

# Greater Goods: Morality and Attitudes toward the Use of Nuclear Weapons

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## Abstract

Recent research into the public's attitude toward the use of nuclear weapons repeats long-standing mistakes in how international relations theorists think about morality. Falsely equating consequentialism with state egoism and normative obligations with restrictions on the use of weapons of mass destruction implies that ethically motivated beliefs about foreign affairs must be other-regarding and that other-regarding behavior is not utilitarian in character. Drawing on empirical research into moral psychology, we argue that liberal, other-regarding morality is only one kind of ethical foundation. Alternative moral concerns such as retribution, deference to authority, and in-group loyalty also help to determine foreign policy beliefs. We find that all three are associated with support for the use of nuclear weapons in the American public. Our survey respondents act as moral utilitarians who weigh different ethical considerations in forming their judgments.

## Keywords

public opinion, belief structure, civilian casualties, foreign policy decision-making

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The debate over whether there is a “taboo” against the use of nuclear weapons has recently taken a behavioral turn. Proponents of the nuclear taboo argue that the nonuse of nuclear weapons since 1945 can be attributed to the “logic of appropriateness,” in which states are restrained by an ethical compunction against the use of nuclear weapons which rests in part on the internalization of an antinuclear norm in the mass public (Tannenwald 1999, 2005, 2007). In contrast, recent articles by Press, Sagan, and Valentino (2013) and Sagan and Valentino (2017) seem to offer compelling evidence against the existence of a nuclear taboo at the level of public opinion, arguing instead that Americans’ attitudes toward nuclear weapons are shaped by the “logic of consequences.” Americans seem to weigh the costs and benefits for the United States and are willing to support the use of nuclear weapons when they offer a significant military advantage. Thus, Press, Sagan, and Valentino (2013) conclude that concerns about the morality of nuclear weapons “take a back seat to assessments of their advantages and disadvantages compared to other military options” and that American presidents are consequently less constrained in their ability to threaten or use nuclear arms than has been assumed by the taboo school (p. 4).

This article argues that framing this latest iteration of the debate as a contest between the logic of consequences and the logic of appropriateness obscures the role played by ethical considerations in forming foreign policy attitudes, a mistake that is common in the field of international relations more generally. The broader literature on norms and morality in international relations typically conflates or equates consequentialism with egoism and appropriateness with other-regarding behavior, leading to two misconceptions about the nature of morality. First, if moral action is always other-regarding, then national egoism must always be amoral or immoral. Second, if consequentialism is always egoistic, then moral action cannot be consequentialist in character but instead must be deontological (i.e., based on the application of rules) rather than utilitarian.

The presumption that egoistic behavior cannot be moral is based on an impoverished understanding of the diversity of human morality, one common in the field. Morality is typically defined in a “liberal” way, in which ethical action is that which does not harm others (Price 2008, 192). However, morality can also be nonliberal as demonstrated by the moral foundations research program, which has shown that many people think about morality in terms of the “binding foundations” of deference to authority, loyalty to the in-group, and the maintenance of purity (Graham et al. 2011; Koleva et al. 2012). Similarly, studies have shown that retribution—the belief that wrongs deserve to be repaid—is also an important moral value that influences both private behavior and political opinions (Tripp and Bies 2009; Carlsmith and Darley 2008; Aharoni and Fridlund 2012). These values influence support for the use of military force under a wide variety of circumstances (Kertzer et al. 2014; Liberman 2006, 2013), and we extend and apply this research to the use of nuclear weapons.

However, rather than acting as strict rules that must be applied regardless of the outcome, both nonliberal and liberal values act as distinct moral lenses through

which individuals evaluate the different costs and benefits of using nuclear weapons. Specifically, we argue that individuals who embrace retribution and the binding foundations are more likely to support the use of nuclear weapons because they see symbolic as well as material benefits from doing so and that when considering the effects that nuclear weapons will have on the ground, they will discount civilian casualties to a greater degree than those who do not embrace these moral values. Thus, we allow morality to be both nonliberal and consequentialist, shaping how each individual balances competing considerations.

To test our theory, we replicated Press, Sagan, and Valentino's (2013) original experiment, with a few modifications, most importantly the addition of measures of respondents' self-identified sense of morality. Our results show that those who adhere to retribution and the binding foundations are more supportive of the use of nuclear weapons and less likely to abandon their position as civilian casualties rise, although they are by no means indifferent to casualties. Military effectiveness, on the other hand, appears to matter a great deal to everyone regardless of moral worldview.

These results do not contradict the findings of previous research but rather their interpretation. Our findings indicate that the debate over the nuclear taboo, and perhaps the effect of norms in general, is improperly framed. The effect of nonliberal moralities shows that ethics are not the exclusive preserve of other-regarding, cosmopolitan individuals. And even those who care about others beyond national borders respond in a consequentialist manner to the rising costs of nuclear strikes. National egoism is not necessarily immoral, and morality is not always deontological. Most people appear to be consequentialists at heart, weighing the good that might come from using a nuclear weapon against the bad, but in a way that shaped by their deep-seated moral intuitions and values. American respondents are utilitarian maximizers seeking to do the greatest good, but there are multiple goods and they disagree about how to weigh them. These findings have important implications for how we think about morality in the study of public opinion and in international relations more generally.

## **Faulty Logics: Misapprehensions about Morality in International Relations**

The nonuse of nuclear weapons since 1945 is an important and enduring puzzle that has sparked a great deal of debate among scholars of international relations. Recently, attention has turned to the role of public opinion. A strong scholarly consensus has now formed around the idea that public opinion exerts an important influence over the foreign policy choices of democratic leaders, particularly when it comes to the use of military force (Arian, Shamir, and Ventura 1992; Foyle 1999; Morgan and Anderson 1999; Sobel 2001; Baum 2004; Stein 2015; Baum and Potter 2015). Even in moments of extreme emergency, such as the Cuban missile crisis, the evidence indicates that decision makers take public opinion into account in choosing

how to respond (McKeown 2000). Thus, studying public opinion is an important part of understanding the nature and the degree of constraint that US presidents and other democratic leaders face regarding the threat or use of nuclear weapons (Press, Sagan, and Valentino 2013).

The current debate over where the public stands on the use of nuclear weapons is framed between those who argue that attitudes toward these weapons are determined by their military utility (Press, Sagan, and Valentino 2013) and others who argue that the use of nuclear weapons is considered “taboo,” a violation of a now deep-seated prohibitive norm (Tannenwald 1999, 2005, 2007). For the former, the choice between use and nonuse is based on the logic of consequences—balancing the added value nuclear weapons offer in undertaking some kind of military operation with their potential short- and long-term costs for one’s own state. The taboo school explains the nonuse of nuclear weapons by reference to the logic of appropriateness and the existence of a strong moral norm of nuclear nonuse; good, civilized states simply do not initiate the use of nuclear weapons.

Framing the debate about the role of norms—and, by implication, morality—in international relations as a contest between the logic of consequences and the logic of appropriateness is common in the field but suffers from a major logical problem. It conflates egoism with the logic of consequences and other-regarding, nonegoistic action with the logic of appropriateness. March and Olsen (1989), who originally made the distinction between these two logics, claim that under the logic of consequences, “behaviors are driven by preferences and expectations about consequences” (p. 160). In contrast, under the logic of appropriateness, “action is more often based on identifying normatively appropriate behavior than on calculating the return expected from alternative choices” (p. 22). However, scholars from outside of international relations have noted that in laying out their two logics, March and Olsen have smuggled in assumptions about egoistic versus more “prosocial” orientations that take into account not only one’s own interests but also those of others as well (Kertzer and Rathbun 2015). For instance, Goldmann (2005) contends that March and Olsen confuse the form of an argument with its content: “In their approach, consequentialist reasoning—a method—is associated with the pursuit of self-interest—a substantive feature—and non-consequentialist reasoning with the application of rules grounded in socially constructed identities” (p. 40). This is evident when March and Olsen (1998) write: “Scholars committed to a consequentialist position tend to see an international system of interacting autonomous, egoistic, self-interested maximizers.... Scholars committed to an identity position... see political actors are acting in accordance with rules and practices that are socially constructed, publicly known, anticipated and accepted. They portray an international society as a community of rule followers and role players with distinctive sociocultural ties, cultural connections, intersubjective understandings and senses of belonging” (p. 952).

The same is true in the international relations (IR) literature, where the “consequentialist” option is always the one that best serves the interests of the actor

while the appropriate response is usually the one that takes into account the interests of a broader community in which the actor is embedded. Conversely, scholars who argue that states follow a logic of appropriateness see norms as a powerful influence on state behavior that restrain self-interest for the good of the international community (Katzenstein 1996, 5). These norms are almost exclusively “liberal” in character, rooted in a cosmopolitan concern for the rights of all individuals, even those outside the home state (Carpenter 2014; Kaufmann and Pape 1999; Lumsdaine 1993; Finnemore 1996, 2003; Klotz 1995; Price 1997; Busby 2010; Keck and Sikkink 1998), something that Krebs and Jackson (2007) have also noted.

By equating consequentialism with egoism and appropriateness (i.e., morally driven behavior) with other-regarding action, we are led into two misconceptions about morality. The first is that morality is necessarily deontological—that is, based on the application of categorical moral rules—rather than consequentialist in character. However, this is at odds with the very origins of utilitarianism in moral philosophy. Pioneered by Jeremy Bentham, moral utilitarianism defines the “appropriate” action as that which takes into account the broader, social whole even if it comes at the cost of particular egos. The utilitarian choice is that which serves the greater good. This is a form of consequentialism in which the right action is defined by the consequences it produces. Thus, morality is not defined by any particular decision-making logic, and studies of moral judgment have shown that people regularly engage in both types of moral thinking (Suter and Hertwig 2011).

