

**MOBILIZING AGGRESSION IN MASS POLITICS**

by

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*To my parents, for your boundless love and support*

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## Abstract

### MOBILIZING AGGRESSION IN MASS POLITICS

By

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This is an investigation of human aggression and the surprising ways it colors modern politics. Although aggression has always existed in human behavior, the emergence of a peculiar new species – the democratic citizen – introduces aggression into the newfound habitat of representative governance. This dissertation reveals the striking breadth of aggression’s influence on mass political behavior, which ranges from intuitive but unstudied links with violent attitudes to its unexpected impact on voting behavior.

Aggression’s dynamic effects stem from interactions between stable individual predispositions for aggressive behavior in everyday life and the violent metaphors that appear regularly in the language of political leaders, journalists, activists, and ordinary citizens. Each element and outcome is grounded in the literatures of political science, psychology, cognitive linguistics, and communication, bridging research on aggression, metaphorical thinking, and political behavior.

For these tests, I utilize complementary methods including: 1) two nationally-representative survey experiments and a third study to make strong, generalizable causal inferences about communication effects, 2) content analysis of presidential nomination acceptance speeches since 1932 to show the prevalence and variation of violent campaign metaphors, and 3) survey analysis with fifty years of American National Election Studies

data that, when merged with the content analysis, replicate the experimental results in real-world election campaigns.

In the first empirical section, trait aggression strongly predicts support for state violence and violence by citizens against political authority. Exposure to mild violent metaphors substantially amplifies support for violence against political authority among trait-aggressive citizens, but the same pattern does not appear for state violence attitudes.

In the second empirical section, I find that exposure to violent campaign metaphors has polarizing effects on voter turnout and vote choice that hinge jointly on individual levels of trait aggression and perceptions of government's responsiveness to citizens. These diverging effects are consistent with media violence research, and the electoral consequences match the signature of emotion's influence in politics.

Ultimately, this work provides substantial evidence supporting a new aggression framework for interpreting political behavior, it attests to the fundamental dependence between communication and personality effects in politics, and it uncovers new instantiations of timeless human behaviors.

## Chapter 1

### Aggressive Roots of Political Behavior

*Of strange, discordant, and even hostile elements, we gathered from the four winds, and formed and fought the battle through, under the constant hot fire of a disciplined, proud, and pampered enemy. Did we brave all them to falter now?-now, when that same enemy is wavering, dissevered, and belligerent? The result is not doubtful. We shall not fail-if we stand firm, we shall not fail.*

Abraham Lincoln (U.S. Senate candidate, “House Divided”, 1858)

*Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battle-field of that war. We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live.*

Abraham Lincoln (U.S. President, “Gettysburg Address”, 1863)<sup>1</sup>

Politics is regularly described in violent terms using metaphors of fighting and war. We hear this language from politicians, commentators, journalists, activists, and ordinary citizens across the political spectrum and across political contexts, over decades (even centuries) and around the world. Candidates promise to “fight” for a better future, leaders declare “war” on social ills, journalists report the latest “attack” in a “hard-fought” campaign, political groups solicit funds to “combat” the latest outrage committed by opponents, and activists rally to “kill” the latest offensive legislation. This language is

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<sup>1</sup> These passages juxtapose war oratory against similarly-constructed representations of politics as war.

striking in its frequency, its universality, and its close correspondence with the rhetoric of real violence. And, given the strategic nature of political campaigns, this language would not be deployed so regularly if practitioners didn't think it had instrumental benefits for the candidate. Are violent political metaphors just rhetorical gimmicks—all style and no substance—or are they something more? Despite its potential importance to electoral politics and political behavior, we know almost nothing about its effects.

Why are violent metaphors so common when politicians and ordinary people talk about politics? The short answer is that it fits; it resonates with how people naturally think about the political process (Pitney 2000).<sup>2</sup> This language encourages us to think about democratic processes like elections and governance as acts of violence, with all that entails. These metaphors highlight the intense conflict, the costly commitments, and the high stakes inherent in politics, including the provocation, frustration, and anger that accompany the political process. Thus, violent political metaphors are significant, in part, for what they reveal about the nature of the politics.

In this light, violent political metaphors encourage social scientists to consider how broad dynamics of aggressive interpersonal behavior influence mass political behavior. In particular, we can test psychological models of aggression that incorporate provocative situational factors—like violent metaphors—and individual-level predispositions—like aggressive personality traits—for understanding essential elements of mass politics. Aggression is a fundamental component of *human* behavior, yet research on *political* behavior has given little attention to aggression and how it helps people make sense of politics. To what extent does aggression shape the political behaviors of citizens?

We could look to apply these models where violence is prominent, for example, in studies of enlistment in revolutionary insurgencies or conditions that lead to ethnic riots. Aggression is certainly there, and others are using cutting-edge aggression models to make sense of it, but I take a different tack here. I look instead to more traditional forms of political behavior—vote choice and electoral participation—that appear to have little connection to aggression at first, but which I show to be tied to aggression. These distant pursuits are supplemented by the more proximate identification of new aggression

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<sup>2</sup> Violent metaphors fit so well that Pitney (2000) gives a book-length treatment applying insights from military tactics and strategy to political campaigning and governance.

dynamics in violent political attitudes, which also serve to validate the approach. Thus, at its heart, the present study shows how modern democratic politics provides a new venue in which timeless human behaviors can be expressed in new and surprising ways.

## Politics & Aggression

Politics inherently involves deep conflict over resources—who gets what—and behavior—who can do what—which sometimes lead to violence between individuals, groups, and nation-states. Everything can be contested: Livelihoods are at stake. Cherished values and beliefs are threatened. Status is challenged: who deserves political rights and liberties, and what are they? Politics defines how individuals and groups act amongst themselves, toward others, toward the state and their surroundings. Politics can be a matter of life and death.

Violence at all social and political levels is recurrent, from individual murders to intercontinental warfare. Yet even when outright violence is absent, the ingredients of violence persist in democratic politics, as they do in society. The single strongest situational factor motivating aggressive behavior in everyday life is provocation (Anderson and Bushman 2002a), and politics provides plenty of it. The basic conflicts in politics described above are more than enough to fuel perceptions of provocation as citizens see others working against their preferences, values, and interests. But provocation can be magnified when political antagonists respond to inherent conflict with verbal vitriol and spiteful retaliation. Frustration, a close cousin of provocation and another strong source of interpersonal aggression, is also well-represented in politics (Anderson and Bushman 2002a). Frustration arises when the attainment of goals is blocked, which can be construed as provocation when the culprit is a political opponent. Politics can seem almost continuously frustrating for everyone involved, among partisans and non-partisans alike, as favored candidates and policies are defeated and basic governance is obstructed. This potent combination of conflict, provocation, and frustration makes politics a fruitful field for aggression to thrive, with manifestations that range from obvious to unexpected.

In this dissertation, I identify three overlapping sites for this initial foray into aggression's influence in politics. The first focuses on violent attitudes in politics, including support for violence carried out by the state (e.g. death penalty, military action)

and support for violence by citizens *against* the state and its political leaders. The second site focuses on orientations toward the political process. These orientations include motivations to participate in the political system through electoral politics, but also comprise attitudes about the legitimacy of violence against political authority. The third site focuses on aggression dynamics in elections and voting behavior, which appear most distant from the typical range of aggression. These include evaluations of political candidates, vote choice, and electoral participation. In the conclusion, I touch on other promising sites for aggression's influence in politics, but these three—violent attitudes, political process, and electoral behavior—provide useful starting points that address key elements of democratic politics.

## Touchstones & Contributions

In this work, I argue that the individual-level factors predisposing citizens to aggressive behavior in everyday life shape how citizens think and act in the political world, and that the influence of these aggressive personality traits is conditioned by exposure to violent political metaphors.

Across two nationally-representative survey experiments and a third experimental study, I measure relationships between aggressive personality traits and a broad set of political attitudes and behaviors. These studies break new methodological ground by as the first representative studies in the U.S. with measures of trait aggression, enabling generalizable tests for the first time. The experimental components in each study involve randomized exposure to political ads containing violent metaphors or non-violent wording, testing the ways that subtle variations in political language influence mass political behavior. I also trace the prevalence, character, and correlates of violent metaphors with content analysis across more eight decades of presidential campaign communication. Finally, I merge this content analysis with five decades of individual-level survey data from the American National Election Studies (ANES) to show how variation in the use of violent campaign metaphors across campaigns shapes electoral participation and vote choice, complementing the strong causal claims of experiments with evidence of connections between real-world rhetoric and mass political behavior.

More broadly, this work highlights an expansive framework for interpreting and investigating a much broader set of political phenomena involving aggression dynamics, including the attitudes and behavior of citizens, political leaders, organizations, and even governments. Unsurprisingly, this project draws its foundations from several overlapping literatures in political science, psychology, cognitive linguistics, and communication studies, including the effects of personality, entertainment violence, and metaphorical thinking, political communication, emotions, and gender in politics, and the conditional effects of campaign messages as moderated by individual differences in audiences. In making these interdisciplinary connections, including some with ties to the biological sciences, this work furthers in some small way the project of consilience across the sciences, acknowledging the gauntlet thrown down most recently by E. O. Wilson (2004).

## Overview of the Dissertation

Decades of research into the roots of human aggression has yielded deep insights about the ubiquity of aggression across time and the dynamic interaction between the individual traits and situational factors that produce aggressive behavior. In Chapter 2, I outline the dynamic psychological framework for human aggression from psychology, paying particular attention to the role of trait aggression as a key personality factor. Chapter 2 also introduces the concept of violent political metaphors, provides illustrations of the concept, and theoretically grounds them within the literatures on media violence and metaphorical thinking. From this literature, I take the basic theoretical structure for understanding human aggression and apply it to each of the three political sites described above. Some, like attitudes toward violence in politics, flow directly from basic aggression models. Others, like the aggression's influence on electoral behavior, require distinctly political modifications to account for the observable patterns.

Chapters 3 and 4 concentrate on the two principal moving parts: trait aggression and violent metaphors. How do we measure aggressive personality, and how does it relate to more familiar social and political variables? What do violent campaign metaphors look like, and how are they used?

Chapter 3 begins with the basic design details of the three original survey data collections. Next I outline an approach for measuring trait aggression with the Buss-Perry

Aggression Questionnaire (Buss and Perry 1992). In the third section, I present the empirical properties of trait aggression in the two national samples, and I highlight its relationships with more familiar social, political, and demographic variables.

Chapter 4 presents a content analysis of violent metaphors from eight decades of presidential campaigns. In the first section, I present several examples of violent metaphors from famous political speeches before proceeding to a more systematic portrait of campaign convention speeches from 1932 to 2008. In the second section, I identify patterns in the use of violent campaign metaphors, including the forms they are most likely to take and the circumstances under which they are more likely to be used.

Chapters 5 through 8 present the main empirical tests assessing aggression's impact on political behavior. The first two chapters investigate aggression dynamics in violent attitudes related to politics. How do predispositions for aggression in everyday life translate into attitudes about violence in the political realm? And can mild violent metaphors really function as violent cues, encouraging greater support for violence?

In Chapter 5, I examine public attitudes on the role of the state in meting out violent punishment on criminals and foreign foes. I find that trait aggression strongly predicts support for a variety of domestic and foreign applications of state violence, even after including controls for other common predictors. Interestingly, the gender gap in state violence attitudes replicated here is not attributable to gender differences in trait aggression—the gap remains virtually undiminished after trait aggression is added to the model. Chapter 5 also presents the first experimental tests, starting with a description of the experimental designs. Contrary to expectation, I find no consistent evidence that exposure to violent political metaphors influences state violence attitudes.

In Chapter 6, I show that mild violent metaphors increase support for violence against political authority among citizens with aggressive predispositions. These attitudes include support for threats, property violence, and physical violence against political leaders and government. Trait aggression also independently predicts support for this form of violence. This work measures normatively troubling orientations toward political violence for the first time in the U.S., and it shows how political leaders inadvertently prime aggression in citizens by using violent political metaphors.

Chapters 7 and 8 focus on the electoral implications of trait aggression and violent political metaphors, including the mobilization of electoral participation, evaluation of political candidates, and vote choice. How do the violent metaphors deployed so frequently on the campaign trail help politicians achieve their electoral goals? And who responds to these kinds of appeals?

Chapter 7 identifies the interactive effects of violent metaphors, trait aggression, and external efficacy on participation intentions leading up to the 2010 midterm elections in both national experiments. Violent metaphors reinforce the efficacy-based participatory habits of trait-aggressive citizens, but weaken the same tendencies among low-aggression citizens. I argue that these effects are consistent with emotional responses to violent content, generating a mix of anger, anxiety, and enthusiasm based on trait aggression levels. I provide a third test of these dynamics by merging the content analysis in Chapter 4 with five decades of survey data on voter turnout and other forms of electoral participation from the ANES. These observational tests provide converging evidence showing the conditional effects of violent campaign metaphors, which depend on both personality traits and political orientations to take their direction.

Chapter 8 identifies nearly identical effects of violent metaphors on the evaluation of candidates who use the language in both national experiments: when trait aggression is elevated, violent metaphors reinforce efficacy-based judgments about the candidates—leaders who represent the political system that is perceived as responsive or not. However, the same language weakens the influence of efficacy on candidate evaluations among low-aggression citizens. These patterns hold for evaluations of individual candidates and when two candidates are judged in a competitive context. Once again, I turn to the content analysis and ANES data for additional corroboration, looking at presidential vote choice from 1968 through 2008. As before, the experimental results replicate well, despite the noisy nature of the measures. These results suggest that campaigns repeatedly deploy violent metaphors to produce reinforcing effects that would otherwise fade away over the course of the campaign.

Chapter 9 concludes the dissertation with a review of the theoretical expectations and key results, discussion on the implications of this work for social science and practice, and an outline of next steps for research on aggression dynamics in political behavior.

## Chapter 2

### Aggression in Mass Politics: A Theoretical Framework

*Politics is war without bloodshed while war is politics with bloodshed.*

Mao Zedong, “On Protracted War” (1938)

*Politics is like war, so people use military metaphors, which in turn makes politics more warlike.*

John Pitney, *The Art of Political Warfare* (2000)

Aggression is a fundamental component of human behavior, a central facet of human nature that is ubiquitous within and between human societies throughout history (Wilson 2004)—yet existing theories of political behavior mostly fail to consider the role of aggression in politics. Given aggression’s prominence in human behavior across eras and contexts, it would be surprising if variation in this basic currency of human interaction is unrelated to how people think and act in the political world. While patterns of human aggression may be timeless, democratic politics give citizens new opportunities for expressing aggression in the modern world, and to do so in ways that vary across the citizens and situations encountered in politics.

In this chapter, I lay the theoretical foundations for incorporating aggression into political behavior research. I begin with a brief introduction to the voluminous aggression literature and outline Anderson and Bushman’s (2002a) comprehensive General Aggression Model, which explains the origins and mechanisms of aggressive behavior by accounting for the influence of individual-level traits, situational factors, and interactions between them. I also highlight a similarly derived framework for trait-situation interactions in political behavior (Mondak et al. 2010). In the second section, I link violent political metaphors to literatures on cognitive linguistics and media violence

effects, and identify related research on political communication effects. In the final section, I present an overview of hypotheses involving the consequences of trait aggression and violent metaphors for political behavior, proposing aggression dynamics across a broad set of mass political behaviors including ingredients of political behavior, violent attitudes related to politics, orientations to the political system, and dynamics of electoral behavior. Although each of these outcomes comes with a sizable research literature, I forgo reviews of previous work until each is taken up in later chapters.

Taken together, this framework identifies new ways in which central predispositions guiding everyday life shape the way citizens think and act in the political world. This approach is among the first in political science to experimentally investigate the interactive effects of personality traits and situational factors together, identifying the conditional effects of violent political metaphors commonly found in political communication. By blending insights from political science, psychology, communication, and linguistics, this interdisciplinary work sheds new light on familiar but fundamental questions for democracy.

## Human Aggression

From individual assault to world wars, nearly every society throughout human history has seen regular instances of individual and collective aggression. Aggression takes many forms—varying in scale, mode, and motive—and it persists across time and place (Wilson 2004), but these aggregate patterns mask enormous variation in behavior across individuals and contexts.

Psychologists define *aggression* as the intentional infliction of harm on others who are motivated to avoid it, and *violence* is aggression intended to cause extreme harm (e.g. death, Anderson and Bushman 2002a). Aggression is often divided into three types: physical, verbal, and indirect (Archer and Coyne 2005; Bjorkqvist 1994). *Physical aggression* involves acts that cause physical pain and injury, but may include damage to property. *Verbal aggression* involves insults, name-calling, and other vocalized efforts to harm. These two kinds are classified as *direct aggression*, where the perpetrator is known to the victim and cannot easily deny hostile intent.

*Indirect aggression* (also known as social or relational aggression) is covert and often involves social manipulation with the intent to damage social reputation and status. Given the decision to aggress, the choice of aggressive form depends on the relative effectiveness of the harmful act relative to potential of personal danger posed by retaliation (Bjorkqvist 1994). Compared to direct confrontation with physical or verbal aggression, indirect aggression is a relatively lower-cost method of harming others. These three forms of aggression also trace a developmental path, beginning with physical aggression, which is supplemented by verbal aggression as verbal skills are developed in childhood, both of which are later supplemented by indirect aggression when complex social skills develop later in childhood (Bjorkqvist 1994). This aggression typology is useful as a starting point for considering aggression's complicated reach into political behavior, where attitudes and actions can cause physical or material harm, but in ways that are often mediated through government. For example, public support of the death penalty may encourage government to continue the practice, but citizens do not make those life and death decisions directly (outside of juries).

Two demographic regularities in aggressive behavior are worth special mention. First, aggressive behavior generally declines as people age. This decline is attributed, in part, to changes in physical capacity for conflict and other biological factors (Archer 2009; Huesmann et al. 1984). Second, men tend to behave more aggressively than women in the lab and in life, especially for physical aggression, but with some important caveats: 1) sex differences in most forms of aggression tend to be substantively small (Eagly and Steffen 1986), 2) when provocation is involved, sex differences diminish resulting in relatively equal levels of aggression between men and women (Bettencourt and Miller 1996), and 3) even without provocation, women tend to exhibit equal or greater levels of indirect (passive) aggression compared to men (Archer and Coyne 2005; Bjorkqvist 1994).

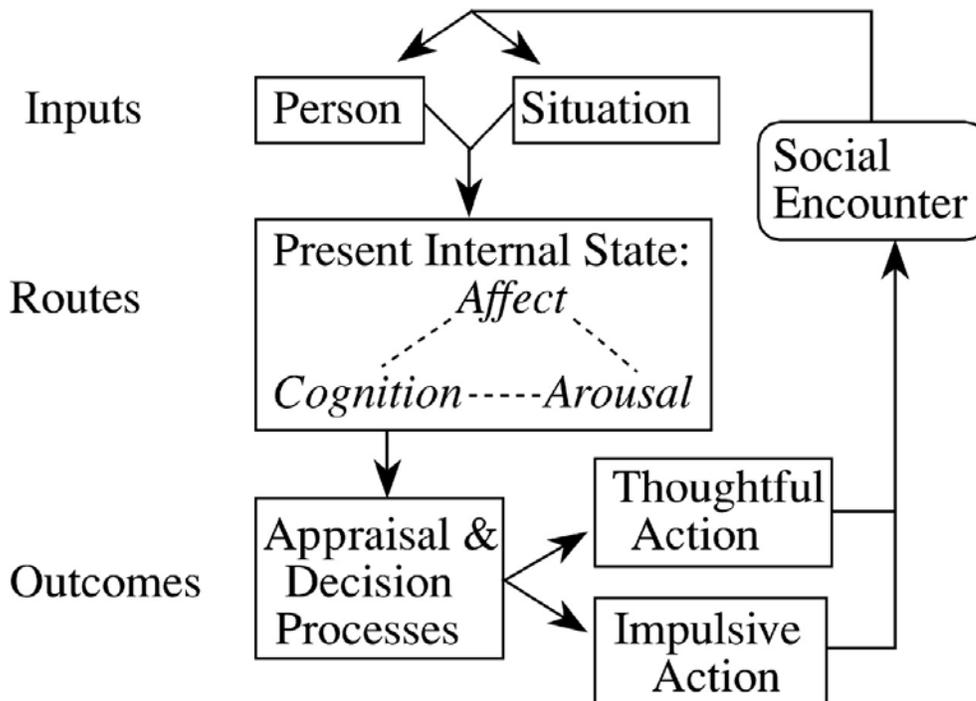
### **Integrating Personality and Situations: The General Aggression Model**

For decades, social and personality psychologists fought to reconcile clear evidence of stable behavioral patterns over time within individuals—personality—with the seeming malleability of human behavior found across variations in situational context.

Common ground was found with the mutual recognition that the effects of situational contexts are contingent on personality traits, and vice versa (see Mischel and Shoda 1995). This interactive framework reconciles behavioral change due to shifting contexts with the high degree of behavioral stability observed in individuals over time. Aggression research was one of the first sites for the widespread application and substantiation of this perspective.

Anderson and Bushman's (2002a) General Aggression Model (GAM) provides a comprehensive interactive framework tracing the causal steps leading from individual differences and situational contexts to aggressive behavior (see Figure 2.1). Brief descriptions of the model below summarize extensively from this pivotal article.

Figure 2.1: General Aggression Model



*Note:* Figure reproduced from Anderson and Bushman (2002a).

The GAM integrates insights from several influential domain-specific models of aggression. The model's unit of analysis is the "episode" which is composed of "the person in the situation" (p. 34). The interaction of person and situation factors influences an individual's internal state at a particular moment, which consists of cognitions,

emotions, and physiological arousal. These states shape perceptions and decision processes, which lead to behavioral choices that may include aggression. Whether these processes yield thoughtful or impulsive action depends on the cognitive resources available and ongoing reappraisals of the situation. As the behavior is carried out, reappraisal is likely to occur, potentially leading to real-time behavioral modifications and changes in future behavior (Anderson and Bushman 2002a).

Person factors include traits, sex, beliefs, attitudes, values, long-term goals, and interpretational and behavioral scripts (Anderson and Bushman 2002a). Among person factors, trait aggression is one of the most important, comprising a superordinate category that neatly approximates the sum of other person factors. Several longitudinal studies of aggression confirm that the relative ranking of individuals from least aggressive to most aggressive is highly stable, even over decades, indicating trait-level status (Huesmann et al. 1984; Olweus 1979). In other words, although aggression tends to decline with age, the people who behave more aggressively as young adults remain more aggressive than their peers in later years. Cognitive factors provide one route to stable aggression differences. Individuals with high trait aggression show more developed aggressive cognitive-associative networks than those with low trait aggression (Bushman 1996). Trait aggression has also been linked to increased hostile expectations (appraisal) in others and more hostile perceptions of others' behavior (Dill et al. 1997). Trait aggression also influences affective and physiological routes to aggression independently and interactively, as discussed below. Trait aggression is the primary focus in this dissertation for assessing the impact of individual differences in aggression on political behavior.

Situation factors—including provocation, aggressive cues, frustration, discomfort and pain, drugs, and incentives—can trigger aggressive thoughts, emotions, arousal, and behavior (Anderson et al. 1995; Anderson et al. 1996). Anderson and Bushman (2002a) describe provocation as “perhaps the most important single cause of human aggression” (p. 37), but they also note that situational factors frequently work in concert to elevate aggressive behavior. In this dissertation, I focus on the effects of violent political metaphors, which are conceptualized as an aggressive cue akin to mild representations of violence in mass media. Some of the dependent variables studied—particularly those assessing attitudes about state violence and political violence against leaders—explicitly

include descriptions of provocative circumstances as part of the scenario, but the traditional electoral behavior items do not.

