

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:

Bastian, B

Title:

Changing Ethically Troublesome Behavior: The Causes, Consequences, and Solutions to Motivated Resistance

Date:

2019-01-01

Citation:

Bastian, B. (2019). Changing Ethically Troublesome Behavior: The Causes, Consequences, and Solutions to Motivated Resistance. *Social Issues and Policy Review*, 13 (1), pp.63-92. <https://doi.org/10.1111/sipr.12048>.

Persistent Link:

<https://hdl.handle.net/11343/284541>

Changing ethically troublesome behavior: The causes, consequences, and solutions to motivated resistance

Brock Bastian, Melbourne School of Psychological Sciences, University of Melbourne, Victoria, 3010, Australia. Email: brock.bastian@unimelb.edu.au, Ph: +61 3 83448880.

Words: 9306

Abstract: Ethical dilemmas are common. Just as commonly, however, these motivational conflicts are overlooked or actively avoided in behavioral decision making. Raising awareness of the ethical implications of action can be a powerful route to changing behavior, yet this approach also risks defensive responding and the potential for backfire effects. Current models of behavior change are not well equipped to predict how people respond to behavior change interventions which seek to make salient ethical conflict. Drawing on research in the field of behavioral ethics, I detail why models of behavior change need to account for defensive responding when people are confronted with their own ethical conflicts. Furthermore, failing to understand the role of this motivated resistance leaves open the possibility of increased commitment to, rather than attempts to change, ethically troublesome behavior. In this review I will focus my analysis on the issue of meat-eating. Most people eat meat, yet many of these same individuals also experience ethical conflict around their meat-consumption. Drawing on dissonance theorizing, I present an overview of the pressure points where behavior can be challenged on ethical grounds, the various

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the [Version of Record](#). Please cite this article as [doi: 10.1111/sipr.12048](https://doi.org/10.1111/sipr.12048).

This article is protected by copyright. All rights reserved.

strategies that individuals may use to avoid change, and ideas on how best to achieve change while also avoiding motivated resistance. This analysis will provide a working model for policy makers to understand how to design effective behavior change campaigns that draw on the power of ethical arguments while also avoiding the possibility of motivated resistance.

Keywords: Behavior Change; Behavioral Ethics; Dissonance; Motivation; Ego-Defense; Culture; Norms

Predicting and changing behavior is not only the bread and butter of psychological research, it is also of critical importance to maintaining a healthy and functioning society and therefore of central concern to policymakers. Over the years, behavior change programs have delivered invaluable benefits, decreasing the population wide prevalence of cigarette smoking (Lancaster, Stead, Silagy, & Sowden, 2000), increasing actions aimed at reducing skin cancer, such as covering up and using sunblock creams (Saraiya et al., 2004), healthy eating and increases in exercise (Michie, Abraham, Whittington, McAteer, & Gupta, 2009), and reducing the spread of HIV/AIDS (Myhre, June, Flora, 2000). Underpinning the success of these interventions are psychological models of behavior change that have been built on a large body of research (e.g., Theory of Planned Behavior; Ajzen, 1991, Stages of Change; Prochaska & DiClemente, 1986). These models have provided critical insight and offered effective solutions for intervention across a range of health behaviors. For instance, the Stages of Change model (Prochaska & DiClemente, 1986) has provided useful insights into how people weigh the pros and cons of behavior change, progressively moving through various stages towards eventual change. The theory of planned behavior has highlighted the critical importance of perceived behavioral control and subjective norms for translating attitudes into behavioral intentions and change (Ajzen, 1991; Fishbein & Ajzen, 1975).

These models of behavior change have been largely developed within the domain of health behavior, where decisions to make change are predominantly driven by personal concerns (i.e., one's own personal health outcomes). Increasingly, however, these models are relied on to understand and intervene in behaviors that are not only problematic for one's own wellbeing, but have direct implications for the wellbeing of others. For instance, the theory of planned behavior has been applied to the promotion of environmentally sustainable conduct (Koger, 2010; Stern, 2005) where the pros and cons of change are not limited to self-relevant considerations and needs, but also have implications for the wellbeing of other people, species, and the environment itself. There has also been a shift in how people think about some health behaviors, with smoking becoming highly moralized (Rozin & Singh, 1999) and viewed as a public (as opposed to simply a personal) health concern. Vegetarian or vegan diets are increasingly promoted not only on the grounds of personal health, but also based on ethical considerations regarding the treatment of animals themselves, the cost to the environment, or whether meat production is an effective use of resources in view of global food shortages (Ruby, 2012). In short, behavior change is commonly, and perhaps even increasingly, advocated for on ethical grounds. This is consistent with a historical trend whereby people are becoming more sensitive to the rights and needs of others (e.g., Pinker, 2011; Singer, 2011) and whereby ethical responsibility, which extends beyond narrow self-interest, is an important foundation from which people choose how to act.

This shift in priorities presents a key challenge to current models of behavior change. These models are based on the assumption that to achieve change, people need to recognize there is a need for change. In the domain of health behavior (e.g., smoking, the use of sunblock creams, or healthy eating) people are reminded that their actions are harmful to their own health. That is, campaigns seek to inform people that they should not smoke, sunbathe unprotected, or consume junk food if they also want to maintain good health. Theoretical

models assume that it is the recognition of this disconnect between current behavior and the goal of being healthy which triggers the motivation to change. Portraying the importance of health-related goals, increasing perceived efficacy to achieve those goals, and paying attention to the influence of supportive or unsupportive social norms has, therefore, been the focus of behavior change models within the health domain. Yet, the assumption that creating tension between current behavior and important goals for behavior should increase the desire for change does not always hold when behaviors are challenged on ethical grounds and may become problematic and lead to backfire effects. People are strongly motivated to see themselves as ethical (e.g., Aquino & Reed, 2002) and there are significant reputational implications for being viewed by others as unethical (Leach, Ellemers & Barreto, 2007; Goodwin, Piazza, & Rozin, 2014). Acknowledging a disconnect between one's own behavior and the goal of being an ethical person presents a view of oneself that people may be motivated to resist. It is this possibility for motivated resistance which sets behavior change within the domain of ethical behavior apart from other forms of behavioral change and demands a full recognition of the possibility for backfire effects. As I will show, when people are committed to their behaviors, but are reminded of ethical conflicts associated with these behaviors, they may become motivated to resolve this inconsistency by downplaying ethical consequences and further committing to their original behavior, making change less (rather than more) likely.

Understanding the nature of this motivated resistance is of central importance for policy-makers whose job it is to address many of the most harmful behaviors within society. Whether it is domestic violence, sexual abuse, racial or religious intolerance, environmental stewardship, white collar crime, or animal welfare, these issues tend to be primarily addressed on ethical grounds. If poorly designed interventions have the capacity to reinforce,

as opposed to change, ethically problematic behavior, then developing tailored insights into behavior change within the ethical domain is paramount to developing effective solutions.

What is Ethically Problematic Behavior?

The current analysis relates to a certain class of behavior's that I refer to as ethically problematic. On the one hand, this may relate to behaviors that have ethical conflicts attached to them, but are not necessary illegal or obviously immoral. An example of such a behavior that I will draw on throughout is meat-eating (see Bastian & Loughnan, 2017). This is not illegal or clearly immoral, yet when reminded most people experience ethical conflict around the associated harm to animals that this behavior necessitates. It is also this conflict that many behavior change campaigns focus on when seeking to promote change. These ethical dilemmas may also arise in the domain of environmental action, where failing to recycle or excess use of fossil fuel may occur daily but can also cause ethical conflict when one is forced to reconcile such actions with environmental harm.

On the other hand, ethically problematic behavior may also refer to illegal or unethical behavior, but where the actor has disengaged from a clear recognition of any ethical implications. For instance, people may be motivated to avoid paying tax, and may employ reporting practices that achieve this goal while maintaining the belief that they are not engaging in tax evasion. It is not that people have forgotten that tax evasion is wrong, but they may be motivated to find ways to frame their behavior such that it does not seem unethical (see Mazar, Amir, & Ariely, 2008). Another example may be white collar crime, where meeting performance goals based on maximizing profits can lead employees to forget the ethical dimensions of their decisions. This process may also be evident in more extreme cases, where perpetrators of abuse may see their actions as benevolent or justifiable, and

entire systems may become embroiled in the process of moral disengagement (see Bandura, 1999).

The key feature of ethically problematic behavior, as defined here, is behavior that is enacted by individuals who have found ways to justify or forget about the associated ethical implications – that is, they have come to believe they are acting in good faith. Being reminded of the ethical implications of their actions triggers an ethical conflict, and the individual is forced to see the behavior as inconsistent with their own internal moral standards or external ethical frameworks.

Theoretical Background: What's Different About Ethical Behavior Change?

Ethical arguments for changing behavior are powerful because they tap into a part of ourselves that we care about deeply. There is now an abundance of research showing that morality is not only of central importance to how people perceive groups (Leach, Ellemers & Barreto, 2007) or other individuals (Goodwin, Piazza, & Rozin, 2014; Goodwin, 2015), but also for how they reflect on and assess their own self-concept (Aquino & Reed, 2002; Merritt, Effron & Monin, 2010; Reed & Aquino, 2003). People like to see themselves (and for others to view them) as moral. This work is consistent with a large body of research suggesting that individuals wish to hold maximally positive views of themselves and seek to enhance their self-appraisals whenever possible (e.g., Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Sedikides & Gregg, 2008; Taylor & Brown, 1988). Yet, it also shows that morality has a special status compared to other dimensions on which positive distinction can be achieved. This is because moral character signifies one's trustworthiness or likelihood of cooperating and communicates one's humanity to others (Goodwin et al., 2014; Leach et al., 2007).

Although people like to think of themselves as moral, they also frequently engage in ethically questionable behavior (Ariely, 2012). For instance, when given the opportunity to cheat and therefore to maximize their own rewards (e.g., financial reimbursement), people will frequently do so. Yet, they will only do so to the extent that it does not impact on their view of themselves as honest and ethical people. In one experiment, Mazar et al., (2008) observed that people cheated to earn money on a puzzle (when given the opportunity to avoid detection), but they did not change their impression of their own honesty or morality relative to the control condition where people did not cheat (because they were not given the opportunity to do so). In other work, Shu, Gino and Bazerman (2011) observed that simply imagining a scenario in which one cheated increased endorsement of moral disengagement items (e.g., cheating is appropriate behavior because no one gets hurt) relative to imagining a scenario in which another person cheated. They also observed that after cheating (because they were given the opportunity to do so) people's memory for an honor code provided to them at the beginning of the study was lower than it was for those who did not cheat (because they were not given the opportunity to do so). Forgetting the honor code was viewed as a means by which people downplayed (or in this case literally forgot) the ethical implications of their actions.