The second misconception is that morality must entail concern for all others, the logical concomitant of an understanding of morality in liberal terms, that is as the protection of the equal worth and dignity of all human beings (Howard and Donnelly 1986; Dworkin 1978). Even those skeptical of the role of morality in foreign affairs think of ethics in this manner; when realists argue that states must violate ethical principles, they are talking about liberal morality (Carr 1964; Morgenthau 1946). Yet, liberal morality does not exhaust the ways in which people define what is right or wrong, and there are understandings of ethics that allow, require, or even celebrate actions that harm others. While they are distasteful to many (indeed to us), that does not make them any less morally meaningful to those who embrace them.

Because of these misconceptions about morality, Press, Sagan, and Valentino’s (2013) finding that there is substantial public support for the use of nuclear weapons, especially when they offer a military advantage for the United States, is seen as indicative of the absence of morality rather than the presence of a different set of nonliberal ethics. If morality need not be deontological and different moral values might predispose individuals both for and against nuclear weapons use, this suggests the strong possibility that individuals engage in a utilitarian weighing process in which they assess the benefits and costs, both to their own countries and others. Depending on individuals’ personal ethics, they will weigh and define these pros and cons differently. In the next section, we offer a more comprehensive understanding of the multitude of moralities that might influence attitudes toward nuclear weapons.

## **Multitude of Moralities: Nonliberal Ethics and Attitudes toward Nuclear Weapons**

We begin by drawing on the “moral foundations” research agenda, pioneered by Jesse Graham and Jonathan Haidt (Graham et al. 2011). Moral foundations research identifies five distinct concerns that underlie individuals’ moral intuitions and that shape their political attitudes on both domestic and foreign policy issues (Koleva et al. 2012; Kertzer et al. 2014). First are the “individualizing foundations” of harm/care and fairness/reciprocity. The harm/care foundation encompasses concern for the suffering of others, while the fairness/reciprocity foundation is focused on equal treatment. Together, these two foundations comprise a view of morality that is based in “how well or poorly individuals treated other individuals” (Graham et al. 2011, 366). The individualizing foundations are at the heart of the liberal project of treating others with “equal concern and respect” (Howard and Donnelly 1986; Dworkin 1978), and they are linked to cosmopolitanism and a willingness to help those who reside outside our national borders because all human beings have equal worth regardless of group boundaries (Kreps and Maxey 2018; Bayram 2015). This is how morality is understood in international relations theory in general and the nuclear taboo debate in particular.

### ***Binding Foundations***

In contrast to the individualizing foundations, the “binding foundations” of in-group/loyalty, authority/respect, and purity/sanctity subordinate individual rights to the needs of the community. The essence of the in-group/loyalty foundation is that one has an obligation to one’s group, and that actions that protect and strengthen the community are morally just, even if those actions trammel individual rights. The authority/respect foundation centers on relationships of dominance and subordination and respect for tradition, construing strong leadership, submission to authority, and conformity to social convention as morally virtuous. The purity/sanctity foundation encompasses concerns about spiritual or ritual purity and the avoidance of contamination.

The moral foundation approach is functional. Morality evolved to help humans survive and thrive in their environment, and each of the five foundations does so in a different way (van Leeuwen et al. 2012). The common denominator of all of the binding foundations is that they strengthen the in-group and protect it from internal and external threats. Deference to authority is necessary so that those charged with acting on behalf of the group can act decisively to neutralize threats to society. Loyalty to the in-group is necessary to provide the solidarity that keeps society internally stable and able to meet internal and external challenges. Purity helps to protect group members from social and environmental hazards. However, while scholars understand the moral foundations as functional, in the lives of ordinary people, individuals do not experience them in a self-conscious or instrumental way

but rather as powerful intuitions that make certain actions simply feel right or wrong, even if they cannot explain why (Haidt and Joseph 2004).

Much of this work build on prior research on right-wing authoritarianism (RWA). Today, social psychologists understand RWA not as a personality type but as a set of social attitudes and beliefs that reflect a preference for conformity, group cohesion, and traditionalism in social life with the underlying motivational goal of attaining collective security through the restriction of individual autonomy (Duckitt et al. 2002, 2010; Feldman 2003). RWA is associated with a belief that the world is a dangerous place, one marked by constant threats, which is consistent with the underlying functional approach of moral foundations research (Altemeyer 1998; Duckitt 2001). Moral foundations scholars are describing the same phenomenon as the authoritarianism literature: a set of individuals who defer to authority, focus on the importance of in-group solidarity, and promote religious traditionalism to maintain purity.

The precise causal relationship between RWA and the binding foundations is unclear. One could argue both that the moral foundations precede RWA, as Koleva et al. (2012) do, but also the opposite, as Federico et al. (2013) do, or even that both constructs are capturing an identical phenomenon. Observational studies cannot distinguish between these possibilities. What we do know is that there is an extremely high correlation of binding moralities with RWA. In-group loyalty, obedience to authority, and purity concerns are as highly associated with RWA scales as they are with one another (Kugler, Jost, and Noorbaloochi 2014; Federico et al. 2013) so much so that it is best to think of these as part of a common, morally laden syndrome. Influential conceptual frameworks such as “dual-process” theory do the same (Duckitt 2001; Federico et al. 2013). Moral foundations research can be understood as an effort to understand the underlying ethical logic of RWA.

The tendency of binders to endorse aggression can lead those with different moral intuitions to see them as amoral consequentialists at best and bloodthirsty sadists at worst. However, doing so misses the distinctly moral character of their worldview. The binding foundations are rooted in an essentialist view of the world as a dangerous place in which outsiders, lacking moral virtue, wish to do the “good” members of society harm (van Leeuwen and Park 2009). Consequently, actions that might be considered unethical from the perspective of the individualizing foundations, including coercion and violence, can be highly moral for binders. In a world of moral asymmetry, where the strength and stability of the good are the only bulwarks against evil, the virtuous are justified in using any means necessary to prevail. This does not mean that binders enjoy trampling on individual rights or derive pleasure from violence. Rather, their moral vision sometimes requires them to set aside liberal principles for the sake of a higher good. Altemeyer (1998) describes RWA: “First, High RWAs are scared. They see the world as a dangerous place, as society teeters on the brink of self-destruction from evil and violence. This fear appears to instigate aggression in them. Second, right-wing authoritarians tend to be highly self-righteous. They think themselves much more moral and upstanding than

others . . . This self-righteousness disinhibits their aggressive impulses” (p. 52). Measures of authoritarian attitudes toward aggression are morally laden, including items such as “Being kind to loaders or criminals will only encourage them to take advantage of your weakness” and “The way things are going in this country, it’s going to take a lot of ‘strong medicine’ to straighten out the troublemakers, criminals and perverts” (Duckitt et al. 2010, 712).

The very essence of consequentialism implies an internal conflict. One must do bad (defined in one sense, generally the harm/care principle) but does not welcome it. Rather, it is necessary to reach other morally justified ends. Were there no conflict, there would be no need to justify actions based on consequences. The nature of consequentialism is apologetic. Given the existence of bad actors in the world, one simply has no choice. There are undoubtedly those who take pleasure in violence, but this is not what the binding foundations capture, a subject we return to below and in Online Appendix 6.

### ***Retribution***

A second literature suggests that retribution (or revenge) is a moral value that shapes how many people think about a wide variety of issues, both personal and political (Tripp and Bies 2009; Carlsmith and Darley 2008; Aharoni and Fridlund 2012; Liberman 2006, 2013). The essence of retribution is the belief that those who hurt others deserve to be hurt in return. From this perspective, giving wrongdoers their “just deserts” is a righteous act in and of itself regardless of its future consequences. For this reason, retribution is said to be “backward-looking”—it is the crime that justifies the punishment and not any future considerations. In other words, retributivists want to see wrongdoers get the punishments they deserve, even if those punishments are unlikely to benefit either the individuals involved or society as a whole.

Although retribution is often associated with the maxim of “an eye for an eye,” the way that retribution is practiced by ordinary people does not require strict proportionality. If desert is the basis for punishment, then more terrible crimes should receive harsher punishments, but the punishment need not be an exact match to the crime in either form or severity. Deciding what punishment a given crime deserves is subjective, and it is influenced both by cultural norms and perceptual biases (Hinton 1998; Schumann and Ross 2010). Thus, retributivists might not always agree on the exact nature of the ideal punishment for any particular crime. What the existing literature does show is that, on average, individuals who believe in retribution are more likely to support the use of harsh methods to deal with wrongdoers in both the domestic and international realms including capital punishment, torture, and the use of military force (Ellsworth and Ross 1983; Cotton 2000; Carlsmith and Sood 2009; Liberman 2006, 2013, 2014; Gollwitzer et al. 2014; Washburn and Skitka 2015).

This literature also demonstrates two key features of retribution. First, its effect is not limited to situations in which the individual (or his or her in-group) has been victimized. Retribution is a general moral principle that says bad guys should get what they deserve—it is not conditional on the identity of the victim, and existing studies have shown that among Americans, retributiveness predicts greater support for the use of force even in situations where the United States has not been attacked or harmed in any way (Lieberman 2014; Stein 2019). Second, retribution is clearly distinct from a taste for violence. Its effect persists even when controlling for aggressive tendencies and aversion to suffering (Lieberman 2014). However, when presented with the opportunity to use force for a nonpunitive purpose—that is, to do something other than strike a blow against a bad guy—retributivists are no more enthusiastic about the use of force, suggesting that their policy preferences arise from a principled moral stance rather than enjoyment of the suffering of others (Stein 2019).