Beyond net effects, situational and person factors often interact to produce higher levels of aggressive behavior. For example, media violence and painful stimuli produce aggression effects that are especially strong among people with higher levels of trait aggression (e.g. Anderson et al. 1998; Caprara et al. 1983; Felsten and Hill 1999; Bushman 1995). Activation occurs through priming mechanisms: people with high trait aggression have more numerous and developed cognitive and emotional structures related to aggression in memory, which are made more accessible by the prime, yielding aggressive responses (Bushman 1996, 1998). However, the effects of aggressive primes aren't always larger among high-aggression subjects: stronger effects can emerge among low-aggression subjects (e.g. Lindsay and Anderson 2000) or the effects can operate additively and independently alongside trait aggression (e.g. Anderson 1997).

Marshall and Brown (2006) resolve these apparent discrepancies by positing trait aggression as an indicator of sensitivity to situational provocation. Thus, mild provocative cues have their strongest aggressive effects among people with high levels of trait aggression, resulting in the most differentiation between low and high trait aggression. When no provocation is present, high trait aggression only slightly elevates levels of aggressive behavior. Conversely, highly provocative situations produce elevated aggressive behavior across levels of aggressive personality, yielding stronger situational reactions among people with low trait aggression. In this dissertation, the violent campaign metaphors used as aggressive cues are quite mild, suggesting maximum differentiation by aggressive personality, with the strongest effects of violent metaphors among subjects with high levels of trait aggression.

### **Trait-Situation Models of Political Behavior**

Mondak and colleagues (2010) extend the framework of trait-situation interactions for application in political behavior research. Guided by the work of Mischel and Shoda (1995) and others, they suggest political behavior models should include interactions between personality factors and situational contexts found in politics. These interactions can include both mediating and moderating effects, and the authors provide

demonstrative observational tests in the domain of civic engagement. Mondak and colleagues also emphasize the primacy of biological origins of various personality traits, as evidenced by estimates of heritability from twin studies, and they argue that the predominantly biological nature of personality traits situate them causally prior to most other social and political factors in social science, apart from sex and age.

Although Mondak and colleagues (2010) are among the first to explicitly highlight the interactive role of personality traits and situational contexts in politics, a great deal of political behavior research has recently embraced the more general perspective of using stable social and political predispositions, including work on the interaction of partisan predispositions and messages from political elites (Zaller 1992), on the interaction of racialized cues and ethnocentric predispositions (Kinder and Kam 2010; Kinder and Sanders 1996; Valentino et al. 2001), and the application of authoritarian personality to political attitudes across levels of threat (Feldman 2003; Feldman and Stenner 1997; Hetherington and Suhay 2010; Stenner 2005).

## Violent Campaign Metaphors

Political leaders routinely frame their messages with violent metaphors. It is a habit nearly as old as American politics itself, but one which varies across leaders and political contexts. They promise to ‘fight’ on behalf of their constituents, declare ‘war’ on problems plaguing the country, and denounce malicious ‘attacks’ by unscrupulous opponents. The language may arise naturally, in part, reflecting fundamental conflicts at the heart of politics (Pitney 2000) and perhaps the traits of leaders themselves (Winter 1987), but strategic actors may also be seeking political advantage when they deploy violent metaphors in politics.

I argue that violent political metaphors constitute a form of media violence, simultaneously stimulating metaphorical thinking and promoting aggression. In other words, I expect violent political metaphors to activate the same broad cognitive, emotional, and physiological responses observed when people are exposed to violent entertainment. I begin by describing connections to the literatures on metaphors in cognitive linguistics and aggression effects from media violence. Although this dissertation focuses particularly on the use of violent metaphors in the context of political

campaigns, many of the implications extend to violent metaphors in other political contexts.

### **The Power of Metaphorical Thinking**

Violent political metaphors encourage citizens to think of political processes—including campaigns and governance—as forms of aggression. Several recent studies show that metaphors are more than just rhetorical flourishes; they actively shape how people think about social interactions and make social judgments (see Landau et al. 2010 for a review). For example, perceptions of physical warmth and literal distance influence judgments of social warmth and closeness. Similarly, literal verticality (high vs. low) is associated with evaluations of goodness and power, in keeping with the metaphors people employ to talk about these concepts. Similarly, physical cleanliness is tied to social judgments of moral behavior for the self and others.

Metaphors are especially useful as heuristics that help people “understand and communicate abstract and elusive ideas” by reference to more concrete objects and processes, which have familiar attributes and relationships that are mapped from the source concept onto the target (p. 1046, Landau et al. 2010). These dynamics make politics an ideal venue for the use of metaphors. For most people, politics is complicated, dull, and distant, requiring a level of knowledge and engagement few citizens possess. Violent metaphors help political elites and ordinary citizens render the complexities of politics in easy-to-understand narratives of conflict and physical aggression. Violence is more comprehensible because it is tangible—citizens can easily imagine fistfights or even gun battles, like those seen in news clips and violent entertainment, in place of intricate and arcane political maneuvers. This is akin to Walter Lippmann’s (1922) characterization of citizens during World War I imagining a brawl between world leaders in place of the harder-to-fathom entangling web of international treaties and political obligations between nations.

Violent political metaphors imply levels of intensity and action that attract attention and interest, motivating greater engagement. This account is consistent with Schattschneider’s (1960) depiction of politics as a street fight, in which the outcome is determined partly by the ability to attract and involve bystanders. Violent metaphors may

be powerful because of their ability to invoke war, which Kinder and Kam (2010) say is unrivaled in its ability to capture and hold public attention. Violent political metaphors invoke that same intensity to draw attention, and they suggest greater levels of effort needed to expend in situations with higher stakes.

Lippmann's (1922) representation of metaphorical thinking was meant to emphasize the cognitive limitations of citizens and the pessimistic implications for democratic judgment. The inverse is the optimism of the political heuristics literature, which acknowledges the lack of public knowledge but emphasizes the ways in which citizens can make due with simpler cues from political leaders exerting opinion leadership (Lupia and McCubbins 1998; Popkin 1991; Zaller 1992) and information about the social groups that are set to lose or gain from various policy choices (Converse 1964; Kinder and Kam 2010; Kinder and Sanders 1996). Violent political metaphors may help citizens engage more with politics by making it more interesting and comprehensible.

Crucially, the influence of metaphors on social behavior often varies based on individual characteristics of audience members. For example, metaphors generally increase attention and interest in persuasive arguments and motivate more systematic processing of arguments, but the effects are especially strong among people with special interest in the domain (Ottati et al. 1999). I expect violent political metaphors to be particularly appealing among people who enjoy other representations of violence, like that found in violent entertainment.

Media violence scholars have identified aggressive personality traits as both a predictor for seeking out violent content and as a moderator that often amplifies the effects of that content on aggressive behavior (Anderson and Bushman 2002a, 2002b; Bushman 1995, 1996; 1998; Caprara et al. 1983; Felsten and Hill 1999; Marshall and Brown 2006). Among trait-aggressive citizens, exposure to violent content causes particularly strong affective activation and physiological arousal, which may explain part of the enhanced appeal of violent entertainment among this group. At the other end of the trait aggression dimension are citizens who find violent content less appealing. Among this group, exposure to violent content can produce unpleasant emotional reactions of anxiety or fear (Bushman 1998). In other words, the contrasting reactions at each end of the aggression spectrum correspond to greater propensities to respond to violent cues

with fight or with flight. These aggressive predispositions among citizens may make violent metaphors especially appealing to some and rather noxious to others.

Despite many similarities, violent political metaphors differ from much of the metaphorical reasoning studied recently by psychologists: whereas many metaphors have little chance of literal embodiment, violent political metaphors raise the specter of literal violence in the forms of assassination, mob violence, civil war, and war between nations. These connotations result in political rhetoric that sometimes blurs the line between metaphorical violence and calls for literal violence, which may serve as confusing signals to some citizens who might see language intended metaphorically as a signal to engage in real violent acts.

### **Political Speech as Media Violence**

Conceptually, I treat violent political metaphors as a form of media violence. Although political speech may seem less compelling than most forms of violent entertainment, psychologists have found that violent speech and text are sufficient to promote aggression (e.g. Anderson et al. 2003; Bushman et al. 2007), even when the text is presented subliminally (Bargh and Pietromonaco 1982). Theoretically, then, violent political rhetoric is capable of producing the same kinds of aggressive responses as violent entertainment, though its implications go much farther than the interpersonal effects identified in media violence research.

Decades of scholarship and hundreds of studies using observational and experimental methods demonstrate a clear causal link between exposure to media violence and interpersonal aggression in the lab and real life from media of all kinds—video, music, pictures, speech, and text (e.g. Anderson and Bushman 2001; Anderson and Bushman 2002b; Anderson and Dill 2000; Bushman 1995; Bushman and Geen 1990; Eron et al. 1972; Huesmann et al. 1984; Huesmann et al. 2003; Wood et al. 1991; Zillman and Weaver 2007). The effects of media violence have been linked to aggression of all kinds, ranging from insults to homicide (Phillips and Hensley 1984).

The impact of media violence differs depending on the viewer's developmental stage (Bushman and Huesmann 2006). For young audiences, violent media desensitize children and teach aggressive scripts, interpretations, and beliefs through observational

learning (e.g. Anderson et al. 2003), especially when the representations are realistic (Atkin 1983; Potter 1998; Hapkiewicz and Stone 1974), when the behavior is rewarded (Berkowitz and Powers 1978; Potter and Ware 1987; Donnerstein et al. 1994), and when viewers identify with the perpetrator (Bandura et al. 1963). In this stage, children acquire the attributes leading to trait aggression.

For adults, violent media cause short-term aggression-related effects via psychological priming: cues activate aggressive cognitive and emotional structures in memory and stimulate physiological arousal, making aggressive responses more accessible (e.g. Bushman 1998). These effects are often strengthened when media violence exposure is paired with other situational factors including interpersonal provocation or frustration (Anderson and Dill 2000; Bartholow and Anderson 2002; Berkowitz 1962, 1965, 1974; Berkowitz and LePage 1967; Carlson et al. 1990; Geen and O'Neal 1969; Lindsay and Anderson 2000; Zillman and Weaver 1999).

The strength of short-term media violence effects on adults depends partly on the attributes of media violence. Effects are strengthened when the media violence is socially sanctioned (Turner and Berkowitz 1972), when negative consequences are minimized (Bandura 1965; Goranson 1969), when injury is perceived to be intentional, when subjects identify with the character, and when it is perceived to be real (Berkowitz and Alioto 1973; Potter 1988). Stronger effects emerge as the violent content intensifies with more blood and more extreme violence (Barlett et al. 2008; Bushman and Geen 1990), but the effects of violent cues tend to diminish as the severity of aggression increases. In counterpoint, violent media effects are enhanced when low-status individuals or outgroups are made available as targets for aggression.

Long-term exposure to media violence makes aggressive constructs chronically accessible in memory (e.g. Huesmann et al. 2003), and any duration of exposure can dampen physiological reactions that contribute to a natural aversion to violence (Anderson and Bushman 2002a, Bartholow et al. 2006; Carnagey et al. 2006; Linz et al. 1984; Zillman 1991).

## **Political Communication Research**

Priming effects and the cognitive-associative memory processes of the GAM and media violence research are familiar to political scientists. Zaller and Feldman (1992) describe the same dynamics at work in their model of survey responses, where accessible thoughts weigh more heavily on survey responses and where situational interventions alter the accessibility of cognitive constructs (i.e. priming). Examples of political priming effects abound, from news agendas influencing presidential evaluations (Iyengar and Kinder 1987) to racial images in political ads shaping vote choice (Valentino et al. 2002) to transforming issue attitudes by activating subtle gendered and racialized ways of thinking (Winter 2008). The literature on political framing effects hammers home the same conclusion (Chong and Druckman 2007, 2010; Druckman 2001, 2004)—that cues in media content bring particular considerations to the foreground, thereby moving others away. Similarly, Stenner’s (2005) work on priming authoritarian personality provides one of the few examples in political science of interactions between situational cues and personality traits using experimental methodology.

## Aggressive Roots of Political Behavior

The mechanisms that produce aggressive behavior in interpersonal interactions point to several likely sites for aggression’s influence on political behavior, as activated by violent political metaphors and routed through trait aggression. Here, I outline the broad directions to be developed and tested in the following chapters, including effects on ingredients of political judgment, attitudes toward politicized violence, orientations toward the political process, and electoral behavior.

### ***Ingredients of Political Behavior***

Anger is a key affective component implicated in broader aggression dynamics, and its substantial impact on political attitudes and behaviors has been demonstrated across a variety of domains (e.g. Druckman and McDermott 2008; Huddy et al. 2007; Valentino et al. 2011). I expect that citizens with higher levels of trait aggression will be more likely to report more frequent experiences of anger *about politics*. This relationship may be moderated by political knowledge, such that political anger is more frequent among citizens who are high in trait aggression *and* politically engaged, with political

knowledge serving as the bridge the broad interpersonal predisposition to the world of politics. Chapter 3 takes up this test as part of a broader examination of trait aggression's relationship with key social and political variables.

### ***The Legitimacy of Violence***

Aggression dynamics also have clear implications for attitudes toward politicized violence, including the two very distinct domains of violence carried out by the state (e.g. death penalty, military action) and violence by citizens against political authority. I expect trait-aggressive citizens to express greater support for both kinds of violence. Moreover, based on insights from media violence research, I expect exposure to violent political metaphors to bolster support for state violence and political violence among trait-aggressive citizens. Of course, for political leaders, these would be unintended and unforeseen effects, but they carry extraordinary normative importance. Tests of these hypotheses are presented for state violence attitudes in Chapter 5, and for political violence attitudes in Chapter 6.

### ***Orientations toward the Political Process***

Attitudes toward violence against political leaders and government represent one way in which aggression dynamics are expected to influence general orientations toward the political process. Support for such violence indicates a rejection of non-violent norms in democratic politics in which citizens respect the peaceful transfer of power as adjudicated by popular elections.

Another indicator of orientations toward the political process is willingness to participate in electoral politics. Theoretically and empirically, voting and violence are not as antithetical as they first appear. By framing electoral participation in violent terms, political leaders make the political process more interesting and attractive to some citizens, but they do so at the risk of turning off others from politics. In particular, I expect greater levels of electoral participation among trait-aggressive citizens when participation is framed with violent metaphors, but I will also look for a backlash among low-aggression citizens who may find the violent depiction of politics unsettling. Chapter 7 investigates aggression's influence on electoral participation.

### *Understanding Electoral Behavior*

While aggression dynamics in electoral participation may indirectly represent orientations toward the political system, they have direct implications for understanding how different kinds of citizens are mobilized to participate in politics, and how campaign communication strategies resonate differently across the electorate depending on citizen traits. But mobilizing political participation is just one of the goals for political leaders on the campaign trail. They may also use violent metaphors in hopes of increasing support for their candidacy. As with political participation, I expect the use of violent metaphors to make candidates more attractive to trait-aggressive citizens, who may find violent political frames appealing. However, low-aggression citizens may be unmoved or even repulsed by the language. Chapter 8 assesses the conditional impact of violent metaphors on candidate evaluations.

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In the next two chapters, I animate the conceptual and theoretical frameworks of this chapter by presenting the two primary moving parts in this dissertation—trait aggression and violent political metaphors—as they are instantiated in real-world politics and operationalized in the research designs.

## Chapter 3

### Measuring Trait Aggression

*In politics... Truth is usually reached only by the rough process of a struggle between combatants fighting under hostile banners.*

John Stuart Mill, *On Liberty* (1859)

The central argument advanced in this work is that aggression—comprising a central facet of human behavior—drives a diverse set of behavioral and attitudinal outcomes in politics. In this chapter, I describe an approach for measuring the stable individual predictors of aggressive behavior collectively known as trait aggression. I highlight the reliability and validity of a popular trait aggression measure based on self-reports as the most promising approach for use in political behavior research that employs surveys and experiments outside the lab.

I begin by outlining the operational and empirical underpinnings for the measurement of trait aggression in psychological research. Second, I describe three sources of data for the analyses that follow, each of my own design and implementation. Two of these sources are data collections utilizing nationally-representative samples from the U.S. adult population, providing a reasonable foundation for generalizing results to the American public. Third, I present the measurement properties of trait aggression in my data and establish its consistency with previous findings as a reliable and valid indicator of the construct. Finally, I empirically situate trait aggression in context with familiar political, social, and demographic characteristics, demonstrating its relations with, and independence from, common variables in studies of political behavior. In sum, this chapter validates an operational approach for analyzing of relationships between trait aggression and political behavior.

## A Measurement Strategy for Trait Aggression

Trait aggression measures are designed to capture stable personality characteristics that distinguish people who are more likely to behave aggressively in daily interpersonal life than others. Often, these measures include subcomponents that differentiate various manifestations of interpersonal aggression and its antecedents, including physical, verbal, and indirect forms.

Psychologists measure trait aggression in a number of ways. Each measurement strategy has strengths and weaknesses that apply to varying degrees depending on the logistical opportunities and limitations of each research design. Patterns of aggressive behavior can be observed directly in lab settings or naturalistic field studies (Mischel and Shoda 1995). However, long-term observation may be infeasible, and brief observation of aggression in limited contexts may not generalize well to the broader predispositions that comprise the trait aggression concept. Other studies use questionnaires in which the subject is rated by others, including peers, teachers, supervisors, or parents (Buss and Perry 1992). This approach has the advantage of avoiding some pitfalls involving self-presentation biases, but the measures can be difficult to gather when acquaintances are not readily available for questioning. Still others use biological markers related to aggression, including genotype, finger-length ratios, upper body size, and sex (McDermott et al 2009; McIntyre et al 2007; Sell et al 2009). These measures circumvent reporting biases, but can also be difficult to acquire. They may also fall further back in the causal chain of personality development, increasing the noisiness of such measures. Most frequently, aggression researchers rely on self-reports in which subjects describe their own retrospective patterns of aggression-related behavior, emotions, and attitudes (Buss and Perry 1992).

Self-reports provide the most versatile source of trait aggression information, allowing global assessments of aggression across situations and over time. Although self-reports involve greater concerns about face-saving responses, anonymous surveys may reduce this risk, and self-report measures have been shown to correspond well with ratings by others and actual behavior (Bushman and Wells 1998; Buss and Perry 1992). The studies in this dissertation are Internet-based survey experiments, which makes self-reports the most promising approach for the sound measurement of trait aggression.

## **Buss-Perry Aggression Questionnaire**

The 29-item Buss-Perry Aggression Questionnaire (BPAQ; Buss and Perry 1992) is the most widely utilized self-report measure in contemporary aggression research, revised from the 75-item Buss-Durkee Hostility Inventory (BDHI; Buss and Durkee 1957). As of June 2012, the original articles presenting these indices have been cited over 2000 and 2100 times, respectively, providing powerful evidence of their broad relevance in aggression research.<sup>3</sup> A shorter, more manageable version of the BPAQ (12 items) was created by Bryant and Smith (2001) and has similar or superior psychometric properties compared to the original BPAQ.

Although the BDHI was initially designed to identify 7 theoretically-distinct aggression-related factors, subsequent factor analysis has identified just 4 replicable factors, corresponding to physical aggression, verbal aggression, anger, and hostility subscales in the revised BPAQ. Physical aggression and verbal aggression subscales are behavior-oriented, whereas anger and hostility subscales tap emotional volatility and hostile attitudes that predict aggression in physical or verbal forms. While these subscales appear particularly well-suited for predicting direct forms of aggression (i.e. physical, verbal), Archer and Webb (2006) show that these items are similarly strong predictors for indirect aggressive behavior as well. The best-fitting measurement models of aggression with BPAQ items reveal a global trait aggression construct with four sub-factors, rather than four independent factors or a single aggression factor that fits all BPAQ items equally (Bryant and Smith 2001).

The individual items consist of statements with 5- or 6-point response scales indicating whether the statement is “true” or “characteristic” of the respondent. Table 3.1 presents the wording of these questions in the BPAQ-SF, as operationalized in the three studies presented here. Scholars utilize either the full BPAQ index or the specific subscale most relevant to the behavior under study (Buss and Perry 1992; Bryant and Smith 2001).

BPAQ measures have high internal consistency and good test-retest reliability. Reliability tests for the BPAQ find Cronbach’s alphas between 0.7 and 0.9 (Buss and Perry 1992; Bryant and Smith 2001; Harris 1996, 1997; Sharpe and Desai 2001). BPAQ

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<sup>3</sup> Google Scholar (scholar.google.com), June 8, 2012.

subscales also show high stability over time, with Pearson's correlations greater than 0.7 over four months, and between 0.67 and 0.82 over seven months (Harris 1997).

Reliabilities on the short-form of the BPAQ are consistent with those from the full scale, and they are superior after accounting for the reduced number of items (Bryant and Smith 2001). The physical aggression subscale generally performs better in these tests than the other subscales. These findings provide greater confidence in the reliability of the BPAQ, but also add to the construct validity by mirroring the stability of aggressive behavior over time.<sup>4</sup>

Table 3.1 Trait Aggression Question-Wording (BPAQ-SF)

For each of the following statements, indicate whether the statement is true or false for you.
There are people who have pushed me so far that we have come to blows. (Physical)
Given enough provocation, I may hit a person. (Physical)
I have threatened people I know. (Physical)
I often find myself disagreeing with people. (Verbal)
I can't help getting into arguments when people disagree with me. (Verbal)
My friends say I'm somewhat argumentative. (Verbal)
I have trouble controlling my temper. (Anger)
Sometimes I fly off the handle for no good reason. (Anger)
I flare up quickly but get over it quickly. (Anger)
At times I feel I have gotten a raw deal out of life. (Hostility)
Other people always seem to get the breaks. (Hostility)
I wonder why sometimes I feel so bitter about things. (Hostility)
Response scale: Completely true for me, Mostly true for me, Slightly true for me, Slightly false for me, Mostly false for me, Completely false for me

BPAQ scales have strong construct validity in laboratory settings, in reports by others, in retrospective assessments of real-world aggression that include violent criminality, and in prospective predictions of aggression in other real-world settings (see Bushman and Wells 1998). BPAQ scales also show strong convergent validity with

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<sup>4</sup> Although subjects may enter the study with varying moods, any influence on reported levels of trait aggression and trait anger is negligible, given the high test-retest reliability over time (Harris 1997). Since trait-aggressive individuals are more likely to enter studies in an aggressive state, this potential confound loses some of its potency. Similarly, although extreme events can cause short-term fluctuations in aggregate levels of reported trait aggression (Carnagey and Anderson 2007), these aggregate changes make no trouble for identifying varying levels of trait aggression *between* subjects.

alternative aggression measures (Bryant and Smith 2001; Harris 1997), along with good discriminant validity (Bryant and Smith 2001). Moreover, self-reports in the BPAQ correspond with peer reports similarly well compared to other major personality traits, like extraversion ( $r = .45$  for physical aggression,  $r = .31$  for total BPAQ,  $r = .42$  for extraversion; Buss and Perry 1992).<sup>5</sup> BPAQ construct validity and factor structure are consistent for men and women (Buss and Perry 1992). These findings provide confidence that BPAQ measures aggressive predispositions in a truly general sense.