Drawing together a range of factors and how they may be used to maintain a moral self-concept, Shalvi, Gino, Barkan and Ayal (2015) suggest that people may engage in pre-violation justifications or post-violation justifications. Pre-violation justifications may involve seeing the act as ambiguous, viewing one's behavior as ultimately altruistic, or bolstering the moral self-concept (by casting other's behavior as worse than their own or downgrading 'do-gooders') and therefore licensing one's own unethical behavior (see also Barkan, Ayal, Gino, & Ariely, 2012; Monin, Sawyer, Marquez, 2008 Sachdeva, Iliev & Medin, 2009). Post-violation justifications may involve seeking to morally cleanse the self in

response to unethical acts, partially confessing to what one has done, or distancing the self from harmful consequences of one's behavior (see also Bandura, Underwood, & Fromson, 1975; Bastian, Jetten & Fasoli, 2011; Baumeister, Smart, & Boden, 1996; Baumeister, Stillwell, & Wotman, 1990; Kowalski, 2000; Meier, Sellbom, & Wygant, 2007; Zhong & Liljenquist, 2006). Through either of these avenues people can protect their moral self-concept from being tarnished by their own ethically problematic behavior (see Figure 1).

This type of self-concept maintenance presents a significant barrier to behavior change interventions. Campaigns which use ethical arguments to achieve behavior change need people to take responsibility for their behavior and acknowledge its ethical consequences. Without this, people either do not see the need for change or will not see it as their responsibility to make that change. Yet, this approach frequently represents a threat to the moral self-concept, potentially triggering motivated resistance to acknowledging the need for change.

The Absence of Ego-Defensive Processes in Dominant Models of Behavior Change

Dominant models of behavior change assume that key barriers to changing behavior broadly include attitudes, norms, and perceived control (e.g., Theory of Planned Behavior; Ajzen, 1991, Stages of Change; Prochaska & DiClemente, 1986). As such, these frameworks advocate for interventions which challenge attitudes and norms and increase perceived efficacy, theoretically leading to change. Although limited research has examined the role of perceived moral obligation in predicting behavioral intentions (e.g., Beck & Ajzen, 1991; Parker, Manstead, & Stradling, 1995; Raats, Shepherd, & Sparks, 1995; Sparks, Shepherd, & Frewer, 1995), this work has mostly focused on whether these moral obligations (in the form of personal or social standards) predict behavioral intentions independently of attitudes. As such, it has been assumed that moral obligations guide and direct behavior in the same way

that personal attitudes and social norms might. Other work has examined the role of self in predicting behavioral intentions (for a review see Eagly & Chaiken, 1993). For instance, research has shown that when behaviors are viewed as important to the self-concept, personal identity plays an independent role in predicting behavior (Biddle, Bank, & Slavings, 1987; Charng, Piliavin, & Callero, 1988; Granberg & Holmberg, 1990; Sparks & Shepherd, 1992; Sparks, Shepherd, Wieringa, & Zimmermanns, 1995; Dennison & Shepherd, 1995; Sparks & Guthrie, 1998). Other work has shown that in addition to personal identity, a person's social identity and the social norms attached to that identity also play an independent role in predicting behavioral intentions (Terry, Hogg, & White, 1999).

What this work has not examined is why and when motivated resistance may arise in attempts to challenge personal behavior as unethical. As detailed above, when reasons for behavior change are mounted on ethical grounds, they represent a threat to the moral self-concept in a way that other grounds for behavior change do not. This is because one's moral identity is considered more central and important to one's character relative to other dimensions of person perception (Goodwin et al., 2014; Leach et al., 2007) and people are, therefore, especially sensitive to threats to their moral self-concept. For example, asking people to refrain from eating meat on the grounds of health simply infers that they may be less healthy than they would like to see themselves. Yet, asking people to refrain from eating meat on the grounds of animal welfare infers that their current meat-eating practices are unethical, and therefore that they may be a less ethical person than they think.

Creating Change by Creating Ethical Dissonance

As noted above, to achieve behavior change, people need to be convinced that there is a mismatch between their behavior and personal or social standards/goals. For instance, being reminded that smoking is inconsistent with one's desire to live a long and healthy life

motivates the intention to quit smoking. It is this inconsistency between current behavior and personal or social standards/goals that motivates change, and behavior change campaigns seek to exploit this motivational state. The same is true of behavior change campaigns which advocate for change on ethical grounds. For instance, campaigns aimed at improving the treatment of animals focus on the harm and suffering associated with the meat industry (e.g. Foer, 2009; Joy, 2011). Quit smoking campaigns target parents by focusing on the health costs to their children (Borrelli et al., 2002). Campaigns seeking to achieve environmental change present images of harm to the environment, animal species, and human populations (Nisbet, Markowitz, & Kotcher, 2012). These approaches seek to convince people that their behaviors are inconsistent with their own moral standards (i.e., to do no harm).

The theory of cognitive dissonance provides a useful framework for understanding this process (Festinger, 1957). Campaigns advocating for behavior change on ethical grounds tend to place people in a state of dissonance – whereby their attitudes or values (e.g., “I am a good person”, “I don’t cause harm”) are shown to be inconsistent with their behavior (e.g., “my meat-eating causes harm”, “my actions hurt the environment”). It is this state of dissonance that creates a motivation towards change (for a discussion of ethical dissonance, see Barkan et al., 2012; Shalvi, Gino, Barkan, & Ayal, 2015). Although there is some disagreement around the role of the self-concept in dissonance-based motivational responding (Aronson, 1968, 1992; Festinger, 1957; Stone & Cooper, 2001; Thibodeau & Aronson, 1992), dissonance within the ethical domain is driven by the recognition that one is responsible for producing adverse or harmful outcomes and is triggered by inconsistencies between behavior and one’s own moral standards or their perception of the self as a moral person (cf. Barkan, Ayal, & Ariely, 2015; Bem 1967; Stone & Cooper, 2001). Creating change, therefore, necessarily requires creating dissonance and this in turn leads to a motivation to resolve feelings of discomfort.

Behavior Change and Motivated Resistance: A Case Study of Meat-Eating

To further flesh out the role of dissonance and motivated resistance in shaping behavior change within the ethical domain, I now focus more directly on the example of meat-eating. This is an excellent illustrative example as it is a common behavior in which the ethical conflict is not always at the forefront in people's minds, yet when this conflict is made salient most people experience a state of dissonance (discomfort). Furthermore, there are many current examples of campaigns that have taken exactly this approach; highlighting animal welfare concerns as reason to avoid meat consumption (e.g., PETA, Mercy for Animals).

Drawing from this example, Bastian and Loughnan (2017) detailed three key avenues through which ethical dissonance around meat-eating can be aroused; taking responsibility for meat consumption, acknowledging its harmfulness to animals, and accepting the identity relevant consequences of this act (see Bastian & Loughnan, 2017). It is through these avenues that the (conscious and unconscious) bifurcation of the self from the consequences of one's actions is eroded – people are brought face-to-face with the ethical consequences of their actions. The intention of behavior change campaigns which seek to highlight the consequences of meat eating on ethical grounds is exactly this – to bring these consequences to conscious awareness and motivate change. Yet, it is also through these same three avenues that people maintain personal distance from their actions, allowing them to continue, as opposed to change, their current meat-eating behavior. By diminishing harm, denying responsibility, or downplaying the identity relevant implications of past behavior, people can protect their self-concept and reduce dissonance. I briefly detail each of these key avenues below.

Emphasizing (Minimizing) Harm

Central to most theories of morality is the notion of harm (Gray, Young, & Waytz, 2012). Behavior is especially questionable on ethical grounds when it causes harm to, or undermines the interests of morally relevant others. One way out of this moral conflict is to change behavior. But when people are committed to their current behavior, or cannot escape from it because it occurred in the past, they may downplay the extent to which their actions cause harm, and this may include denying the moral relevance of affected others – i.e., their capacity to experience that harm. This motivated response has been demonstrated when people are reminded of past atrocities committed against other human groups, whereby such reminders are met with a tendency to view the members of victimized groups as less-than-human and, therefore, as less capable of experiencing harm and in turn less worthy of fair treatment (Castano & Giner-Sorolla, 2006; Imhoff & Banse, 2009; Jackson & Gaertner, 2010; Leidner, Castano, & Ginges, 2013; Opatow, 1990; 1993).

In a study of meat-eaters, Bastian, Loughnan, Haslam, and Radke (2012) presented participants with a consumer task that either required them to consume delicatessen beef or a green apple. Prior to this task, participants had provided ratings of how many mental states they thought that a cow generally had. This was embedded within a larger set of measures provided to them at the same time. Just before the consumer task, but after receiving their instructions, the research assistant informed them they were leaving the room to get some cutlery, and gave them another rating task to complete while they were gone. It was the same picture of a cow and they were asked to rate the cow's mental capacities as they did previously. It was found that participants changed their impression of a cow's mental capacity, and therefore the capacity of that cow to experience harm, when they believed they were about to consume beef. This did not happen when they believed they were about to consume green apples. Furthermore, the more they reduced their attribution of mental states

to the cow the less negative affect they reported. This study provided clear evidence that changing perception of the moral qualities of an animal that is harmed by the act of meat-consumption can reduce discomfort (dissonance) associated with this behavior (see also Bilewicz, Imhoff, & Drogoz, 2011; Loughnan, Haslam, & Bastian, 2010).

Taking (Avoiding) Responsibility

A sense of personal choice and agency is central to the experience of dissonance (Cooper, 1971; Festinger, 1957), and it is also the foundation on which moral responsibility is grounded. If we had no choice in our actions, then we are not responsible for our behavior and whether it conflicts with our self-image is of little psychological consequence. Diminishing responsibility is therefore a key way in which people seek to downplay the personal relevance of unethical outcomes (Ritov & Baron, 1990; Spranca, Minsk, & Baron, 1991). People may achieve this by viewing authorities or others around them as responsible for their actions, or by diffusing the implications of their own behavior through seeing them as only a small part of a much larger collective problem (e.g., Bandura, 1999). In line with this type of moral self-concept maintenance strategy, people may adopt a belief that their behavior is natural or necessary (e.g., Joy, 2011), thereby framing their actions as a given, rather than a choice, and reducing personal responsibility. For instance, in a recent study, Piazza et al (2015) asked around 300 people to report three reasons ‘why you think it is ok to eat meat’. Across two studies, 10-12% of justifications appealed to the idea of normality (e.g., ‘Society says it’s okay’), 17-23% of justifications stated that meat consumption is natural (e.g., ‘Humans are carnivores’), 36-42% of all justifications stated that meat consumption was necessary (e.g., ‘Humans need meat to survive’). The tendency to report all three types of justification was associated with increased meat-consumption. Theoretically,

the reliance on these justifications should also reduce the experience of dissonance by reducing the perception of personal choice and responsibility (Cooper, 1971).

