown that the Act meets the criterion of material proportionality.

# Relative proportionality

This criterion holds that if the state endorses paternalistic interventions with regard to a given type of consumer product on grounds it is likely to cause significant harm, *then* the state can justifiably introduce structurally identical paternalistic interventions with regard to all other consumer products if they are comparably likely to cause significant harm. Insofar as coherence and internal consistency is a relevant criterion of policy development, then the principle of relative proportionality is warranted. The driving epistemological component of the principle is the sub-principle that: (i) if A applies to all X in R respect; and (ii) if X and Y are

relevantly identical or comparable; then (iii) A applies to Y in R respect.

The principle of relative proportionality is logically intuitive and yet challenges plain packaging profoundly, because it potentially justifies the extension of plain packaging to the most fundamental of all commodities, food. Mokdad *et al.*'s (2000: 1238) study of the actual causes of death in the USA makes this conclusion plain: 'The leading causes of death in 2000 were tobacco (435,000 deaths; 18.1% of total US deaths), poor diet and physical inactivity (400,000 deaths; 16.6%), and alcohol consumption (85,000 deaths; 3.5%)'. 'Thus, in the USA tobacco and food are relevantly comparable products in terms of public health risk factors, because both cause a substantial number of deaths. This indicates that plain packaging should therefore also be introduced to food and alcohol.

Some critics will find this argument to be flawed, for two main reasons. First, tobacco and food may be seen as non-comparable, because there is no safe level of tobacco consumption, whereas food is a necessary condition to maintain life. Secondly, tobacco has been proven to kill half of all persistent smokers (Doll et al., 1994, 2004) and is thereby a far greater threat than diet-related ill health. Yet, this argument does not stack up against the empirical evidence. Scarborough et al. (2011: 527) estimate the economic cost of risk factors for chronic disease due to poor diet, physical inactivity, smoking, alcohol and obesity in the UK. Based on economic data from 2006 to 2007, they find that 'poor diet is a behavioural risk factor that has the highest impact on the budget of the NHS [National Health Service UK], followed by alcohol consumption, smoking and physical inactivity'. While it may sound provocative to compare tobacco and food in terms of health risk factors, in health economic terms the cost of treating chronic diseases caused by poor diets far outstrips the comparable cost of treating chronic diseases caused by smoking. Scarborough et al. conclude that 'In 2006-07, poor diet-related ill health cost the NHS in the UK £5.8 billion. The cost of physical inactivity was £0.9 billion. Smoking cost was £3.3 billion, alcohol cost £3.3 billion, overweight and obesity cost £5.1 billion'.

I do not wish to imply that chronic conditions associated with poor diet are more important or significant than chronic conditions associated with smoking. I am simply making the case that if plain packaging is introduced because smoking is a severe public health threat, then the principle of relative proportionality implies that plain packaging should also be introduced to some food and drink categories as they pose a comparable health threat in terms of being very substantial

Table 1. Actual justification of plain packaging

	Pla	in packaging		
F	Policy constructs		Justification	
Political concern	Principle, criteria	Sub-principle, sub-criteria	Controversial	Non- controversial
Type of paternalism	Soft vs. hard Weak vs. strong Pure vs. impure		V V	V
Respect for self-interests	Individual preferences	Empowerment Time endurance		$\sqrt{}$
Respect for others	The harm principle	Harm to others Harm to self	$\checkmark$	$\checkmark$
Nature of decision	High stake Irreversible	Addiction Consequence of action	$\sqrt{}$	V
Operational criteria	Efficacy	Causal Unintended side effects	$\checkmark$	
	Proportionality	Means-end Material Relative	$\sqrt{}$	

Overview of the extent to which plain packaging policy is justifiably paternalist within a liberal democratic framework, based on available scientific evidence.

public health challenges. The principle of relative proportionality therefore justifies extending plain packaging to food products.

This conclusion holds internationally insofar as poor diets and obesity are global health threats (WHO, 2000). A conservative guess must assume that extending plain packaging to food and drink would cause widespread political, industry and consumer opposition and be considered aggressively paternalistic. Yet, this would be a warranted development. There is therefore a strong need for clear demarcation of what product categories can justifiably be subjected to plain packaging. Especially, a demarcation of different types of food and drink is pertinent.

This is further emphasized by a recent industry report, which documents an 'identifiable cascade in the regulatory and tax burden from the more harmful products, such as tobacco, to less harmful product categories such as food...' (Deloitte, 2013). In line with the findings of the report, businesses are preparing for a future policy debate on non-tobacco plain packaging. For example, international law firms advice the food and packaging sector on plain packaging (e.g., Stephens, 2012; Stephens and Bond, 2014). The UK-based Consumer Packaging Manufacturers Alliance (CPMA, 2015) is actively lobbying against plain packaging. And individual global brands like Mars, the confectionary maker, and Diageo, the alcoholic beverage company, are voicing their concerns that the introduction of tobacco plain packaging will spread to other consumer products that are classified as unhealthy (Boyle, 2015; Qureshi, 2014).

# **Concluding Discussion**

Table 1 summarizes the results of the analysis of the justification of the paternalistic dimension of plain packaging policy. Table 2 provides an overview of the key contributions to the ethical framework.