Social desirability could conceivably pose a validity threat for self-reports of trait aggression among people with high sensitivity to desirability considerations, and there is some evidence of a moderate negative relationship between social desirability and trait aggression (Buss and Perry 1992). However, the strong relationship between self-report measures and others using alternative measurement strategies is reassuring. Moreover, it may be substantively revealing that aggressive people are more likely to disregard social desirability considerations. The present studies do not include measures of social desirability response sets, but future studies may wish to include such measures to control for the pattern if it is deemed problematic. In sum, the ubiquity and demonstrated reliability and validity of the BPAQ in aggression research makes it a practical choice for use in survey-based research on trait aggression.<sup>6</sup>

### Three Studies

To assess the relationship between trait aggression, violent political metaphors, and political behavior, I fielded three studies in the summer and fall leading up to the 2010 midterm elections. Two of these studies were conducted using an Internet-based survey format administered through Knowledge Networks, a survey research company.

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<sup>5</sup> The greater correspondence for physical aggression is not surprising given that both physical aggression and extraversion are behavioral manifestations of traits, whereas anger and hostility are more internal and therefore known better by the subject than by others. While verbal aggression is also behavioral, instances of argumentativeness may be less memorable for peers than physical aggression.

<sup>6</sup> Some scholars employ alternative measures. The Caprara Irritability Scale (i.e. trait hostility) measures the same underlying trait aggression construct (e.g. Anderson and Dill 2000; Lindsay and Anderson 2000), with factor analysis showing that Trait Hostility and the BPAQ load onto the same factor, interpreted as trait aggression (Dill et al 1997). Other theoretically- and empirically-related measurement alternatives include subscales on the Personality Assessment Inventory (Morley 1991), subscales on the MMPI-2 PSY-5 (Harkness et al 1995), and Gladue's Aggression Inventory (1991).

The methodology employed by Knowledge Networks uses random sampling procedures that draw a nationally-representative sample from the population of U.S. adults. The third study was conducted with college students from the University of Michigan. Each study measures trait aggression, several questions about political attitudes and behaviors, and social and demographic characteristics. The studies also include experimental manipulations involving violent political rhetoric, which will be described more fully in later chapters.

### **Ford-Marsh Study**

The first national study was conducted online through Knowledge Networks with 412 U.S. adults between July 2<sup>nd</sup> and July 20<sup>th</sup>, 2010. This data collection was funded by the Gerald R. Ford research fellowship from the political science department and the Marsh Research Fellowship from the Communication Studies department, both at the University of Michigan.

Participants were selected randomly from the Knowledge Networks panel. The selection process for the panel is described in greater detail below. Subjects participated in the online survey at a time and place of their choosing upon receiving a notification email. The survey was completed by 68% of selected panelists. In addition to survey responses, Knowledge Networks provided a broad set of social and demographic information about each respondent.

The survey began with measures of social and political traits, including partisanship, trait aggression, authoritarianism, and political knowledge, along with external political efficacy. After the presentation of a randomized treatment text, participants answered questions about the treatment, vote choice and participation intentions in the upcoming election, presidential approval, attitudes toward political violence, and attitudes toward state violence.

### **TESS Study**

The second national study was conducted online through Knowledge Networks with 512 U.S. adults between July 29<sup>th</sup> and August 10<sup>th</sup>, 2010. The data for this study were collected by Time-sharing Experiments for the Social Sciences (NSF Grant

0818839, Jeremy Freese and Penny Visser, Principal Investigators). As in the Ford-Marsh study, participants were selected randomly from the Knowledge Networks panel and completed the survey online at a time and place of their own choosing. The study was completed by 55% of the selected sample.

Given greater restrictions on survey length, the content included in the TESS study is more limited. The survey began with the trait aggression battery and political knowledge questions. After the presentation of a randomized treatment text, participants responded to questions about the treatment, participation intentions for the upcoming election, and attitudes toward political violence. Partisanship, ideological identification, and demographic variables were provided by Knowledge Networks from previous data collections with these respondents.

### **How representative are Knowledge Networks samples?**

Knowledge Networks provides a representative group of respondents recruited through probability-based sampling techniques with random-digit dialing and address-based sampling methods.<sup>7</sup> Participants receive financial incentives, internet services, and computer hardware (if necessary) to reduce attrition and enable more representative participation in households that otherwise would be excluded. Knowledge Networks maintains an ongoing re-sampling process to limit distortions in representativeness caused by attrition.<sup>8</sup> The quality of the sample provides reasonable grounds for generalizing the findings to the full population.<sup>9</sup> Knowledge Networks also provides sampling weights, which allow researchers to account for slight imbalances between the samples and the national population. This weight reduces any non-response and non-coverage bias in the overall panel membership using demographic distributions of U.S. adults from the most recent Current Population Study.

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<sup>7</sup> Knowledge Networks uses a dual sampling frame that includes households with listed phone numbers, unlisted numbers, cell phone only, and no phone.

<sup>8</sup> The survey analysis utilizes sampling weights provided by Knowledge Networks to make better inferences about the national population. The survey also included an experimental manipulation involving violent vs. non-violent campaign rhetoric in vignettes. The experimental component is not modeled in the analysis below.

<sup>9</sup> Chang and Krosnick (2009) show that a probability sample is more representative than non-probability sample in internet studies, even after weighting. Internet samples showed less random measurement error and satisficing than a telephone surveys, suggesting that an online, probability-based survey (e.g. Knowledge Networks) is optimal.

How well do the particular samples in the two Knowledge Networks studies reflect national variation, even before survey weights are added? Table 3.2 provides a demographic breakdown in both studies relative to the national population. Both closely match national characteristics across median household income, education, race and ethnicity, sex, and region. Although the samples have substantially higher median age than the national population, this difference is accounted for by the exclusion of children from the sample.

Table 3.2: Representativeness in the Ford-Marsh and TESS Studies

	Ford-Marsh Study	TESS Study	National Population
Median Household Income	\$50-60K	\$50-60K	\$52,029
Education			
< H.S. diploma	14%	13%	16%
H.S. grad/Some college	58%	56%	56%
College grad +	28%	30%	28%
Race/Ethnicity			
White	77%	78%	65%
Black	7%	6%	13%
Hispanic	10%	10%	14%
Other	6%	6%	8%
Sex			
Female	50%	48%	51%
Median Age	49	47	37
Region			
Northeast	18%	19%	18%
Midwest	20%	22%	22%
South	40%	39%	37%
West	22%	20%	23%

*Note:* National data are from U.S. Census estimates for July 2009, except income data (U.S. Census estimates for 2008) and education data (U.S. Census estimates for 2007)

### University of Michigan Study

The third study was conducted online through Qualtrics with a convenience sample of 384 University of Michigan students enrolled in introductory psychology and

communications classes in exchange for class credit. Participants completed the study at a time and place of their own choosing.

As in the national studies, the first section included measures of partisanship, ideological identification, trait aggression, racial attitudes, and political knowledge. Following the presentation of a randomized treatment text, subjects answered questions about the treatment, political participation intentions for the upcoming election, policy preferences related to blacks and Hispanics, state violence, and state aid in disasters, and attitudes toward political violence. Sex, region, and race/ethnicity were asked at the conclusion of the survey.

Generally speaking, the observational relationships observed between trait aggression and political variables in the national studies are replicated within this student data. However, because of the limits of generalization from this data, I present these findings in footnotes. This data is primarily used to assess the experimental hypotheses set forth later in this work. For the purposes of comparison, I present measurement characteristics for the student sample along with the national data for comparison.

### Characteristics of Trait Aggression

To my knowledge, the FM and TESS studies are the first nationally-representative U.S. data to include measures of trait aggression. Thus, these data provide the first opportunity to observe the distribution of trait aggression among U.S. adults as a population. Table 3.3 presents the distributions for individual items across all three studies, along with Cronbach's alphas indicating internal reliability of the BPAQ-SF scale and subscales.<sup>10</sup> Table 3.4 presents the correlations between the BPAQ and its subscales in all 3 studies, and Figure 3.1 shows the distributions of the BPAQ and subscales for the two national studies. Not surprisingly, each of the subscales strongly relates to the full scale in each of the studies, and the subscales show strong correlations

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<sup>10</sup> Mean values across all three studies are remarkably similar, and the internal reliabilities of the full BPAQ scale and its subscales are extremely high. Comparing the Michigan Study to the two national studies, we see that the student distributions of trait aggression are practically identical to those of the full population, providing added confidence for using student subjects in aggression-related experiments. Moreover, although the internal reliabilities are somewhat diminished among the student sample, they are still very good.

with each other. Each of the trait aggression distributions is massed at the low end of the scale, with long tails reaching toward the high end of the scales. The distribution is most stark for the physical subscale in which more than 50% of respondents place themselves at the lowest level. More typically across the other distributions, the low end is anchored by about 25% of each sample and spreads upward more evenly. Nonetheless, the 95<sup>th</sup> percentile for each of the distributions—including physical aggression—falls about 2/3 of the way to the maximum trait aggression score, showing considerable variation in the measures.

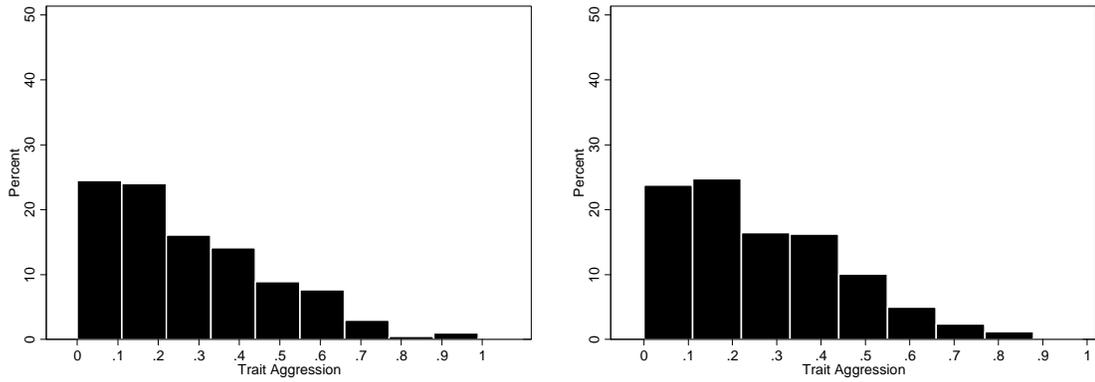
Table 3.3 Measurement Characteristics of BPAQ-SF Items

	Ford-Marsh Study				TESS Study				Michigan Study			
	Mean	S.D.	Alpha	N	Mean	S. D.	Alpha	N	Mean	S. D.	Alpha	N
<b>Full Scale</b>	.28	.21	.92	404	.27	.19	.91	505	.29	.16	.86	371
<b>Physical</b>	.18	.24	.82	405	.17	.22	.81	507	.18	.20	.72	372
Blows	.21	.30			.18	.28			.18	.25		
Hit	.20	.29			.20	.27			.22	.28		
Threaten	.14	.24			.13	.22			.15	.23		
<b>Verbal</b>	.31	.23	.80	405	.30	.23	.82	507	.31	.19	.62	372
Disagree	.39	.26			.38	.26			.40	.23		
Argue/Dis	.25	.27			.25	.25			.23	.26		
Argue	.29	.29			.27	.28			.29	.26		
<b>Anger</b>	.28	.25	.84	406	.27	.23	.80	506	.35	.19	.54	371
Temper	.25	.27			.23	.25			.34	.23		
Handle	.24	.28			.23	.26			.36	.27		
Flare	.36	.30			.34	.29			.35	.28		
<b>Hostility</b>	.33	.26	.82	406	.32	.25	.83	507	.33	.21	.68	372
Raw	.33	.30			.33	.30			.24	.23		
Breaks	.34	.30			.35	.28			.37	.29		
Bitter	.32	.31			.30	.29			.39	.26		

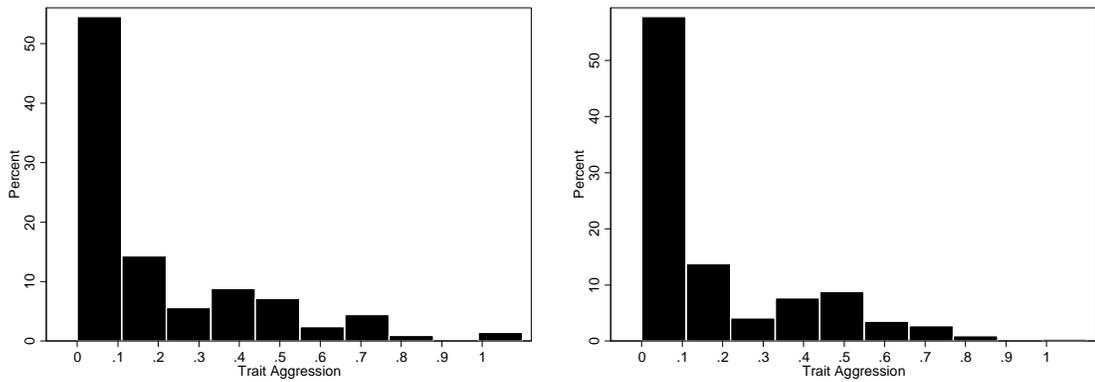
Table 3.4 Correlations between the BPAQ-SF and its Subscales

	Ford-Marsh Study				TESS Study				Michigan Study			
	F	P	V	A	F	P	V	A	F	P	V	A
Full Scale (F)	--				--				--			
Physical (P)	.82	--			.79	--			.72	--		
Verbal (V)	.86	.64	--		.84	.56	--		.87	.45	--	
Anger (A)	.88	.65	.70	--	.84	.55	.64	--	.81	.38	.71	--
Hostility (H)	.84	.54	.62	.65	.84	.53	.60	.60	.87	.51	.71	.60

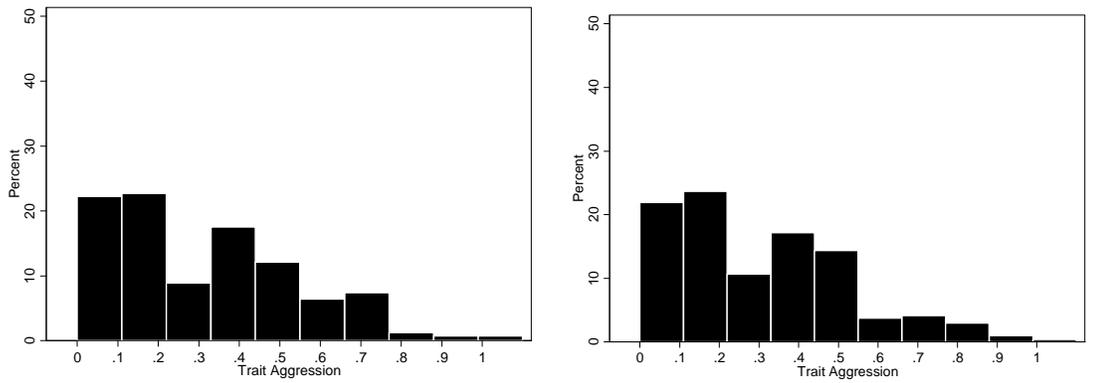
Figure 3.1 Distributions of the BPAQ-SF and Subscales (FM Study/TESS Study)  
Full Scale



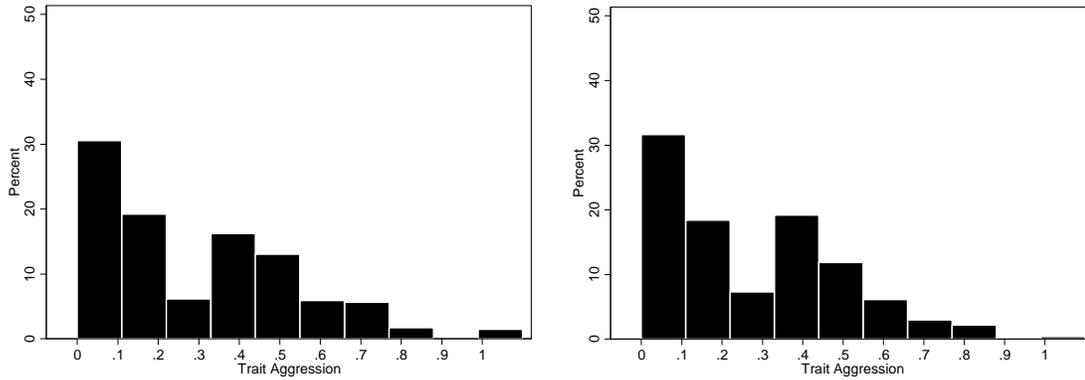
Physical Subscale



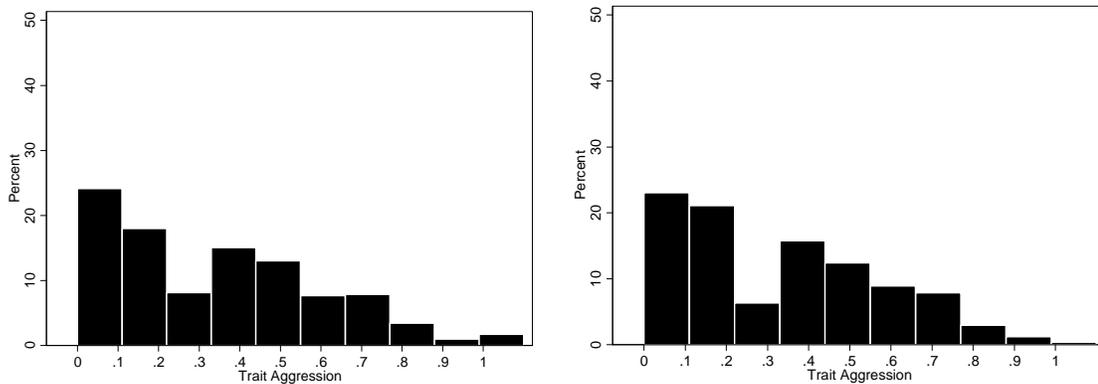
Verbal Subscale



### Anger Subscale



### Hostility Subscale



## Trait Aggression in Social and Political Context

The political context of both national studies and the wealth of social and demographic data provided by Knowledge Networks for each participant permits tests that will provide a better understanding of trait aggression in context. These tests serve to replicate previously identified relationships between trait aggression, social characteristics, and demographics. These analyses also indicate the relationship between trait aggression and common political variables, including partisanship, ideological identification, authoritarianism, and political knowledge. Together, these tests illustrate trait aggression's uneven distribution across various social and political groups in the United States, but also demonstrate trait aggression's independence from other familiar constructs in political behavior research.

To these ends, I estimate bivariate Pearson's correlations between trait aggression and key social and political variables. For social and demographic factors, I include

measures of age, sex, race, education, income, region, parent status, marital status, employment status, and urbanicity. For political variables, I include partisanship, partisan strength, political knowledge, ideological identification, political anger, authoritarianism, and beliefs about electoral responsiveness. Since some of the analyses that follow utilize subscales of the BPAQ, I include separate analyses for each of the four subscales, which reveal some distinctiveness in the distributions of trait aggression across different parts of the construct.

Age is measured by rescaling years between 0 and 1, with 0 representing 18 years and 1 representing maximum ages over 90 in both samples. Sex is measured dichotomously, with female coded 1 and male coded 0. Race is measured dichotomously as white (1) or non-white (0). Education is coded trichotomously, denoting less than high school graduate (0), high school graduate or some college (.5), and college graduate (1). Income is coded with four categories, dividing the sample into quartiles. Region is coded with indicator variables for the South, following Census Bureau groupings. Parent status is coded dichotomously as having kids or not. Marital status is coded as 1 for currently married (excluding “separated”) and 0 for all other statuses. Employment status is coded 0 for employed or retired and 1 for unemployed. Urbanicity is coded as 1 for metropolitan and 0 for rural.

Among political variables, partisanship is measured using the standard branching format, which generates a 7-point scale that I recode between 0 and 1. Partisan strength is a 4-point scale coded between 0 and 1 corresponding to the strength categories created by folding the partisanship scale. Political knowledge is measured with three standard multiple-choice questions about politics (identifying John Roberts’ position, the proportion of votes needed to override a presidential veto, which branch rules on Constitutionality), coded 1 for a correct answer and 0 for incorrect answers. The items are then summed into a reliable index (FM Cronbach’s alpha = .51; TESS alpha = .48) and recoded between 0 and 1. In keeping with Mondak’s (2001) recommendations, respondents were encouraged to guess even if they do not know the answer, and “don’t know” options were not provided. Ideological identification (TESS only) is measured at some point prior to this survey administration, with the traditional 7-point self-placement scale running from “extremely liberal” to “extremely conservative”, though Knowledge

Networks did not provide the usual “don’t know” or “haven’t thought much about it” response options. The scale is recoded between 0 and 1, with 1 representing the most conservative response. Political anger (FM only) is measured with a new face-valid question indicating the frequency that the respondent feels angry about politics on a 7-point scale, recoded between 0 and 1. Authoritarianism (FM only) is measured with two of the four traditional authoritarian items (Feldman 2003; Feldman and Stenner 1997; Stenner 2005), which are summed and rescaled between 0 and 1 (Cronbach’s  $\alpha=.46$ ). The two items were chosen for their reliability and predictive validity in the 2004 American National Election Study. Beliefs about government’s responsiveness to elections are measured with a single ANES item. Question wording for all political items is included in the Appendix. Table 3.5 presents the correlations between trait aggression and these key variables, including tests for statistical significance.

### **Trait Aggression and Age**

The strongest and most consistent finding shows that trait aggression is highest among young adults and drops dramatically as people age, especially for physical aggression. Further analysis shows that, across the full lifespan, trait aggression declines from around .45 to .20 in the FM data, on average, and from around .31 to .08 in the TESS data. Physical aggression drops even more precipitously, from around .37 to .04 in the FM data, on average, and from around .25 to 0 in the TESS data. These patterns appear for men and women alike. These results are consistent with past research, but they are the first representative evidence for U.S. adults.

In addition to the substantive implications of this finding, the decline of trait aggression over the lifespan may have analytical consequences for estimating the impact of trait aggression and violent political metaphors on political behavior. In particular, as average trait aggression scores approach 0, they may lose variance, leaving less room for covariance with political outcomes. In the analyses that follow in the next chapters, I keep an eye out for significant differences in the relationship between trait aggression and violent attitudes among older adults.

### **Trait Aggression and Sex**

Another regularity in aggression research is the moderately lower propensity for aggressive behavior among women, especially when the behavior involves physical harm. The results here are consistent with these past findings. Women show significantly lower levels of trait aggression than men, especially for physical aggression. The TESS study shows a more consistent pattern of sex differences across all the trait aggression subscales, while the Ford-Marsh study only shows significant differences for the physical subscale.