In sum, both retribution and the binding foundations can provide an ethical underpinning for actions that liberals might find morally repugnant. When citizens express support for policies like the death penalty, torture, or the use of military force, they are not necessarily setting aside ethics. They may instead be taking a morally motivated stance rooted in a distinctly nonliberal understanding of what constitutes ethical behavior.

## **Building a Moral Utilitarian Argument with Multiple Moral Inputs**

Recognizing that morality is neither exclusively liberal nor exclusively deontological in character, we argue that both liberal and nonliberal ethical values function as distinct perceptual lenses that shape how individuals evaluate the costs and benefits of nuclear weapons. Put another way, judgments about the use of nuclear weapons are the product of a utilitarian calculation in which ethical values influence the factors that enter into that calculation and the subjective utility that individuals assign to them. The use of nuclear weapons has both potential advantages and disadvantages that must be weighed against one another but which are understood and valued differently by every person. Dolan (2013) has demonstrated such a trade-off consideration in a qualitative analysis of American elites. We aim to identify the underlying moral structure of this calculation. Importantly, individuals might consider both the consequences of particular actions (lives lost, lives saved) but also the expressive function of different options, what we think of as the symbolic benefits or costs of nuclear use.

First, given their moral worldviews, individuals who embrace retribution and the binding foundations will see significant benefits to using nuclear weapons not true of those who do not share their nonliberal values. These benefits derive from the symbolic qualities of nuclear weapons, which are independent of their effects on the ground. Nuclear weapons have a unique status—they are the ultimate weapon—

capable of invoking feelings of power and ruination and linked to potent images of destruction in a way that conventional weapons are not, even if capable of achieving the same objectives. The idea that nuclear weapons are uniquely terrible has its origins in their capacity to cause physical destruction, but over time, it has been reified to such an extent that their position as the ultima ratio is no longer reducible to their explosive capacity (Frey 2006; Santana 2009). In addition, it is well-documented that nuclear technology inspires a visceral horror that is out proportion to the actual risks involved (Erikson 1991; Slovic, Flynn, and Layman 1991). This response is rooted in the psychology of risk perception and causes people to overrate the danger posed by nuclear technology compared to other hazards. Consequently, nuclear weapons carry an aura of dread that makes them feel more fearsome even when conventional weapons can match them in terms of destructive capacity.

These symbolic qualities could have value in the eyes of binders and retributivists because they help to achieve important moral aims. For binders, who see the world as a Manichean struggle between good and evil, the symbolism of nuclear weapons is an added benefit because it provides a demonstration that their leaders are willing to do whatever it takes to prevail in that struggle. Beyond whatever impact nuclear weapons have on the ground, the ability and willingness to use the ultimate weapon and unleash its horror on our enemies show a commitment to protecting and strengthening the community at any cost, which for binders is the highest moral good. For retributive individuals, who believe in the righteousness of giving evildoers their just deserts, nuclear weapons' symbolic qualities hold value because they enhance the feeling of punitiveness associated with their use. Their connotations of power and terror make the use of nuclear weapons feel like a harsher and more punitive option even if conventional weapons can do similar damage on the ground. Dying in a nuclear blast seeks like a particularly horrible way to die.

Nuclear weapons are symbols as well as explosive devices, and their symbolism should increase their perceived utility when seen through the lens of nonliberal ethical values. Thus, we expect individuals who embrace those values to express greater support for the use of nuclear weapons even when they offer no military advantage. In contrast, the symbolic qualities of nuclear weapons should be repellent from the perspective of the individualizing foundations, which emphasize the rights and well-being of others.

**Hypothesis 1:** Retribution and the binding foundations should be positively related to support for the use of nuclear weapons regardless of their military effectiveness.

**Hypothesis 2:** The individualizing foundations should be negatively associated with support for the use of nuclear weapons regardless of their military effectiveness.

In addition, ethical values can influence the weight that individuals place on the different material costs and benefits of using nuclear weapons. In particular, we

expect that the binding foundations and retribution will be associated with a decreased sensitivity to the civilian casualties caused by a nuclear strike. This is a well-documented psychological effect of moral conviction, and it is believed to play an important role in the perpetration of inhumanities (Skitka and Mullen 2002; Zaal et al. 2011; Bandura 1999). When people see a certain outcome as not just preferable but morally correct, they tend to discount the costs involved in achieving that outcome, and any negative emotions or self-censure that might arise from feeling responsible for the suffering of others is muted. As discussed above, both binders and retributivists are inclined to see the use of nuclear weapons as a means to a moral end, and we would therefore expect them to place less weight on civilian casualties than individuals who do not share their moral convictions. The individualizing foundations, on the other hand, are explicitly concerned with minimizing harm, and they should therefore amplify casualty sensitivity rather than reducing it.

**Hypothesis 3:** Retribution and the binding foundations will be associated with decreased casualty sensitivity.

**Hypothesis 4:** The individualizing foundations will be associated with increased casualty sensitivity.

Finally, different moral lenses may alter the value that individuals place on the military effectiveness of nuclear weapons. Binders, who believe in the morality of strong leadership in the service of protecting and strengthening the in-group, are likely to put greater weight on egoistic considerations when it comes to foreign policy. They should elevate the welfare of their group above that of others and be willing to buck any perceived ethical injunction against the use of these weapons if it promotes American security. This suggests an interaction between military effectiveness and the binding foundations with effectiveness having its greatest impact among the strongest binders. In a sense, we might expect that it is the binders who most clearly exhibit the nationally egoistic and consequentialist tendency described by Press, Sagan, and Valentino.

Given that retribution is not consequentialist in this manner, we would not expect to see such an interaction with effectiveness. Those with individualizing, liberal moral values should also not be responsive to effectiveness as they have a more global sphere of moral concern, one that does not prioritize American interests like binders do.

**Hypothesis 5:** There will be a positive interaction between the binding foundations and the military effectiveness of nuclear weapons.

**Hypothesis 6:** There will be no interaction between retribution and the military effectiveness of nuclear weapons.

**Hypothesis 7:** There will be a negative interaction between the individualizing foundations and the military effectiveness of nuclear weapons.

## Research Design and Data Collection

To test our hypotheses, we replicated Press, Sagan, and Valentino's (2013) experimental design with some minor adjustments (hereafter, we refer to the authors as PSV). Subjects were presented with a fictional news story about a military crisis between the United States and Syria. The story reported that the United States had discovered an Al-Qaeda nuclear weapons laboratory in Syria and that the president was deciding between two military options, one conventional and one nuclear, for destroying the lab. PSV's main experimental treatment manipulated the relative military effectiveness of these options. In our study, respondents read either that both types of weapons had a 90 percent chance of destroying the lab (equal effectiveness) or that nuclear weapons had a 90 percent chance of destroying the lab compared to 45 percent for conventional weapons (nuclear advantage).<sup>1</sup> Information about the expected number of American military and foreign civilian casualties (0 and 1,000, respectively) was also included and held constant across the treatments. The full text is available in Online Appendix 1.

In addition, we added two new treatments to address some questions about the generalizability of PSV's findings. As the authors themselves note, the high level of support that they find for the use of nuclear weapons could have been an effect of the specific target group (Al-Qaeda) or the extreme nature of the threat (the development of a nuclear weapon). Hence, in our experiment, we manipulated the identity of the terrorist group (Al-Qaeda vs. Hezbollah) and the type of weapon being developed (nuclear vs. incendiary). In both cases, respondents were told that the group "is an Islamic terrorist organization operating in the Middle East that is opposed to American interests in the region." Respondents were told that incendiary weapons "cause mass destruction by igniting enormous fires," in order to ensure that their destructive potential was understood. This design gives us total of eight treatment groups ( $2 \times 2 \times 2$ ). In all other respects, we kept the text of the news story exactly the same.<sup>2</sup>

Like PSV, we measured respondents' attitudes toward the nuclear strike in two different ways. First, we measured respondents' prospective preference by asking them whether they would prefer the nuclear strike or the conventional strike if forced to choose between them. Second, we measured respondents' retrospective approval by asking them whether they would approve or disapprove if the United States decided to conduct a nuclear strike to destroy the weapons lab.

We also presented respondents who indicated an initial preference for the nuclear strike a series of follow-up questions that asked whether they would still choose the nuclear strike if it caused an increasingly large number of civilian casualties (while keeping the number of casualties for the conventional strike fixed at 1,000). This allows us to identify the level of casualties at which each individual switches to preferring the conventional strike.

To measure the moral foundations, respondents were administered a standard Moral Foundations Questionnaire, which can be found in Online Appendix 2.

To measure retribution, we asked respondents to indicate whether they agreed or disagreed with the following items: (1) “those who have done wrong deserve to be paid back for it,” (2) “in order for justice to be served, violence must be repaid with violence,” and (3) “‘an eye for an eye’ is the wrong way to deal with wrongdoers” (reverse-coded). Importantly, we placed all these questions before the experiment so as to ensure that they were not affected by the treatments. We used factor analysis to generate two moral foundations scale, one for the individualizing foundations and the other for the binding foundations (see Online Appendix 2 for details and Online Appendix 3 for the distribution of the variables). We did the same for the retribution scale confirming that these items load on a single factor and generating factor scores.<sup>3</sup>

We collected an online convenience sample of 2,003 adult US residents from Amazon Mechanical Turk (MTurk), a popular “online Web-based platform for recruiting and paying subjects to perform tasks” (Berinsky, Huber, and Lenz 2012, 351), in July 2015.<sup>4</sup> We chose MTurk for a combination of reasons. First, prior studies have generally found good results in replicating well-established findings with MTurk samples (Berinsky, Huber, and Lenz 2012; Mullinix et al. 2015). Second, the cost is substantially lower than contracting with a survey firm, which was of particular importance given the lengthy questionnaires necessary to capture moral values and the desirability of recruiting a large sample in order to examine heterogeneous treatment effects. Third, while MTurk samples are not nationally representative (they tend to be younger and more liberal), our main interest lies in individual-level differences, making concerns about the representativeness of the sample less important. Furthermore, we have no reason to believe that a younger and more liberal sample will significantly alter the relationship between our moral factors and attitudes toward nuclear weapons. Finally, there is reason to believe that MTurkers will do a better job completing the survey attentively, which is particularly important given that our main concern is internal validity. Although they are being incentivized to complete the task, the same is true of the more representative samples recruited by Survey Sampling International (SSI) or YouGov, and MTurkers are highly concerned about their Human Intelligence Task (HIT) approval rate. They are motivated to pay attention and think about questions carefully. Following Berinsky, Margolis, and Sances (2013), we included a number of attention checks in our survey, which were answered correctly by 96.7 percent of respondents. Descriptive statistics on the main variables for our sample are in Online Appendix 3.