In conclusion, the policy is partly justified. On the one hand, it meets important ethical benchmarks by empowering citizens to act on key personal preferences that would otherwise have been ineffective. On the other hand, the type of paternalism which plain packaging represents is largely controversial and the policy fails to meet all operational criteria. With regards to the harm principle, which is historically the most important ethical benchmark in the justification of libertyinterfering policies, the policy is conflicted: it aims at protecting non-smokers against harm from secondhand smoke and smokers against harm from their

	Plain packaging	Plain packaging paternalism: Overview of contributions to the ethical analysis
Main contribution of this paper	per	The main contribution of this paper is to analyse the paternalistic dimension of the tobacco plain packaging policy introduced in Australia, December 2012. The paper establishes an ethical framework (see Table 1) spanning a range of specific criteria, and analyses the policy against those criteria. The framework comprises a synthesis of contributions from a range of scholars and the author's original developments. This table provides an overview of the contributions.
Definition of paternalism		The paper's definition of paternalism relies on Dworkin's seminal discussions of different definitions of paternalism.  Dworkin, G. (2013). Defining Paternalism. In: Coons, C. and Weber, M. (eds.), Paternalism:  Theory and Practice. Cambridge: Cambridge University Press, pp. 25-38.  Dworkin, G. (2014). Paternalism. In: Zalta, E. N. (ed.), The Stanford Encyclopedia of Philosophy.
Type of paternalism	Soft vs. hard Weak vs. strong Pure vs. impure	The distinctions between the different types of paternalism are commonplace in analytic philosophy. This paper draws on Dworkin's (2014) discussion of the distinctions. Dworkin, G. (2014). Paternalism. In: Zalta, E. N. (ed.), The Stanford Encyclopedia of Philosophy.
Respect for self-interests	Individual preferences	The paper's discussion of the importance of respect for individual preferences to the justification of plain packaging builds on Thomas and Buckmaster (2010). Their discussion progresses from Goodin (1995). This paper contributes to the discussion of the ethical importance of preferences of future selves by providing independent arguments as to why the preferences of the future self sometimes are ethically superior to those of the contemporaneous self. Goodin, R. (1995). In Defence of the Nanny State. In: Etzioni, A (ed.) Rights and the Common Good: Communitarian Perspectives. New York: St Martin's Press.  Thomas, M. and Buckmaster, L. (2010). Paternalism in Social Policy: When Is It Justifiable? Canberra: Social Policy Section, Parliament of Australia.
Respect for others	The harm principle	Historically, Mill's (1859) harm principle is the single most important policy benchmark for paternalistic policies.  Mill, J. S. (1859). On Liberty. London: John W. Parker and Son.

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	Plain packagir	Plain packaging paternalism: Overview of contributions to the ethical analysis
Nature of decision	High stake Irreversible	Drawing on Goodin (1995), Thomas and Buckmaster (2010) discuss and define the notion of high stake irreversible decisions. This paper contributes to the generic ethical discussion by arguing against Thomas and Buckmaster's definition and providing an alternative definition. Goodin, R. (1995). In defence of the Nanny State. In: Etzioni, A (ed.) Rights and the Common Goodi. Communitarian Perspectives. New York: St Martin's Press. Thomas, M. and Buckmaster, L. (2010). Paternalism in Social Policy: When Is It Justifiable? Social Policy Section, Parliament of Australia.
Operational criteria	Proportionality	This paper introduces and defines three notions of proportionality (means-end, material and relative). Especially the criterion of relative proportionality is highly relevant for future policy development as it sets the boundaries for the extension of plain packaging to product categories other than tobacco. This is pertinent as the debate on plain packaging of unhealthy food an alcohol is gaining momentum.
	Efficacy	The analysis of causal efficacy and unintended side effects builds on Moodie et al.'s (2012, 2013) systematic reviews of plain packaging research and Chantler's (2014) review of the reviews. This paper challenges these authors' positive view on the behavioural efficacy of plain packaging by arguing that the inferential schema used to connect plain packaging with potential behavioural impact may equally strongly support the opposite conclusion, depending on which psychological studies one uses as behavioural evidence base.  Chantler, C. (2014). Standardised Packaging of Tobacco: Report of the Independent Review Undertaken by Sir Cyril Chantler. UK Department of Health, London.  Moodie, C., Angus, K., Stead, M. and Bauld, L. (2013). Plain Tobacco Packaging Research: An Update. Stirling, UK: Centre for Tobacco Control Research and Institute for Social Marketing, Ukiving, UK: Centre for Tobacco Control Research and Institute for Social Marketing, Ukiviersity of Stirling. UK: Centre for Tobacco Control Research and Institute for Social Marketing, University of Stirling.

own actions. While the harm principle clearly allows for the protection of others from second-hand smoke, it would characterize interference with consonant smoking that does not put others at risk as unjustified.

Policymakers can alleviate many of the controversial points. Plain packaging policies can obtain material proportionality by ensuring that the adverse health conditions communicated on the pack (e.g., a picture of terminal throat cancer) correspond to the future state of affairs awaiting the average consumer. This, in turn, would also increase the impact of the health warnings as the motivational and behavioural impact of fear appeals is conditional on the target audiences' perceived susceptibility to the threat (Peters et al., 2013). Achieving this benchmark is a matter of policy reformulation. The policy fails on the criterion of causal efficacy for two reasons. In the first instance because the policy aims are expressed in terms of motivational states rather than behavioural change. The first step towards meeting this criterion is therefore to adopt clear and measurable behavioural aims and outline key behavioural change metrics. This is again a matter of policy reformulation. However, the core concern is that the behavioural evidence is weak. There is an immediate need for additional research that establishes a direct causal link between plain packaging and relevant behaviours and which neither relies on self-reporting nor bridges the intentionbehaviour gap by reference to psychological studies in other areas of research (Chantler, 2014).