Acknowledging (Diminishing) Identity-Relevant Consequences

As noted above, ethical dissonance involves reflecting on whether one's actions align with one's self-concept. Generally, people are motivated to see themselves as moral and so are motivated to resolve dissonance and protect their self-image (e.g., Aquino & Reed, 2002; Alicke, Klotz, Breitenbecher, Yurak, & Vredenburg, 1995; Sedikides & Gregg, 2008; Taylor & Brown, 1994). While changing behavior can protect the self-concept, motivating that change often requires acknowledgement of past behavior as unethical. To protect against this, a person might buffer the self-concept by diminishing the frequency or the extremity of a given action, making it seem morally opaque (e.g., Gino, Ayal, & Ariely, 2009; Mazar, Amir, & Ariely, 2008; Tenbrunsel, Diekmann, Wade-Benzoni, & Bazerman, 2010).

In the case of meat-eating, evidence suggests that people frequently under-report how often they eat meat or they may limit their meat intake or eat only certain types of meat as a way of reducing the perceived extremity or frequency of their behavior (Rothgerber, 2014; 2015a; 2015b). In this way they reduce dissonance by emphasizing 'responsible' behavior. They may also judge others' behavior more harshly in order to present themselves as morally virtuous (Barkan et al., 2012), such as when people become horrified over the consumption of dog meat but maintain their consumption of pork or beef. People may also protect themselves by embedding their behavior within relevant social identities, thereby diffusing responsibility. For instance, the consumption of meat is central to many cultural traditions (Foer, 2010) and can, therefore, become symbolic of cultural identities in a way that non-meat foods, such as vegetables, rarely do.

By minimizing harm, avoiding personal responsibility and diminishing the extent to which one's actions reflect on the self, people are capable of reducing discomfort around their (unethical) actions. As noted by Bastian and Loughnan (2017), these strategies may operate as a 'cascade of denial' whereby it is only when harm becomes inconveniently apparent that one needs to obfuscate personal choice, and in turn when personal responsibility is inescapable one might seek to buffer one's identity. There may also be alternative routes beyond these examples provided here via which people seek to reduce the experience of dissonance. The key point to be made is that where behavior can be flexibly interpreted, it can often be enacted in a way that does not elicit ethical dissonance. It is these kinds of 'grey area' behaviors that are frequently the focus of behavior change campaigns: We know it is wrong to injure or kill others, but we needed to be convinced it is unethical to drink and drive for this reason. We know it is wrong to cause harm to morally relevant others, but we needed to be convinced that animals (and especially those used for meat) fall into this category. We know it is wrong to commit rape, but we needed to be educated around what consent entails. It is this process of education which attempts to reframe these 'grey area' behaviors as unethical and therefore to motivate people to engage in change. As noted earlier, this can be an especially powerful strategy, as it targets a core element of a person's identity, and it is for this reason that many behavior change campaigns grounded in ethical considerations have met with good success. Yet, in order to be effective it is also important to account for the possibility of backfire effects.

When the Promotion of Ethical Behavior Change Backfires

Focusing on meat-eating as a case example, the preceding analysis reveals that when people are exposed to behavior change campaigns that challenge current behavior on ethical

grounds this creates a state of dissonance. Furthermore, that the individual seeks to resolve this experience of dissonance, either by changing their behavior or finding ways to justify it.

This second option requires that they frame their actions in a way that allows them to maintain their moral self-concept, thereby reducing dissonance. Recent theorizing has proposed that dissonance reduction is primarily motivated by the need to facilitate effective action. These processes are described in the Action-Based Model (Harmon-Jones, Amodio, Harmon-Jones, 2009; Harmon-Jones & Harmon-Jones, 2002, 2007; Harmon-Jones, Harmon-Jones, Fearn, Sigelman, & Johnson, 2008; Harmon-Jones & Mills, 1999). A key proposition of this model is that dissonance reduction not only reduces discomfort (its more palliative function), but also involves the ‘spreading of alternatives’ (i.e., a tendency to increase the perceived viability of one’s chosen option and to reduce the perceived viability of the non-chosen option). For instance, one may feel conflicted over whether they should go to France or Italy on holiday. Dissonance theory would predict that if they chose Italy, they will also begin to view France as a less viable option therefore reinforcing their preferred alternative and reducing conflict. Furthermore, via this process (of post-decisional closure; see Harmon-Jones, Amodio, & Harmon-Jones, C. (2009), people also *increase* their behavioral commitment to the chosen alternative. Resolving a conflict over whether to holiday in Italy or France before choosing to go to Italy leads to the effortful generation of more reasons to holiday in Italy than might have been salient had there been no conflict in the first place, and in turn increased commitment to this option. It is this second outcome of dissonance reduction which allows for effective action – i.e., to travel to Italy unconflicted about whether one should have chosen France instead. This was demonstrated in a study by Harmon-Jones and Harmon-Jones (2002) where people who made difficult decisions became more committed to their chosen behavior compared to when those decisions were easy. Difficult

decisions invoke greater dissonance and it is this heightened motivational state that leads people to reinforce their preferred alternative after making that difficult decision. This is consistent with research showing that once people have decided to engage in a given behavior they become motivated towards the goal of enacting that behavior (cf. Beckmann & Irle, 1985; Gollwitzer, 1990; Heckhausen, 1986; Kuhl, 1984) and they view the alternative as a less viable option.

This model of dissonance and its reduction is especially relevant to behavior within the ethical domain. Ethical decisions are often hard, and invoke heightened levels of dissonance. To bring this back to meat-eating, when people are exposed to a behavior change campaign seeking to make salient that their meat-eating brings harm to animals, they will experience conflict. They may resolve this conflict by choosing not to eat meat (and perhaps overtime becoming a vegetarian or perhaps eating less meat), but if they chose to eat meat (and continue their same meat-eating behavior overtime as many do) they find themselves in a motivated state whereby they are seeking good reasons for why they should continue eating meat (both at the point when moral conflict has been aroused, as well as into the future). This motivated state is heightened by being reminded of harm (e.g., through exposure to campaigns), but may be resolved by convincing oneself that continuing current eating-meat practices is the only viable option, and as explained above, thereby increasing one's commitment to this chosen alternative (see Figure 2). Providing evidence for this, studies have found that the more people experience ethical conflict around their actions, the more likely they are to commit to those same actions in the future (Martens, Kosloff, Greenberg, Landau, & Schmader, 2007; see also Lee, Hochman, Prince, & Ariely, 2016).

Promoting Ethical Change Can Lead to Bad Habits

Critically, this backfire effect may do more than simply increase commitment to ethically troublesome behavior; it may also lead to that behavior becoming embedded within people's routines and their ways of thinking. Large-scale behavior change campaigns mostly focus on widespread and frequent behavior. It is these common, yet ethically troublesome behaviors that such campaigns seek to influence (e.g., meat-eating, drink driving, or the boundary between flirting and sexual harassment) by exposing people to, and reminding them of, the harm these actions can bring to others. These reminders can, and often do, lead to a change. Yet for some people, who are already highly committed to their behaviors and resist change, over time and with repeated reminders of ethical implications, such interventions may lead those same individuals to develop more effective defenses, allowing them to more easily, and more efficiently, justify their actions.

For instance, in the case of meat-eating, the process of dissonance reduction may lead people to routinely dementalize meat-animals, develop stronger views that their own meat-eating is natural, normal, and necessary, and come to view their meat-eating as symbolic of cultural identities, thereby defusing responsibility and protecting the moral self-concept. These strategies ultimately allow people avoid sources of discomfort while maintaining their current practices and without the effort of resolving dissonance each time the behavior is performed. Indeed, classic work suggests that people are generally motivated to avoid dissonance evoking information (Abelson et al., 1968; Frey, 1982; Mills, 1965) and this avoidance is well served by reducing conscious reflection on, or awareness of, a given (unethical) behavior (Quinn, Pascoe, Wood, & Neal, 2010). Research has demonstrated that behavioral habits are generally independent of a person's goals or intentions and are, instead, automatically triggered by exposure to contexts in which the behaviors have been learned (Wood & Neal, 2009). This means that habits can lead to the initiation of behavior without

intention and can run to completion without conscious reflection (Neal, Wood, & Quinn, 2006; Neal, Wood, Wu, & Kurlander, 2011).

Evidence for how unethical behavior can become habitual, allowing people to engage in morally troublesome acts without conscious reflection, comes from Garret, Lazzaro, Ariely, and Sharot (2016) who found that self-serving dishonest behavior increases with repetition. Furthermore, using fMRI they observed that the amygdala response to dishonesty is reduced overtime. This is a way to measure the extent to which people are emotionally engaged in an event, and specifically how sensitive they are to the level of threat associated with that event. Behaving dishonestly can feel threatening as it contravenes important ethical values and produces ethical conflict. As such, this finding revealed that people became less aware of, or at least less sensitive to, the unethical nature of their actions. This shows that as people repeatedly engage in ethically troublesome acts, and refine their capacity to discount or distance themselves from inconvenient reminders of harm, they become less sensitive to the ethical implications of their behavior. It also suggests that people are, therefore, engaging in such acts with little conscious reflection or awareness – they are not focused on, or sensitive to, the ethical implications – and this allows ethically troublesome behavior to become habitual.

Ethical Behavior Change and Cultures of Resistance

The analysis thus far suggests that behavior change interventions may trigger defensive responding when they advocate for change on ethical grounds. When people choose to defend their current practices, the process of dissonance reduction may increase commitment to current ethically troublesome behavior, and furthermore, over repeated attempts, could lead to that behavior becoming more habitual. The backfire effect of ethical

behavior change interventions may not stop here, however, also having the capacity to shape societies in ways that ultimately protect people from dissonance.

One reason that arousing dissonance around ethically troublesome behavior may lead to a culture of resistance is that people who choose to maintain their current behavior will be motivated to recruit others to their point of view. Engendering social support for one's own views reinforces that it is the right thing to do, thus protecting against dissonance. This process is detailed within dynamic social impact theory (Latané, 1996; Nowak, Szamrej, & Latané, 1990) which predicts that the persuasiveness, supportiveness, and polarization of a given attitude or behavior will predict its capacity to spread through a given social context (see also Kaplan, Miller, & Charles, 1987). The process of dissonance reduction, as detailed above, is likely to have a polarizing effect on how people view a given behavior. When a behavior is polarized, people will also seek to actively defend their own actions and derogate those who oppose them or choose the alternative; a process that can effectively increase social support for one's own perspective (see also Skitka, Bauman, & Sargis, 2005).

This spreading of ethically troublesome behavior may also occur less consciously and intentionally. High frequency behaviors that have become habitual overtime due to the process of dissonance reduction detailed above (e.g., meat-eating), will elicit little discomfort for the actor. Observers are, therefore, likely to infer that such acts are normative and 'agreed upon'. Research shows that people frequently adopt seemingly normative behaviors, even if they are not personally supportive of them (Miller & McFarland, 1991; Prentice & Miller, 1993).