Table 3.5 Pearson's Correlations: Trait Aggression in Context

	Ford-Marsh Study					TESS Study				
	F	P	V	A	H	F	P	V	A	H
Age	-.33*	-.36*	-.27*	-.22*	-.28*	-.21*	-.22*	-.18*	-.13*	-.15*
Female	-.06	-.12*	-.09^	-.02	.01	-.18*	-.18*	-.22*	-.12*	-.10*
White	-.01	-.09^	.00	.02	.01	-.17*	-.21*	-.12*	-.10*	-.15*
Education	-.24*	-.27*	-.09^	-.24*	-.22*	-.18*	-.19*	-.06	-.13*	-.21*
Income	-.24*	-.27*	-.11*	-.20*	-.24*	-.13*	-.12*	-.02	-.08^	-.23*
Unemployed	.07	.13^	.02	.01	.09^	.13*	.14*	.12*	.09*	.09*
South	.03	.02	-.01	.04	.05	.04	.04	.02	.04	.02
Urbanicity	-.10*	-.10*	-.04	-.10*	-.08^	-.03	.00	-.03	-.04	-.04
Married	-.16*	-.14*	-.12*	-.08^	-.22*	-.07	-.11*	-.02	.01	-.11*
Kids	.16**	.14*	.15**	.10*	.17*	.04	.03	.04	-.01	.07
Republican	.00	-.02	.03	.02	-.05	-.06	-.08^	-.04	-.02	-.07
PID Strength	-.12*	-.15*	-.05	-.07	-.15*	-.10*	-.09*	-.05	-.07	-.11*
Political Info	-.20*	-.24*	-.07	-.18*	-.20*	-.12*	-.16*	.01	-.10*	-.14*
Conservative	--	--	--	--	--	-.18*	-.16*	-.14*	-.14*	-.16*
Pol. Anger	.08	.03	.12*	.07	.04	--	--	--	--	--
Authoritarian	.07	.06	-.01	.09^	.11*	--	--	--	--	--
Electoral Response	-.17*	-.20*	-.08	-.13*	-.18*	-.05	.00	-.01	-.07^	-.07

Note: \*  $p < .05$  ^  $p < .10$ , two-sided t-test.  $N = 396$  (F-M), 501 (TESS).

### **Trait Aggression and Socio-economic Status**

Education, income, and employment tend to be negatively associated with aggressive behavior, but most studies studying trait aggression measures lack sufficient diversity in their samples to judge the relationships. Here, I find strong negative relationships between trait aggression and both education and income, and weaker but persistent positive relationships with unemployment. These findings are consistently strongest for physical aggression.

### **Trait Aggression, Race, and Ethnicity**

The results on race are not especially consistent. On average, it initially appears that whites may score slightly lower on measures of trait aggression than people of color, though the statistical strength of the results is inconsistent across the two studies. Given unequal distributions of socio-economic status between these communities and the close ties between low status and aggression, this bivariate relationship may be unsurprising. Indeed, the difference is cut in half after accounting for disparities in education, income, and unemployment, and it loses even marginal statistical significance across the FM study and for the anger subscale in the TESS study. Further analysis shows that the initial difference between whites and people of other racial and ethnic groups is primarily due to elevated scores among Hispanics and people with multiracial or non-Hispanic background, with whites and African-Americans at equally lower levels. In the FM study, none of the groups differ statistically on the full trait aggression index, and the initial difference for the physical aggression subscale—which is found among Hispanics—disappears after controlling for socio-economic status.

### **Trait Aggression and Geography**

Nisbett and Cohen (1997) identify regional differences in culture as a source for some forms of aggressive behavior, with the honor culture of the American South encouraging more violence. However, the tendency they find holds only for honor-related provocations, not general aggression. It is not surprising, then, that I find no trait aggression differences between Southerners and other citizens in these studies. While each of the correlations is positive, none approach statistical significance. Nonetheless, it

is important to confirm these consistent findings with trait aggression measures that go beyond the mostly behavioral outcomes studied by Nisbett and Cohen.

The results are slightly stronger for urbanicity. Across most of the subscales in both studies, people living in metropolitan areas have lower levels of trait aggression, on average, than those in rural areas, though the differences are only statistically significant in the FM study.

### **Trait Aggression and Family**

Interestingly, trait aggression appears to have opposite relationships with marital status and having kids. Married people have consistently lower levels of trait aggression across both studies. In the FM study, these relationships are statistically significant (or marginally so) across the full index and the individual subscales. In the TESS study, the differences are statistically significant for the physical aggression and hostility subscales, but not for the other tests.

In contrast, trait aggression among people with kids moves in the opposite direction, with parents exhibiting higher levels of trait aggression across the board. Although these relationships are statistically significant in the FM study, they are not in the TESS study. Additional analysis shows that, in the FM study, trait aggression is stable across unmarried people with or without kids and married people with kids, but is about 10 points lower on the trait aggression index among married people without kids. The same pattern appears in the TESS study, though the gap is only about 4 points, but the difference among married people without kids is statistically significant in both studies. Some of these differences may be due to the older average age of people married without children.

### **Trait Aggression, Partisanship, and Ideological Identification**

Trait aggression has never been compared with partisanship or ideological identification. Intuitively, it is easy to imagine aggressive people of all political persuasions, so there are no clear expectations about differences in trait aggression based on partisanship or self-applied ideological labels. On the other hand, we might expect indirect relationships with trait aggression. For instance, present-day Republicans and

self-identified conservatives regularly express greater support for particular kinds of state violence. If some partisans and self-identified ideologues are drawn to their identifications because of these issue positions, there may be an indirect relationship between trait aggression and these two identifications.

The empirical evidence from the two studies is surprising. On the one hand, partisanship is consistently unrelated to trait aggression in both studies, with the lone exception that Democrats appear to be modestly more physically aggressive in the TESS study. In contrast, self-identified liberals appear to be significantly more trait-aggressive than conservatives across the board. Although partisanship is usually thought of as a more meaningful political force than the relatively abstract and generally misunderstood ideological terms, trait aggression may be related to non-political understandings of the liberal and conservative terminology. In any case, the connection between trait aggression and conservatism runs against the expectation suggested by an account of issue attitudes about state violence. Unfortunately, state violence and ideology measures are not available in the same study to investigate all three further.

More compelling still, when partisanship, ideology, and trait aggression are considered simultaneously, liberal identification continues to correspond with significantly greater trait aggression, but Republican identification does as well, at marginally-significant levels ( $p < .10$ ). Finally, despite presumptions that political knowledge might provide the link from trait aggression to politics, these relationships are strongest among the *least* knowledgeable third of the TESS sample, but not FM subjects.

### **Trait Aggression and Political Anger**

At first pass, it seems sensible to expect trait aggression—particularly trait anger—to correspond closely to anger in a particular domain—politics, in this case. The results above move in the expected direction, but only weakly so. Trait aggression is slightly but significantly related to the frequency of anger in politics, with minimal covariance except for the verbal aggression subscale. This last is surprising, since trait anger should seemingly outperform the rest. However, the empirics for the full sample do not support this supposition. Interestingly, as with partisanship and ideology, these relationships are strongest among the least knowledgeable third of the sample. For them,

the full trait aggression index and the anger subscale predict frequencies of political anger at marginally-significant levels ( $p < .1$ ). While political anger may wax and wane over time, citizens with higher levels of trait aggression and trait anger seem slightly more likely to feel angry about politics.

### **Trait Aggression and Other Political Characteristics**

Partisan strength and political knowledge show fairly strong relationships with trait aggression, but these patterns are mostly (though not entirely) attributable to covariation with other factors including education and age.

Authoritarianism is an important personality trait in political research, including violent attitudes in politics. Moreover, authoritarianism is sometimes said to have an aggressive component, though this assertion is usually shown tautologically by its prediction of support for state violence. For these reasons, establishing the distinctness of authoritarianism and trait aggression is especially important. The empirical tests show no consistent relationship between trait aggression and authoritarianism. In other words, authoritarians are no more predisposed to interpersonal aggression than non-authoritarians.

Finally, we might expect a relationship between trait aggression and beliefs about government's responsiveness to elections, particularly for the components reflecting hostility. In other words, people who are cynical about elections as instruments for representing public interests may also be more likely to express bitterness toward other people, believing that they are "getting the breaks." These expectations are borne out in the FM study, but results are much weaker in the TESS study.

### **The Independence of Trait Aggression**

While most of the discussion above has noted the links between trait aggression and important social and political characteristics, taking up one at a time, it is equally important to note that even the sum of these relationships accounts for only 7% to 28% of the variance in the trait aggression measure, averaging less than 16%. This finding speaks to the statistical independence of the BPAQ-SF trait aggression measure and its subscales, boding well for the analyses to follow in which trait aggression is used as a predictor of

political behavior. Moreover, the causal precedence of trait aggression over other factors like political anger and ideological identification reduces concerns about these relationships, which may well suggest a mediation process in which trait aggression works partly through political orientations.

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This chapter provided a valid and reliable measurement strategy for assessing trait aggression, and it traced those relationships across several familiar social and political groupings in American politics. In the next chapter, I take up the second key element in this dissertation—violent political metaphors—in a content analysis identifying patterns of its use in presidential campaigns from 1932 through 2008, along with its aggregate electoral consequences.

## Chapter 4

### Violent Metaphors in Presidential Campaigns

*The provision for defense must in this, as in all other cases be made commensurate to the danger of attack. Ambition must be made to counteract ambition.*

Publius, *Federalist No. 51* (1788)

*Labor has always had to fight for its gains. Now you are fighting for the whole future of the labor movement. We are in a hard, tough fight against shrewd and rich opponents. They know they can't count on your vote. Their only hope is that you won't vote at all. They have misjudged you. I know that we are going to win this crusade for the right!*

Harry Truman, Labor Day Address in Cadillac Square, Detroit (1948)

This dissertation focuses on two ingredients driving aggression dynamics in political behavior. The first—trait aggression—was conceptualized in the second chapter and operationalized in the third. In this chapter, I present the results of a systematic content analysis identifying the prevalence of the second ingredient—violent political metaphors—in modern presidential campaigns, along with its aggregate electoral consequences.

Violent political metaphors are important, in part, because they are a basic trope in political communication, even in the most renowned speeches. Their frequency suggests their impact, given that leaders would be unlikely to use it so often if they didn't think it was an effective tool for accomplishing their goals for election and governance, an inference that is rigorously tested in later chapters.

Here, I start by presenting historic examples of violent metaphors from presidential rhetoric that illustrate the concept and its character. Next, I describe the

analytic approach for systematically identifying violent metaphors in presidential campaigns, for identifying patterns of their use in context, in form, and over time. For texts, I analyze presidential nomination acceptance speeches by candidates at their party conventions from 1932 through 2008, which provide the core template for the communication styles in each candidate's campaign, appearing thereafter in stump speeches, in television advertisements since 1952, and in televised debates since 1960. This section includes examples from each speech to paint a richer portrait of the language in campaign contexts. Finally, I show the empirical trends in violent campaign metaphors across 76 years of U.S. presidential campaigns and candidates, identifying its most common forms, its correlations with candidate attributes, and its relationships with electoral outcomes.

## Historical Examples of Violent Political Metaphors

I define violent political metaphors as figures of speech that cast non-violent political behaviors of campaigning and governing in violent terms, that portray political leaders or groups as combatants, or that depict political objects as weapons.

Violent political metaphors aren't obscure phenomena relegated to low-profile speeches—they can be found at the core of the most famous American political oratory. Here, I highlight the ubiquity of violent metaphors across two centuries of often transcendent presidential rhetoric, demonstrating its importance in frequency and scope.

Abraham Lincoln's "House Divided" speech in 1858 helped to catapult the country lawyer to national prominence, first as Stephen Douglas' opponent for Senate, and later as the nation's greatest president. Here, Lincoln uses war imagery in his conclusion to recall the Republican Party's 1856 campaign opposing the extension of slavery, in defiance of the Democrats and amid the violence of "bleeding Kansas," and to rally Republicans for a renewed charge:

Two years ago the Republicans of the nation **mustered** over thirteen hundred thousand strong. We did this under the single impulse of resistance to a common danger, with every external circumstance against us. Of strange, discordant, and even hostile elements, we gathered from the four winds, and **formed and fought** the **battle** through, under the constant hot **fire** of a disciplined, proud, and pampered **enemy**. Did we brave all them to falter now?—now, when that same **enemy** is wavering, dissevered, and

**belligerent?** The result is not doubtful. We shall not fail—if we stand firm, we shall not fail. Wise counsels may accelerate, or mistakes delay it, but, sooner or later, the victory is sure to come.

Four decades later, as populist William Jennings Bryan campaigned for the 1896 Democratic presidential nomination, he finished his famed “Cross of Gold” speech with allusions to biblical victimization and a war of self-defense. The speech must have resounded in the Democrat-dominated post-Reconstruction South with its echoes of Confederate rhetoric during the American Civil War:

We do not come as **aggressors**. Our **war** is not a **war of conquest**. We are **fighting** in the **defense** of our homes, our families, and posterity. Never before in the history of American politics has a great issue been **fought** out as this issue has been by the voters themselves. Here is the **line of battle**. We care not upon which issue they **force the fight**. We are prepared to meet them on either issue or on both. If they dare to come out in the **open field and defend** the gold standard as a good thing, we shall **fight** them to the uttermost, having behind us the producing masses of the nation and the world. Having behind us the commercial interests and the laboring interests and all the toiling masses, we shall answer their demands for a gold standard by saying to them, you shall not press down upon the brow of labor this crown of thorns. You shall not **crucify** mankind upon a cross of gold.

President Theodore Roosevelt gave voice to progressive values and free speech, cast in violent terms, in his “Man with a Muckrake” speech of 1906. In one section, he celebrates journalists and writers as combatants, fighting against wrong-doing and wrong-doers in politics and business:

There are in the body politic, economic and social, many and grave evils, and there is urgent necessity for the **sternest war upon them**. There should be relentless exposure of and **attack** upon every evil man, whether politician or business man, every evil practice, whether in politics, business, or social life. I hail as a benefactor every writer or speaker, every man who, on the platform or in a book, magazine, or newspaper, **with merciless severity makes such attack**, provided always that he in his turn remembers that the **attack** is of use only if it is absolutely truthful. It is because I feel that there should be **no rest in the endless war** against the forces of evil that I ask the **war** be conducted with sanity as well as with resolution.

Franklin Roosevelt’s First Inaugural Address in 1933 reassures citizens with a vision of a newly sworn-in government mobilizing to combat the Great Depression with the same resolve as in war, headed by an emboldened President:

Our greatest primary task is to put people to work. This is no unsolvable problem if we face it wisely and courageously. It can be accomplished in part by **direct recruiting by the Government** itself, treating the task as we would treat the **emergency of a war**, but at the same time, through this employment, accomplishing great -- greatly needed projects to stimulate and reorganize the use of our great natural resources. These, my friends, are the **lines of attack**. I shall presently urge upon a new Congress in special session detailed measures for their fulfillment, and I shall seek the immediate assistance of the 48 States. With this pledge taken, I assume unhesitatingly the leadership of this **great army** of our people dedicated to a **disciplined attack** upon our common problems. I shall ask the Congress for the one remaining instrument to meet the crisis -- broad Executive power to **wage a war** against the emergency, as great as the power that would be given to me if we were in fact **invaded by a foreign foe**.

In 1952, Senator Richard Nixon delivered his televised “Checkers” speech in a successful bid to retain his position as vice presidential candidate, amid allegations of improper favors and gifts. It was seen or heard live by tens of millions of Americans. Although his saccharine anecdote about Checkers the dog is most remembered, Nixon also showed a darker side, highlighting his credentials battling alleged Communists in government. As he starts this passage, Nixon stands and comes out from behind the desk, then approaches the camera as he concludes:

I remember in the dark days of the Hiss case some of the same columnists, some of the same radio commentators who are **attacking** me now and misrepresenting my position, were **violently opposing** me at the time I was after Alger Hiss. But I continued to **fight** because I knew I was right, and I can say to this great television and radio audience that I have no apologies to the American people for my part in putting Alger Hiss where he is today. And as far as this is concerned, I intend to continue to **fight**. ... And I say that the only man who can lead us in this **fight** to rid the Government of both those who are Communists and those who have corrupted this Government is Eisenhower, because Eisenhower, you can be sure, recognizes the problem, and he knows how to deal with it. ... But just let me say this last word: Regardless of what happens, I'm going to continue this **fight**. I'm going to campaign up and down in America until we drive the crooks and the Communists and those that defend them out of Washington.

In 1964, President Lyndon Johnson presented a vision for America as a “Great Society” in a speech known eponymously. In it, he casts efforts to preserve the nation—through expansive new Federal programs—as a war that must be won:

Today we must act to prevent an ugly America. For once the **battle** is lost, once our natural splendor is **destroyed**, it can never be **recaptured**. And once man can no longer walk with beauty or wonder at nature his spirit will wither and his sustenance be wasted. So, will you **join in the battle** to give every citizen the full equality which God enjoins and the law requires, whatever his belief, or race, or the color of his skin? Will you **join in the battle** to give every citizen an escape from the crushing weight of poverty? Will you **join in the battle** to make it possible for all nations to live in enduring peace -- as neighbors and not as mortal enemies? Will you **join in the battle** to build the Great Society, to prove that our material progress is only the foundation on which we will build a richer life of mind and spirit? There are those timid souls that say this **battle** cannot be won; that we are condemned to a soulless wealth. I do not agree. We have the power to shape the civilization that we want. But we need your will and your labor and your hearts, if we are to build that kind of society.

Just one year later, and one week after Civil Rights marchers were viciously beaten by police in Selma, Alabama, President Johnson spoke before a joint session of Congress, memorably appropriating the slogan of the Movement, “We Shall Overcome,” in a speech known by the same name. Here, he portrays the pursuit of equality as a righteous war:

But even if we pass this bill, the **battle** will not be over. What happened in Selma is part of a far larger movement which reaches into every section and State of America. It is the effort of American Negroes to secure for themselves the full blessings of American life. Their cause must be our cause too. Because it's not just Negroes, but really it's all of us, who must overcome the crippling legacy of bigotry and injustice. And we shall overcome. For at the real heart of **battle** for equality is a deep seated belief in the democratic process. Equality depends not on the force of arms or tear gas but depends upon the **force** of moral right; not on recourse to violence but on respect for law and order. And there have been many pressures upon your President and there will be others as the days come and go. But I pledge you tonight that we intend to **fight this battle** where it should be **fought** -- in the courts, and in the Congress, and in the hearts of men.

During the energy crisis of 1979, President Jimmy Carter diagnosed a national “Crisis of Confidence” and sought to inspire renewed confidence again. Also known as Carter’s “malaise” speech, he uses war imagery to convey the scope of the problem and the national mobilization needed to fight it:

We are the generation that dedicated our society to the pursuit of human rights and equality. And we are the generation that will **win the war** on the energy problem and in that process, rebuild the unity and confidence of

America. Just as a similar synthetic rubber corporation helped us win World War II, so will we mobilize American determination and ability to win the **energy war**. Energy will be the immediate test of our ability to unite this nation, and it can also be the **standard around which we rally**. On the **battlefield** of energy we can **win** for our nation a new confidence, and we can **seize control** again of our common destiny.

While the examples presented above provide a flavor of violent metaphors in famous speeches, they exclude notable speeches that don't use violent metaphors. My claim is that violent metaphors are often employed, not that they are always present. More provocatively, the absence of violent metaphors may often be due to a focus on real violence, including Lincoln's Gettysburg Address and Second Inaugural, FDR's after Pearl Harbor, Eisenhower's Farewell Address, and Kennedy's during the Cuban Missile Crisis. Notable speeches tend to be those that strike the right tone in a time of crisis. To give a memorable speech, even the greatest orator needs a compelling context *and* a purpose to be served by those words—reassurance, resolve, a call to action. War often provides that backdrop. But when war is absent, many presidents turn to violent metaphors as a way to communicate the stakes, the urgency, and the need for action.

## Violent Metaphors in Presidential Campaigns

Although violent metaphors appear regularly in politics, no systematic analysis of their use has been conducted. In this section, I outline a methodical approach for assessing violent metaphors in the context of presidential campaigns, uncovering the language that political leaders use to advance their electoral prospects, but which may also have unintended consequences. This analysis is instrumental in identifying the broader implications of violent metaphors for politics by showing its prevalence across every modern presidential campaign.

The goals of this content analysis are qualitative and quantitative: Qualitatively, I provide a flavor of the language in the specific context of the campaign environment. Quantitatively, I use word counts to identify the frequency of violent metaphors, the most common words employed to convey violent imagery, and the contexts in which the language is used, including issues, candidate traits, and relations to electoral outcomes.

## **The Speeches**

The 39 acceptance speeches given by presidential candidates at party convention from 1932 through 2008 comprise the texts for analysis. This source is ideal for several reasons. First, presidential campaigns are arguably the most important race in American politics because of the singularity of the powerful office, making it a prime site for study. Second, the speeches have massive audiences tuning in directly through live radio since 1924 and live television since 1948, and indirectly through reporters who transmit the message more broadly in news outlets the next day. With audiences of millions, the speech itself may exert effects. Third, convention speeches provide the template for the presidential campaign to follow, identifying key issues and fundamental styles that will appear on the campaign trail. Fourth, presidential rhetoric sets the tone and style for other political contests. Presidential nominees are the leaders of their parties, and down-ticket candidates seek to ride the nominee's coattails into office by adopting the same campaign agendas and styles in their campaigns. Fifth, 39 of the 40 candidates across this time period gave these speeches, which make the texts highly comparable: they all have similar formatting and come at the same point in each campaign cycle.<sup>11</sup>

## **Coding Design**

Each text was read in its entirety. Passages that make use of violent imagery in non-violent contexts were highlighted. Although best-practices for content analysis involve multiple independent coders to improve the reliability and validity of the analysis, I completed this initial coding effort on my own for expediency. In the future, I plan to hire independent coders to reassess these texts.

I determined that the most useful unit for assessing violent metaphors is at the level of individual words (or, occasionally, phrases). First, multiple uses of violent metaphors in short spans may amplify its effects on audiences. Second, my working assumption is that a string of violent metaphors clustered closely together will attract

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<sup>11</sup> Of course, these texts also have some limitations. Convention speeches may differ in some respects from campaign communication in other forms, and presidential campaigns may diverge from campaigns for other offices in ways that matter for violent metaphors. In the future, I plan to expand the content analysis to include presidential television ads and emails to supporters, rhetoric from party primaries, and content from campaigns for other offices. However, as a first cut, there is no better source for studying the language of political campaigns than presidential convention speeches.

more notice than a single use. Thus, even if the cognitive priming process is not amplified by additional exposure, audiences are more likely to be “treated” by the violent language when given multiple opportunities to recognize the usage.

In addition to providing raw counts of violent metaphors to score each speech, I also generate a standardized score indicating their frequency per 1000 words. This approach increases the comparability of violent rhetoric across speeches given the varied lengths of acceptance speeches. Additionally, measurement as a rate is important if the density of violent rhetoric trumps its absolute frequency. More coding details are provided in the chapter appendix.

### Convention Speeches: 1932 to 2008

In this section, I provide a sketch of violent metaphors from the 39 presidential convention speeches given since 1932, providing impressions of the rhetoric in this period, including frequencies, trends over time, and rhetorical contexts within and across speeches. The full text of each speech is available from the UCSB Presidential Papers archive online, but I have included all snippets of violent rhetoric in a separate document.

The presidential election of 1932 was pivotal, coming amidst America’s worst economic crisis. Franklin Delano Roosevelt’s landslide victory over Herbert Hoover inaugurated the modern presidency, marking a massive expansion in federal government and presidential power, all in an environment of greater communication between president and public. Hoover’s speech utilizes metaphors of a “terrible storm” battering the “Ship of State,” implying circumstances out of his administration’s control. It contains 16 violent metaphors, including these two: “we may move from defense to a powerful **attack** upon the depression along the whole national **front**.”