## Results and Discussion

We begin by examining the direct effect that both our experimental treatments and our measures of morality have on attitudes toward the use of nuclear weapons. For this analysis, we dichotomize our two dependent variables. The prospective preference variable indicates respondents who said that they would somewhat or strongly prefer the nuclear strike if given the choice, while the

retrospective approval variable indicates respondents who said that they would approve to some degree if the United States carried out the nuclear strike. Overall, 30.7 percent of our respondents expressed a prospective preference for nuclear weapons and 41.1 percent expressed retrospective approval. This pattern is consistent with PSV's finding that support for the use of nuclear weapons tends to be higher when individuals are asked to evaluate a *fait accompli* rather than choosing between two possible options.

Table 1 reports the results of two multivariate logistic regression models with prospective preference and retrospective approval as the dependent variables. Both models include controls for age, gender, race, education, party identification, ideology, church attendance, citizen status, military ties, and political knowledge. Looking first at our experimental treatments, we see that as PSV's results would lead us to expect, military effectiveness has a positive and significant effect in both models.<sup>5</sup> Support for the nuclear strike is significantly higher when nuclear weapons offer a military advantage. Group and target type also have significant effects (with the exception of group in the prospective preference model), but they are substantially smaller than military effectiveness. As we hypothesized, the binding foundations and retribution are positive and significant predictors of support for nuclear use in both models. The individualizing foundations also have the expected negative relationship with prospective preference.

To illustrate the size of these effects, Figure 1 reports the predicted probability of choosing the nuclear strike with our three experimental treatments in the top row and our three moral factors in the bottom row based on the analysis from Table 1 with 95 percent confidence intervals. Figure 2 reports an analogous set of results for retrospective approval. Figure 1 clearly illustrates the degree to which the impact of military effectiveness dominates the effects of group and target type. When nuclear and conventional weapons are equally effective, the predicted probability of choosing the nuclear strike is 15.5 percent, but when nuclear weapons are twice as effective, the likelihood rises to 45.6 percent, an increase of 30.1 percentage points. In contrast, target type (nuclear vs. incendiary) increases the likelihood of support for the nuclear strike by just 3.9 percentage points, and the particular terrorist group has no statistically significant effect.

Figure 1 also shows that of our three moral factors, retribution has the largest impact on preference for the nuclear strike, although the binding and individualizing foundations also have substantial effects. For retribution, an increase of one standard deviation above the mean increases the predicted probability of preferring a nuclear strike by 7.8 percentage points, and over the full range of the scale, likelihood rises by 37.3 percentage points (from 16.3 percent to 53.6 percent). For the binding foundations, a one-standard-deviation increase causes likelihood of a nuclear strike preference to rise by 2.9 percentage points, and over the full range of the scale, likelihood increases by 13.9 percentage points (from 23.1 percent to 37.0 percent). The effect of the individualizing foundations works in the negative direction: moving one standard deviation above the mean decreases the predicted probability of

**Table 1.** Moral Values and Nuclear Strikes.

	Prospective Preference	Retrospective Approval
Al-Qaeda	0.05 (.10)	0.22* (.10)
Nuclear lab	0.22* (.11)	0.22* (.10)
Nuclear advantage	1.65*** (.11)	0.86*** (.10)
Retribution scale	2.09*** (.29)	2.52*** (0.28)
Binding scale	0.81* (.34)	1.62*** (.33)
Individualizing scale	0.98* (.38)	1.19** (.37)
Age	0.01* (.01)	0.01 (.004)
Male	0.56*** (.11)	0.62*** (.11)
Minority	0.31* (.14)	0.09 (.13)
Education	0.03 (.04)	0.01 (.04)
Party ID	0.02 (.06)	0.24 (.05)
Ideology	0.05 (.06)	0.19** (.06)
Church attendance	0.04 (.05)	0.05 (.05)
US citizen	0.64 (.51)	0.89 (.51)
Military ties	0.04 (.12)	0.09 (.11)
Political knowledge	0.12* (.05)	0.11* (.05)
Constant	1.155 (.65)	1.196 (.64)
N	2,002	2,002

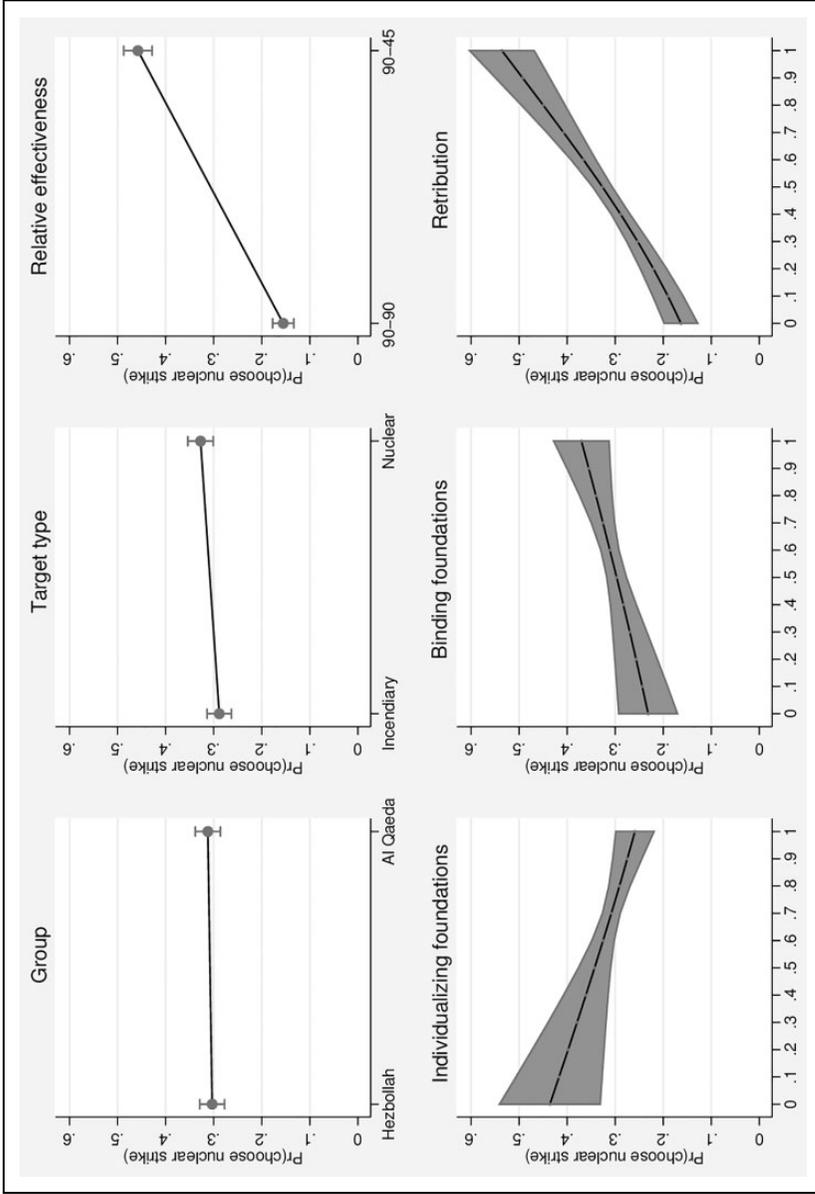
Note: Logistic regression models with standard errors in parentheses. The experimental treatment variables (*Al-Qaeda*, *nuclear lab*, *nuclear advantage*) are dichotomous as are *male*, *minority*, *US citizen*, and *military ties*.

\* $p < .05$ .