Finally, overtime, cultures of resistance may develop more established ways to protect against the incursion of dissonance around ethically troublesome actions. First, highly visible cultural norms and practices tend to develop around valued behaviors. Because dissonance reduction leads people to place increased value on their chosen course of action, it is likely

that cultural norms and processes will tend to develop around behaviors that have the capacity to trigger dissonance. An example of this can be found in the common tendency for nations to build their identities around acts of war (e.g., through remembrance days; Liu et al., 2005; Liu & Hilton, 2005). Drawing from the current perspective, this is functional because acts of war arouse high-levels of dissonance – they involve morally problematic behaviors. Ritualizing these acts serves to maintain their perceived importance, protecting people from experiencing discomfort associated with past atrocities (cf., Aquino, Reed, & Freeman, 2007; Paez & Liu, 2011; Watkins & Bastian, 2018). Like habits, people engage in ritualized behavior without questioning its logic or reflecting on its direct causal consequences (Legare, Wen, Herrmann, & Whitehouse, 2015; Nielsen, Kapitány, & Elkins, 2015; Whitehouse, 2004).

A more concrete example of how institutions may seek to protect people from discomfort is evident within the meat industry, where organizations, companies, and other stakeholders seek to obscure meat production from the consumer. This ensures that individuals are able to purchase and consume meat without explicitly connecting it to the animals from which it came (Hoogland, de Boer, & Boersema, 2005), and this may be achieved in several ways. The remote location of farming and slaughtering of animals facilitates a disconnect between meat and meat-animals (Plous, 2003). Beyond physical distance, people are also protected from information associated with these practices, such that farm animals tend to receive less media coverage than wild animals (e.g., Singer, 1991). There is a general lack of media coverage of the process, scope, and impact of meat production (e.g., Joy, 2011) and large-scale abattoirs or factory farms are hesitant to allow transparency around their processes (e.g., Foer, 2010). This same lack of transparency is evident in the marketing of meat, where meat-products are typically separated from their animal origins (Plous, 1993). Language used to describe meat-products (e.g., pork not pigs,

beef not cow, veal not calves; see Hyers, 2006; Leach, 1964; Mitchell, 2011; Plous, 1993, 2003, Rasmussen, Rajecski, & Craft, 1993) is not unlike the ‘euphemistic labelling’ referred to by Bandura (1999) as a process through which people can morally disengage from their actions, and which is perpetuated and supported by social institutions and norms.

Where to From Here?

Drawing on a motivational analysis of ethically troublesome behavior (see Bastian & Loughnan, 2017) and research within the field of behavioral ethics more broadly, I have argued that behavior change initiatives that invoke ethical arguments may lead to backfire effects. Beyond increasing commitment to, and the frequency of, a targeted behavior, over repeated exposure, interventions may even lead to the development of habits and cultures of resistance. These responses effectively protect people against the experience of discomfort which these campaigns seek to trigger, allowing them to continue their current actions with little reflection.

The foregoing analysis underlines that morally charged behaviors, and attempts to challenge them on ethical grounds, can lead to backfire effects and that this cannot be addressed with standard models of behavioral change. To understand the motivational dynamics of behavior change around ethical issues, we need an account of how self-perception and motivated resistance can work against change – these self-relevant beliefs and motivations are more at stake in the case of unethical behavior compared to other types of behavior (i.e., unhealthy behavior). Although the theory of planned behavior (Ajzen, 1991) has detailed how negative attitudes or unsupportive social norms may block efforts to achieve change, it has not accounted for the possibility that such efforts may produce backfire effects, increasing and spreading a targeted behavior. If interventions have the capacity to increase ethically troublesome behavior and embed it within minds and cultures, then we need to think

carefully about how to apply interventions when they draw on ethical arguments (or perhaps when not to use ethical arguments), such that we do not end up doing more harm than good. This requires a careful analysis of how we might challenge ethically troublesome behavior while also avoiding the possibility of defensive responding. In the next section, I detail several practical considerations for behavior change interventions that may help to avoid backfire effects.

Social Issues and Policy Implications

Over the past decades we have seen a shift towards the moralization of a range of social issues. As Rozin (1999) notes, there has been a shift towards the moralization of smoking, drugs, obesity, and meat-eating (see Rozin, Markwith, & Stoess, 1997). As we become more sensitive to the rights and needs of others (Pinker, 2011), including more distant others (Singer, 2011; Crimston, Bain, Hornsey, & Bastian, 2016), the reasons for our actions are more likely to be guided and directed by ethical considerations. Behavior change campaigns need to recognize this shift. The question becomes, how can we intervene in ethically troublesome behavior in ways that avoid fostering resistance to change?

Ethical arguments are powerful avenues through which to promote behavior change. For this reason, it is not advisable to walk away from ethical arguments, but rather to understand how to deliver them effectively. As argued by Markowitz and Shariff (2012), campaigns that seek to increase concern over climate change are well advised to elevate it to the status of a moral issue. Similarly, concern for the welfare of other humans is elevated by emphasizing their moral relevance (i.e., by humanizing them; Capozza et al. 2012; Majdandžić et al. 2012; Tam et al. 2007; Viki et al. 2012; Vezzali et al. 2012) and concern for the welfare of animals is elevated when they are likened to humans, thereby increasing their moral importance (Amiot & Bastian, 2017; Bastian, Costello, Loughnan, & Hodson, 2012).

Yet, as the above analysis has hopefully made clear, this can backfire when the self-concept is threatened. By pushing people's ethical buttons, we may achieve change in some, but we may also foster and build resistance in others (i.e., those who are highly committed to their existing behavior). Below I will detail several ideas for how behavior change interventions might manage this tension (see Table 1).

Linking Behavior Change to Positive Moral Outcomes

Moralizing behavior may lead people to feel guilty over their past actions. While there is some work suggesting that this has the capacity to lead to positive change (Ferguson & Branscombe, 2009), other findings suggest that dire messages can backfire and lead to reduced levels of concern and engagement (Feinberg & Willer, 2011). Positive moral emotions may, however, provide an alternative and perhaps even more powerful route. For instance, Schneider, Zaval, Weber, and Markowitz (2017) found that anticipated pride from pro-environmental behavior is a more powerful motivator of behavior change than is anticipated guilt from inaction. Linking future behavior change to positive moral emotions (e.g., pride, gratitude and hope) rather than past failure to negative moral emotions (e.g., guilt or shame) may allow for the moralization of an issue without threatening the moral self-concept. A similar approach may be to link behavior change in one domain to ethical outcomes in another domain. For instance, Bain, Hornsey, Bongiorno and Jeffries (2012) found that people who remained unconvinced regarding anthropogenic climate change intended to act more pro-environmentally when they thought climate change action would create a society where people are more considerate and caring. This shows that highlighting the positive and ethically important outcomes of behavior change, even when these outcomes may be only indirectly related to the target issue, may motivate people towards change while avoiding threats to the moral self-concept and in turn the likelihood of backfire effects

Target Behavior but Reduce Personal Liability

Another way in which motivated resistance may be avoided is by focusing on the unethical consequences of a similar behavior in others. An example of this was the live exports scandal in Australia, where footage of Indonesian abattoir practices was aired on Australian television, leading to outrage and a temporary suspension of live cattle trade. In this context, Australian consumers were focused on the unethical treatment of cattle in other countries, but this also led them to reflect on the unethical consequences of their own meat-eating behavior. This had the potential to lead to a change in one's own behavior without feeling directly targeted or threatened. While there is some anecdotal evidence that this event was indeed effective in motivating a reduction in meat consumption for Australians (personal communication Animals Australia) direct evidence for this effect is yet to be reported.

Research on scapegoating confirms that by expressing outrage at others, people can reduce their own feelings of guilt. Yet, this work also suggests that a reduction in guilt corresponds to a reduced motivation to change one's own behavior (Rothschild, Landau, Molina, Branscombe & Sullivan, 2013; Rothschild, Landau, Sullivan, & Keefer, 2012; see also Barkan et al., 2012). It may be that eliciting outrage towards the harmful practices of others (e.g., the environmental impact of large industry, or the treatment of animals through the meat production process) can go beyond defusing personal guilt to motivating a desire for distancing the self from those actions. This creates a context where change can be considered while motivated resistance is minimized. This type of intervention would, in effect, seek to trigger the motivation for positive differentiation from the unethical actions of others (e.g., Jetten, Spears, & Manstead, 1998).

Present Challenges to Behavior from Ingroup Members

There is now a substantial body of research showing that criticisms from ingroup members are responded to less defensively compared to challenges from outgroup members (Hornsey & Imani, 2004; see Hornsey, 2005 for a review). Prior research has shown these effects using national group memberships, whereby Australians are used to criticize other Australians. Yet, social identities are also formed around important behaviors, such as meat-eater vs. vegetarian. An especially powerful intervention may be one that comes from someone who does not profess to be a moral saint, but who also seeks to encourage behavior change on ethical grounds. For instance, meat-eaters might be used to encourage other meat-eaters to reduce their consumption (i.e., meat-avoidance or 'Reducetarianism') or people who admit to sometimes poor environmental stewardship, advocating for greater efforts to achieve positive environmental change. Finding those individuals who are willing to put their own moral self-concept on the line (i.e., to publicly admit the ethically problematic nature of their own behavior and therefore the need for personal change) and therefore to be identified as ingroup members may be difficult, but if done well, it may prove to be especially effective in changing others behavior. Put differently, leading by example may not always be the best strategy when targeting others ethically troublesome behavior (e.g., Monin et al., 2008). One caveat to this statement might be the use of celebrities who advocate for behavior change on ethical grounds (a strategy frequently employed by organizations such as PETA). People wish to positively identify with these revered others, and through this process of positive identification may see them as ingroup rather than outgroup members, seeking to align their own behavior (Basil, 1996).

Use Nudges Rather than Direct Challenges

Approaches to changing behavior in ways that is often outside of conscious awareness has recently been popularized by the ‘nudge’ movement (Thaler & Sunstein, 2008). This work shows that the way choices are presented, as well as subtle cues or reminders, can lead to behavior change. Although reflective ethical decision making is unlikely to be influenced outside of conscious awareness, there is now a significant body of research showing that moral intuitions are closely tied to emotional states and may even become primed through activating emotions such as disgust (e.g., Haidt, 2001; but see Landy & Goodwin, 2015). As reported by Rozin and Sign (2008) disgust towards cigarette smoking was highly correlated with judging it as immoral. This suggests that eliciting feelings of disgust toward a particular object (e.g., meat) or behavior (e.g., smoking, cheating) may provide an avenue through which to change behavior. This may be especially effective if the emotional response is targeted at other’s actions rather than one’s own, or elicited incidentally, to avoid backfire effects.

Another example of how nudges can be used within the ethical domain comes from research on how social norms can influence people to pay their taxes on time. Hallsworth, List, Metcalfe and Vlaev (2017) used administrative data from more than 200,000 individuals in the UK to show that including social norms and public goods messages in tax payment reminder letters considerably enhanced tax compliance. Learning that others were complying with an ethical norm increased the likelihood of people adopting that norm themselves. One could imagine such an approach applied to meat-eating, for instance, where people learn that others have started to curtail their personal consumption due to concerns over animal welfare. Considerable social psychological research has demonstrated the power of social norms to influence individual behavior (Cialdini, 2004).