Four elements are expected to remain controversial in future policy development, even if behavioural impact is evidenced. First, the cited evidence indicates fear appeals to be inherently connected with unintended side effects such as stigmatization and stereotyping, which is a form of emotional harm. Secondly, plain packaging must be expected to remain an impure intervention because a number of consonant smokers must be anticipated at all times. Third, plain packaging is likely to remain a form of strong paternalism, because the policy prevents citizens from consuming a specific type of product benefits. To smokers, branded packs and plain packs are not relevantly identical products in that only branded packs offer highly valuable symbolic benefits. Fourth, relative proportionality will prove very difficult to obtain, because it would require extending the policy to some food and drink categories, which would be a move that would likely be met with profound opposition from citizens, politicians and industry.

On one dimension—the criterion of high stake, irreversible decision—the policy may reasonably be expected to face impeded justification. The reason being that as cessation services become more effective and

changes in cultural norms increasingly discourage smoking (Moodie *et al.*, 2012), it is likely that more smokers will quit after shorter periods of time. This will further increase the substantial immediate and long-term health benefits of cessation and contribute to the reversibility of decision.

Thus, plain packaging policy is currently a controversial paternalist policy, the justification of which can be significantly improved in two ways. First is to commission independent research, which robustly confirms the behavioural efficacy of plain packaging. Second is through policy development by adopting behavioural policy aims and inventing behavioural metrics.

This article has addressed the justification of the paternalistic dimension of plain packaging policies, but other ethical issues are also relevant. Even if future developments provide a full paternalistic justification of the policy, it may still be controversial against other ethical criteria. Most obviously, health equality is a key concern, which the discussion of paternalism does not take into account. For example, smoking cessation policies may be evaluated normatively against the extent to which they are effective in particular social groups, favouring impact among low-income, uneducated smokers. Although it is beyond the scope of this article to pursue the argument in detail, it is worth pondering that plain packaging may have adverse impact on health equality. The crux of the argument would go as follows: (i) A strong self-efficacy belief is an important precondition for an individual to successfully change behaviour (such as quitting smoking) (Strecher et al., 1986; Bandura, 2010; Schwarzer, 2014). Evidence suggests a negative correlation between socio-economic status and pro-active attitudes to behaviour change (e.g., self-efficacy) such that lower socio-economic groups have weaker beliefs in their own capacity to change their health status (Wardle and Steptoe, 2003; Denney et al., 2014). (ii) As previously discussed, fear appeals are often counterproductive among targets with low selfefficacy beliefs (Peters et al., 2013). This means that (iii) plain packaging may have a negative impact on health equality in that the fear appeals used are less likely to effectively motivate behaviour change among lower socio-economic groups.

# **Notes**

1. The main critics of plain packaging are tobacco companies or individuals associated with the tobacco industry. Having discussed a selection of industry arguments at some length, Chantler (2014)

reasonably finds the industry critique to be unconvincing. However, Chantler does not address the issue of paternalism, which the tobacco industry has also flagged up. Hastings (2012) would argue that the profit-maximizing interests of the industry would render their ethical criticism of the policy invalid. This is debatable. It is the position of this article that claims and arguments should be assessed—not against intentions and interests-but against evidence and ethical principles. The author of this article does not work for, consult to or own shares in the tobacco industry. His sole interest is an unbiased discussion of the ethical ramifications of tobacco plain packaging with respect to the particular issue of paternalism. The fact that the tobacco industry argues that plain packaging is paternalistic does not entitle academic scholars to dismiss the relevance of the claims. Rather, it places us under an obligation to discuss the merits of the claim against ethical principles, ignoring any special interests.

- 2. Dworkin, who has made several formative contributions to the understanding of paternalism since his seminal 1972 paper 'Paternalism' published in The Monist, employs the terms weak/strong paternalism. See, for example, his overview of paternalism in the Stanford Encyclopedia of Philosophy. Dworkin defines weak/strong paternalism in terms of interference with citizens' means and ends, which may have influenced Sunstein (2013) to subsequently use the term means/end paternalism for roughly the same types of paternalism. Perhaps shaping up is two different streams of research on public policy and paternalism: one associated with Dworkin and philosophical discussions of paternalism and (social) liberalism, another associated with Thaler's and Sunstein's work on behavioural economics.
- 3. I owe this example to one of the anonymous reviewers of the article. The example has been very helpful in clarifying the subsequent argumentation as to why I find plain packaging to be a strong form of paternalism.
- 4. See Faden and Shebaya (2015) for a general discussion of paternalism and the harm principle within the context of public health ethics.
- 5. Other reporting is, of course, associated with other issues such as significant selection effects (e.g., any participant would need to be a smoker who spends a substantive amount of time with the person observing their smoking activity). Also, this would only measure a part of the totality of the smoking activity. Nonetheless, it could be a workable way to triangulate data.