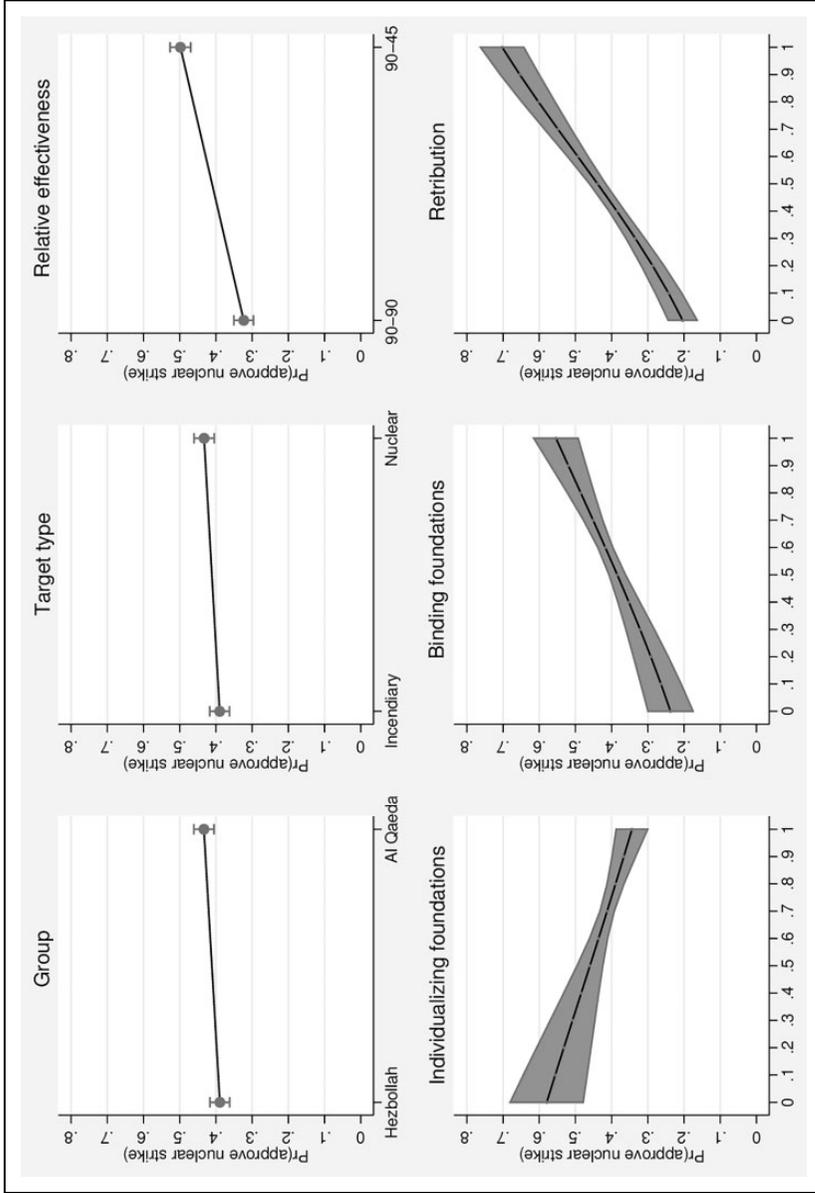
\*\* $p < .01$ .

\*\*\* $p < .001$ .

choosing the nuclear strike by 2.5 percentage points, and moving from the minimum of the scale to its maximum decreases the likelihood by 17.7 percentage points (from 43.6 percent to 25.9 percent).



**Figure 1.** Effects of experimental treatments and moral foundations on prospective preference for nuclear strikes. Predicted probability of prospective preference for the nuclear strike derived from model 1 in Table 1 (using the margins package in STATA version 14). Error bars represent 95 percent confidence intervals.



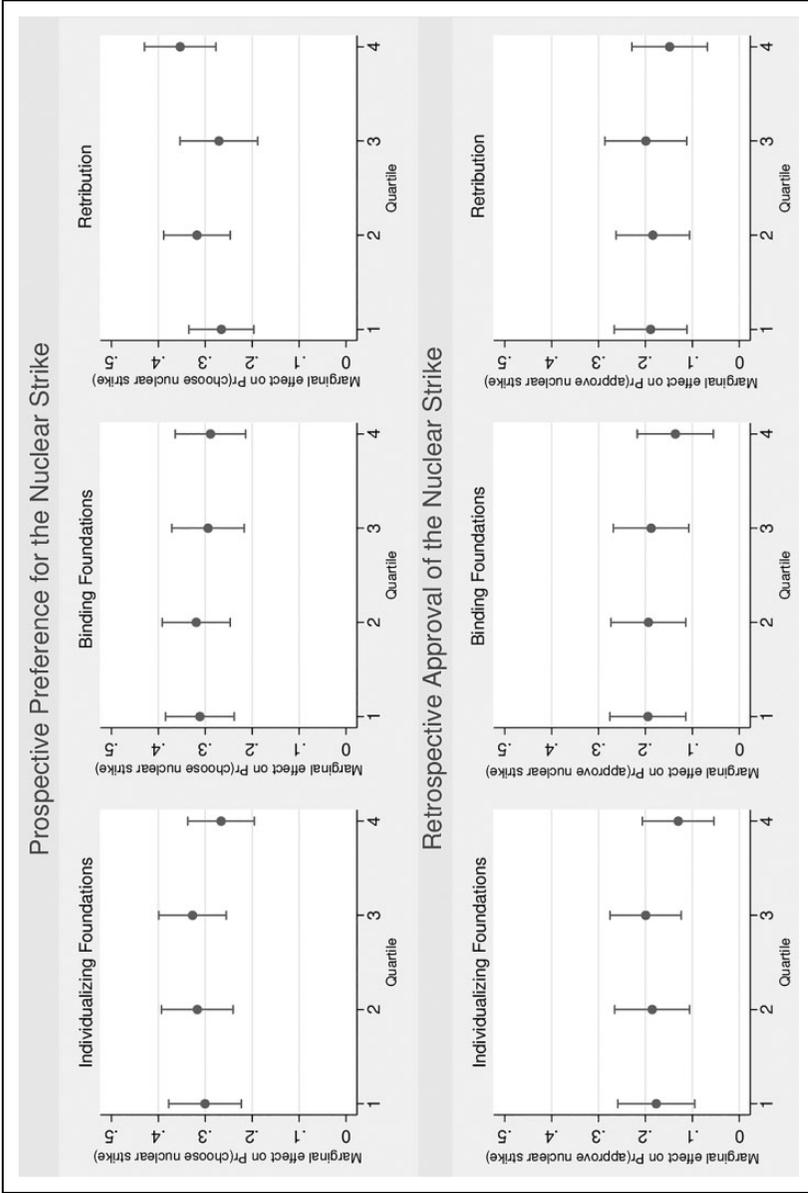
**Figure 2.** Effects of experimental treatments and moral foundations on retrospective approval of nuclear strikes. Predicted probability of retrospective approval of the nuclear strike derived from model 2 in Table 2 in Table 1 (using the margins package in STATA version 14). Error bars represent 95 percent confidence intervals.

Turning to retrospective approval in Figure 2, the importance of military effectiveness relative to group and target type remains unchanged. However, the marginal effect of the nuclear advantage treatment is smaller. Here, the predicted probability of approving the nuclear strike is 17.5 percentage points higher when nuclear weapons offer a military advantage over conventional weapons (49.8 percent vs. 32.3 percent). In contrast, our moral factors have stronger effects on retrospective approval compared to prospective preference. Here, an increase in one standard deviation above the mean of the retribution scale increases the likelihood of approval by 10.9 percentage points, and over the full range of the scale by 49.8 percentage points. For the binding foundations, moving one standard deviation above the mean increases the probability of approval by 6.8 percentage points, and by 31.7 percentage points over the full range of the scale (from 23.7 percent to 55.4 percent). For the individualizing foundations, moving one standard deviation above the mean decreases the likelihood of approval by 3.5 percentage points, and moving from the minimum to the maximum of the scale produces a decrease in this likelihood of 23.5 percentage points (from 57.9 percent to 34.4 percent).

These results support the main finding from PSV's original study. There is no taboo-like resistance to the use of nuclear weapons, and support for their use can be substantially increased by information about their military effectiveness. Furthermore, this effect is not limited to the special case of an Al-Qaeda nuclear weapons lab. We find no major differences in the impact of military effectiveness when the group is Hezbollah or the target is an incendiary weapons lab. At the same time, our results indicate that morality matters too, especially for retrospective approval. As predicted by Hypothesis 1, individuals who embrace retribution and the binding foundations are substantially more likely to support the use of nuclear weapons than individuals who do not share their particular moral worldviews. Hypothesis 2 also receives support. Respondents whose morality centers on the individualizing foundations, with their emphasis on avoiding harm and ensuring fair treatment, are less likely to support the nuclear strike.

Next, we turn to the question of whether there is an interaction between morality and military effectiveness, as predicted by Hypotheses 5 through 7. To test these hypotheses, we divide the binding, individualizing, and retribution scales into quartiles and estimate the marginal effect of the nuclear advantage treatment in each quartile (see Figure 3). This allows us to test whether the marginal effect varies across our moral variables without over-relying on the end points of the scales where there are very few observations. The results reported in Figure 3 indicate that there is no statistically significant increase in the impact of military effectiveness at higher levels of the binding foundations, nor is there a significant decrease at higher levels of the individualizing foundations. Retribution also indicates no interaction.

What this analysis shows is that regardless of their moral outlook, military effectiveness matters a great deal to our respondents, especially when making a prospective choice between nuclear and conventional weapons. One possible explanation for these results is that the threat of a major terrorist attack on the United States using



**Figure 3.** Moral foundations demonstrate no interaction with effectiveness of nuclear strikes. Marginal effects of the nuclear advantage treatment, estimated for quartiles of the binding, individualizing, and retribution scales (using the margins package in STATA version 14). Error bars represent 95 percent confidence intervals. There are no statistically significant differences between any of the quartiles.

WMDs weapons of mass destruction inspires a strong desire for self-defense (and therefore a preference for the more effective option) that does not vary across different moral viewpoints and that drowns out the effect of alternative moral considerations that might otherwise influence the attitudes of strong binders and retributivists. It is also possible that by making nuclear weapons twice as effective as conventional weapons, we made the effect of the nuclear advantage treatment so strong as to swamp any differences between individuals with different values that might emerge in cases where nuclear weapons offer a more modest increase in military effectiveness.