Social norms may be communicated as injunctive norms (what most people think we should do) or descriptive norms (what most people do; Cialdini, Reno, & Kallgren, 1990). Although injunctive norms may play a role in elevating the moral status of a behavior (e.g., Markowitz & Shariff, 2012), this approach may also threaten people's moral self-concept leading to motivated resistance. Another approach, like that used by Hallsworth et al. (2017) is to highlight positive descriptive norms (e.g., to communicate that most people comply with taxation legislation, or many people have begun to limit their meat-intake or have substituted meat with more vegetables or nuts). This side-steps the moral condemnation of a given behavior (e.g., most people think it is wrong to pay tax late, or most people think it is unethical to eat-meat), while setting up a comparison context that people may be motivated to engage with in positive ways (i.e., by bringing their behavior in line with what most other people are doing themselves). This becomes more difficult when a given behavior, such as meat-eating, is widespread. Yet, it may be that highlighting trends rather than norms per se can have a similar effect. Learning that there is a trend for people to reduce their meat-consumption or choosing to become vegetarian or vegan can lead people to contemplate the reasons for why this change is occurring, rather than feeling threatened by messages telling them they need to change. Such reasons may be varied (e.g., health or lifestyle factors as well as ethical concerns), but allowing people to explore these reasons can make salient ethical conflict without directly targeting people's current behavior.

Focus on Incremental Change Rather than Radical Change

As noted above, research shows that many people tend to cheat when given the opportunity, but only enough so that it does not impact on their perception of themselves as good and moral people (Mazar et al., 2008). This suggests that incremental change within the ethical domain can occur without it impacting on self-perception. It is likely that this same

process also works in the other direction. Asking people to adjust their behavior, rather than eradicate it completely, may also lead to less motivated resistance. Messages that seek to convince people they could avoid meat or reduce their meat intake are likely to be less threatening compared to when they are asked to completely remove it from their diet. This is because messages that promote incremental adjustments are less likely to invoke black and white thinking. People can entertain the various benefits, including ethical ones, of adjusting their behavior without feeling that they are being cast as unethical (e.g., Schneider et al., 2017). Furthermore, this approach may also lead people to feel good about themselves when they do make incremental change. Indeed, research shows that focusing on the attainment of positive gains, as opposed to avoiding wrong behavior, is a better way to motivate behavior change in general (Higgins, 1998).

Research on the differences between people who are vegetarian for reasons of health vs. for ethical reasons, shows that health vegetarians tend to engage in gradual change whereas ethical vegetarians tend to engage in abrupt change (Jabs, Devine & Sobal, 1998, see also Beardsworth & Keil, 1991; Rothgerber, 2015a,b; Rozin et al., 1997). This ‘conversion experience’ of ethical vegetarians underlines the way in which ethical issues can be powerful sources of behavior change, but also that they tend to be cast in an all or nothing (black or white) framework. It may be that ethical interventions need to walk the fine line between helping people to see the ethical implications of their behavior, while also providing them with ways to reduce (rather than attempt to initially eliminate) these outcomes. For instance, a significant reduction in meat intake mixed with a choice to purchase more ethically produced meat products would have a significant impact on the use of factory farming practices, thereby significantly reducing the extent of animal harm.

Target the Necessity of the Behavior

One of the key motivations for why people choose to maintain a given behavior is that they see it as necessary and, therefore, do not see viable alternatives. For instance, one of the key justifications provided for meat-consumption is that it is necessary (Piazza et al., 2015; see also Peace, 2008). Addressing the necessity of a meat-consumption (e.g., socially, medically, nutritionally, or practically), and perhaps especially the necessity of frequent meat-consumption, would target a key motivation for behavior maintenance. This would effectively also frame behavior change in non-ethical terms as necessity would be addressed at the level of an individual's own needs (i.e., whether they need to eat meat, or whether competing demands that might lead them to cheat are worth pursuing), rather than the ethical consequences of their actions. Key to this approach, would be to assist people to see viable alternatives. This would ensure that people are not stuck in a prevention mindset, but rather become focused on the promotion of viable and positive alternatives (see Higgins, 1998). In the context of meat-eating, this would be providing information around ways to achieve a balanced diet with less (or no) reliance on meat.

Conclusions

Behavior change represents a major field of research and practice within psychology. Given that people frequently make decisions to act based on ethical considerations and unethical behavior is can be costly, the field is well advised to integrate insights from research on behavioral ethics to address some of society's most pressing and troublesome issues. If confronting people with the unethical implications of their actions may be just as likely to increase their commitment to those actions as it may increase their desire for change, this presents a major challenge to dominant models when applied to behavior change initiatives that are primarily communicated in terms of ethical considerations. The current

analysis also provides an account of how and why unethical behavior needs to be understood and addressed within its social context. Micro- and macro-cultural environments can provide havens for ethically troublesome action, frequently blinding people to the implications. Campaigns that seek to motivate change on ethical grounds aim to remove this veil of ignorance and avoidance as a way to foster behavioral change, yet they need to carefully balance the powerful impacts of doing so with the possibility of triggering motivated resistance. By adapting and updating current models to better predict how to change ethically troublesome behavior, we will develop important insights into how we might challenge and change some of the most harmful behaviors within society, ranging from the overconsumption of meat to environmental conservation, and from the perpetuation of prejudice and socio-economic inequality to questionable practices within organizational and professional contexts.

References

- Abelson, R. P., Aronson, E., McGuire, W. J., Newcomb, T. M., Rosenberg, M. J., & Tannenbaum, P. H. (Eds.). (1968). *Theories of cognitive consistency: A sourcebook*. Chicago, IL: Rand-McNally.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Alicke, M. D., Klotz, M. L., Breitenbecher, D. L., Yurak, T. J., & Vredenburg, D. S. (1995). Personal contact, individuation, and the better-than-average effect. *Journal of Personality and Social Psychology*, 68(5), 804-825.
- Amiot, C. E., & Bastian, B. (2017). Solidarity with animals: Assessing a relevant dimension of social identification with animals. *PLoS ONE*, 12(1), e0168184.
<https://doi.org/10.1371/journal.pone.0168184>
- Aquino, K., & Reed II, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423-1440. <https://doi.org/10.1037//0022-3514.83.6.1423>
- Aquino, K., Reed II, A., Thau, S., & Freeman, D. (2007). A grotesque and dark beauty: How moral identity and mechanisms of moral disengagement influence cognitive and emotional reactions to war. *Journal of Experimental Social Psychology*, 43(3), 385-392.
- Ariely, D. (2012). *The (honest) truth about dishonesty: How we lie to everyone—especially ourselves* (1st ed.). New York, NY: Harper.
- Aronson, E. (1968). Dissonance theory: Progress and problems. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of cognitive consistency: A sourcebook* (pp. 5-27). Chicago, IL: Rand McNally.
- Aronson, E. (1992). The return of the repressed: Dissonance theory makes a comeback. *Psychological Inquiry*, 3(4), 303-311.

- Bain, P. G., Hornsey, M. J., Bongiorno, R., & Jeffries, C. (2012). Promoting pro-environmental action in climate change deniers. *Nature Climate Change*, 2(8), 600-603. <https://doi.org/10.1038/nclimate1532>
- Bandura, A. (1999). Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review*, 3(3), 193-209.
- Bandura, A., Underwood, B., & Fromson, M. E. (1975). Disinhibition of aggression through diffusion of responsibility and dehumanization of victims. *Journal of Research in Personality*, 9(4), 253-269. [https://doi.org/10.1016/0092-6566\(75\)90001-X](https://doi.org/10.1016/0092-6566(75)90001-X)
- Barkan, R., Ayal, S., & Ariely, D. (2015). Ethical dissonance, justifications, and moral behavior. *Current Opinion in Psychology*, 6, 157-161. <https://doi.org/10.1016/j.copsyc.2015.08.001>
- Barkan, R., Ayal, S., Gino, F., & Ariely, D. (2012). The pot calling the kettle black: Distancing response to ethical dissonance. *Journal of Experimental Psychology: General*, 141(4), 757-773. <https://doi.org/10.1037/a0027588>
- Basil, M. D. (1996). Identification as a mediator of celebrity effects. *Journal of Broadcasting & Electronic Media*, 40(4), 478-495.
- Bastian, B., Costello, K., Loughnan, S., & Hodson, G. (2012). When closing the human-animal divide expands moral concern: The importance of framing. *Social Psychological and Personality Science*, 3(4), 421-429.
- Bastian, B., Jetten, J., & Fasoli, F. (2011). Cleansing the soul by hurting the flesh: The guilt-reducing effect of pain. *Psychological Science*, 22(3), 334-335. <https://doi.org/10.1177/0956797610397058>
- Bastian, B., & Loughnan, S. (2017). Resolving the meat-paradox: A motivational account of morally troublesome behavior and its maintenance. *Personality and Social Psychology Review*, 21(3), 278-299.

- Bastian, B., Loughnan, S., Haslam, N., & Radke, H. R. (2012). Don't mind meat? The denial of mind to animals used for human consumption. *Personality and Social Psychology Bulletin*, 38(2), 247-256.
- Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Review*, 103(1), 5-33. <https://doi.org/10.1037/0033-295X.103.1.5>
- Baumeister, R. F., Stillwell, A., & Wotman, S. R. (1990). Victim and perpetrator accounts of interpersonal conflict: Autobiographical narratives about anger. *Journal of Personality and Social Psychology*, 59(5), 994-1005. <https://doi.org/10.1037/0022-3514.59.5.994>
- Beardsworth, A., & Keil, T. (1991). Health-related beliefs and dietary practices among vegetarians and vegans: A qualitative study. *Health Education Journal*, 50(1), 38-42. <https://doi.org/10.1177/001789699105000111>
- Beardsworth, A. D., & Keil, E. T. (1991). Vegetarianism, veganism, and meat avoidance: Recent trends and findings. *British Food Journal*, 93(4), 19-24.
- Beck, L., & Ajzen, I. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of Research in Personality*, 25(3), 285-301.
- Beckmann, J., & Irl, M. (1985). Dissonance and action control. In J. Kuhl, & J. Beckmann, (Eds.), *Action control: From cognition to behavior* (pp. 129-150). Berlin, Germany: Springer-Verlag.
- Bem, D. J. (1967). Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review*, 74(3), 183-200. <https://doi.org/10.1037/h0024835>
- Biddle, B. J., Bank, B. J., & Slavings, R. L. (1987). Norms, preferences, identities and retention decisions. *Social Psychology Quarterly*, 50(4), 322-337. <https://doi.org/10.2307/2786817>