- 6. The operationalization of the principle of material proportionality should differentiate between rare and common diseases associated with smoking: it seems reasonable not to uphold the principle for rare smoking-related diseases such as Buerger's disease. Rare smoking-related diseases are not likely to result from average sustained tobacco consumption and the principle of material proportionality would therefore prevent plain packaging from using graphical health warnings in this case although this would run against the interests of the target audience. I would like to thank one of my anonymous reviewers for this important qualification.
- 7. Danaei et al.'s (2009: 1) more recent conclusion supports the assumption that food consumption is a very significant cause of preventable death: 'Smoking and high blood pressure, which both have effective interventions, are responsible for the largest number of deaths in the US. Other dietary, lifestyle, and metabolic risk factors for chronic diseases also cause a substantial number of deaths in the US'.

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# Conflict of Interests

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# References

- Al-Hamdani, M. (2013). The Effect of Cigarette Plain Packaging on Individuals' Health Warning Recall. Healthcare Policy, 8, 68–77.
- Arnould, E. J. and Thompson, C. J. (2005). Consumer Culture Theory (CCT): Twenty Years of Research. *Journal of Consumer Research*, **31**, 868–882.
- Bahn, K. D. (1986). How and When Do Brand Perceptions and Preferences First Form? A Cognitive Developmental Investigation. *Journal of Consumer Research*, 13, 382–393.
- Baldwin, K. M., Baldwin, J. R., and Ewald, T. (2006). The Relationship among Shame, Guilt, and Self-Efficacy. *American Journal of Psychotherapy*, **60**, 1–21.
- Bandura, A. (2010) Self-Efficacy. In Weiner, I. B. and Craighead, W. E. (eds), *The Corsini Encyclopedia of Psychology*. Hoboken, NJ: John Wiley & Sons, Inc., pp. 1632–1635.
- Barber, S. and Conway, L. (2014). *Standardised (Plain) Packaging of Tobacco Products.* London: House of Commons.
- Barton, A. (2013). How Tobacco Health Warnings Can Foster Autonomy. *Public Health Ethics*, **6**, 207–219.
- Basham, P. (2012). Plain Tobacco Packaging. *BBC Radio 4 Today*, broadcast August 10.
- Basham, P. and Luik, J. C. (2011). Erasing Intellectual Property: "Plain Packaging" for Consumer Products and the Implications for Trademark Rights. Washington, DC: Washington Legal Foundation.
- Basham, P. and Luik, J. C. (2012). Health Warnings on Consumer Products: Why Scarier Is Not Better. Critical Legal Issues: Working Paper Series. Washington, DC: Washington Legal Foundation.
- Bayer, R., Gostin, L., and Marcus-Toll, D. (2012). Repackaging Cigarettes – Will the Courts Thwart the FDA? New England Journal of Medicine, 367, 2065–2067.
- BBC (2014). Cigarette Packaging: Republic of Ireland Bid to Ban Branded Tobacco, available from: http://www.bbc.co.uk/news/world-europe-27781825 [accessed 16 May 2016].
- Belk, R. W. (1988). Possessions and the Extended Self. Journal of Consumer Research, 15, 139–168.

- Bell, K., Salmon, A., Bowers, M., Bell, J., and McCullough, L. (2010). Smoking, Stigma and Tobacco 'Denormalization': Further Reflections on the Use of Stigma as a Public Health Tool. *Social Science and Medicine*, **70**, 795–799.
- Benowitz, N. L. (2010). Nicotine Addiction. *New England Journal of Medicine*, **362**, 2295–2303.
- Benowitz, N. L. and Henningfield, J. E. (1994). Establishing a Nicotine Threshold for Addiction: The Implications for Tobacco Regulation. *New England Journal of Medicine*, **331**, 123.
- Blumenthal-Barby, J. S. (2012). Between Reason and Coercion: Ethically Permissible Influence in Health Care and Health Policy Contexts. *Kennedy Institute of Ethics Journal*, **22**, 345–366.
- Blumenthal-Barby, J. S., Cantor, S. B., Russell, H. V., Naik, A. D., and Volk, R. (2013). Decision Aids: When 'Nudging' Patients to Make a Particular Choice Is more Ethical than Balanced, Nondirective Content. *Health Affairs*, **32**, 303–310.
- Borland, R., Savvas, S., Sharkie, F., and Moore, K. (2013). The Impact of Structural Packaging Design on Young Adult Smokers' Perceptions of Tobacco Products. *Tobacco Control*, **22**, 97–102.
- Boyle, M. (2015). Junk Food and Booze Could follow Tobacco in Plain Packaging Push. *BloombergBusiness*, January 23, available from: http://www.bloomberg.com/news/articles/2015-01-23/junk-food-and-booze-could-follow-tobacco-in-plain-packaging-push [accessed 16 May 2016]
- Brownson, R. C., Chriqui, J. F., and Stamatakis, K. A. (2009). Understanding Evidence-Based Public Health Policy. *American Journal of Public Health*, **99**, 1576–1583.
- Buss, S. (2014). Personal Autonomy. In Zalta, E. N. (ed.), The Stanford Encyclopedia of Philosophy, available from: http://plato.stanford.edu/archives/spr2014/entries/personal-autonomy [accessed 13 May 2015].
- Cahill, K., Stevens, S., Perera, R., and Lancaster, T. (2013). Pharmacological Interventions for Smoking Cessation: An Overview and Network Meta-Analysis. Cochrane Database of Systematic Reviews, 5, CD009329.
- Centers for Disease Control and Prevention (CDCP) (2011). Quitting Smoking among Adults United States, 2001–2010. *Morbidity and Mortality Weekly Report*, **60**, 1513–1545.
- Chantler, C. (2014). Standardised Packaging of Tobacco: Report of the Independent Review Undertaken by Sir Cyril Chantler. London: UK Department of Health.