In any case, our results suggest that the main way in which the binding foundations and retribution influence attitudes toward nuclear weapons is by increasing the value of their symbolic qualities rather than attentiveness to their military effectiveness. It is the mere fact of using a nuclear weapon that demonstrates the willingness to use any means necessary to protect the community that strong binders find morally virtuous and provides the feeling of additional punitiveness that is necessary to serve justice in the eyes of retributivists. Those with nonliberal moral values are more likely to prefer the nuclear strike over the conventional option, regardless of whether nuclear weapons offer a military advantage. We also do not find any meaningful interactions between our moral measures and either group or target type (see Online Appendix 5 for a more in-depth discussion and our explanation of why that might be the case).

Finally, we examine the relationship between our moral values and casualty sensitivity, that is, the rate at which support for the nuclear strike declines as civilian casualties rise. To capture this rate of decline, we asked the 616 respondents who initially said they would choose the nuclear strike whether they would still do so if the nuclear strike caused  $X$  casualties (compared to 1,000 casualties for the conventional strike), with  $X$  increasing from 10,000 to more than 1,000,000. Each time a respondent chose the nuclear strike, they were presented with the next level of casualties until they either switched to the conventional strike or reached the maximum number of casualties without switching.

These data have a time-to-event structure (individuals are observed at multiple points in time, i.e., casualty levels), with right censoring (respondents who never switch to the conventional strike), and we therefore conduct a survival analysis using a Cox proportional hazard model with robust standard errors (see Table 2).<sup>6</sup> This model estimates the relationship between the independent variables and the hazard rate, which is the probability of failure (switching to the conventional strike) conditional on having survived to time  $t$  (a given level of casualties). Therefore, a positive coefficient indicates an increase in the hazard rate, meaning that support for the nuclear strike has a shorter life in the face of rising casualties (i.e., greater casualty sensitivity). Conversely, a negative coefficient indicates a decrease in the hazard rate, meaning a longer life and lower sensitivity to casualties.

The results in Table 2 show that all three of our moral variables have a significant effect on casualty sensitivity. Consistent with Hypotheses 3 and 4, retribution and the binding foundations have a negative effect, meaning that they are associated with

**Table 2.** Moral Values and Casualty Sensitivity.

	Coefficient (Standard Error)
Al-Qaeda	.06 (.05)
Nuclear lab	.05 (.05)
Nuclear advantage	.033 (.07)
Retribution scale	.63*** (.15)
Binding scale	.58*** (.17)
Individualizing scale	.55** (.20)
Age	.001 (.002)
Male	.07 (.06)
Minority	.03 (.07)
Education	.03 (.02)
Party ID	.03 (.03)
Ideology	.001 (.03)
Church attendance	.03 (.02)
US citizen	.01 (.18)
Military ties	.11 (.06)
Political knowledge	.02 (.03)
N	616

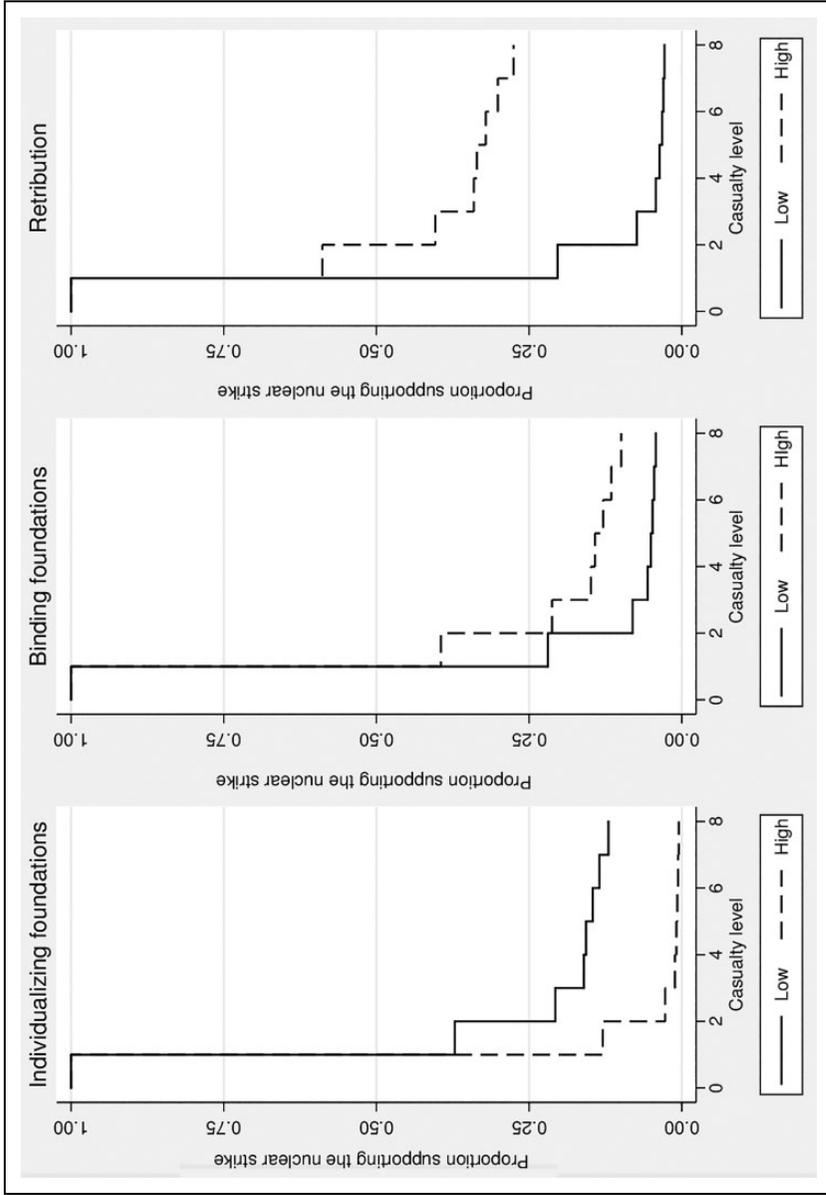
Note: Cox proportional hazard models with robust standard errors (in parentheses).  $N = 606$  respondents who initially expressed a preference for the nuclear strike. Positive coefficients indicate an increase in the hazard rate (the probability of switching to the conventional strike conditional on having survived to a given level of casualties). Negative coefficients indicate a decrease in the hazard rate.

\* $p < .05$ .

\*\* $p < .01$ .

\*\*\* $p < .001$ .

decreased casualty sensitivity, while the individualizing foundations have a positive effect, meaning that liberal morality is associated with increased casualty sensitivity.<sup>7</sup> To illustrate how individuals with different moral values respond to increasing



**Figure 4.** Moral foundations affect sensitivity to civilian casualties in a hypothetical nuclear strike. Survival curves adjusted for age, gender, race, education, party identification, ideology, church attendance, citizen status, military ties, and political knowledge (dichotomous variables are set to zero and continuous variables are set at their means). Each curve represents the proportion of respondents who remain supportive of the nuclear strike at each level of casualties, ranging from 0 (the baseline of 1,000 casualties in the original experiment) to 8 (> 1,000,000 casualties).

casualties, we dichotomized our moral variables (splitting them at the median into high and low groups) and then calculate a series of survival curves, which represent the percent of respondents who remain supportive of the nuclear strike at each subsequent level of casualties (ranging from 1 [10,000 casualties] to 8 [more than a million casualties]).<sup>8</sup>

Figure 4 reports these survival curves.<sup>9</sup> Looking first at the individualizing foundations, the survival curve for the high group lies below the survival curve for the low group. This means that those in the high individualizing group switch to the conventional strike more quickly as casualties rise. In other words, their initial support for the nuclear strike is more sensitive to civilian casualties. The reverse is true for the binding foundations and retribution: the survival curve for the high group lies above the survival curve for the low group. This shows that the high binding and retribution groups are slower to abandon their support for the nuclear strike as civilian casualties rise. Their willingness to support the nuclear strike is less responsive to civilian casualties compared to individuals who do not share their nonliberal moral values.

It is also evident from Figure 4 that casualties matter a great deal to all respondents, and at very high levels of casualties, support is very low among all the groups. This is consistent with our argument that morality need not operate in a deontological fashion. A person may believe that killing civilians is morally wrong without applying that principle as a strict decision rule that excludes all other considerations. Instead, individuals with different moral values place different weight on civilian casualties when balancing the costs and benefits of a nuclear strike. Individuals whose moral system is heavily based on concern for the suffering of others give more weight to civilian casualties, and they are quicker to change their minds about supporting the nuclear strike as casualties rise. For those with strong nonliberal values, casualties are a less important (but not unimportant) consideration, making their support more resistant (but not invariant) in the face of mounting casualties.

Thus far, we have shown that individuals who embrace nonliberal morality are more likely to support the use of nuclear weapons, even when they do not offer a military advantage over conventional weapons. This is true even when these weapons do not kill more civilians. However, they are less likely to change their minds in response to an increase in civilian casualties. This pattern is consistent with our theory, but it also raises an important question about whether these individuals are really being driven by their sense of right and wrong or whether they are simply displaying an antipathy toward out-groups or a general callousness that has nothing to do with morality. We consider this question more fully in Online Appendix 6 and find that our results cannot be explained by a general lack of humanitarianism.

## **Conclusion: Situating Individual-level Findings in the Broader Literature**

This article seeks to contribute to an ongoing debate about the role of morality in the nonuse of nuclear weapons, which has recently turned to the attitudes of the public.

Our article, while confirming previous findings, seeks to reframe them and push research into new areas. Press, Sagan, and Valentino (2013) have convincingly demonstrated that among ordinary Americans, there does not appear to be a taboo against the use of nuclear weapons in the sense of a categorical refusal on the part of a majority of the mass public. Provided that nuclear weapons make operations more effective, sizable numbers of Americans are willing to contemplate their use in certain instances such as major national emergencies or when the costs to others are relatively low. However, this does not tell the whole story. There is also substantial individual-level variation in how people evaluate the costs and benefits of using nuclear weapons, which has important implications for how we think about morality and ethics in the nuclear use debate but also in international relations more generally.