- Bilewicz, M., Imhoff, R., & Drogosz, M. (2011). The humanity of what we eat: Conceptions of human uniqueness among vegetarians and omnivores. *European Journal of Social Psychology, 41*(2), 201-209.
- Borrelli, B., McQuaid, E. L., Becker, B., Hammond, K., Papandonatos, G., Fritz, G., & Abrams, D. (2002). Motivating parents of kids with asthma to quit smoking: The PAQS project. *Health Education Research, 17*(5), 659-669.
- Capozza, D., Andrighetto, L., Di Bernardo, G. A., & Falvo, R. (2012). Does status affect intergroup perceptions of humanity? *Group Processes & Intergroup Relations, 15*(3), 363-377. <https://doi.org/10.1177/1368430211426733>
- Castano, E., & Giner-Sorolla, R. (2006). Not quite human: Infrahumanization in response to collective responsibility for intergroup killing. *Journal of Personality and Social Psychology, 90*(5), 804-818. <https://doi.org/10.1037/0022-3514.90.5.804>
- Charng, H. W., Piliavin, J. A., & Callero, P. L. (1988). Role identity and reasoned action in the prediction of repeated behavior. *Social Psychology Quarterly, 51*(4), 303-317. <https://doi.org/10.2307/2786758>
- Cialdini, R. B. (2004). The science of persuasion. *Scientific American Mind, 14*(1), 70-77.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology, 58*(6), 1015-1026. <https://doi.org/10.1037/0022-3514.58.6.1015>
- Cooper, J. (1971). Personal responsibility and dissonance: The role of foreseen consequences. *Journal of Personality and Social Psychology, 18*(3), 354-363. <https://doi.org/10.1037/h0030995>
- Crimston, D., Bain, P. G., Hornsey, M. J., & Bastian, B. (2016). Moral expansiveness: Examining variability in the extension of the moral world. *Journal of Personality and Social Psychology, 111*(4), 636-653. <https://doi.org/10.1037/pspp0000086>

- Dennison, C. M., & Shepherd, R. (1995). Adolescent food choice: An application of the theory of planned behaviour. *Journal of Human Nutrition and Dietetics*, 8(1), 9-23.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.
- Feinberg, M., & Willer, R. (2011). Apocalypse soon? Dire messages reduce belief in global warming by contradicting just-world beliefs. *Psychological Science*, 22(1), 34-38.
<https://doi.org/10.1177/0956797610391911>
- Ferguson, M. A., & Branscombe, N. R. (2010). Collective guilt mediates the effect of beliefs about global warming on willingness to engage in mitigation behavior. *Journal of Environmental Psychology*, 30(2), 135-142. <https://doi.org/10.1016/j.jenvp.2009.11.010>
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Fishbein, M. & Ajzen, I. (1975). *Belief, attitude, attitude, intention and behavior: An introduction to theory of research*. Reading, MA: Addison-Wesley.
- Foer, J. S. (2009, October 11). Against meat. *New York Times Magazine*, 74, MM68.
- Foer, J. S. (2010). *Eating animals*. New York, NY: Back Bay Books
- Frey, D. (1982). Different levels of cognitive dissonance, information seeking, and information avoidance. *Journal of Personality and Social Psychology*, 43(6), 1175-1183.
<https://doi.org/10.1037/0022-3514.43.6.1175>
- Garrett, N., Lazzaro, S. C., Ariely, D., & Sharot, T. (2016). The brain adapts to dishonesty. *Nature Neuroscience*, 19(12), 1727-1732. <https://doi.org/10.1038/nn.4426>
- Gino, F., Ayal, S., & Ariely, D. (2009). Contagion and differentiation in unethical behavior: The effect of one bad apple on the barrel. *Psychological Science*, 20(3), 393-398.
- Gollwitzer, P. M. (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior*, Vol. 2, pp. 53-92). New York, NY: Guilford Press.

- Goodwin, G. P. (2015). Moral character in person perception. *Current Directions in Psychological Science*, 24(1), 38-44.
- Goodwin, G. P., Piazza, J., & Rozin, P. (2014). Moral character predominates in person perception and evaluation. *Journal of Personality and Social Psychology*, 106(1), 148-168. <https://doi.org/10.1037/a0034726>
- Granberg, D., & Holmberg, S. (1990). The person positivity and principal actor hypotheses. *Journal of Applied Social Psychology*, 20(22), 1879-1901.
- Gray, K., Young, L., & Waytz, A. (2012). Mind perception is the essence of morality. *Psychological Inquiry*, 23(2), 101-124.
- Haidt, J. (2001). The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological Review*, 108, 814-834.
- Hallsworth, M., List, J. A., Metcalfe, R. D., & Vlaev, I. (2017). The behavioralist as tax collector: Using natural field experiments to enhance tax compliance. *Journal of Public Economics*, 148, 14-31. <https://doi.org/10.1016/j.jpubeco.2017.02.003>
- Harmon-Jones, E., Amodio, D. M., & Harmon-Jones, C. (2009). Action-based model of dissonance: A review, integration, and expansion of conceptions of cognitive conflict. *Advances in Experimental Social Psychology*, 41, 119-166.
- Harmon-Jones, E., & Harmon-Jones, C. (2002). Testing the action-based model of cognitive dissonance: The effect of action orientation on postdecisional attitudes. *Personality and Social Psychology Bulletin*, 28(6), 711-723.
- Harmon-Jones, E., & Harmon-Jones, C. (2007). Cognitive dissonance theory after 50 years of development. *Zeitschrift für Sozialpsychologie*, 38(1), 7-16.
- Harmon-Jones, E., Harmon-Jones, C., Fearn, M., Sigelman, J. D., & Johnson, P. (2008). Left Frontal Cortical Activation and Spreading of Alternatives: Tests of the Action-Based

- Model of Dissonance. *Journal of Personality and Social Psychology*, 94(1), 1-15.
<https://doi.org/10.1037/0022-3514.94.1.1>
- Harmon-Jones, E., & Mills, J. (1999). An introduction to cognitive dissonance theory and an overview of current perspectives on the theory. In E. Harmon-Jones & J. Mills (Eds.), *Science conference series. Cognitive dissonance: Progress on a pivotal theory in social psychology* (pp. 3-21). Washington, DC: American Psychological Association.
<http://dx.doi.org/10.1037/10318-001>
- Heckhausen, H. (1986). Why some time out might benefit achievement motivation research. In J. H. L. van den Bercken, T. C. M. Bergen, & E. E. J. De Bruyn (Eds.), *Achievement and task motivation* (pp. 7-39). Lisse, The Netherlands: Swets & Zeitlinger.
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In *Advances in Experimental Social Psychology* (Vol. 30, pp. 1-46). Academic Press.
- Hoogland, C. T., de Boer, J., & Boersema, J. J. (2005). Transparency of the meat chain in the light of food culture and history. *Appetite*, 45(1), 15-23.
- Hornsey, M. J. (2005). Why being right is not enough: Predicting defensiveness in the face of group criticism. *European review of social psychology*, 16(1), 301-334.
- Hornsey, M. J., & Imani, A. (2004). Criticizing groups from the inside and the outside: An identity perspective on the intergroup sensitivity effect. *Personality and Social Psychology Bulletin*, 30(3), 365-383. <https://doi.org/10.1177/0146167203261295>
- Hyers, L. L. (2006). Myths used to legitimize the exploitation of animals: An application of Social Dominance Theory. *Anthrozoös*, 19(3), 194-210.
- Imhoff, R., & Banse, R. (2009). Ongoing victim suffering increases prejudice: The case of secondary anti-Semitism. *Psychological Science*, 20(12), 1443-1447.

- Jabs, J., Devine, C. M., & Sobal, J. (1998). Model of the process of adopting vegetarian diets: Health vegetarians and ethical vegetarians. *Journal of Nutrition Education*, 30(4), 196-202. [https://doi.org/10.1016/S0022-3182\(98\)70319-X](https://doi.org/10.1016/S0022-3182(98)70319-X)
- Jackson, L. E., & Gaertner, L. (2010). Mechanisms of moral disengagement and their differential use by right-wing authoritarianism and social dominance orientation in support of war. *Aggressive Behavior*, 36(4), 238-250.
- Jetten, J., Spears, R., & Manstead, A. S. R. (1998). Defining dimensions of distinctiveness: Group variability makes a difference to differentiation. *Journal of Personality and Social Psychology*, 74(6), 1481-1492. <https://doi.org/10.1037/0022-3514.74.6.1481>
- Joy, M. (2011) *Why we love dogs, eat pigs, and wear cows: An introduction to Carnism*. San Francisco, CA: Conari Press.
- Kaplan, M. F., & Miller, C. E. (1987). Group decision making and normative versus informational influence: Effects of type of issue and assigned decision rule. *Journal of Personality and Social Psychology*, 53(2), 306-313. <https://doi.org/10.1037/0022-3514.53.2.306>
- Koger, S. (2010). Coping with the Deepwater Horizon disaster: An Ecopsychology interview with Deborah Du Nann Winter. *Ecopsychology*, 2(4), 205-209. <https://doi.org/10.1089/eco.2010.0059>
- Kowalski, R. M. (2000). "I was only kidding!": Victims' and perpetrators' perceptions of teasing. *Personality and Social Psychology Bulletin*, 26(2), 231-241.
- Kuhl, J. (1984). Volitional aspect of achievement motivation and learned helplessness: Toward a comprehensive theory of action control. In B. A. Maher & W. B. Maher (Eds.), *Progress in experimental personality research* (Vol. 13, pp. 99-171). New York, NY: Academic Press.

- Lancaster, T., Stead, L., Silagy, C., & Sowden, A. (2000). Effectiveness of interventions to help people stop smoking: findings from the *Cochrane Library*. *BMJ : British Medical Journal*, 321(7257), 355-358.
- Landy, J. F., & Goodwin, G. P. (2015). Does incidental disgust amplify moral judgment? A meta-analytic review of experimental evidence. *Perspectives on Psychological Science*, 10, 518-536.
- Latané, B. (1996). Dynamic social impact: The creation of culture by communication. *Journal of Communication*, 46(4), 13-25.
- Leach, E. (1964). Anthropological aspects of language: Animal categories and verbal abuse. In E. Lenneberg (Ed.), *New directions in the study of language* (pp. 23-64). Cambridge, MA: MIT Press
- Leach, C. W., Ellemers, N., & Barreto, M. (2007). Group virtue: the importance of morality (vs. competence and sociability) in the positive evaluation of in-groups. *Journal of Personality and Social Psychology*, 93(2), 234-249.
- Lee, C. Y., Hochman, G., Prince, S. E., & Ariely, D. (2016). Past actions as self-signals: How acting in a self-interested way influences environmental decision making. *PLoS ONE*, 11(7), e0158456. <https://doi.org/10.1371/journal.pone.0158456>
- Legare, C. H., Wen, N. J., Herrmann, P. A., & Whitehouse, H. (2015). Imitative flexibility and the development of cultural learning. *Cognition*, 142, 351-361.
- Leidner, B., Castano, E., & Ginges, J. (2013). Dehumanization, retributive and restorative justice, and aggressive versus diplomatic intergroup conflict resolution strategies. *Personality and Social Psychology Bulletin*, 39(2), 181-192.
- Liu, J. H., Goldstein-Hawes, R., Hilton, D., Huang, L. L., Gastardo-Conaco, C., Dresler-Hawke, E., ... & Kashima, Y. (2005). Social representations of events and people in world history across 12 cultures. *Journal of Cross-Cultural Psychology*, 36(2), 171-191.