- Chapman, S. and Wakefield, M. A. (2013). Large-Scale Unassisted Smoking Cessation Over 50 Years: Lessons from History for Endgame Planning in Tobacco Control. Tobacco Control, 22, 33-35.
- Conly, S. (2013a). Coercive Paternalism in Health Care: Against Freedom of Choice. Public Health Ethics, 6, 241-245.
- Conly, S. (2013b). Against Autonomy: Justifying Coercive Paternalism. Cambridge: Cambridge University
- Consumer Packaging Manufacturers Alliance (CPMA) (2015). Available from: http://www.cpm-alliance.co. uk [accessed 16 May 2016].
- Danaei, G., Ding, E. L., Mozaffarian, D., Taylor, B., Rehm, J., Murray, C. J. L., and Ezzati, M. (2009). The Preventable Causes of Death in the United States: Comparative Risk Assessment of Dietary, Lifestyle, and Metabolic Risk Factors. PLOS Medicine, 6, 1-22.
- Dawson, A. and Verweij, M. (2010). Smoke Gets in Your Eyes: Offence, Harm and the Good Life. Public Health Ethics, 3, 89-90.
- Deloitte (2011). Tobacco Packaging Regulation: An International Assessment of the Intended and Unintended Impacts. London: Deloitte MCS Limited.
- Deloitte (2013). Accelerating Complexity: Regulatory Trends in the Consumer Goods Industry. London: Deloitte Global Services Limited.
- Denney, J. T., Krueger, P. M., and Pampel, F. C. (2014). Socioeconomic Status and Health Behaviors. In Cockerham, W. C., Dingwall, R., and Quah, S. R. (eds), The Wiley Blackwell Encyclopedia of Health, Illness, Behavior, and Society. Wiley-Blackwell, pp. 2223-2227.
- Doll, R., Peto, R., Boreham, J., and Sutherland, I. (2004). Mortality in Relation to Smoking: 50 Years' Observation on Male British Doctors. British Medical Journal, 328, 1519.
- Doll, R., Peto, R., Wheatley, K., and Sutherland, I. (1994). Mortality in Relation to Smoking: 40 Years' Observation on Male British Doctors. British Medical Journal, 309, 901.
- Dworkin, G. (1972). Paternalism. The Monist, 56, 64-84.
- Dworkin, G. (2013). Defining Paternalism. In Coons, C.and Weber, M. (eds), Paternalism: Theory and Practice. Cambridge: Cambridge University Press, pp. 25-38.
- Dworkin, G. (2014). Paternalism. In Zalta, E. N. (ed.), The Stanford Encyclopedia of Philosophy, available

- from: http://plato.stanford.edu/entries/paternalism [accessed 13 May 2015].
- Edwards, R. (2004). The Problem of Tobacco Smoking. British Medical Journal, 328, 217-219.
- Erceg-Hurn, D. M. and Steed, L. G. (2011). Does Exposure to Cigarette Health Warnings Elicit Psychological Reactance in Smokers? Journal of Applied Social Psychology, 41, 219–237.
- Faden, R. and Shebaya, S. (2015). Public Health Ethics. In Zalta, E. N. (ed.), The Stanford Encyclopedia of Philosophy, available from: http://plato.stanford. edu/entries/publichealth-ethics/#Pat [accessed 15 December 2015].
- Ford, A., MacKintosh, A. M., Moodie, C., Richardson, S., and Hastings, G. (2013a). Cigarette Pack Design and Adolescent Smoking Susceptibility: A Cross-Sectional Survey. British Medical Journal (BMJ Open), 3, 1–14.
- Ford, A., Moodie, C., MacKintosh, A., and Hastings, G. (2013b). How Adolescents Perceive Cigarette Packaging and Possible Benefits of Plain Packaging. Education and Health, 31, 83-88.
- Frankfurt, H. G. (1971). Freedom of the Will and the Concept of a Person. The Journal of Philosophy, 68, 5-20.
- Frankfurt, H. G. (1982). The Importance of What We Care About. Synthese, 53, 257-272.
- Frijters, P., Shields, M. A., Price, S. W., and Williams, J. (2011). Quantifying the Cost of Passive Smoking on Child Health: Evidence from Children's Cotinine Samples. Journal of the Royal Statistical Society: Series a (Statistics in Society), 174, 195-212.
- Gleeson, D. H., Tienhaara, K. S., and Faunce, T. A. (2012). Challenges to Australia's National Health Policy from Trade and Investment Agreements. Medical Journal of Australia, 196, 354-356.
- Goodin, R. (1995). In defence of the Nanny State. In Etzioni, A. (ed), Rights and the Common Good: Communitarian Perspectives. New York: St Martin's
- Gostin, L. O. (2002). Corporate Speech and the Constitution: The Deregulation of Tobacco Advertising. American Journal of Public Health, 92, 352-355.
- Grill, K. (2013). Normative and Non-Normative Concepts: Paternalism and Libertarian Paternalism. In Strech, D., Hirschberg, I., and Marckmann, G. (eds), Ethics in Public Health and Health Policy: Concepts, Methods, Case Studies. Public Health Ethics, 1, 27-46.