We find evidence that the public is generally utilitarian but that different moral foundations serve to shape individuals' evaluation of the advantages and disadvantages of nuclear strikes. Those with different moral visions see the costs and benefits of nuclear weapons differently. Individuals who embrace nonliberal morality see value in the symbolic qualities of nuclear weapons, and they are willing to pay a higher price in terms of civilian casualties to obtain those benefits. However, this does not mean that moral vision crowds out all other considerations. Regardless of their moral values, all our respondents valued military effectiveness equally, and all our respondents exhibited concern about rising civilian casualties, although strong binders and retributivists were slower to respond. Thus, we need not label the public as either ethical or consequentialist; it is both.

More broadly, our results speak to the need for a change in how we think about ethics in international relations. Egoism is not necessarily immoral, and morality is not always deontological. Ethics are not limited to domain of other-regarding, cosmopolitan individuals or states, nor are they defined by a particular decision-making logic. Framing the debate over the nuclear taboo—and the effect of norms in general—as a contest between the logic of consequences and the logic of appropriateness has limited our understanding of what morality is and how it works to shape behavior. It is inappropriate.

This study has implications for elite decision-making about the use of nuclear weapons. Some might argue that public opinion is unlikely to influence decision-making about the use of nuclear weapons either because in the face of an existential threat all other considerations must fall by the wayside or because it is elites who lead public opinion and not the other way around. However, studies have shown that public opinion can shape the menu of acceptable options even in the most existential crises (McKeown 2000) and that the public is less dependent on elites for their attitudes than has been posited by the literature on elite cues (Berinsky 2009). Moreover, Dolan (2013) shows that elites face the same moral trade-offs.

While it is true that the public is generally uninformed about foreign affairs, there is significant evidence that people supplement the gaps in their knowledge with gut feelings about politics that come from general dispositions toward foreign affairs,

postures that are not endogenous to elite beliefs and indeed might explain the individual's choice of cue-givers in the first place (Kertzer and Zeitzoff 2017). These dispositions themselves have been found to rest on moral values (Rathbun et al. 2016; Kertzer et al. 2014). In a historical examination of American foreign policy, Krebs (2015) finds that presidents are confined by narratives, stories that Americans tell themselves about the country, which are highly moral in nature. In this way, the public's moral values define the bounds of acceptable behavior for elites.

For those who believe that nuclear weapons are or should be taboo, the existence of a significant number of Americans whose moral values predispose them to look favorably upon the offensive use of nuclear should be worrying for several reasons. First, while nonliberal moralists are not a majority in the United States, they are disproportionately represented in the Republican Party (Graham, Haidt, and Nosek 2009). This suggests that while partisan polarization remains extreme and presidents see themselves as more accountable to their party base than to the American people as a whole, any restraining effect of public opposition to nuclear weapons is likely to be weaker under a Republican administration than a Democratic one. The taboo may still operate in American foreign policy because leaders have internalized it. However, President Trump's willingness to contemplate the use of nuclear weapons and to issue blatant nuclear threats has the potential to weaken the taboo at the elite level by emboldening or inspiring others to adopt or express similar views. In that case, the loss of the bulwark of public disapprobation may make the use of nuclear weapons more thinkable than at any time in recent memory.

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### **Supplemental Material**

Supplemental material for this article is available online.

### **Notes**

1. Press, Sagan, and Valentino (PSV) also included an intermediate treatment that gave nuclear weapons a 90 percent chance of destroying the lab compared to 70 percent for conventional weapons.
2. While PSV formatted their vignettes as mock newspaper articles from the Associated Press, we simply presented respondents with the text of what we described as "an article about a hypothetical situation in international affairs."

3. A factor analysis of both the retribution items and the moral foundations items together yielded a three-factor solution in which retribution is a separate dimension. In other words, retribution is not reducible to the other moral foundations.
4. According to Google Trends, this was the period of the lowest interest in the Syrian civil war following its onset in 2011. The period scores a 7 on the “interest over time” score, where 100 is the peak.
5. We offer an in-depth comparison with their results in Online Appendix 4, which also concludes that our sample is unlikely to have biased our findings.
6. The Cox proportional hazard model is appropriate here because it does not specify the functional form of the hazard.
7. Online Appendix 3 shows the distribution of the variable.
8. Survival curves can only be compared across groups rather than at different values of the independent variables as is possible with marginal effects. It is possible to create more groups, but dichotomizing our moral variables provides an uncluttered comparison that is easy to interpret.
9. Adjusted for age, gender, race, education, party identification, ideology, church attendance, citizen status, military ties, and political knowledge (dichotomous variables are set to zero and continuous variables are set at their means).

## References

- Aharoni, Eyal, and Alan J. Fridlund. 2012. “Punishment without Reason: Isolating Retribution in Lay Punishment of Criminal Offenders.” *Psychology, Public Policy, and Law* 18 (4): 599-625.
- Altemeyer, Robert A. 1998. “The Other ‘Authoritarian Personality.’” *Advances in Experimental Social Psychology* 30: 47-91.
- Arian, Asher, Michal Shamir, and Raphael Ventura. 1992. “Public Opinion and Political Change: Israel and the Intifada.” *Comparative Politics* 24 (3): 317-34.
- Bandura, Albert. 1999. “Moral Disengagement in the Perpetration of Inhumanities.” *Personality and Social Psychology Review* 3 (3): 193-209.
- Baum, Matthew A. 2004. “Going Private Public Opinion, Presidential Rhetoric, and the Domestic Politics of Audience Costs in US Foreign Policy Crises.” *Journal of Conflict Resolution* 48 (5): 603-31.
- Baum, Matthew A., and Philip Potter. 2015. *War and Democratic Constraint: How the Public Influences Foreign Policy*. Princeton, NJ: Princeton University Press.
- Bayram, A. Burcu. 2015. “What Drives Modern Diogenes? Individual Values and Cosmopolitan Allegiance.” *European Journal of International Relations* 21 (2): 451-79.
- Berinsky, Adam J. 2009. *In Time of War: Understanding American Public Opinion from World War II to Iraq*. Chicago: University of Chicago Press.
- Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. 2012. “Evaluating Online Labor Markets for Experimental Research: Amazon.com’s Mechanical Turk.” *Political Analysis* 20 (3): 351-68.

- Berinsky, Adam J., Michele F. Margolis, and Michael W. Sances. 2013. "Separating the Shirkers from the Workers? Making Sure Respondents Pay Attention on Self-Administered Surveys." *American Journal of Political Science* 58 (3): 739-53.
- Busby, Joshua. 2010. *Moral Movements and Foreign Policy*. Cambridge, MA: Cambridge University Press.
- Carlsmith, Kevin M., and John M. Darley. 2008. "Psychological Aspects of Retributive Justice." *Advances in Experimental Social Psychology* 40: 193-236.
- Carlsmith, Kevin M., and Avani Mehta Sood. 2009. "The Fine Line between Interrogation and Retribution." *Journal of Experimental Social Psychology* 45 (1): 191-96.
- Carpenter, Charli. 2014. *Lost Causes: Agenda-vetting in Global Issue Networks and the Shaping of Human Security*. Ithaca, NY: Cornell University Press.
- Carr, E. H. 1964. *The Twenty Years' Crisis*. New York: Harper.
- Cotton, Michele. 2000. "Back with a Vengeance: The Resilience of Retribution as an Articulated Purpose of Criminal Punishment." *The American Criminal Law Review* 37 (4): 1313-62.
- Dolan, Thomas M. 2013. "Unthinkable and Tragic: The Psychology of Weapons Taboos in War." *International Organization* 67 (1): 37-63.
- Duckitt, John. 2001. "A Dual-process Cognitive-motivational Theory of Ideology and Prejudice." *Advances in Experimental Social Psychology* 33: 41-113.
- Duckitt, John, Boris Bizumic, Stephen W. Kruass, and Edna Heled. 2010. "A Tripartite Approach to Right-wing Authoritarianism: The Authoritarianism-conservatism-traditionalism Model." *Political Psychology* 31 (5): 685-715.
- Duckitt, John, Claire Wagner, Ilouize Du Plessis, and Ingrid Birum. 2002. "The Psychological Bases of Ideology and Prejudice: Testing a Dual Process Model." *Journal of Personality and Social Psychology* 83 (1): 75.
- Dworkin, Ronald. 1978. *Taking Rights Seriously*. Cambridge, MA: Harvard University Press.
- Ellsworth, Phoebe C., and Lee Ross. 1983. "Public Opinion and Capital Punishment: A Close Examination of the Views of Abolitionists and Retentionists." *Crime and Delinquency* 29 (1): 116-69.
- Erikson, Kai. 1991. "Radiation's Lingering Dread." *Bulletin of the Atomic Scientists* 47 (2): 34-39.
- Federico, Christopher M., Christopher R. Weber, Damla Ergun, and Corrie Hunt. 2013. "Mapping the Connections between Politics and Morality: The Multiple Sociopolitical Orientations Involved in Moral Intuition." *Political Psychology* 34 (4): 589-610.
- Feldman, Stanley. 2003. "Enforcing Social Conformity: A Theory of Authoritarianism." *Political Psychology* 24 (1): 41-74.
- Finnemore, Martha. 1996. *National Interests in International Society*. Ithaca, NY: Cornell University Press.
- Finnemore, Martha. 2003. *The Purpose of Intervention: Changing Beliefs about the Use of Force*. Ithaca, NY: Cornell University Press.
- Foyle, Douglas C. 1999. *Counting the Public in: Presidents, Public Opinion, and Foreign Policy*. New York: Columbia University Press.