- Liu, J. H., & Hilton, D. J. (2005). How the past weighs on the present: Social representations of history and their role in identity politics. *British Journal of Social Psychology*, 44(4), 537-556.
- Loughnan, S., Haslam, N., & Bastian, B. (2010). The role of meat consumption in the denial of moral status and mind to meat animals. *Appetite*, 55(1), 156-159.
- Majdandžić, J., Bauer, H., Windischberger, C., Moser, E., Engl, E., & Lamm, C. (2012). The human factor: Behavioral and neural correlates of humanized perception in moral decision making. *PLoS ONE*, 7(10), e47698.
- Markowitz, E., & Shariff, A. (2012). Climate change and moral judgement. *Nature Climate Change*, 2(4), 243-247. <https://doi.org/doi: 10.1038/nclimate1378>
- Martens, A., Kosloff, S., Greenberg, J., Landau, M. J., & Schmader, T. (2007). Killing begets killing: Evidence from a bug-killing paradigm that initial killing fuels subsequent killing. *Personality and Social Psychology Bulletin*, 33(9), 1251-1264.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6), 633-644.
- Meier, B. P., Sellbom, M., & Wygant, D. B. (2007). Failing to take the moral high ground: Psychopathy and the vertical representation of morality. *Personality and Individual Differences*, 43(4), 757-767.
- Merritt, A. C., Effron, D. A., & Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. *Social and personality psychology compass*, 4(5), 344-357.
- Michie, S., Abraham, C., Whittington, C., McAteer, J., & Gupta, S. (2009). Effective Techniques in Healthy Eating and Physical Activity Interventions: A Meta-Regression. *Health Psychology*, 28(6), 690-701. <https://doi.org/10.1037/a0016136>

- Miller, D. T., & McFarland, C. (1991). When social comparison goes awry: The case of pluralistic ignorance. In J. Suls & T. A. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 287-313). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Mills, J. (1965). Effect of certainty about a decision upon postdecision exposure to consonant and dissonant information. *Journal of Personality and Social Psychology*, 2(5), 749-752. <http://dx.doi.org/10.1037/h0022676>
- Mitchell, L. (2011). Moral disengagement and support for nonhuman animal farming. *Society & Animals*, 19(1), 38-58.
- Monin, B., Sawyer, P. J., & Marquez, M. J. (2008). The rejection of moral rebels: Resenting those who do the right thing. *Journal of Personality and Social Psychology*, 95(1), 76-93. <https://doi.org/10.1037/0022-3514.95.1.76>
- Myhre, L., June A., & Flora, S. (2000). HIV/AIDS communication campaigns: progress and prospects. *Journal of Health Communication*, 5(sup1), 29-45.
- Neal, D. T., Wood, W., & Quinn, J. M. (2006). Habits—A repeat performance. *Current Directions in Psychological Science*, 15(4), 198-202.
- Neal, D. T., Wood, W., Wu, M., & Kurlander, D. (2011). The pull of the past: When do habits persist despite conflict with motives? *Personality and Social Psychology Bulletin*, 37(11), 1428-1437. <https://doi.org/10.1177/0146167211419863>
- Nielsen, M., Kapitány, R., & Elkins, R. (2015). The perpetuation of ritualistic actions as revealed by young children's transmission of normative behavior. *Evolution and Human Behavior*, 36(3), 191-198. <https://doi.org/10.1016/j.evolhumbehav.2014.11.002>
- Nisbet, M. C., Markowitz, E. M., & Kotcher, J. E. (2012). Winning the conversation: Framing and moral messaging in environmental campaigns. In L. Ahern & D. Bortree (Eds.), *Talking green: Exploring current issues in environmental communication* (pp. 9-36). New York, NY: Peter Lang.

- Nowak, A., Szamrej, J., & Latané, B. (1990). From private attitude to public opinion: A dynamic theory of social impact. *Psychological Review*, 97(3), 362-376.
- Opotow, S. (1990). Moral exclusion and injustice: An introduction. *Journal of Social Issues*, 46(1), 1-20. <https://doi.org/10.1111/j.1540-4560.1990.tb00268.x>
- Opotow, S. (1993). Animals and the scope of justice. *Journal of Social Issues*, 49(1), 71-85.
- Paez, D., & Liu, J. (2011). Collective memory of conflicts. In D. Bar-Tal (Ed.) *Intergroup conflicts and their resolution: Social psychological perspectives* (pp. 105-124). New York, NY: Psychology Press.
- Parker, D., Manstead, A. S., & Stradling, S. G. (1995). Extending the theory of planned behaviour: The role of personal norm. *British Journal of Social Psychology*, 34(2), 127-138.
- Peace, A. (2008). Meat in the genes. *Anthropology Today*, 24, 5-10.
- Piazza, J., Ruby, M. B., Loughnan, S., Luong, M., Kulik, J., Watkins, H. M., & Seigerman, M. (2015). Rationalizing meat consumption. The 4Ns. *Appetite*, 91, 114-128.
- Pinker, S. (2011). *The better angels of our nature: Why violence has declined*. New York, NY: Viking.
- Plous, S. (1993). Psychological mechanisms in the human use of animals. *Journal of Social Issues*, 49(1), 11-52.
- Plous, S. (2003). Is there such a thing as prejudice towards animals. In S. Plous (Ed.), *Understanding prejudice and discrimination* (pp. 509-528). Boston, MA: McGraw-Hill
- Prentice, D. A., & Miller, D. T. (1993). Pluralistic ignorance and alcohol use on campus: Some consequences of misperceiving the social norm. *Journal of Personality and Social Psychology*, 64(2), 243-256. <http://dx.doi.org/10.1037/0022-3514.64.2.243>

- Prochaska, J. O., & Diclemente, C. C. (1986). Toward a Comprehensive Model of Change. In J. O. Prochaska & C. C. Diclemente (Eds.), *Treating addictive behaviors* (pp. 3-27). Boston, MA: Springer.
- Quinn, J. M., Pascoe, A., Wood, W., & Neal, D. T. (2010). Can't control yourself? Monitor those bad habits. *Personality and Social Psychology Bulletin*, 36(4), 499-511.
- Raats, M. M., Shepherd, R., & Sparks, P. (1995). Including moral dimensions of choice within the structure of the theory of planned behavior. *Journal of Applied Social Psychology*, 25(6), 484-494.
- Rasmussen, J. L., Rajecki, D. W., & Craft, H. D. (1993). Humans' perceptions of animal mentality: ascriptions of thinking. *Journal of Comparative Psychology*, 107(3), 283-290. <https://doi.org/10.1037//0735-7036.107.3.283>
- Reed, A. II, & Aquino, K. F. (2003). Moral identity and the expanding circle of moral regard toward out-groups. *Journal of Personality and Social Psychology*, 84(6), 1270-1286.
- Ritov, I., & Baron, J. (1990). Reluctance to vaccinate: Omission bias and ambiguity. *Journal of Behavioral Decision Making*, 3(4), 263-277.
- Rothgerber, H. (2014). Efforts to overcome vegetarian-induced dissonance among meat eaters. *Appetite*, 79, 32-41. <https://doi.org/10.1016/j.appet.2014.04.003>
- Rothgerber, H. (2015a). Can you have your meat and eat it too? Conscientious omnivores, vegetarians, and adherence to diet. *Appetite*, 84, 196-203. <https://doi.org/10.1016/j.appet.2014.10.012>
- Rothgerber, H. (2015b). Underlying differences between conscientious omnivores and vegetarians in the evaluation of meat and animals. *Appetite*, 87, 251-258. <https://doi.org/10.1016/j.appet.2014.12.206>
- Rothschild, Z. K., Landau, M. J., Molina, L. E., Branscombe, N. R., & Sullivan, D. (2013). Displacing blame over the ingroup's harming of a disadvantaged group can fuel moral

- outrage at a third-party scapegoat. *Journal of Experimental Social Psychology*, 49(5), 898-906. <https://doi.org/10.1016/j.jesp.2013.05.005>
- Rothschild, Z. K., Landau, M. J., Sullivan, D., & Keefer, L. A. (2012). A dual-motive model of scapegoating: Displacing blame to reduce guilt or increase control. *Journal of Personality and Social Psychology*, 102(6), 1148-1163. <https://doi.org/10.1037/a0027413>
- Rozin, P. (1999). The Process of Moralization. *Psychological Science*, 10(3), 218-221. <https://doi.org/10.1111/1467-9280.00139>
- Rozin, P., Markwith, M., & Stoess, C. (1997). Moralization and becoming a vegetarian: The transformation of preferences into values and the recruitment of disgust. *Psychological Science*, 8(2), 67-73.
- Rozin, P., & Singh, L. (1999). The moralization of cigarette smoking in the United States. *Journal of Consumer Psychology*, 8(3), 321-337
- Ruby, M. B. (2012). Vegetarianism. A blossoming field of study. *Appetite*, 58(1), 141-150. <https://doi.org/10.1016/j.appet.2011.09.019>
- Sachdeva, S., Iliev, R., & Medin, D. L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychological Science*, 20(4), 523-528.
- Saraiya, M., Glanz, K., Briss, P. A., Nichols, P., White, C., Das, D., ... & Gandhi, N. (2004). Interventions to prevent skin cancer by reducing exposure to ultraviolet radiation. *American Journal of Preventive Medicine*, 27(5), 422-466.
- Schneider, C. R., Zaval, L., Weber, E. U., & Markowitz, E. M. (2017). The influence of anticipated pride and guilt on pro-environmental decision making. *PLoS ONE*, 12(11), e0188781. <https://doi.org/10.1371/journal.pone.0188781>
- Sedikides, C., & Gregg, A. P. (2008). Self-enhancement: Food for thought. *Perspectives on Psychological Science*, 3(2), 102-116.