Roosevelt’s speech countered Hoover’s storm imagery by arguing “economic laws are not made by nature. They are made by human beings.” His speech includes six violent metaphors, ending with a powerful exhortation: “[t]his is more than a political campaign; it is a **call to arms**. Give me your help, not to win votes alone, but to win this **crusade** to restore America to its own people.”

In 1936, President Roosevelt handily won reelection over Alf Landon. Landon gave no convention speech. In a speech with references to the American Revolution,

Roosevelt uses 22 violent metaphors, concluding once again with a flourish: “here in America we are waging a great and successful **war**. It is not alone a **war** against want and destitution and economic demoralization. It is more than that; it is a **war** for the survival of democracy. We are **fighting** to save a great and precious form of government for ourselves and for the world. I accept the **commission** you have tendered me. I join with you. I am **enlisted** for the duration of the **war**.”

In 1940, President Roosevelt won reelection for an unprecedented third term over Wendell Willkie. Willkie’s speech emphasizes American principles, his immigrant roots, and the looming war in Europe. It includes 15 violent metaphors, highlighting “[t]he New Deal’s **attack** on business” and a litany of “**victims**”. Roosevelt’s speech focuses almost entirely on defense preparations, but with two violent metaphors that coin a resonant phrase: “It is rather a **war** against poverty and suffering and ill-health and insecurity, a **war** in which all classes are joining in the interest of a sound and enduring democracy.”

In the midst of World War II, Roosevelt was reelected to a fourth term over Thomas Dewey in the 1944 election. Dewey’s speech focuses on the war, but criticizes governance of the home front, including five violent metaphors: “The present administration ... is at **war** with Congress, and at **war** with itself.” Roosevelt’s speech also focuses heavily on the war, making no use of violent metaphors.

In 1948, President Harry Truman defeated Thomas Dewey and Dixiecrat Strom Thurmond. Dewey’s speech contains only one violent metaphor: “proof of how Americans, who honestly differ, **close ranks** and move forward, for the Nation’s well-being, shoulder to shoulder.” In contrast, Truman’s speech lives up to his reputation as a fighter with 15 violent metaphors, some more graphic than most. “In 1932 we were **attacking** the **citadel** of special privilege and greed. We were **fighting** to drive the money changers from the temple. Today, in 1948, we are now the **defenders** of the **stronghold** of democracy and of equal opportunity, the haven of the ordinary people of this land and not of the favored classes or the powerful few. The **battle cry** is just the same now as it was in 1932.” He paraphrases FDR’s 1932 “**call to arms**,” and, more vividly, accuses Republicans of passing a bill that “helps the rich and **sticks a knife into the back** of the poor.”

In 1952, war hero Dwight Eisenhower won the presidency over Governor Adlai Stevenson after being courted by both parties to run. Eisenhower's speech uses 16 violent metaphors to highlight his war experience: "Today is the first day of this great **battle**. The road that leads to Nov. 4 is a **fighting** road. In that **fight** I will keep nothing in **reserve**." Stevenson's speech chastises Eisenhower's militaristic language, saying "I hope and pray that we Democrats, win or lose, can campaign not as a crusade to exterminate the opposing party, as our opponents seem to prefer, but as a great opportunity to educate and elevate a people whose destiny is leadership." Although Stevenson uses ten violent metaphors, they are directed toward problems, not opponents. He concludes, saying: "Let's tell them that the **victory** to be won ... is a **citadel** guarded by thick **walls** of ignorance and of mistrust which do not fall before the trumpets' blast or the politicians' imprecations or even a **general's** baton. They are, my friends, **walls** that must be directly **stormed** by the **hosts** of courage, of morality, and of vision, standing shoulder to shoulder, unafraid of ugly truth, contemptuous of lies, half truths, circuses, and demagoguery."

In 1956, President Eisenhower won the rematch with Stevenson by an even greater margin. Eisenhower's speech is less bellicose than four years before, with just six violent metaphors: "Let us quit **fighting** the **battles** of the past." Instead, he notes the Republican Party's centennial and calls for peace through strength. Stevenson's speech uses just two violent metaphors: "I say they have **smothered** us in smiles and complacency while our social and economic advancement has ground to a halt and while our leadership and the security in the world have been imperiled."

In 1960, Senator John Kennedy narrowly defeated Vice President Nixon. Nixon's speech emphasizes the need for a strong but intelligent policy toward the Soviets, but then pivots to invoke non-violent means to win the global "**battle**" for freedom, using 30 violent metaphors: "all these must be welded together into one powerful economic and ideological **striking force** under the direct supervision and leadership of the United States because what we must do, you see, is to wage the **battles** for peace and freedom with the same unified direction and dedication with which we wage battles in war." Kennedy's speech challenges Americans to be pioneers in a New Frontier, using seven violent metaphors: "We recognize the power of the **forces** that will be aligned against us."

We know they will invoke the name of Abraham Lincoln on behalf of their candidate-- despite the fact that the political career of their candidate has often seemed to show charity toward none and **malice** for all.”

In 1964, President Lyndon Johnson won a landslide victory over Senator Barry Goldwater. Goldwater’s speech is remembered for his declaration that “extremism in the defense of liberty is no vice. And...moderation in the pursuit of justice is no virtue.” He trumpeted American exceptionalism and individualism, and he excoriated Democrats for seeking absolute power at home and weakness abroad. However, this firebrand candidate used relatively few violent metaphors, seven: “you and I are going to **fight** for the goodness of our land.” Johnson’s speech emphasizes the need to build the Great Society for Americans in need and for peace in the world. This speech had just two instances of violent metaphors, echoing FDR: “For more than 30 years, from social security to the **war** against poverty, we have diligently worked to enlarge the freedom of man.”

The tumultuous and violent 1968 election campaign included the assassination of Senator Robert Kennedy, riots outside the Democratic National Convention in Chicago, fistfights on the convention floor, and former Vice President Richard Nixon’s victory over sitting Vice President Hubert Humphrey and segregationist George Wallace. Nixon’s speech coins the Silent Majority phrase and features nine violent metaphors, emphasizing the “**war** against organized crime” and echoing FDR: “The **war** on poverty didn't begin five years ago in this country. It began when this country began. It's been the most successful **war** on poverty in the history of nations.”

Humphrey’s speech acknowledges the tumult but regards the crisis as an opportunity for betterment. The speech contains five violent metaphors, including an especially apt one: “There is always the temptation to leave the scene of **battle** in anger and despair, but those who know the true meaning of democracy accept the decision of today, but never relinquish their right to change it tomorrow.” “It is the special genius of the Democratic Party that it welcomes change, not as an **enemy** but as an **ally**...not as a **force** to be suppressed, but as an instrument of progress to be encouraged.”

In 1972, President Nixon handily defeated Senator George McGovern for a second term. Nixon’s speech decries quotas as divisive and contains four violent metaphors, describing the launch of a “**war** against hunger” and “an **all-out offensive**

against crime.” McGovern’s speech was full of hopefulness, but also includes three violent metaphors: “Our deep need is ... for facilities to **combat** pollution.”

In 1976, Governor Jimmy Carter defeated President Gerald Ford. Ford’s speech describes the nation moving forward from Watergate and Vietnam, and it contains four violent metaphors: “We will continue winning the **fight** against inflation.” And in the campaign, “[w]e will come out **fighting**, and we will win.” Carter’s speech talks of healing the nation from political, economic, and social ills, with the recurring theme of dependability. It includes ten violent metaphors: “Ours is the party that welcomed generations of immigrants—the Jews, the Irish, the Italians, the Poles, and all the others, **enlisted** them in its **ranks** and **fought** the political **battles** that helped bring them into the American mainstream.”

In 1980, Governor Ronald Reagan won the presidency from President Carter. Reagan’s speech asks voters ‘are you better off now than four years ago?’ It includes eight violent metaphors: “For those who have abandoned hope, we’ll restore hope and we’ll welcome them into a great national **crusade** to make America great again!” Carter’s speech attempts to rise above the malaise with twelve violent metaphors: “Our economic renewal program for the 1980’s will meet our immediate need for jobs and **attack** the very same, long-range problem that caused unemployment and inflation.”

In 1984, President Reagan won reelection over former Vice President Walter Mondale. Reagan’s speech asks voters to recognize his record, and it includes seven violent metaphors: “We will continue to **fight** for that amendment, mandating that government spend no more than government takes in. And we will **fight**, as the Vice President told you, for the right of a President to veto items in appropriations bills without having to veto the entire bill.” Mondale’s speech includes his famous gaffe “Mr. Reagan will raise taxes, and so will I. He won’t tell you. I just did” and it contains 16 violent metaphors, focusing on Reagan’s “**assault**” on Democratic constituencies and programs: “Let them **fight** over the past. We’re **fighting** for the American future.”

In 1988, Vice President George Bush defeated Governor Michael Dukakis. Bush’s speech includes his ill-advised “Read my lips: no new taxes” pledge and three violent metaphors: “I mean to run hard, to **fight** hard, to stand on the issues - and I mean to win.” Dukakis’s speech includes seven violent metaphors: “I want them to wage **war**

on hunger and pollution and infant mortality; and I want them to work with us to win the **war** against AIDS, the greatest public health emergency of our lifetimes, and a disease that must be **conquered**.” “We’re going to have a real **war** and not a phony **war** against drugs.” “We will **fight** for the ideals of this, our country.”

In 1992, Governor Bill Clinton won the presidency from President George Bush and third-party candidate Ross Perot. Bush’s speech, which contains 17 violent metaphors, contrasts his war service with Clinton’s non-service: “So I made a decision to go off and fight a battle much different from political **battles**.” “I am **fighting** to reform our legal system, to put an end to crazy lawsuits. If that means **climbing into the ring** with the trial lawyers, well, let me just say, **round one starts** tonight.” Interestingly, at two points during the speech, the audience began to chant, “hit ‘em again, harder, harder,” to which Bush replied “**I’m fixing to**.” He also quotes Truman quoting FDR: “This is more than a political **call to arms**...” Clinton’s speech offers a “New Covenant” with the country, along with eleven violent metaphors: “As an adult, I watched her fight off breast cancer, and again she has taught me a lesson in courage. And always, always, always she taught me to **fight**. That’s why I’ll **fight** to create high-paying jobs so that parents can afford to raise their children today.”

In 1996, President Clinton won reelection over Senator Bob Dole and Ross Perot. Dole’s speech focuses on defending America’s values and principles, using eight violent metaphors: “Tonight, I stand before you tested by adversity, made sensitive by hardship, a **fighter** by principle, and the most optimistic man in America.” “[Democrats] are **fighting** not for our sake but for the power to tell us what to do.” Clinton’s speech focuses on building “a bridge to the 21<sup>st</sup> century.” The bridge includes eleven violent metaphors: “But I will not **attack**. I will not **attack** [Republicans] personally or permit others to do it in this party if I can prevent it.” In contrast to rhetoric describing literal violence against terrorism one decade later, Clinton uses violent metaphors: “We are **fighting** terrorism on all **fronts** with a three-pronged strategy.” “Second, we must give law enforcement the tools they need to take the **fight** to terrorists.”

In 2000, Governor George W. Bush narrowly won the Electoral College vote, but not the popular vote, over Vice President Al Gore. Bush’s speech was noted for his criticism of “the soft bigotry of low expectations” on race and education, and for his

advocacy of “compassionate conservatism.” The speech includes six violent metaphors: “I don't have **enemies** to **fight** [in Washington].” “Their **war room** is up and running ... but we are ready. Their **attacks** will be relentless ... but they will be answered.” Gore’s speech emphasizes populism and is loaded with 22 violent metaphors as he repeatedly pledges to “**fight**” for people and programs: “But the Presidency is more than a popularity contest. It's a day-by-day **fight** for people.”

In 2004, President Bush narrowly won reelection over Senator John Kerry. Bush’s speech focuses heavily on terrorism and the violence used to fight it—characterized as a fight for freedom—but contains one violent metaphor: “we will lead an **aggressive** effort to enroll millions of poor children who are eligible but not signed up for the Government's health insurance programs.” Kerry’s speech is styled to emphasize his military record: “I'm John Kerry and I'm **reporting for duty**.” It uses nine violent metaphors: “Americans will be proud to have a **fighter** for the middle class” and “Republicans and Democrats must make this election a contest of big ideas, not small-minded **attacks**.”

In 2008, Senator Barack Obama defeated Senator John McCain. McCain’s speech emphasizes his military service and tenacious temperament with heavy use of violent metaphors, totaling 34. He concludes: “I'm going to **fight** for my cause every day as your President. I'm going to **fight** to make sure every American has every reason to thank God, as I thank Him ... **Fight** with me. **Fight** with me. **Fight** for what's right for our country. **Fight** for the ideals and character of a free people. **Fight** for our children's future. **Fight** for justice and opportunity for all. ... Stand up, stand up, stand up and **fight**.”

Obama’s speech emphasizes the hopeful promise of the American Dream and its contrast with the previous Administration. The speech contains only four violent metaphors, perhaps to avoid activating negative racial stereotypes: “I remember all those men and women on the South Side of Chicago who I stood by and **fought** for two decades ago after the local steel plant closed.”

### **Tallies and Trends**

Figure 4.1 presents the frequencies from each of the speeches, tallied by candidate, party, and year. In addition to displaying the raw count of violent metaphors, I also

present the rate of violent words relative to the total spoken in Figure 4.2. Table A4.1 in the chapter appendix presents the same information in table format.

Figure 4.1 Tally of Violent Metaphors by Party over Time

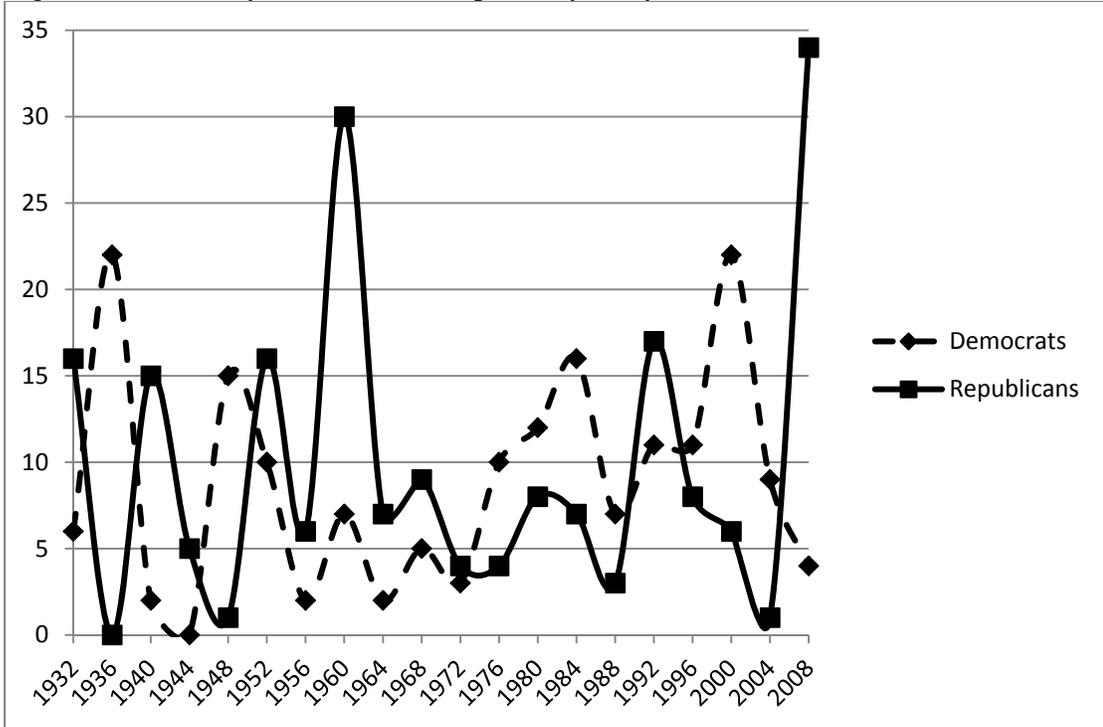
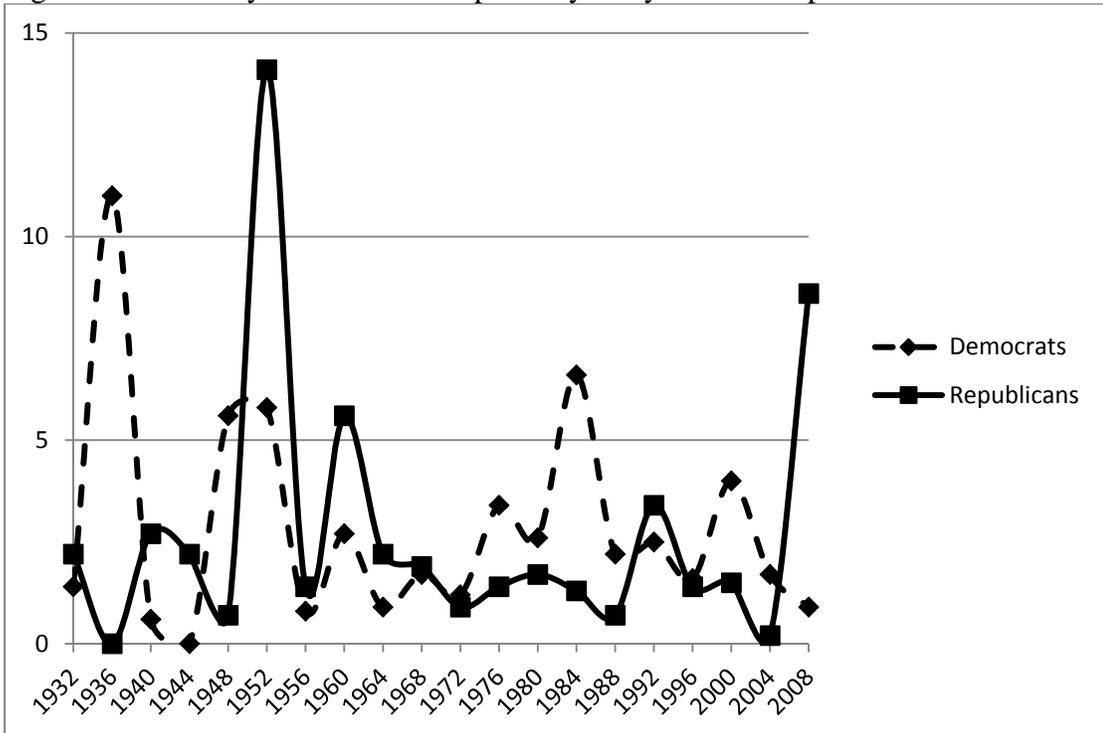


Figure 4.2 Tally of Violent Metaphors by Party over Time per 1000 Words



Both figures show great variability in the use of violent metaphors by nominees from both parties and no clear linear trends over time. Despite the apparent upward trend in the raw count of violent metaphors later in the series, it is ephemeral: it disappears when the concurrent trend of lengthening speeches is taken into account. The average rate of violent metaphors per 1000 words across time and party is 2.85, with identical rates for both parties (Democrats 2.86; Republicans 2.84). Among Democrats, surges in violent rhetoric appear in the speeches of FDR in 1936, Truman in 1948, Mondale in 1984, and Gore in 2000. Republicans used violent language most frequently in the speeches of Eisenhower in 1952, Nixon in 1960, Bush in 1992, and McCain in 2008.

Table 4.1 Most Frequent Violent Metaphors

Words	Count
Fight	124
Battle	22
War	22
Attack	20
Destroy	15
Army/Ranks	15
Crusade	14
Enlist/Call to Arms	9
Enemy	9

The examples from the previous section provide a flavor of the specific metaphors chosen and the contexts in which they were deployed. Table 4.1 provides a quantitative summary of the words they used. The most common violent metaphor, by far, is “fight” or variants “fought” and “fighter,” accounting for more than one-third of the tally. Although ‘fight’ is commonly used throughout the time-series, the outlying McCain and Gore speeches account for 52 instances. “Battle,” “war,” and “attack” are the next three most common violent metaphors, jointly accounting for one of every six instances. Generally, candidates of both parties used similar words, though Republicans were responsible for 11 of the 14 instances of “crusade”.

Violent rhetoric tends to portray “us” fighting against policy problems, which brings “us” into battle against “them”—political opponents who stand in the way of progress. In contrast, violent metaphors tend to portray opponents attacking good people and programs, and occasionally “us.” Although there is some interchangeability in word

choice, in the vast majority of cases, “fight” is used to describe what “we” are going to do to policy problems or to our opponents, and “attack” is used to describe what “they” are doing to “us” or to the people we represent. When the speaker, his party, or the country is cast as the ‘fighter,’ the language seems intended to indicate resolve, great effort, and confidence in ultimate success.

Violent metaphors are applied broadly across issue domains and tend to follow the most salient issues of the day. However, once a particular problem is branded with a memorable metaphor, like the “war on poverty”, it tends to stick in later speeches, even in passing references. The violent outrages of opponents are often paired provocatively with the violent rhetorical response of allies. Rarely are opponents characterized in violent terms without a follow-up pledge to fight back against their aggression. In other cases, however, the opponents are barely mentioned and the violence “we” will inflict on important problems is the primary focus.

Although violent metaphors can range from mild to extreme forms, even blurring the lines between figurative and literal language, presidential campaign rhetoric almost never reaches the extremes and rarely gets more graphic than the mildest forms, as seen above. Extreme language may be perceived as un-presidential, and it may not be necessary: presidents and presidential candidates can rely on surrogates to throw ‘red meat’ to crowds, as President Obama did in Detroit on Labor Day in 2011. While Obama used a series of mild violent metaphors in a rousing labor speech, echoing Truman, he was preceded by Teamsters president Jimmy Hoffa, Jr., who was criticized for saying, “President Obama, this is your army, we are ready to march...let's take these sons-of-bitches out.” A president’s mild violent metaphors may resonate more strongly—like code words—when the audience has heard the stronger language just before.

### Correlates of Violent Campaign Metaphors

Political candidates (and their staffs) are strategic actors. They make campaign decisions that are usually designed to increase the chances of electoral victory. However, strategic considerations are probably not the only cause for the language that candidates use. Speech writers often try to channel the candidate’s natural personality and speaking style into the text of the candidate’s speeches. Thus, candidates may choose to use violent

metaphors for many reasons, including personal style and campaign strategy based on their place in the polls, incumbent status, and military experience they seek to highlight.

Some candidates are known for their aggressive style of speaking and politics than others. To the extent this is reflected in figures of speech, candidates are likely to show some stability in their use of violent rhetoric across speeches. Thirteen of the 39 speeches given between 1932 and 2008 were by candidates who had been nominated previously by their party, resulting in two or more convention speeches. To test the stability of violent rhetoric over time within individual candidates, I compare the number of violent metaphors per 1000 words to the same count from their previous speech. Speeches by candidates who were nominated only once are excluded, of course. Surprisingly, the correlation between violent metaphors in second speech compared to the previous speech is -0.20, suggesting that the second speech differs from the first. Substantively, the average rate of violent metaphors drops 2.0 words per 1000 from the previous speech, a substantial decline given an overall average of just 2.85. While initially puzzling, this pattern might be explained by another factor: incumbency.

Many of the repeated nominations came about because the sitting president was nominated for a second (or third or fourth) term. Sitting presidents may be less likely to use violent rhetoric than others because it may seem un-presidential, or because the added electoral security of their position may decrease the fire they breathe into their speeches. On average, non-incumbents use 0.8 more violent metaphors per 1000 words. This is consistent as explanation for the decline observed with the second speeches by candidates nominated multiple times, most of whom were incumbents.