- Grill, K. and Fahlquist, J. N. (2012). Responsibility, Paternalism and Alcohol Interlocks. *Public Health Ethics*, 5, 116–127.
- Guttman, N. and Salmon, C. T. (2004). Guilt, Fear, Stigma and Knowledge Gaps: Ethical Issues in Public Health Communication Interventions. *Bioethics*, 18, 531–552.
- Hakkarainen, P. (2013). Tobacco Road Finland How Did an Accepted Pleasure Turn Into an Avoidable Risk Behaviour? *Social Science & Medicine*, **98**, 253–259.
- Hammond, D., Dockrell, M., Arnott, D., Lee, A., and McNeill, A. (2009). Cigarette Pack Design and Perceptions of Risk among UK Adults and Youth. The European Journal of Public Health, 19, 631–637.
- Hammond, D., Fong, G. T., Cummings, K. M., and Hylands, A. (2005). Smoking Topography, Brand Switching, and Nicotine Delivery: Results from an In vivo Study. Cancer Epidemology, Biomarkers and Prevention, 14, 1370–1375.
- Hastings, G. (2012). The Marketing Matrix: How the Corporation Gets Its Power And How We Can Reclaim It. Abingdon: Routledge.
- Hastings, G., Stead, M., and Webb, J. (2004). Fear Appeals in Social Marketing: Strategic and Ethical Reasons for Concern. *Psychology and Marketing*, 21, 961–986.
- Haukkala, A., Laaksonen, M., and Uutela, A. (2001). Smokers Who Do Not Want to Quit Is Consonant Smoking Related to Lifestyle and Socioeconomic Factors? *Scandinavian Journal of Public Health*, **29**, 226–232.
- Hoefges, M. (2003). Protecting Tobacco Advertising Under the Commercial Speech Doctrine: The Constitutional Impact of Lorillard Tobacco Co. Communication Law and Policy, 8, 267–311.
- Hoek, J., Gendall, P., Gifford, H., Pirikahu, G., McCool,
  J., Pene, G., Edwards, R., and Thomson, G. (2012).
  Tobacco Branding, Plain Packaging, Pictorial
  Warnings, and Symbolic Consumption. *Qualitative Health Research*, 22, 630–639.
- Hogarth, L., Maynard, O. M., and Munafò, M. R. (2015). Plain Cigarette Packs Do Not Exert Pavlovian to Instrumental Transfer of Control over Tobacco-Seeking. *Addiction*, 110, 174–182.
- Imperial Tobacco Australia. (2010). Submission to the Senate Community Affairs Legislation Committee for the Inquiry into the Plain Tobacco Packaging (Removing Branding from Cigarette Packs) Bill 2009. Baulkham Hills, NSW: Imperial Tobacco Australia.

- Jennings, B. (2009). Public Health and Liberty: Beyond the Millian Paradigm. *Public Health Ethics*, **2**, 123–134.
- Kang, H. G., Kwon, K. H., Lee, I. W., Jung, B., Park, E. -C., and Jang, S. -I. (2013). Biochemically-Verified Smoking Rate Trends and Factors Associated with Inaccurate Self-Reporting of Smoking Habits in Korean Women. Asian Pacific Journal of Cancer Prevention, 14, 6807–6812.
- Krumpal, I. (2013). Determinants of Social Desirability Bias in Sensitive Surveys: a Literature Review. Quality and Quantity, 47, 2025–2047.
- Liberman, J. (2013). Plainly Constitutional: The Upholding of Plain Tobacco Packaging by the High Court of Australia. *American Journal of Law and Medicine*, **39**, 361–442.
- Luik, J. C. (1998). *Plain Packaging and the Marketing of Cigarettes*. Toronto, Ont.: Admap Publications.
- Matsumura, K. T. (2014). Binding future selves. *Louisiana Law Review*, **75**, 71–125.
- Maynard, O. M. (2014). Plain Cigarette Packaging: What's the Evidence? *PSYPAG Quarterly*, **90**, 32–35.
- Maynard, O. M., Leonards, U., Attwood, A. S., Bauld, L., Hogarth, L., and Munafò, M. R. (2014). Plain Packaging of Cigarettes and Smoking Behavior: Study Protocol for a Randomized Controlled Study. *Trials*, 15, 252.
- Maynard, O. M., Munafò, M. R., and Leonards, U. (2013). Visual Attention to Health Warnings on Plain Tobacco Packaging in Adolescent Smokers and Non-Smokers. *Addiction*, **108**, 413–419.
- Ménard, J. -F. (2010). A 'Nudge' for Public Health Ethics: Libertarian Paternalism as a Framework for Ethical Analysis of Public Health Interventions? *Public Health Ethics*, **3**, 229–238.
- Mill, J. S. (1859). *On Liberty*. London: John W. Parker and Son.
- Mokdad, A. H., Marks, J. S., Stroup, D. F., and Gerberding, J. L. (2000). Actual Causes of Death in the United States. *Journal of the American Medical Association*, **291**, 1238–1245.
- Moodie, C., Angus, K., Stead, M., and Bauld, L. (2013).
  Plain Tobacco Packaging Research: An Update.
  Stirling, UK: Centre for Tobacco Control Research and Institute for Social Marketing, University of Stirling.
- Moodie, C. and MacKintosh, A. M. (2013). Young Adult Women Smokers' Response to Using Plain Cigarette Packaging: A Naturalistic Approach. British Medical Journal (BMJ Open), 3, 1–10.
- Moodie, C., Stead, M., Bauld, L., McNeill, A., Angus, K., Hinds, K., Kwan, I., Thomas, J., Hastings, G., and