- Shalvi, S., Gino, F., Barkan, R., & Ayal, S. (2015). Self-serving justifications: Doing wrong and feeling moral. *Current Directions in Psychological Science*, 24(2), 125-130.
- Shu, L. L., Gino, F., & Bazerman, M. H. (2011). Dishonest deed, clear conscience: When cheating leads to moral disengagement and motivated forgetting. *Personality and Social Psychology Bulletin*, 37(3), 330-349.
- Singer, P. (1991). *Animal liberation* (2nd ed.). London, UK: Thorsons
- Singer, P. (2011). *The expanding circle: Ethics, evolution, and moral progress*. Princeton, NJ: Princeton University Press.
- Skitka, L. J., Bauman, C. W., & Sargis, E. G. (2005). Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology*, 88(6), 895-917. <https://doi.org/10.1037/0022-3514.88.6.895>
- Sparks, P., & Guthrie, C. A. (1998). Self-identity and the theory of planned behavior: A useful addition or an unhelpful artifice? *Journal of Applied Social Psychology*, 28(15), 1393-1410. <http://dx.doi.org/10.1111/j.1559-1816.1998.tb01683.x>
- Sparks, P., & Shepherd, R. (1992). Self-identity and the theory of planned behavior: Assessing the role of identification with “green consumerism”. *Social Psychology Quarterly*, 55(4), 388-399. <https://doi.org/10.2307/2786955>
- Sparks, P., Shepherd, R., & Frewer, L. J. (1995). Assessing and structuring attitudes toward the use of gene technology in food production: The role of perceived ethical obligation. *Basic and Applied Social Psychology*, 16(3), 267-285.
- Sparks, P., Shepherd, R., Wieringa, N., & Zimmermanns, N. (1995). Perceived behavioural control, unrealistic optimism and dietary change: An exploratory study. *Appetite*, 24(3), 243-255.
- Spranca, M., Minsk, E., & Baron, J. (1991). Omission and commission in judgment and choice. *Journal of Experimental Social Psychology*, 27(1), 76-105.

- Stern, P. C. (2005). Understanding individuals' environmentally significant behavior. *Environmental Law Reporter News and Analysis*, 35(11), 10785-10790.
- Stone, J., & Cooper, J. (2001). A self-standards model of cognitive dissonance. *Journal of Experimental Social Psychology*, 37(3), 228-243.
- Tam, T., Hewstone, M., Cairns, E., Tausch, N., Maio, G., & Kenworthy, J. (2007). The impact of intergroup emotions on forgiveness in Northern Ireland. *Group Processes & Intergroup Relations*, 10(1), 119-136.
- Taylor, S. E., & Brown, J. D. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103(2), 193-210.
<http://dx.doi.org/10.1037/0033-2909.103.2.193>
- Taylor, S. E., & Brown, J. D. (1994). Positive illusions and well-being revisited: Separating fact from fiction. *Psychological Bulletin*, 116(1), 21-27. <https://doi.org/10.1037/0033-2909.116.1.21>
- Tenbrunsel, A. E., Diekmann, K. A., Wade-Benzoni, K. A., & Bazerman, M. H. (2010). The ethical mirage: A temporal explanation as to why we are not as ethical as we think we are. *Research in Organizational Behavior*, 30, 153-173.
- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *British Journal of Social Psychology*, 38(3), 225-244.
- Thaler, R., & Sunstein, C. (2008). *Nudge: The gentle power of choice architecture*. New Haven, CT: Yale University Press.
- Thibodeau, R., & Aronson, E. (1992). Taking a closer look: Reasserting the role of the self-concept in dissonance theory. *Personality and Social Psychology Bulletin*, 18(5), 591-602.

- Vezzali, L., Capozza, D., Stathi, S., & Giovannini, D. (2012). Increasing outgroup trust, reducing inhumanization, and enhancing future contact intentions via imagined intergroup contact. *Journal of Experimental Social Psychology*, 48(1), 437-440.
- Viki, G. T., Fullerton, I., Raggett, H., Tait, F., & Wiltshire, S. (2012). The role of dehumanization in attitudes toward the social exclusion and rehabilitation of sex offenders. *Journal of Applied Social Psychology*, 42(10), 2349-2367.
- Watkins, H., & Bastian, B. (2018). Lest we forget. Preprint: <https://psyarxiv.com/73hqb/>
- Whitehouse, H. (2004). *Modes of religiosity: A cognitive theory of religious transmission*. Walnut Creek, CA: Alta Mira Press.
- Wood, W., & Neal, D. T. (2009). The habitual consumer. *Journal of Consumer Psychology*, 19(4), 579-592.
- Zhong, C. B., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science*, 313(5792), 1451-1452.
<https://doi.org/10.1126/science.1130726>

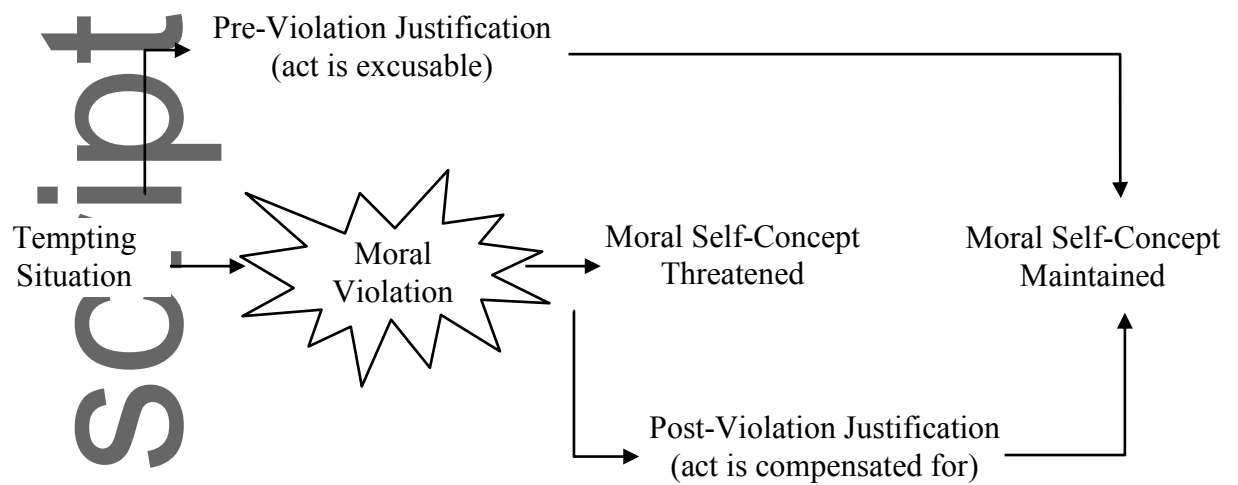


Figure 1. This illustration shows how people can do wrong but feel moral. This may be achieved by relying on pre- or post-violation justifications. Pre-violation justifications (top route) excuse misbehaviors and thus reduce the threat to the self-concept beforehand. Post-violation justifications (bottom route) compensate for violations that were committed, thus enabling the person to reduce the psychological costs associated with wrongdoing and maintain a moral self-concept after the fact. Adapted from Shalvi et al. (2015).

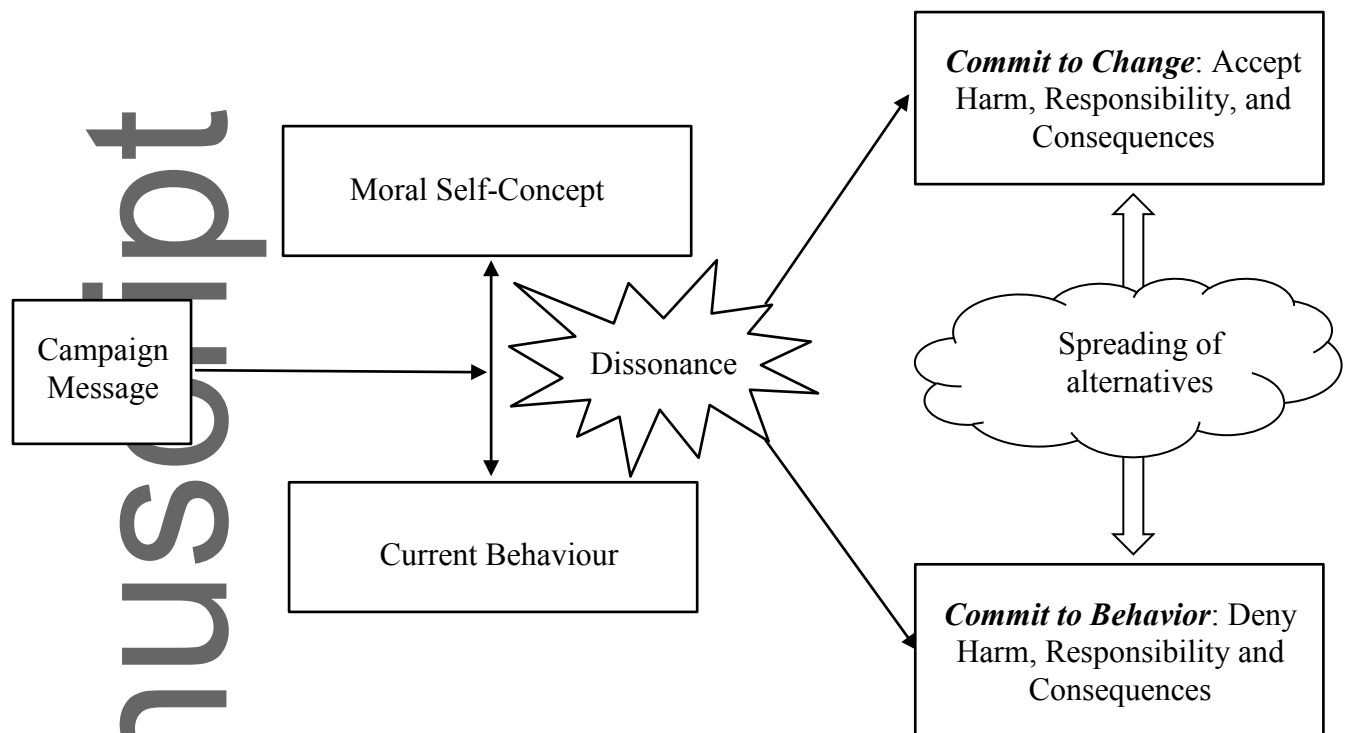


Figure 2. Behavior change campaigns seek to create tension between current behavior (e.g., meat-eating) and the moral self-concept. To resolve dissonance people spread the alternatives; either committing to change or committing to current behavior and adjusting their beliefs to reinforce their choice.

Table 1: Six strategies to avoid motivated resistance when challenging behavior on ethical grounds

1. Use positive emotion	Link behavior change messages to pride about future positive behavior, rather than guilt about past negative behavior.
2. Focus on action	Target behavior, but don't target people. Sometimes highlighting the unethical consequences of other's actions may be a way to get people to reflect non-defensively on consequences of their own actions.
3. Seek to identify	Use people who are seen to be 'on their side' and part of their own group to deliver messages. People tend to be less defensive when criticized by people they see as part of their own group.
4. Nudge, don't confront	Use nudges rather than direct challenges. This helps people to adjust their behavior, without having to feel confronted by strong messages characterizing them as unethical.
5. Step-by-step	Focus on incremental change rather than radical change. This allows people to engage with the issue in a less black and white way.
6. Target motivations	Challenge the perceived necessity of the behavior. This allows people to see viable alternatives and reduces resistance.