We can look for a similar pattern for party incumbency, where the candidate belongs to the same party as the sitting president. In fact, party incumbents use violent rhetoric as often as or slightly more so than non-party incumbents. This rules out the alternative interpretation that the incumbency difference is due to a partisan advantage.

Candidates might also use violent rhetoric to emphasize military experience. Interestingly, after 1948, the only candidates without military experience were Barack Obama, Bill Clinton, and Hubert Humphrey, so there is not much variation in service. Nonetheless, candidates with military service used 0.8 more violent metaphors per 1000 words than those without.

How do electoral prospect before each party’s convention shape the use of violent metaphors by their nominee? Since trial-heat polls matching the two nominees are not readily available for many of the elections, I use Gallup’s presidential approval in the two weeks leading up to the convention as a proxy for partisan atmosphere, from 1948 through 2008. In 10 of 16 campaigns, this is an evaluation of the incumbent president running for reelection. In the 15 cases where the candidate’s prospects looked poor—either the president of the candidate’s own party was rated below 50% approval or the president of the opponent’s party was rated at or above 50% - candidates averaged 3.2 violent metaphors per 1000 words. In the 17 cases where the candidate’s prospects looked good, candidates averaged 2.6 violent metaphors per 1000 words. This difference suggests candidates are more likely to use violent metaphors when their electoral prospects are bleak.

Table 4.2 Correlates of Violent Metaphors per 1000 words

	Rate of Violent Metaphors		
	Model 1	Model 2	Model 3
Republican	-.14 (.84)	--	-.06 (.85)
Incumbent	-1.93 (1.33)	--	-2.53* (1.11)
Party of Incumbent	1.58 (1.25)	--	1.47 (1.25)
Military	.66 (.98)	--	2.00^ (1.12)
Gallup50	--	-.47 (1.00)	.02 (1.04)
Gallup Closeness	--	-5.15 (4.93)	-5.52 (5.06)
Constant	2.34* (.85)	7.13^ (4.04)	5.56 (3.54)
$R^2$	.06	.08	.22
$N$	39	32	32

Note: OLS models, robust standard errors clustered by year. \*  $p < .05$ , ^  $p < .10$ , two-sided.

The Gallup numbers can also be parsed to see whether closeness of the election relates to the total rate of violent metaphors per 1000 words summed across both candidates. I measure closeness as the absolute value of presidential approval minus 50, with the outcome inverted to so that presidential approval of 50 percent (close) equals 1 and approval of 100- or 0 percent equals 0. The relationship is negative and fairly strong ( $r = -.36$ ), suggesting that a close contest preceding the conventions may *discourage* both candidates from using violent metaphors. For every 5 points closer to 50 percent presidential approval, the total number of violent metaphors per 1000 words drops by .50.

As a final test, I put each of these factors together to identify the partial relationships between the violent metaphors, candidate traits, and electoral conditions. Table 4.2 presents the results of OLS models predicting violent metaphors per 1000 words for each candidate, with standard errors clustered by year. The bivariate patterns described above generally hold, with stronger evidence that candidates with military records use significantly more violent metaphors ( $p < .1$ ) and incumbents use significantly less ( $p < .05$ ). Candidates facing better electoral prospects are no more likely to use violent metaphors, but closeness substantially decreases use of violent metaphors. Results are substantively similar analyzing the raw count of violent metaphors for each candidate.

### **Violent Metaphors and Electoral Outcomes**

How do candidates who use violent rhetoric fare on Election Day? Across 19 election cycles, the candidate who used a smaller proportion of violent metaphors won 13 times (68%). On average, losing candidates used 1.4 more violent metaphors per 1000 words than winners. However, success can be broken down in other ways: each additional violent metaphor per 1000 words relative to the opponent is related to a .07 percent decrease in the two-party vote ( $r = -.19$ ) and a 10.3 point loss in electoral votes ( $r = -.21$ ).

We can partly untangle the relationship with vote choice by looking at the candidate's vote share relative to their position in the polls just prior to their party's convention. In other words, Gallup presidential approval numbers serve as a proxy for each candidate's baseline vote, with the difference between the Gallup numbers and the two-party vote percentage indicating whether the candidate over- or under-performed

relative to the baseline. Convention speeches are made between these two points, creating a rough pre- and post-test design. Candidates who used increasingly greater portions of violent metaphors than their opponent did not substantially outperform their baseline votes ( $r = .04$ ), rising only .12 percent among voters compared to the Gallup numbers.

We can also examine the relationship between violent metaphors and voter turnout by comparing the total rate of violent metaphors per 1000 words for both candidates to the voting-eligible (VEP) turnout rate for from 1948 through 2008.<sup>12</sup> Across 16 elections, use of violent metaphors by presidential candidates exhibits a surprisingly strong correlation with voter turnout ( $r = .34$ ), with turnout rising .64 percent for every additional violent metaphor per thousand words. If this relationship is to be believed, more than 11% of the variation in voter turnout is attributable to the prevalence of violent metaphors in presidential campaign messages.

Of course, several plausible alternatives could explain these aggregate relationships, most of which involve a third factor driving both electoral outcomes and the use of violent metaphors in campaigns. Unfortunately, given the abundance of potential confounds and the limited number of elections, a more substantial parsing is impossible with aggregate election data. Nonetheless, the sizable basic relationship between voting and violent campaign metaphors is promising.

### **Violent Metaphors & Negative Advertising**

Perhaps the closest (but still distant) conceptual cousin of violent political metaphors in the political communication literature is negativity. Geer (2006) defines negative ads broadly as “any criticism leveled by one candidate against another during a campaign” (p. 23). Despite the breadth of this definition, Geer’s measure correlates well with negativity measures based on alternative definitions and measures. Geer’s conceptualization of negativity is clearly distinct from violent metaphors, but what about empirical distinctiveness? Across the overlapping time frame between Geer’s (2012) analysis and the one here (1960-2008), the simple bivariate correlation between the two

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<sup>12</sup> VEP turnout data are drawn from Table 1 of McDonald and Popkin (2001) and from Michael McDonald’s website ([http://elections.gmu.edu/voter\\_turnout.htm](http://elections.gmu.edu/voter_turnout.htm)).

measures is basically nil ( $r = -.09$ ).<sup>13</sup> Later, in Chapters 7 and 8, I present observational analysis on participation and vote choice from 1968 to 2008 using these violent metaphor rates. During that period, the correlation between violent metaphors and negative ads becomes positive and somewhat stronger ( $r = .34$ ), but the small number of cases makes this estimate especially volatile. In sum, the two concepts and measures are distinct, but further efforts to make more definitive statements about their relationship are hindered by the scarcity of modern presidential campaigns.

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This chapter provided a systematic qualitative and quantitative portrait of violent political metaphors as they have been employed by presidents in famous addresses and in modern presidential campaigns over the past eighty years. In the next four chapters, I examine the effects of violent metaphors on electoral behavior and attitudes toward violence using experimental designs that reflect the real-world patterns of campaign rhetoric highlighted in this chapter.

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<sup>13</sup> It is worth noting that Geer measures the portion of negativity among ads created by the campaigns, not the portion of negativity broadcast in ads.

## Chapter Appendix

Table 4.3 Violent Metaphors in Convention Speeches over Time

	Democrats	Republicans	Total	Democrats per 1000	Republicans per 1000	Total per 1000
1932	<b>6</b>	16	22	<b>1.4</b>	2.2	1.9
1936	<b>22</b>	--	--	<b>11.0</b>	--	--
1940	<b>2</b>	15	17	<b>0.6</b>	2.7	1.9
1944	<b>0</b>	5	5	<b>0.0</b>	2.2	1.2
1948	<b>15</b>	1	16	<b>5.6</b>	0.7	3.9
1952	10	<b>16</b>	26	5.8	<b>14.1</b>	9.1
1956	2	<b>6</b>	8	0.8	<b>1.4</b>	1.2
1960	<b>7</b>	30	37	<b>2.7</b>	5.6	4.7
1964	<b>2</b>	7	9	<b>0.9</b>	2.2	1.6
1968	5	<b>9</b>	14	1.7	<b>1.9</b>	1.9
1972	3	<b>4</b>	7	1.2	<b>0.9</b>	1.0
1976	<b>10</b>	4	14	<b>3.4</b>	1.4	2.4
1980	12	<b>8</b>	20	2.6	<b>1.7</b>	2.2
1984	16	<b>7</b>	23	6.6	<b>1.3</b>	3.0
1988	7	<b>3</b>	10	2.2	<b>0.7</b>	1.4
1992	<b>11</b>	17	28	<b>2.5</b>	3.4	3.0
1996	<b>11</b>	8	19	<b>1.6</b>	1.4	1.5
2000	22	<b>6</b>	28	4.0	<b>1.5</b>	2.9
2004	9	<b>1</b>	10	1.7	<b>0.2</b>	1.0
2008	<b>4</b>	34	38	<b>0.9</b>	8.6	4.4

*Text source:* UCSB American Presidency Project. Winner is bolded.

### Additional Coding Details:

I have defined violent political rhetoric as violent language in non-violent contexts, and I carry that conceptualization into this coding process. The president’s role as commander in chief makes national security and military affairs a key priority and a touch point in many communiques. However, given variation in the international (and domestic) climate of violence over the eight decades under study, violent language in non-violent contexts may be a better benchmark. When real violence is a pressing issue, all candidates must address it. No such pressure forces candidates to use violent language in non-violent contexts. Candidates may well make appeals to aggressive voters by touting their willingness to freely utilize the instruments state violence as president—like when candidate Mitt Romney said “[t]he right thing for Osama bin Laden was the bullet in the head that he received” (CFR 1/17/12)—but that is beyond the scope of the present study. In the vast majority of cases, the distinction between literal and metaphorical violence is abundantly clear. However, some contexts were more difficult, particularly

those relating to issues of communism and terrorism, and when candidates seeking to highlight their military service transition from the literal fight for their country to the metaphorical fight they continue in politics.

Some other important coding decisions should be noted here. Rhetoric that mentions and rejects the violent *language* of opponents is not counted, but this is rare. However, language that mentions and rejects the *policies* of opponents, described in violent terms, is counted. Sometimes the language is ambiguous: for example, “marching” is not classified as violent, despite potential connotations with an army. Sometimes the same phrase, like “fighting for freedom”, can be classified as a violent metaphor and other times be discounted as a reference to actual violence, depending on the context. “Defend” and “protect” were consistently coded as non-violent. “Crack down,” “confront,” and “take on” were coded as non-violent. Rejecting “retreat” is not counted as violent, though “holding the line” sometimes is. “Opposed” and “standing up” for/to is coded as non-violent.

Violent metaphors that focus on the non-political struggles of individuals, like fighting cancer, are excluded. Individuals fighting for political change are included. When fighting terrorism means sanctions, law enforcement, and security, it is a violent metaphor. When it means military action, it is not. Harm that is described as naturally occurring or due to uncontrollable forces does not count. Consequently, context matters: economic harm caused by the Great Depression is like a great storm, according to Herbert Hoover. Yet, when Hoover later embodies the crisis as “invading forces of destruction” in the same speech, he turns the non-violent metaphor of a storm into a violent one of attacking armies.

While some of these classification rules and judgments are open to question, I trust that they provide a solid foundation for a first cut at the textual content. I intend to revisit these decisions with updated coding rules and independent evaluations by other coders in the future.

## Chapter 5

### Support for State Violence

*War is the remedy that our enemies have chosen, and I say let us give them all they want.*

William Tecumseh Sherman (U.S. General, 1864)

*The right thing for Osama bin Laden was the bullet in the head that he received.*

Mitt Romney (U.S. presidential candidate, January 2012)

Building on the theoretical foundations established in previous chapters, this chapter begins to empirically test the impact of trait aggression and violent political metaphors on mass political attitudes and behaviors, focusing here on support for state violence, including attitudes about the death penalty, painful interrogation of terrorist suspects, military strikes against hostile nations, and assassination of terrorist leaders.<sup>14</sup>

For the state and its citizens, few policy decisions weigh as heavily as those involving the state's power to injure or kill, whether targeting domestic criminals or foreign foes. State violence policies are continually contested in politics, with varying intensity by issue and circumstance. Debates over state violence regularly feature in election campaigns, and leaders are especially attuned to shifts in public opinion on matters of war and punishment, given the impact of related evaluations on public voting decisions (Canes-Wrone and Shotts 2004; Fiorina 1981). Thus, while states reserve the right to carry out violence within their territory—and sometimes outside it—citizens in democracies play a critical role in guiding and validating state violence with their consent on these salient issues (Jacobs and Page 2005; Schattschneider 1960; Stimson et al. 1995).

Through the years, public opinion research has focused extensively on the origins of state violence attitudes. Scholars have identified several sources for preferences

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<sup>14</sup> Much of the content in the first half of this chapter is drawn from my forthcoming article in *Political Behavior* (Kalmoe 2013).

including partisan opinion leadership (Berinsky 2009; Zaller 1992), dramatic personal threats tied to state violence (Erikson and Stoker 2011), issue-specific emotions (Huddy et al. 2007; Kinder 1994), and individual differences like sex (Shapiro and Mahajan 1986), ethnocentrism and race (Kinder and Kam 2009), and authoritarian personality (Feldman 2003; Feldman and Stenner 1997; Stenner 2005). Surprisingly, although aggression is a central human trait, most studies of state violence attitudes overlook the predictive potential of aggressive personality in citizens, and none has assessed trait aggression's influence with methods that generalize the findings to broader populations.

This chapter proposes and tests a theory of state violence attitudes in which citizens derive political preferences from their stable propensity to engage in interpersonal aggression in everyday life (Buss and Perry 1992; Huesmann et al. 1984), with greater support for state violence expected among citizens with high levels of trait aggression. In an original nationally-representative survey of U.S. adults, I test the relationship between trait aggression and support for state violence in various forms. I also describe the design of an experiment embedded in the survey, which tests the effects of randomized exposure to violent political metaphors. Building from theory in Chapter 2, I expect these cues to amplify the effects of trait aggression on state violence attitudes.

## From Fistfights to Firefights

Since most people do not bring well-developed political belief systems to bear on their political preferences and often lack the knowledge to make sophisticated policy judgments (Converse 1964), they tend to reason about politics the way they reason about everyday life, carrying their familiar interests, prejudices, and predispositions from mundane experiences to the distant abstractions of the political world. Recent scholarship on the role of personality traits in politics makes this point well by showing that five broad personality factors (i.e. Big Five), measured without reference to politics, strongly predict political attitudes and behaviors, including issue preferences, partisanship, and participation (Gerber et al. 2010; Mondak 2010; Mondak et al. 2010). With state violence attitudes, I argue citizens are likely to draw on the aggressive predispositions that guide their behavior in life's assorted conflicts. Consequently, when the state has an

opportunity to respond to policy problems with violence, trait-aggressive citizens will be more likely to support violent policies.

The link between trait aggression and support for state violence is theoretically undergirded by a network of aggression-related attitudes, beliefs, values, expectations, perceptual screens, and physiological attributes (Anderson and Bushman 2002a). Aggression researchers have found trait-aggressive individuals to be more confident in the effectiveness of aggressive responses to problems and their ability to successfully carry out aggressive acts, and to hold attitudes and values characterizing aggression as positive and normatively untroubled. Trait-aggressive individuals are more likely to expect aggressive acts from others, readying them for retaliation for slights real or imagined, and to perceive ambiguous actions by others as hostile and therefore provocative. They also have greater knowledge of aggressive behavioral scripts learned from social models that teach aggressive responses to situations. Finally, trait-aggressive people are more desensitized to the human consequences of aggression, lowering the moral stakes of aggression. Each of these differences is attributable, in part, to long-term social learning processes that interact with trait aggression and reinforce it over time (Anderson and Bushman 2001, 2002a).

Although not tested directly here, I expect each of these elements to influence judgments about dilemmas facing the state. Support for state violence among trait-aggressive individuals will be sustained by 1) stronger belief in the state's ability to carry out violent acts, 2) greater confidence in the effectiveness of state violence for achieving state goals, 3) stronger belief in the normative appropriateness of state violence, 4) greater perceptions of threat posed by targets of state violence, 5) more hostile interpretations of actions by state violence targets, 6) greater familiarity with scripts associated with state violence, and 7) decreased emotional and physiological sensitivity to the human suffering caused by state violence. This reasoning process is mostly automatic, with little need for conscious deliberation, making support for state violence more like a gut response than a conscious calculation. I expect each of these factors to shape the state violence preferences of trait-aggressive citizens, yielding greater support.

### **Reasons for Doubt?**

Presumably, citizens need only recognize the violent character of a proposed policy to make a judgment based on aggressive personality traits. Yet, such a relationship may be unlikely. State violence differs in several important respects from interpersonal aggression. First, whereas citizens are directly and personally implicated in interpersonal aggression, state violence is usually a remote phenomenon carried out by anonymous others. Citizens can distance themselves from personal responsibility and avoid personally-targeted retribution for state violence, while the same is not often true for personally-enacted aggression. Second, the targets of state violence probably appear more malignant to citizens—murderers, terrorists, and foreign enemies—than even the most provocative people they encounter in daily life. These two factors—delegation of responsibility and the odious identities of state violence targets—facilitate disengagement from moral reasoning processes that would otherwise inhibit citizens from considering violence (Bandura et al. 1996). Third, the most common instruments of state violence (e.g. fighter jets, electric chair, machine guns), diverge in form and lethality from the usual instruments of interpersonal aggression (e.g. insults, fists, malicious rumors), making the instruments less familiar and their consequences more extreme by several orders of magnitude. State violence regularly results in serious bodily injury or death, whereas such outcomes are rare for interpersonal aggression. Finally, state violence is carried out by a broadly recognized authority, which adds legitimacy to violence that would be absent if enacted by other individuals or organizations (Milgram 1963).

### **Past Research**

Aggression research has produced preliminary support documenting the relationship between trait aggression and support for state violence, but the evidence to date has been drawn exclusively from convenience samples. For example, Anderson and colleagues (Anderson et al. 2006; Carnagey and Anderson 2007) link trait aggression and attitudes toward war and penal code violence among college students. McIntyre and colleagues (2007) find similar evidence in simulated war games among college students using a physiological measure of aggressive predispositions based on finger-length ratios.

Beyond sample composition, the present study diverges from previous research by explicitly modeling state violence attitudes as a product of trait aggression rather than

a component of it. The General Aggression Model (Anderson and Bushman 2002a) conceptualizes violent attitudes as one part of the trait aggression concept, but does not specify the causal relationship between personality and attitude measures. Although a definitive determination on causation cannot be made with the present research design, a stronger theoretical case can be made for personality traits predicting specific violent political attitudes than the reverse. Since interpersonal aggression is a concrete part of everyday life and politics is remote for all but the most engaged citizens, especially on matters of foreign policy, it would be surprising to find political attitudes driving interpersonal behavior. This distinction differentiates this question of causal ordering from others in political behavior involving only *political* attitude objects (e.g. partisanship and policy attitudes, Bartels 2002; Fiorina 1981; Franklin and Jackson 1983).

### **Anger and State Violence Support**

Research linking anger and state violence support is also relevant here, given the strong relationship between anger and aggression (Berkowitz 1993). For example, Huddy and colleagues (2007) and Kinder (1994) identify associations between self-reported anger related to Iraq and support for military action in 2003 and 1991, respectively. While most studies on the political consequences of anger are framed with theories of cognitive appraisal (e.g. Huddy et al. 2007) or Affective Intelligence (Marcus et al. 2000), they might be enriched further by situating anger in the broader theoretical context of aggression. Anger is a key emotional antecedent to aggressive behavior, and some people are prone to more frequent and intense episodes of anger than others. This stable predisposition, known as trait anger, is a subcomponent of the trait aggression concept and measure (Buss and Perry 1992), representing the emotional and physiological components of aggressive behavior.

The present study explicitly tests the anger-aggression link by examining the relationship between state violence support and each of the trait aggression subcomponents, including trait anger. If support for state violence is a form of aggression, then trait anger is a likely predictor of state violence support. This empirical finding would link state violence attitudes with emotional predispositions one step back in the

causal chain leading through anger to attitudes. As with trait aggression, no nationally-representative study has tested the relationship between trait anger and state violence.

### **The Gender Gap in State Violence Attitudes**

For decades, men have reliably reported greater support for state violence than women in public opinion surveys (e.g. Eichenberg 2003; Shapiro and Mahajan 1986), especially when choices are concrete rather than hypothetical (Sapiro and Conover 1993).<sup>15</sup> While these averages hide diverse perspectives in both groups, the persistent differences call for explanation.

Attributions for the gender gap include personality differences rooted in a maternal-based ethic of nurturance, structural emphasis on women's political and economic marginality, and political exposure to feminist ideologies (see Tessler et al. 1999). The first of these perspectives suggests that women are intrinsically less aggressive than men in everyday life, and that this difference translates into lower support for state violence preferences. Broadly speaking, women do behave less aggressively than men (Anderson and Bushman 2002a), though differences are usually moderate rather than large (e.g. Eagly and Steffen 1986), the differences depend on the type of behavior (e.g. physical, verbal, indirect; Bjorkvist 1994), and situational contexts like provocation further reduce sex differences in aggressive behavior (e.g. Bettencourt and Miller 1996). If the gender gap in state violence preferences is attributable to differences in aggressive personality, the gap should disappear after controlling for trait aggression. The present study provides the first such test in a nationally-representative sample.

### **Research Methods**

To test the observational relationship between trait aggression and support for state violence, I rely principally on data from the Ford-Marsh study.<sup>16</sup> For ease of presentation, the observational analysis initially pools responses across the experimental cells in the Ford Marsh study. I take up the experimental tests in the latter portion of this

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<sup>15</sup> Interestingly, these regular gender gaps are not always replicated outside the U.S. and Europe (Tessler et al. 1999), pointing toward explanations not based on universal sex differences.

<sup>16</sup> Due to limited space, the TESS study did not include state violence questions, and for now, I set aside the Michigan study data despite its inclusion of state violence items because the observational analysis is less useful in a student-based convenience sample.

chapter. As detailed in Chapter 3, trait aggression is measured with the full short form of the Buss-Perry Aggression Questionnaire (BPAQ; Buss and Perry 1992).<sup>17</sup>

### Measuring Support for State Violence

In the Ford-Marsh study, preferences regarding violence by the state are measured across domestic and foreign contexts. The items include attitudes on the death penalty for convicted murderers, painful interrogation tactics for terrorist suspects, assassinating terrorist leaders, and military air strikes. The wording for each item is shown in Table 5.1.

The death penalty is the most salient example of state violence in domestic American politics, and it is a regular source of political contention. Respondents were asked whether they preferred the death penalty or life in prison without parole for a convicted murderer, indicating their preference on a 4-point scale indicating strength of preference, scaled between 0 and 1.