- O'Mara-Eves, A. (2012). Plain Tobacco Packaging: A Systematic Review. Stirling, UK: Centre for Tobacco Control Research and Institute for Social Marketing, University of Stirling.
- Mullins, R. and Borland, R. (1996). Do Smokers Want to Quit? Australian and New Zealand Journal of Public Health, 20, 426-427.
- Munafò, M. R., Roberts, N., Bauld, L., and Leonards, U. (2011). Plain Packaging Increases Visual Attention to Health Warnings on Cigarette Packs in Non-Smokers and Weekly Smokers but Not Daily Smokers. Addiction, 106, 1505-1510.
- New Zealand Government (NZG) (2014). Smoke-Free Environments (Tobacco Plain Packaging) Amendment Bill. Wellington: New Zealand Parliament, Health Committee.
- Norwegian Government (NG) (2015). Norwegian Government to Consult on Proposal for Standardised Packaging of Tobacco Products, available from: https://www.regjeringen.no/en/aktuelt/ foreslar-standardiserte-tobakkspakninger/id2395028 [accessed 16 May 2016].
- O'Leary, A. (1985). Self-Efficacy and Health. Behaviour Research and Therapy, 23, 437-451.
- Öberg, M., Jaakkola, M. S., Woodward, A., Peruga, A., and Prüss-Ustün, A. (2011). Worldwide Burden of Disease from Exposure to Second-Hand Smoke: A Retrospective Analysis of Data from 192 Countries. The Lancet, 377, 139-146.
- Owens, J. and Cribb, A. (2013). Beyond Choice and Individualism: Understanding Autonomy for Public Health Ethics. Public Health Ethics, 6, 262-271.
- Parliament of Australia (PA). (2011a). Tobacco Plain Packaging Act 2011, No. 148.
- Parliament of Australia (PA) (2011b). Tobacco Plain Packaging Bill.
- Peters, G. -J. Y., Ruiter, R. A. C., and Kok, G. (2013). Threatening Communication: A Critical Re-Analysis and a Revised Meta-Analytic Test of Fear Appeal Theory. Health Psychology Review, 7, 8-31.
- Public Interest Litigation (PIL). (2013). Love Care Foundation Versus Union of India. Writ petition no.1078 (M/B) of 2013.
- Qureshi, W. (2014). Mars Voices Concerns about Plain Packaging. Packaging News, July 28, available from: http://www.packagingnews.co.uk/news/mars-voices-co ncern-about-plain-packaging [accessed 16 May 2016].
- Ranney, L., Melvin, C., Lux, L., McClain, E., and Lohr, K. N. (2006). Systematic Review: Smoking Cessation Intervention Strategies for Adults and Adults in

- Special Populations. Annals of Internal Medicine, **145**, 845–856.
- Redish, M. H. (1996). Tobacco Advertising and the First Amendment. Iowa Law Review, 81, 589-639.
- Resnik, D. (2014). Paternalistic Food and Beverage Policies: A Response to Conly. Public Health Ethics, **7**, 170–177.
- Rhodes, R. E. and de Bruijn, G. -J. (2013). How Big is the Physical Activity Intention-Behaviour Gap? A Meta-Analysis Using the Action Framework. British Journal of Health Psychology, **18**, 296–309.
- Rhodes, R. E. and Dickau, L. (2012). Experimental Evidence for the Intention-Behavior Relationship in the Physical Activity Domain: A Meta-Analysis. Health Psychology, 31, 724-727.
- Rizzo, M. J. and Whitman, D. G. (2009). Little Brother is Watching You: New Paternalism on the Slippery Slopes. Arizona Law Review, 51, 685-739.
- Ruiter, R. A. C. and Kok, G. (2005). Saying is Not (Always) Doing: Cigarette Warning Labels Are Useless. The European Journal of Public Health, 15, 329.
- Russell, M. A. H. (1990). The Nicotine Addiction Trap: A 40-Year Sentence for Four Cigarettes. British Journal of Addiction, 85, 293-300.
- Samet, J. M. (2013). Tobacco Smoking: The Leading Cause of Preventable Disease Worldwide. Thoracic Surgery Clinics, 23, 103-112.
- Scarborough, P., Bhatnagar, P., Wickramasinghe, K. K., Allender, S., Foster, C., and Rayner, M. (2011). The Economic Burden of Ill Health Due to Diet, Physical Inactivity, Smoking, Alcohol and Obesity in the UK: An Update to 2006-07 NHS Costs. Journal of Public Health, 33, 527-535.
- Scheffels, J. and Sæbø, G. (2013). Perceptions of Plain and Branded Cigarette Packaging among Norwegian Youth and Adults: A Focus Group Study. Nicotine & Tobacco Research, 15, 450-456.
- Schembri, S., Merrilees, B., and Kristiansen, S. (2010). Brand Consumption and Narrative of the Self. Psychology and Marketing, 27, 623-637.
- Schwarzer, R. (2014). Self-Efficacy in the Adoption and Maintenance of Health Behaviors: Theoretical Approaches to a New Model. In Schwarzer, R. (ed.), Self-Efficacy: Thought Control of Action. New York: Routledge, pp. 217–244.
- Sen, A. (2007). Unrestrained Smoking Is a Libertarian Half-way House. Financial Times, 11 February, available from: http://www.ft.com/cms/s/0/c8617786ba13-11db-89c8-0000779e2340.html#axzz3YaLM wHpg [accessed 16 May 2016].