- Frey, Karsten J. 2006. *Nuclear Weapons as Symbols: The Role of Norms in Nuclear Policy Making*. Rochester, NY: Social Science Research Network. SSRN Scholarly Paper. Accessed July 30, 2018. <https://papers.ssrn.com/abstract=960762>.
- Goldmann, Kjell. 2005. "Appropriateness and Consequences: The Logic of Neo-institutionalism." *Governance* 18 (1): 35-52.
- Gollwitzer, Mario, Linda J. Skitka, Daniel Wisneski, Arne Sjöström, Peter Liberman, Syed Javed Nazir, and Brad J. Bushman. 2014. "Vicarious Revenge and the Death of Osama Bin Laden." *Personality and Social Psychology Bulletin* 40 (5): 604-16.
- Graham, Jesse, Jonathan Haidt, and Brian A. Nosek. 2009. "Liberals and Conservatives Rely on Different Sets of Moral Foundations." *Journal of Personality and Social Psychology* 96 (5): 1029-46.
- Graham, Jesse, Brian A. Nosek, Jonathan Haidt, Ravi Iyer, Spassena Koleva, and Peter H. Ditto. 2011. "Mapping the Moral Domain." *Journal of Personality and Social Psychology* 101 (2): 366-85.
- Haidt, Jonathan, and Craig Joseph. 2004. "Intuitive Ethics." *Daedalus* 133 (4): 55-66.
- Hinton, Alexander Laban. 1998. "A Head for an Eye: Revenge in the Cambodian Genocide." *American Ethnologist* 25 (3): 352-77.
- Howard, Rhoda E., and Jack Donnelly. 1986. "Human Dignity, Human Rights and Political Regimes." *American Political Science Review* 80 (3): 801-17.
- Katzenstein, Peter J., Ed. 1996. *The Culture of National Security: Norms and Identity in World Politics*. New York: Columbia University Press.
- Kaufmann, Chaim D., and Robert A. Pape. 1999. "Explaining Costly International Moral Action: Britain's Sixty-year Campaign against the Atlantic Slave Trade." *International Organization* 53 (4): 631-68.
- Keck, Margaret, and Kathryn Sikkink. 1998. *Activists Beyond Borders: Advocacy Networks in International Politics*. Ithaca, NY: Cornell University Press.
- Kertzer, Joshua D., Kathleen E. Powers, Brian C. Rathbun, and Ravi Iyer. 2014. "Moral Support: How Moral Values Shape Foreign Policy Attitudes." *The Journal of Politics* 76 (3): 825-40.
- Kertzer, Joshua D., and Brian C. Rathbun. 2015. "Fair Is Fair: Social Preferences and Reciprocity in International Politics." *World Politics* 67 (4): 613-55.
- Kertzer, Joshua D., and Thomas Zeitzoff. 2017. "A Bottom-up Theory of Public Opinion about Foreign Policy." *American Journal of Political Science* 61 (3): 543-58.
- Klotz, Audie. 1995. "Norms Reconstituting Interests: The Global Racial Equality and U.S. Sanctions against South Africa." *International Organization* 49 (3): 451-78.
- Koleva, Spassena P., Jesse Graham, Ravi Iyer, Peter H. Ditto, and Jonathan Haidt. 2012. "Tracing the Threads: How Five Moral Concerns (Especially Purity) Help Explain Culture War Attitudes." *Journal of Research in Personality* 46 (2): 184-94.
- Krebs, Ronald. 2015. *Narrative and the Making of US National Security*. Cambridge, UK: Cambridge University Press.
- Krebs, Ronald, and Patrick Thaddeus Jackson. 2007. "Twisting Tongues and Twisting Arms: The Power of Political Rhetoric." *European Journal of International Relations* 13 (10): 35-66.

- Kreps, Sara, and Sarah Maxey. 2018. "Mechanisms of Morality: Sources of Support for Humanitarian Intervention." *Journal of Conflict Resolution* 62 (8): 1814-42.
- Kugler, Matthew, John Jost, and Sharareh Noorbaloochi. 2014. "Another Look at Moral Foundations Theory." *Social Justice Research* 27 (4): 413-31.
- Lieberman, Peter. 2006. "An Eye for an Eye: Public Support for War against Evildoers." *International Organization* 60 (3): 687-722.
- Lieberman, Peter. 2013. "Retributive Support for International Punishment and Torture." *Journal of Conflict Resolution* 57 (2): 285-306.
- Lieberman, Peter. 2014. "War and Torture as 'Just Deserts.'" *Public Opinion Quarterly* 78 (1): 47-70.
- Lumsdaine, David Halloran. 1993. *Moral Vision in International Politics: The Foreign Aid Regime, 1949-1989*. Princeton, NJ: Princeton University Press.
- March, James G., and Johan P. Olsen. 1989. *Rediscovering Institutions: The Organizational Basis of Politics*. New York: Free Press.
- March, James G., and Johan P. Olsen. 1998. "The Institutional Dynamics of International Political Orders." *International Organization* 52 (4): 943-69.
- McKeown, Timothy J. 2000. "The Cuban Missile Crisis and Politics as Usual." *Journal of Politics* 62 (1): 70-87.
- Morgan, T. Clifton, and Christopher J. Anderson. 1999. "Domestic Support and Diversionary External Conflict in Great Britain, 1950-1992." *The Journal of Politics* 61 (3): 799-814.
- Morgenthau, Hans. 1946. *Scientific Man vs. Power Politics*. Chicago: University of Chicago Press.
- Mullinix, Kevin J., Thomas J. Leeper, James N. Druckman, and Jeremy Freese. 2015. "The Generalizability of Survey Experiments." *Journal of Experimental Political Science* 2 (2): 109-38.
- Press, Daryl G., Scott D. Sagan, and Benjamin A. Valentino. 2013. "Atomic Aversion: Experimental Evidence on Taboos, Traditions, and the Non-use of Nuclear Weapons." *American Political Science Review* 107 (1): 1-19.
- Price, Richard. 1997. *The Chemical Weapons Taboo*. Ithaca, NY: Cornell University Press.
- Price, Richard. 2008. "Moral Limit and Possibility in World Politics." *International Organization* 62 (2): 192-220.
- Rathbun, Brian C., Joshua D. Kertzer, Jason Reifler, Paul Goren, and Thomas J. Scotto. 2016. "Taking Foreign Policy Personally: Personal Values and Foreign Policy Attitudes." *International Studies Quarterly* 60 (1): 124-37.
- Sagan, Scott D., and Benjamin A. Valentino. 2017. "Revisiting Hiroshima in Iran: What Americans Really Think about Using Nuclear Weapons and Killing Noncombatants." *International Security* 42 (1): 41-79.
- Santana, Anne Harrington de. 2009. "Nuclear Weapons as the Currency of Power." *The Nonproliferation Review* 16 (3): 325-45.
- Schumann, Karina, and Michael Ross. 2010. "The Benefits, Costs, and Paradox of Revenge." *Social and Personality Psychology Compass* 4 (12): 1193-205.
- Skitka, Linda J., and Elizabeth Mullen. 2002. "The Dark Side of Moral Conviction." *Analyses of Social Issues and Public Policy* 2 (1): 35-41.

- Slovic, Paul, James H. Flynn, and Mark Layman. 1991. "Perceived Risk, Trust, and the Politics of Nuclear Waste." *Science* 254 (5038): 1603-07.
- Sobel, Richard. 2001. *The Impact of Public Opinion on U.S. Foreign Policy Since Vietnam: Constraining the Colossus*. New York: Oxford University Press.
- Stein, Rachel M. 2015. "War and Revenge: Explaining Conflict Initiation by Democracies." *American Political Science Review* 109 (3): 556-73.
- Stein, Rachel M. 2019. *Vengeful Citizens, Violent States: A Theory of War and Revenge*. Cambridge, MA: Cambridge University Press.
- Suter, Renata S., and Ralph Hertwig. 2011. "Time and Moral Judgment." *Cognition* 119 (3): 454-58.
- Tannenwald, Nina. 1999. "The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-use." *International Organization* 53 (3): 433-68.
- Tannenwald, Nina. 2005. "Stigmatizing the Bomb: Origins of the Nuclear Taboo." *International Security* 29 (40): 5-49.
- Tannenwald, Nina. 2007. *The Nuclear Taboo: The United States and the Non-use of Nuclear Weapons since 1945*. Cambridge, UK: Cambridge University Press.
- Tripp, Thomas M., and Robert J. Bies. 2009. *Getting Even: The Truth about Workplace Revenge—And How to Stop It*. San Francisco, CA: Jossey-Bass.
- Van Leeuwen, Florian, and Justin H. Park. 2009. "Perceptions of Social Dangers, Moral Foundations, and Political Orientation." *Personality and Individual Differences* 47 (3): 169-73.
- Van Leeuwen, Florian, Justin H. Park, Bryan L. Koenig, and Jesse Graham. 2012. "Regional Variation in Pathogen Prevalence Predicts Endorsement of Group-focused Moral Concerns." *Evolution and Human Behavior* 33 (5): 429-37.
- Washburn, Anthony N., and Linda J. Skitka. 2015. "Motivated and Displaced Revenge: Remembering 9/11 Suppresses Opposition to Military Intervention in Syria (for Some)." *Analyses of Social Issues and Public Policy* 15 (1): 89-104.
- Zaal, Maarten P., C. Van Laar, T. Ståhl, N. Ellemers, and B. Derks. 2011. "By Any Means Necessary: The Effects of Regulatory Focus and Moral Conviction on Hostile and Benvolent Forms of Collective Action." *British Journal of Social Psychology* 50 (4): 670-89.