Table 5.1: State Violence Question-Wording

<p>1. Do you favor the death penalty for persons convicted of murder, or do you favor life imprisonment without parole instead?</p> <p>Strongly favor death penalty, Somewhat favor death penalty, Somewhat favor life imprisonment, Strongly favor life imprisonment</p>
<p>2. When the U.S. government has trouble capturing terrorist leaders in other countries, should the government be allowed to kill the terrorist leaders with missiles, or should the government continue trying to catch the leaders alive?</p> <p>Strongly favor killing terrorist leaders, Somewhat favor killing terrorist leaders, Somewhat favor trying to catch terrorist leaders, Strongly favor trying to catch terrorist leaders</p>
<p>3. When the U.S. government questions terrorist suspects, do you favor or oppose using methods that cause severe pain during questioning?</p> <p>Strongly favor painful questioning, Somewhat favor painful questioning, Somewhat oppose painful questioning, Strongly oppose painful questioning</p>
<p>4. If Iran continues to make progress toward building a nuclear weapon, do you favor or oppose bombing military targets in Iran?</p> <p>Strongly favor bombing Iran, Somewhat favor bombing Iran, Somewhat oppose bombing Iran, Strongly oppose bombing Iran</p>

<sup>17</sup> Results are substantively identical when using just the physical aggression subscale.

The use of painful interrogation tactics on terrorist suspects, labeled as torture by some, including President Obama, has caused considerable controversy. Respondents were asked to indicate whether they favored or opposed interrogations for terrorist suspects that employ “methods that cause severe pain” on a 4-point scale indicating strength of preference, scaled between 0 and 1.

For more than a decade, the U.S. government has maintained a “kill” list for suspected terrorists who have been designated for assassination in the event their location becomes known, including Osama bin Laden, who was killed in May 2011. Respondents indicated whether the government should kill terrorist leaders with missiles when the government has trouble capturing terrorist leaders alive, or whether the government should continue efforts to capture them, with a 4-point scale indicating strength of preference, scaled between 0 and 1.

Airstrikes have played an important role in recent U.S. military interventions, including 2011 bombing in Libya. At the time of the survey, tensions with Iran were at their highest in years, with concerns growing about Iran’s pursuit of nuclear weapons. Subjects were asked whether they would favor or oppose bombing Iranian military targets if Iran makes progress toward a nuclear weapon, with a 4-point scale indicating strength of preference, scaled between 0 and 1.

Notably, each of these items indicates some level of provocation, which introduces a situational factor that likely increases aggregate support for violence. Although provocation may be seen as a confound, state violence is unlikely to receive public support without some semblance of provocation or threat in the issue domains utilized here (e.g. executing non-murders, bombing non-threatening countries). However, to the extent that attitude variation persists in the absence of provocation, trait aggression should predict it given that trait aggressive individuals exhibit more aggressive behavior in the presence and absence of provocation (Bettencourt et al. 2006; Bushman 1995).<sup>18</sup>

Responses are broadly distributed on each issue. The death penalty was most popular (mean=.62, s.d.=.35), followed by terrorist assassination (mean=.58, s.d.=.36),

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<sup>18</sup> Most of these items tap something like principles or values regarding state violence and not just specific applications of violence. These attitudes may be especially stable, perhaps even approaching trait-like status. However, their stability is unlikely to equal that of trait aggression, furthering the contention of causal direction posited here from personality to attitudes.

and bombing Iran (mean=.55, s.d.=.33). Painful interrogation was least popular (mean=.43, s.d.=.34). The items load strongly and exclusively onto one factor, justifying their combination into an additive index indicating general support for state violence. The index shows good internal reliability ( $\alpha = 0.76$ ; mean=.55, s.d.=.26), and all items contribute equally to the index. Non-responses (< 2%) were excluded.

### **Other Predictors**

Past scholarship identifies several additional predictors of support for state violence, which are included as controls. Partisanship (Berinsky 2009; Zaller 1992) is measured with standard branching items producing a 7-point scale, rescaled between 0 (Strong Democrat) and 1 (Strong Republican). Republicans are expected to express greater support for these examples of state violence. Authoritarianism is linked to greater support for violent punishment, especially during periods of economic peril or security threat (Feldman 2003; Feldman and Stenner 1997).<sup>19</sup> Due to space limitations, only two of the four Feldman-Stenner authoritarianism items on child-rearing values were included—obedience vs. self-reliance and good manners vs. curiosity. These two items had greater internal reliability and predictive power than the other two items in a validation analysis using 2004 ANES data.<sup>20</sup> They are added together and rescaled 0 to 1.

Education is related to state violence support, increasing opposition to police violence (Gamson and McEvoy 1970) and military intervention (Kinder and Kam 2010). Education is coded trichotomously indicating less than high school diploma, high school diploma or some college, and college degree or greater. Southerners generally express greater support for state violence, including police violence and support for violent state institutions like the military (Nisbett and Cohen 1997). Region is coded dichotomously. Age is not commonly linked to state violence support but is strongly correlated with aggressive behavior. Age is measured continuously from youngest to oldest in the sample (0 to 1). Sex (Shapiro and Mahajan 1986) is coded 1 for women, 0 for men. Finally, white Americans favor state violence more than Americans of color—including military

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<sup>19</sup> Accounts of “authoritarian aggression” (e.g. Altemeyer 1996) usually describe the outcome—support for violent policies—not the psychology of aggression that I argue motivates support.

<sup>20</sup> In the 2004 ANES data, the Pearson’s correlation between these two items is .38, which is highest among any pair of the four items. In these data, the correlation for these two items is .30.

intervention and capital punishment—especially among those high in ethnocentrism (Kinder and Kam 2010). Race is measured as an indicator variable for white participants; ethnocentrism is not measured due to space constraints.

## Results

### Trait Aggression and its Subcomponents

For a basic test of the primary hypothesis, I consider the bivariate relationships between state violence attitudes and trait aggression. Table 5.2 presents OLS coefficients and standard errors for the full trait aggression index and its subcomponents across each of the state violence items and the index. Survey sampling weights provided by Knowledge Networks are applied. Results are substantively similar without.

Table 5.2: Trait Aggression and State Violence Attitudes—Bivariate Model

	Death Penalty	Painful Interrogation	Killing Terrorist Leaders	Bomb Iran	State Violence Index
Trait Aggression	.26* (.10) $R^2 = .02$ $N = 403$	.30* (.09) $R^2 = .03$ $N = 401$	.19^ (.11) $R^2 = .01$ $N = 398$	.19* (.09) $R^2 = .01$ $N = 400$	.23* (.07) $R^2 = .03$ $N = 395$
Physical	.16^ (.09) $R^2 = .01$ $N = 404$	.32* (.08) $R^2 = .05$ $N = 402$	.11 (.09) $R^2 = .00$ $N = 399$	.15* (.08) $R^2 = .01$ $N = 401$	.18* (.07) $R^2 = .02$ $N = 396$
Verbal	.14 (.10) $R^2 = .01$ $N = 404$	.15^ (.09) $R^2 = .01$ $N = 402$	.20* (.09) $R^2 = .02$ $N = 399$	.10 (.08) $R^2 = .01$ $N = 401$	.15* (.07) $R^2 = .02$ $N = 396$
Anger	.21* (.09) $R^2 = .02$ $N = 405$	.17* (.08) $R^2 = .01$ $N = 403$	.10 (.09) $R^2 = .00$ $N = 400$	.21* (.07) $R^2 = .02$ $N = 402$	.17* (.06) $R^2 = .02$ $N = 397$
Hostility	.20* (.08) $R^2 = .02$ $N = 405$	.19* (.07) $R^2 = .02$ $N = 403$	.13 (.08) $R^2 = .01$ $N = 400$	.08 (.07) $R^2 = .00$ $N = 402$	.15* (.06) $R^2 = .02$ $N = 397$

*Note:* Bivariate OLS coefficients in separate models, with standard errors in parentheses.

^  $p < .1$  \*  $p < .05$ , two-sided t-test.

Across each of the items, the full trait aggression index significantly predicts support for state violence, corresponding to large shifts across one-quarter of the scales, on average. The strongest results appear for the death penalty and for painful interrogation items. Turning to the subscales of trait aggression, we see that each subscale contributes more or less equally in predicting scores on the state violence index, and that each is less powerful than the index of all four subscales together, resulting in substantively consistent but statistically less-reliable estimates.

The results for the trait anger subscale are particularly relevant to research on the impact of anger in politics. While most studies examine the influence of angry moods in relation to state violence preferences, few examine the antecedent role of trait anger. Here, we see that trait anger predicts favorable attitudes toward state violence, reaching statistical significance in four of five tests. This finding extends research relating angry moods and state violence attitudes by capturing the more distant connection between state violence support and personality-based antecedents of anger, fitting research on political anger into a broader aggression-oriented theoretical framework. Importantly, the stronger result for the full trait aggression index may suggest that trait anger is a subsidiary component in a broader relationship between trait aggression and state violence attitudes, though the difference could also be due to differences in measurement reliability.

### **Adding Trait Aggression to the Standard Model**

Does trait aggression continue to predict support for state violence after accounting for other predictors of state violence preferences? Table 5.3 presents the results for OLS models predicting the state violence items and the index, including the control variables described above.

The relationship between trait aggression and support for state violence is robust to this more stringent test, performing as well as partisanship in the multivariate models. Given the importance of partisanship in public opinion, trait aggression's impact is even more impressive. In fact, the estimated relationship for trait aggression is barely attenuated by the controls. In four of five models, trait aggression produces substantively large, statistically-significant coefficients. Only for the item on bombing Iran does the consistent trait aggression relationship fail to reach statistical significance after controls

( $p=.15$ ), perhaps because it is more hypothetical than the rest. In any case, movement across the trait aggression index increases support on the state violence index by one standard deviation, shifting respondents across 21 percent of the scale. Moreover, including trait aggression in the model increases the variance explained by 15 percent over the same model without trait aggression.

Table 5.3: Trait Aggression and State Violence Attitudes—Multivariate Model

	Death Penalty	Painful Interrogation	Killing Terrorist Leaders	Bomb Iran	State Violence Index
Trait Aggression	.26* (.11)	.21* (.10)	.23* (.11)	.13 (.09)	.21* (.08)
Partisanship	.21* (.08)	.22* (.07)	.20* (.06)	.30* (.05)	.23* (.05)
Authoritarianism	.04 (.06)	.08 (.05)	.06 (.06)	.08^ (.05)	.07 (.04)
Education	.10 (.07)	-.02 (.06)	.18* (.07)	-.05 (.06)	.06 (.05)
Female	-.05 (.04)	-.07^ (.04)	-.06 (.04)	-.01 (.04)	-.05^ (.03)
Age	.05 (.11)	-.09 (.09)	.08 (.09)	.00 (.08)	.00 (.07)
South	.02 (.04)	.02 (.04)	-.02 (.04)	.03 (.04)	.01 (.03)
White	.11^ (.06)	.09^ (.05)	.11* (.05)	.04 (.04)	.09* (.04)
Constant	.25* (.11)	.22* (.10)	.20* (.10)	.32* (.08)	.24* (.08)
$R^2$	.11	.13	.13	.14	.20
$N$	403	401	398	400	395

Note: OLS coefficients, standard errors in parentheses. \*  $p<.05$  ^  $p<.1$ , two-sided.

The relationships are substantively similar—though weaker—when each of the trait aggression subscales is substituted for the general measure in turn (not shown), providing further evidence that each element contributes to the broader relationship, even

after accounting for the influence of control variables. Physical aggression performs as well as the full index, followed by marginally smaller significant relationships for trait anger and hostility subscales. Verbal aggression is substantively consistent, but narrowly misses marginal significance ( $p=.13$ ).<sup>21</sup>

The other predictors in the models perform as expected, though not always reaching statistical significance. Partisanship is a strong predictor in each model, slightly surpassing the influence of trait aggression, with strong Republicans scoring nearly 25 percent higher on the state violence index than strong Democrats. Estimates for authoritarianism, education, and residency in the South all move in expected directions, but not significantly so. White participants express moderately greater support for state violence than other racial groups, on average.

### **Explaining the Gender Gap?**

The gender gap in state violence attitudes is also replicated here. In a separate bivariate OLS analysis, women reported significantly lower support for state violence ( $b = -.06, p < .05$ ) though the difference is rather small. In the multivariate analyses of Table 5.3 the difference remains but with marginal statistical significance. The small size of the gap may be due to the low likelihood of American casualties in these particular scenarios (Eichenberg 2003) or the hypothetical nature of some items (Sapiro and Conover 1993).

These data provide the first opportunity for a generalizable test of whether the gender gap in state violence attitudes arises from differences in aggressive personality between men and women. If so, the difference between men and women should disappear when trait aggression is accounted for. For the first test, I add trait aggression to the bivariate test between sex and state violence attitudes. Doing so leaves the coefficient for women substantively and statistically unchanged ( $b = -.06, p < .05$ ), maintaining 97% of the gender gap. For a second test, the state violence index model in Table 5.3 was re-estimated without trait aggression (not shown). With or without, the coefficients for sex are marginally-significant and similar in magnitude (with TA:  $-.05$ , without TA:  $-.06$ ).

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<sup>21</sup> Additionally, the predictive power of the full trait aggression index is not driven by the trait anger subscale. Not surprisingly, the full trait aggression index outperforms the trait anger subscale when both are included simultaneously. Similarly, when adding a single item measuring frequency of *political* anger, trait aggression remains strong and significant. Political anger itself is a significant but independent predictor of state violence attitudes in this model.

Here, the gender gap retains 84% of its size. These results suggest that the gender gap in state violence attitudes is not attributable to gender differences in trait aggression.

### Priming Trait Aggression with Violent Metaphors

The foundations in Chapter 2 establish that the expression of aggression is contingent on situational factors as well as person factors like trait aggression, and their interaction (Anderson and Bushman 2002a). Violent cues like those found in entertainment media, pictures, and text can moderate the impact of person factors like trait aggression, and I have conceptualized violent political metaphors as a kind of violent cue. Given that these rhetorical comparisons are generally mild compared to other kinds of violent cues and provocations, we should expect that these violent cues in politics serve to strengthen the relationship between trait aggression and state violence attitudes found in the previous section through a priming process.

In the context of state violence attitudes, violent political metaphors serve as a stand-in for other kinds of violent cues in politics and news media that might have similar effects, such as imagery of soldiers or weapons, with attendant implications for strategic uses of violent cues by political leaders. However, the strategic implications are less clear for violent metaphors *per se* since any effects on state violence attitudes are unlikely to be intended by the speaker. Violent metaphors are applied to non-violent contexts by definition, so their use in a domain unrelated to state violence with the goal of influencing state violence attitudes is improbable. Consequently, studying the influence of violent political metaphors in this domain is primarily useful for what it says about the role of violent cues in general and as evidence of their unintended effects.

### Designing Experimental Treatments

For the three studies in this dissertation, I designed experimental treatments that reflect violent political metaphors as they are found in the real world. Across each study, subjects were randomly assigned to read a short vignette that included violent metaphors or non-violent synonyms also found in the convention speeches. Each design incorporates different elements to test the basic effects of violent metaphors, the effects in a competitive 2-message environment, and the effects when the partisanship of the source

is given. I outline the details for each of the Ford-Marsh and Michigan studies below. I describe the basic, one-message TESS design in Chapter 6 since that data does not include state violence questions.

### Ford-Marsh Study

To simulate exposure to violent political rhetoric, I presented subjects with text from two ostensible television advertisements for U.S. House candidates, representing both competitors in the race, who were not identified by name or party. Each respondent was randomly assigned to read a violent or non-violent ad for Candidate A, followed by a violent or non-violent ad for Candidate B. The resulting 2x2 design permits a test for whether violent metaphor effects are amplified when subjects are exposed to two violently-worded ads compared to one or none.

Table 5.4 Ford-Marsh Study Treatments

<p>“Next, we will show the text from two campaign ads by opposing candidates for the U.S House of Representatives. After each ad, please give your impression of the candidate, then choose your favorite.”</p> <p>Candidate A: “<b>Fighting/Standing Up</b> for America’s Future Americans today are <b>fighting/struggling</b> to keep their jobs and their homes. All you ever asked of government is to stand on your side and <b>fight/stand up</b> for your future. That’s just what I intend to do. I will <b>fight/work</b> hard to get our economy back on track. I will <b>fight/work</b> for our children’s future. And I will <b>fight/work</b> for justice and opportunity for all. I will always <b>fight/work</b> for America’s future, no matter how tough it gets. Join me in this <b>fight/effort</b>.”</p> <p>[Page break]</p> <p>Candidate B: “<b>Fighting/Working</b> for You For almost 25 years, I’ve been <b>fighting/working</b> hard for you. And with your support, I will continue to <b>fight/work</b> for you in Washington. In these tough times, we need to <b>fight for/do</b> what’s right for our country. That means <b>fighting/working</b> hard to ensure equal opportunities for everyone in life. As your representative, I promise to <b>fight/work</b> for all the people, not the powerful interests. But I can’t win this <b>battle/race</b> without your help. Together, we can build a better future.”</p>
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The text for both ads is presented in Table 5.4, with key words bolded to indicate interchanged words across the treatments. It is drawn almost verbatim from prominent presidential-level rhetoric, as demonstrated by its correspondence with examples in

Chapter 4, but it is unlikely to be recognized out of context. The language is non-partisan and non-ideological, advocating platitudes rather than divisive issue positions.

The violent versions include several instances of “fighting” words, but the text is quite mild. There are no vivid descriptions of violence, no person or group is targeted, and the ads include plenty of non-violent language. This design is therefore a conservative test reflecting natural political rhetoric drawn from mainstream, high-profile sources. Even in political messages with several violent metaphors, the content is not usually dominated by violent language. The text-based format also lacks the power of an impassioned delivery, providing more experimental control. This approach increases the breadth of generalizable effects, but probably diminishes effect sizes.<sup>22</sup>

### **Michigan Study**

In the UM study, the basic treatments involve a one-message design with random assignment to the violent or non-violent text from Candidate A in the Ford-Marsh study, but with a partisan twist. Subjects were randomly assigned to be told that the ad text came from a Republican or a Democrat running for the U.S. House, producing a 2x2 design. The design allows tests for the heterogeneity of violent metaphor effects based on the partisanship of the source, along with interaction effects moderated by the partisanship of the subject.

Notably, the treatments in both studies make no mention of state violence, making the treatment even more subtle relative to its target. I expect (but do not test) that rhetoric directly emphasizing the violent nature of state violence would have larger effects.

### **Results**

In both studies, I estimate an OLS regression including variables for trait aggression, exposure to the violent metaphors, and the interaction between the two, with the state violence indices as dependent variables. To provide a basic first test of the experimental hypothesis, I pool the violent treatments in the Ford-Marsh study to compare seeing no violent ads versus seeing at least one violent ad. Similarly, in the Michigan study, I disregard the partisan labels attached to the ads for now.

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<sup>22</sup> More graphic media violence tends to cause larger aggression behavior effects (e.g. Barlett et al 2008).

In addition to the four state violence items from the Ford-Marsh study, the Michigan study also included an extra domestic state violence item in the index: whether police should shoot a running suspect who is thought to be armed ( $\alpha = .57$ ). This new item loads more weakly than the other items, but still contributes enough to increase the reliability of the index. The basic results are presented in Table 5.5.

Table 5.5: Violent Metaphor Effects on State Violence Attitudes

	Ford-Marsh State Violence Index	Michigan State Violence Index
Trait Aggression	.20 (.13)	.17* (.08)
Violent Ad	.02 (.05)	-.02 (.04)
Trait Aggression* Violent Ad	-.03 (.15)	.09 (.11)
Constant	.49* (.05)	.33* (.03)
$R^2$	.02	.04
$N$	395	371

Note: OLS coefficients, standard errors in parentheses. \*  $p < .05$  ^  $p < .1$ , two-sided.

Table 5.5 shows the effects of violent metaphors and trait aggression in both studies. The results show no consistent evidence that violent metaphors increase the influence of trait aggression on state violence attitudes. In the Ford-Marsh study, coefficient estimates on the treatment and the interaction are virtually zero. In the Michigan study, the interaction is directionally consistent with the hypothesized effects, but still falls well short of statistical significance. The impact of trait aggression is positive and statistically-significant, and exposure to violent metaphors increases that effect by about 50 percent, but the treatment effect is not statistically-significant. Taken together, these results do not support expectations about the amplifying effects of violent metaphors on state violence attitudes. These non-findings present a bit of a puzzle, which

I take up in the discussion, in Chapter 6, and in the concluding chapter. In the meantime, there are additional tests to consider involving the other design elements in both studies.

The Ford-Marsh experiment permits tests for the effects of exposure to multiple messages with violent metaphors, and the Michigan study enables tests for the effects of violent messages with partisan labels attached. For the Ford Marsh study, this involves splitting the indicator for exposure to violent metaphors into two indicators—one for exposure to a single violent ad and one for exposure to two violent ads—both interacted with trait aggression. For the Michigan study, I estimate separate models for self-identified Democrats and Republicans. Although I initially estimated the models with separate treatment indicators for a violent Democratic or violent Republican message, the results for both are virtually identical, so I pool these into a single indicator of violent metaphors to increase the power. However, that still leaves another indicator distinguishing the non-violent Republican message from the non-violent Democratic message. Going in, I have no distinct expectations for this latter partisan difference.

Table 5.6 presents the results for both studies, bringing in the additional design elements. In the Ford-Marsh experiment, the effects of exposure to two violent metaphors on state violence attitudes look quite similar to those for exposure to a single violent ad. Although exposure to two ads moves slight further in the opposite direction of the hypothesis, the results are not statistically-significant.

In the Michigan study, we find more interesting variations. First, trait aggression in the non-violent Democrat condition is unexpectedly related to significantly *less* support for state violence among self-identified Democrats, but is positively related in each of the other three conditions. The positive coefficient on trait aggression in the two violent treatments is marginally-significant while the coefficient in the non-violent Republican message lands just above zero. For self-identified Democrats, then, the effect of exposure to either of the violent messages significantly increases support for state violence among trait-aggressive subjects compared to the non-violent Democratic message. When the non-violent Republican message is used as a baseline, the direction of the violent metaphor effects is directionally-consistent but not significant.

Low-aggression Democrats show the opposite reaction when exposed to violent metaphors from either party when compared to the non-violent Democratic message,

expressing significantly less support for state violence. However the effect among this group disappears when the non-violent Republican ad is the baseline.

Table 5.6: Violent Metaphor Effects on State Violence Attitudes—Treatment Variations

	Ford-Marsh State Violence Index	Michigan State Violence Index (Democrats)	Michigan State Violence Index (Republicans)	
Trait Aggression	.20 (.13)	-.31* (.15)	.19 (.19)	Trait Aggression
One Violent Ad	.00 (.06)	-.12^ (.07)	-.07 (.10)	Non-Violent Republican
Trait Aggression* One Violent Ad	.03 (.15)	.36^ (.21)	.27 (.29)	Trait Aggression* NV Republican
Two Violent Ads	.07 (.06)	-.12* (.06)	-.09 (.13)	Violent Ad
Trait Aggression* Two Violent Ads	-.19 (.19)	.52* (.22)	.10 (.36)	Trait Aggression* Violent Ad
Constant	.49* (.05)	.41* (.05)	.41* (.07)	Constant
$R^2$	.02	.05	.07	$R^2$
$N$	395	186	113	$N$

Note: OLS coefficients, standard errors in parentheses. \*  $p < .05$  ^  $p < .1$ , two-sided.

In sum, self-identified Democrats have polarized reactions to violent metaphors based on levels of trait aggression. As predicted, trait-aggressive subjects expressed greater support for state violence when exposed to violent metaphors, and, unexpectedly, low-aggression Democrats responded with decreased support for state violence. This seemingly aversive response appears to be consistent with aggression anxiety—anxious responses to violent content among low-aggression people.