- Sheeran, P. (2002). Intention-Behavior Relations: A Conceptual and Empirical Review. *European Review of Social Psychology*, **12**, 1–36.
- Skipper, R. A. (2012). Obesity: Towards a System of Libertarian Paternalistic Public Health Interventions. *Public Health Ethics*, **5**, 181–191.
- Stephens, K. (2012). Plain Packaging Measures for Cigarettes An Update. *Bird&Bird Food Law Digest*, September.
- Stephens, K. and Bond, T. (2014). Plain Packaging Plans Advance in the UK and Ireland whilst the WTO Dispute over Australia's Laws also Heats Up. *Bird&Bird*, available from: http://www.twobirds.com/en/news/articles/2014/global/food-law-july/plain-packaging-plans-advance-in-uk-ireland-whilst-wto-dispute-over-australias-laws-heats-up [accessed 16 May 2016].
- Strecher, V. J., DeVellis, B. M., Becker, M. H., and Rosenstock, I. M. (1986). The Role of Self-Efficacy in Achieving Health Behavior Change. *Health Education & Behaviour*, **13**, 73–92.
- Sunstein, C. R. (2013). Behavioral Economics and Paternalism. *Yale Law Journal*, **122**, 1867–1899.
- Thaler, R. H. and Sunstein, C. R. (2009). Nudge: Improving Decisions about Health, Wealth and Happiness. London: Penguin Books.
- Thomas, M. and Buckmaster, L. (2010). *Paternalism in Social Policy: When Is It Justifiable?* Canberra: Social Policy Section, Parliament of Australia.
- Thompson, L. E., Barnett, J. R., and Pearce, J. R. (2009).
   Scared Straight? Fear-Appeal Anti-Smoking Campaigns, Risk, Self-Efficacy and Addiction.
   Health, Risk and Society, 11, 181–196.
- Thrasher, J. F., Rousu, M. C., Hammond, D., Navarro, A., and Corrigan, J. R. (2011). Estimating the Impact of Pictorial Health Warnings and "Plain" Cigarette Packaging: Evidence from Experimental Auctions among Adult Smokers in the United States. *Health Policy*, 102, 41–48.
- Tobacco Labelling Resource Centre (TLRC) (2014). Brazil's Tobacco legislation, available from: http://www.tobaccolabels.ca/countries/brazil [accessed 16 May 2016].
- USDHHS U.S. Department of Health and Human Services (2012). Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA: U.S., Centers for Disease Control and Prevention, National Center for

- Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- Voon, T. (2013). Acquisition of Intellectual Property Rights: Australia's Plain Tobacco Packaging Dispute. European Intellectual Property Review, 2, 113–118.
- Voon, T., Mitchell, A. D., Liberman, J., and Ayres, G. (2012). *Public Health and Plain Packaging of Cigarettes: Legal Issues*. Cheltenham, UK: Edward Elgar.
- Vries, H. D., Backbier, E., Kok, G., and Dijkstra, M. (1995). The Impact of Social Influences in the Context of Attitude, Self-Efficacy, Intention, and Previous Behavior as Predictors of Smoking Onset. *Journal of Applied Social Psychology*, 25, 237–257.
- Wakefield, M., Germain, D., Durkin, S., Hammond, D., Goldberg, M., and Borland, R. (2012). Do Larger Pictorial Health Warnings Diminish the Need for Plain Packaging of Cigarettes? *Addiction*, **107**, 1159–1167.
- Wakefield, M. A., Hayes, L., Durkin, S., and Borland, R. (2013). Introduction Effects of the Australian Plain Packaging Policy on Adult Smokers: A Cross-Sectional Study. *British Medical Journal (BMJ Open)*, 3, 1–10.
- Wardle, J. and Steptoe, A. (2003). Socioeconomic Differences in Attitudes and Beliefs about Healthy Lifestyles. *Journal of Epidemiology and Community Health*, **57**, 440–443.
- Wardrope, A. (2015). Relational Autonomy and the Ethics of Health Promotion. *Public Health Ethics*, **8**, 50–62.
- Webb, T. L. and Sheeran, P. (2006). Does Changing Behavioral Intentions Engender Behaviour Change? A Meta-Analysis of the Experimental Evidence. *Psychological Bulletin*, **132**, 249–268.
- World Health Organisation (WHO) (2000). Obesity: Preventing and Managing the Global Epidemic. WHO Technical Report Series (894). Geneva.
- Wong, S. L., Shields, M., Leatherdale, S., Malaison, E., and Hammond, D. (2012). Assessment of Validity of Self-Reported Smoking Status. *Health Reports*, **23**, 47–53.
- Young, J. M., Stacey, I., Dobbins, T. A., Dunlop, S., Dessaix, A. L., and Currow, D. C. (2014).
  Association between Tobacco Plain Packaging and Quitline Calls: A Population-Based, Interrupted Time-Series Analysis. *The Medical Journal of Australia*, 200, 29–32.