What about the effects for self-identified Republicans? In all four conditions, trait aggression is positively and significantly related to support for state violence, and none of the differences across conditions approaches statistical significance. Thus, in this sample

at least, preferences about state violence policies are unaffected by violent metaphors among self-identified Republicans. It's worth noting here that, when the Ford-Marsh model is re-estimated separately for Republicans and Democrats, the results are substantively identical, so the difference across partisans in the student sample does not appear to replicate in the national sample.

## Discussion

The analyses in this chapter yield several insights about the powerful role of trait aggression in state violence attitudes, the position of trait anger as it relates to state violence preferences, and trait aggression's inability to explain the gender gap in these violent attitudes. They also provide mixed results in the first test of the political effects of violent political metaphors.

At its core, this work shows for the first time that trait aggression consistently predicts support for state violence in a nationally-representative sample, with an influence that rivals partisanship. The substantive political strength of trait aggression is especially impressive given that it measures an interpersonal predisposition from everyday life, without reference to politics. Aggression is clearly an important source of mass political reasoning, both as a behavioral predisposition and as part of a broader aggression model.

The observational results are broadly consistent with the General Aggression Model (GAM), which provides a comprehensive framework for understanding the dynamics of aggression-related processes (Anderson and Bushman 2002). The present study shows that the explanation and prediction of aggressive outcomes can be generalized beyond interpersonal behavior to include support for violence carried out by the state on behalf of its citizens. Citizens can and do extrapolate from interpersonal behavioral contexts to derive attitudes about violence by the state.

This study advances our understanding of the nature and origins of the gender gap in state violence attitudes by ruling out gender differences in aggressive personality as a likely source. Previous studies on gender, aggression, and state violence attitudes have been limited by use of non-representative convenience samples, raising questions about the generalizability of their findings to the full population. This study provides the first evidence on the question in a nationally-representative survey, showing that trait

aggression accounts for virtually none of the gap in state violence support between men and women. While replication will help solidify this conclusion, the work here provides the most reliable evidence to date.

The experimental evidence on the effects of violent metaphors is mixed but mostly disappointing. In the national study, exposure to violent metaphors had no effect on state violence attitudes. In the Michigan study, Democrats seemed to respond to violently-worded messages in the expected ways, but Republicans did not. Further analysis of the Ford-Marsh study did not replicate this partisan difference.

What might explain the null and inconsistent results for the effects of violent metaphors? A definitive explanation is not possible with the evidence so far, but the tests in the next chapters—particularly Chapter 6 on support for political violence—may shed some additional light here. However, a few possibilities stand out. One may be that the treatments are simply too subtle to prime aggression. However, given previous research showing aggressive reactions to even subliminal exposure to text, this explanation appears somewhat wanting. Another may be that the campaign context of the language interfered with the application of aggressive responses to state violence attitudes. If so, the mechanisms at work involve more complicated action than mere exposure to violent cues. A third explanation might be that interpersonal aggression processes are too distant from state violence, as describe early in this chapter. However, the strong relationship between trait aggression and state violence attitudes belies this line of thinking. Finally, the single line of promising results among Democrats in the Michigan study with partisan cues opens the possibility for more conditional effects in which the political orientations of the audience govern their responsiveness to messages from leaders with varying traits. In the remaining chapters and the conclusion, I return to this question as more evidence is gathered to strengthen or weaken the cases for each of these alternative explanations.

\*\*\*

In the next chapter, I take up another form of violent attitudes in politics, focusing on support for violence against governmental authority. As in Chapter 5, I test the roles that trait aggression and violent political metaphors play in shaping these attitudes.

## Chapter Appendix

Table 5.7 Distributions of State Violence Items

	Death Penalty	Painful Interrogation	Killing Terrorist Leaders	Bombing Iran
Strongly Favor	32%	14	31	22
Somewhat Favor	36	29	30	37
No Response	1	2	2	2
Somewhat Oppose	14	29	20	24
Strongly Oppose	17	26	17	15

*Note:* Percent of sample giving response.  $N = 412$

## Chapter 6

### Support for Violence against Political Authority

*I don't want to abolish government. I simply want to reduce it to the size where I can drag it into the bathroom and drown it in the bathtub.*

Grover Norquist (Activist, 2001)

*If [Republicans] bring a knife to the fight, we bring a gun.*

Barack Obama (Presidential candidate, 2008)

The specter of violence against political authority haunts even the most stable democracies, including the United States. Assassins have shot down presidents, members of Congress, federal judges, state governors, mayors, activists, and others. Political extremists have exploded bombs outside government buildings. Vandals have smashed and ransacked government offices. And angry citizens sometimes threaten the lives of public officials by the hundreds. Several recent acts of violence against political leaders—most notably in the U.S. and Norway—have raised public concern and brought sustained attention to the problem.

What factors lead to such violence, and how can the risk be minimized? Several variables are known to increase the likelihood of individual violent acts, but most fall outside the realm of politics (see Anderson and Bushman 2002a) or focus on broad contextual features that do not vary across individuals (e.g. Fearon and Laitin 2003; Iqbal and Zorn 2006; but see Humphreys and Weinstein 2008). However, in the aftermath of the Arizona and Norway shootings, many pundits and politicians began to ask whether political leaders heighten the risk of violence with the frequent use of violent rhetoric (Hulse and Zernike 1/8/2011). Others countered that violent language in politics is merely stylistic, pervasive but innocuous. Neither side has provided empirical evidence to

support their claims. What's more, violence behavior may not be the only pernicious effect of violent political language: the same mechanisms that encourage rare acts of violence in unstable individuals may also fuel violent political attitudes in a broader audience, serving to create environments that embolden others to act violently and representing normatively troubling orientations in their own right.

To provide the first systematic tests of the consequences stemming from violent political rhetoric and aggressive personality traits, I return to the two nationally-representative survey experiments and the third local experiment described in Chapter 3. Subjects were randomly assigned to view one of two forms of the same political advertisements, which differed only in the presence or absence of mild violent metaphors. These studies also measured trait aggression to investigate the independent and interactive effects of this key personality trait. Given the extremity of violence against political authority and its rarity in the population—a reasonably sized population sample is unlikely to include even a single perpetrator of violence against political authority—these studies focus on attitudinal support for such violence, which is dually conceptualized as a risk factor for violent behavior and as an indicator of tolerance of violent behavior by others.

In addition to identifying the dynamic roots of troubling orientations toward violence against political authority, this work reveals surprising interactions between subtle elite discourse and fundamental personality traits in citizens. These findings help to validate the integrative framework proposed by Mondak and colleagues' (2010) for understanding the conditional political consequences of personality traits and situational factors, in which each often depends on the other.

### **Concerns about Violent Political Rhetoric**

Worries about rhetoric's role in inciting politically-motivated violence have been persistent in American politics. For instance, in 1970, after students bombed a University of Wisconsin building, President Richard Nixon said,

It isn't just the radicals that set the bomb in the lighted, occupied building who were guilty. The blood is on the hands of anyone who encouraged them, anyone who talked recklessly of revolution, anyone who has chided with mild

disparagement the violence of extremism, while hinting that the cause was right all the time (Pitney 2000).

More recently, former Alaska governor Sarah Palin's now-infamous map was at the center of the debate about violent imagery in politics, both before and after the Giffords shooting, with gun sights aimed at the districts of 20 named House Democrats who voted for healthcare reform, including Ms. Giffords'. In the midst of the uproar surrounding the 2010 healthcare reform, vandals smashed the windows at her office and the offices of three other swing-district Democrats "targeted" on the map, and sent death threats. Giffords criticized the map saying, "when people do that, they have to realize there are consequences to that action" (Martinez 1/10/2011). New York Times columnist Frank Rich also criticized the vitriolic atmosphere around the 2010 healthcare bill, blaming Republican leaders whom he said "incited an unglued firestorm of homicidal rhetoric" (Rich 3/27/2010).

In contrast, when asked whether the healthcare debate was becoming too incendiary, Senator John McCain replied, "to say that there is a targeted district or that we 'reload' or go back to fight again, please... Those are fine. They're used all the time... That rhetoric and kind of language is just part of the political lexicon" (Montopoli 3/25/10). As we saw in Chapter 4, violent rhetoric is indeed pervasive in American politics. Extreme examples may attract headlines, but its milder forms are a staple of political language.

After the 2011 shooting, the debate over political language was renewed. Representative Richard Durbin chastised "the kind of toxic rhetoric that can lead unstable people to believe this is an acceptable response" (Quinones and Muskal 1/9/2011), and the New York Times editorialized that "Republicans and particularly their most virulent supporters in the media [are] responsible for the gale of anger that has produced the vast majority of these threats, setting the nation on edge" (NYT 1/10/2011).

Others pushed back against these assertions, including Glenn Reynolds at the Wall Street Journal, who said that "asserting a connection between the 'rhetoric' and the shooting, which based on evidence to date would be what we call a vicious lie" (Reynolds 1/10/2011). Similarly, Howard Kurtz wrote in the Daily Beast that "[t]his kind of rhetoric is highly unfortunate... But it's a long stretch from such excessive language

and symbols to holding a public official accountable for a murderer” (1/8/2011). However, he tempered his remarks by saying, “[o]f course, some rhetoric is deliberately incendiary,” noting that federal judge John Roll—one of the victims in the Giffords shooting—had been previously targeted by talk radio hosts, incensed by his decision about undocumented immigrants, who told listeners that “[w]e should kill him. He should be dead,” leading to hundreds of death threats against him.

### **Conceptualizing Support for Violence against Political Authority**

Although political violence comes in many forms, I focus on violence directed at political leaders and government by individuals or groups intending to achieve political aims (e.g. intimidating leaders to change their behavior, punishing them for past misdeeds, or preventing them from committing future transgressions), rather than violence carried out by the state or ethnic violence, which tends to broadly target group members rather than government leaders *per se*, though the general theoretical framework involving aggressive traits and provocative situational cues is likely to hold across all forms of political violence.

The likelihood of violence against political authority by any single individual is extremely low in stable political contexts like the U.S., making it difficult to study systematically in a survey setting. These problems are compounded by social desirability, along with legal and ethical concerns. In place of behavioral measures of violence I focus on attitudinal support for violent against political authority, which I treat as a likely risk factor for violent behavior in politics and for milder, more common forms of aggressive political behavior, including physical altercations with opponents, property damage, threats, and verbal abuse. Although this approach is unable to test the direct link from violent political attitudes to violent behavior, the relationship between attitudes and behavior is well-established in aggression research and other domains (e.g. Anderson and Bushman 2001; Archer 2004; Azjen and Fishbein 1980; Bushman 1995). In future research, I will move closer to behavior by assessing self-reported likelihood of personally carrying out acts of political aggression and even violence under various circumstances (Kalmoe 2012).

Beyond risk factors for violent behavior, support for violence against political authority may have a broader impact by encouraging others with less restraint to act violently. Violent offenders are ultimately responsible for their actions, but the likelihood of violence may rise when leaders and citizens give voice to violent attitudes toward political authority or when they fail to denounce the expression of violent attitudes. These views help create a tolerant political atmosphere that legitimizes violence.

Finally, attitudinal support for violence against political leaders is an important subject for study in and of itself. Such views reveal attitudes diametrically opposed to fundamental democratic principles: they implicitly reject the legitimacy of democratic outcomes and the illegitimacy of violence. Democracy falters when its outcomes are violently opposed whenever unfavorable to one side. These violent attitudes also indicate a troubling level of malice and incivility in politics that goes far beyond the usual political invective.

In sum, support for violence against political authority serves as a risk factor for violent behavior, as a potential enabling factor that encourages violence by others, and as a normatively troubling attitude toward political opponents and the broader system of democratic governance.

### **Measuring Support for Violence against Political Authority**

Support for violence against political authority has received little empirical attention. Without past instrumentation as a guide, I fielded five questions to tap support for threats against leaders, property violence, physical force against government, using bullets to solve political problems, and a disavowal of violence for expressing political grievances (reverse-coded). The items were presented with 5-point agree-disagree responses. The wording for these items is provided in Table 6.1.

The questions were designed as face-valid indicators of support for violence against political authority with several considerations in mind. First, social desirability could lead to universal rejection of violence, even among citizens who privately endorse violence. The questions are partly shrouded in ambiguity and remoteness to make them more broadly applicable: they do not directly implicate the respondent, the political

target’s identity is open to projection, and the target’s transgressions are unspecified.<sup>23</sup> The ambiguity for targets and offenses removes partisan and ideological content from the questions. Militant citizens from a variety of political backgrounds engage in violence against political authority, so the items allow respondents to infer which targets and transgressions might call for violence. The statements also use descriptions that facilitate moral disengagement, lowering barriers to agreement (see Bandura et al. 1996). However, each item clearly advocates physical harm against political leaders or government. Table 6.2 presents the distribution of responses in the two national studies.

Table 6.1: Violence against Political Authority Question-Wording

<p>“When politicians are damaging the country, citizens should send threats to scare them straight.”</p> <p>“The worst politicians should get a brick through the window to make them stop hurting the country.”</p> <p>“Sometimes the only way to stop bad government is with physical force.”</p> <p>“Some of the problems citizens have with government could be fixed with a few well-aimed bullets.”</p> <p>“Citizens upset by government should never use violence to express their feelings.”</p> <p>5-point response scale: “Strongly Agree” to “Strongly Disagree”</p>
---

Although most citizens reject violence against political authority, a substantial minority expresses support. In the Ford-Marsh study, 9% said citizens should threaten leaders, 6% advocated smashing windows with bricks, 8% supported using physical force against government, 5% said bullets can fix problems with government, and 16% disagreed that citizens should express discontent non-violently. An additional 15 to 23% fail to reject violence by choosing neutrality or mild disagreement, which is startling given the extremity of these items.

The same patterns emerge in the TESS Study, which only had room for three of the five items. Thirteen percent support throwing bricks through windows, 6% endorse using bullets to solve political problems, and 10% rejected non-violence in politics. An

<sup>23</sup> Given the surprising variation found in response to these items and the usefulness of more direct questioning, follow-up studies (Kalmoe 2012) forgo this ambiguity and add personal implication.

additional 22 to 28% respond to violence with neutrality or slight disagreement. The representativeness of these samples suggests that tens of millions of Americans express support for violence in these forms. Moreover, the proportions observed probably signify a lower bound since some respondents may be reluctant to express their true feelings on sensitive items.

Table 6.2: Distribution of Support for Violence against Political Authority

	Ford-Marsh Study					TESS Study		
	Threaten	Force	Brick	Bullets	No Violence	Brick	Bullets	No Violence
Strongly Disagree	68.5%	70.2	75.6	80.3	9.9	59.1	71.5	4.6
Somewhat Disagree	9.6	8.9	6.7	4.2	5.7	9.7	6.6	4.6
Neither Agree Nor Disagree	12.8	12.6	11.3	10.4	10.8	17.9	16.0	14.7
Somewhat Agree	5.4	5.9	3.9	2.5	10.8	7.1	3.2	11.7
Strongly Agree	3.7	2.5	2.5	2.7	62.8	6.2	2.8	64.5
<i>N</i>	406	406	406	405	406	504	501	504

*Note:* Michigan Study distributions are substantively identical, but are not shown here because they are less informative than the representative samples.

The Michigan Study includes all five items, and the college students appear at least as willing to endorse violence against political authority, with support ranging from 3 to 11% agreement across the items. In fact, the students were *more* reluctant to reject violence against political authority compared to the national studies, with 31 to 57% choosing neutrality or “somewhat disagree” across the items.

To reduce measurement error, I aggregate the items in each study into reliable additive indices: Ford-Marsh study (alpha = .84; mean=.15; s.d.=.22), TESS study (alpha = 0.69; mean=.19; s.d.=.23), Michigan study (alpha = 0.77; mean=.20; s.d.=.17). In both

national studies, average scores of support for these violent attitudes among Democrats and Republicans were statistically indistinguishable.<sup>24</sup>

### **Predicting Support for Violence against Political Authority**

Violent political metaphors are especially compelling in the context of violence against political authority because they encourage audiences to think of democratic processes like governance and elections as forms of violent action. As noted in Chapter 2, I conceptualize violent political rhetoric as a form of violent cue, capable of activating the same aggressive responses triggered by violent entertainment. These effects are often moderated by trait aggression—a person’s stable propensity to engage in interpersonal aggression. Trait-aggressive people tend to be more susceptible to violent primes because they maintain a larger store of aggression-related schemata in memory ready to be activated (Bushman 1995, 1998; Dill et al. 1997). However, the precise moderating role of trait aggression depends on the strength of provocative cues (Marshall and Brown 2006). The mildness of the violent metaphors employed in the three dissertation studies are expected to produce the strongest effects among people with high levels of trait aggression.

Trait aggression’s powerful ties to aggressive attitudes and behaviors make it a promising candidate for independently predicting citizen support for this form of violence. As with state violence attitudes in Chapter 5, I expect to find a strong positive relationship between trait aggression and support for violence against political authority based on the propensity to for trait-aggressive citizens to see violence as a legitimate and effective means for solving problems. I also expect trait aggression to moderate the effects of violent political rhetoric, with aggressive citizens expressing more support for violence when exposed to violent language.

*H1: Trait aggression is positively related to support for violence against political authority.*

*H2: Exposure to violent political rhetoric increases support for violence against political authority among trait-aggressive individuals.*

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<sup>24</sup> In the Michigan study, Republican identifiers were significantly more supportive of violence.

## Results

To test the effects of exposure to violent rhetoric on support for violence against political authority, I estimate OLS regressions for all three studies with an indicator variable for exposure to ads with violent metaphors. To maintain consistency with the analyses throughout the dissertation, I operationalize trait aggression with the full BPAQ-SF index,<sup>25</sup> and I include its interaction with the violent metaphors treatment. For parsimony, I pool the treatment conditions in the Ford-Marsh Study to indicate seeing at least one violent ad, and I set aside the party labels in the Michigan Study. The results for the models are shown in Table 6.3. Figure 6.1 shows predicted values from the models at the 5<sup>th</sup> and 95<sup>th</sup> percentiles of trait aggression.<sup>26</sup>

Table 6.3: Effects on Violence against Political Authority Attitudes

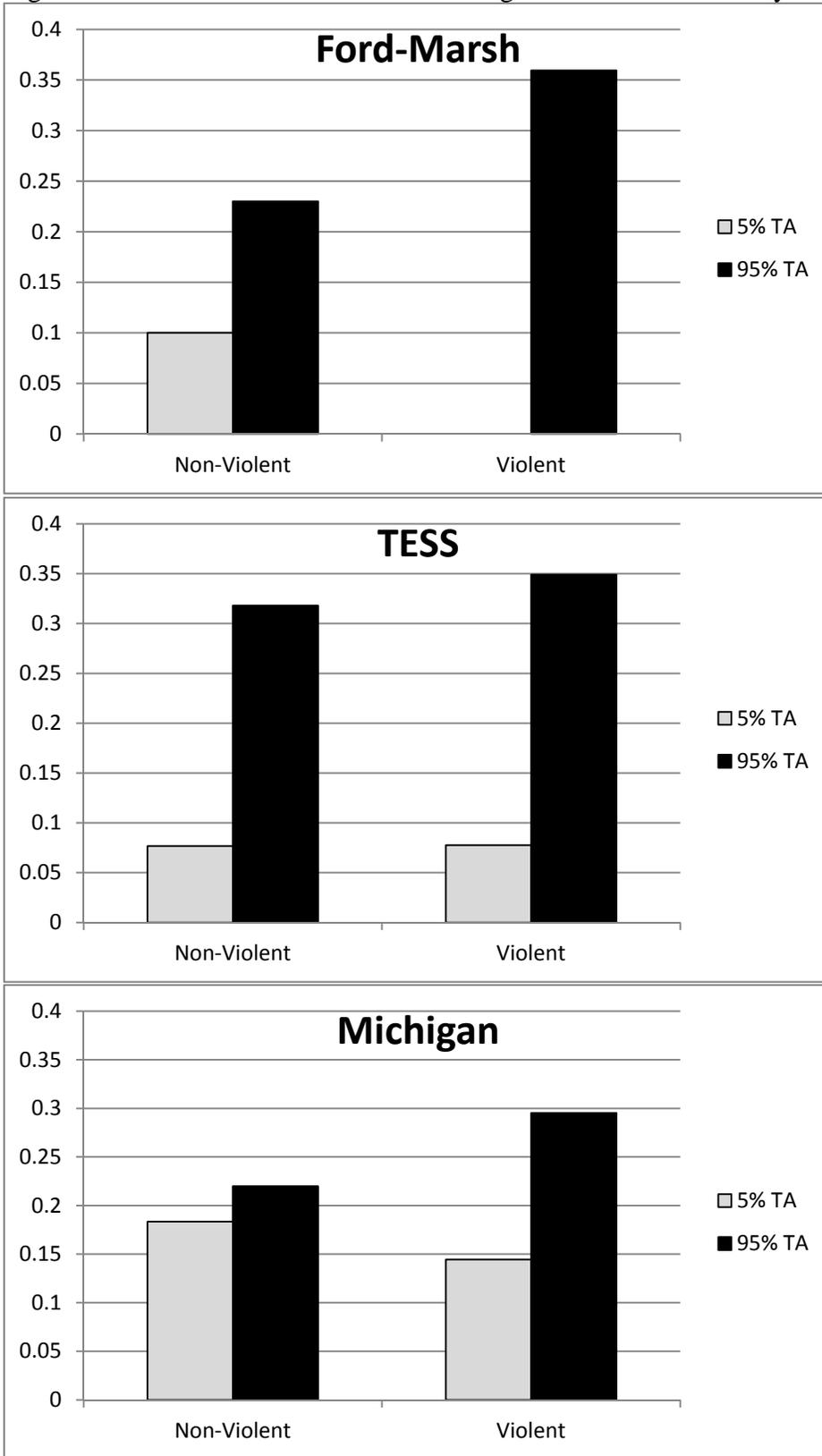
	Ford-Marsh VAPA Index	TESS VAPA Index	FM-TESS VAPA Index	Michigan VAPA Index
Trait Aggression	.20* (.09)	.40* (.07)	.32* (.06)	.07 (.08)
Violent Ad	-.10* (.04)	.00 (.02)	-.05* (.02)	-.05 (.04)
Trait Aggression* Violent Ad	.35* (.11)	.05 (.10)	.18* (.07)	.22* (.11)
Constant	.10* (.03)	.07* (.02)	.08* (.02)	.18* (.03)
$R^2$	.21	.13	.16	.04
$N$	401	498	899	362

Note: OLS coefficients, standard errors in parentheses. <sup>^</sup>  $p < .1$  \*  $p < .05$ , two-sided.

<sup>25</sup> This approach with the index of all four subscales of the BPAQ together differs from my previous treatments, which employed the physical aggression subscale alone.

<sup>26</sup> A separate test yields no net treatment effect for violence support.

Figure 6.1: Predicted Values for Violence against Political Authority Attitudes



Note: Predicted values at 5<sup>th</sup> and 95<sup>th</sup> percentiles of trait aggression from Table 6.3 index.

In the Ford-Marsh study, results strongly support both hypotheses. First, in the absence of violent political metaphors, trait aggression has a large and statistically-significant positive relationship with support for violence against political authority. High-aggression citizens express levels of support for violence that are, on average, 20 points higher than low-aggression citizens on the 0 to 1 index. Second, randomized exposure to violent metaphors significantly increases support for violence among trait-aggressive citizens. In fact, exposure to these subtle treatments more than *doubles* support among this group. Interestingly, we also see the opposite effect of violent metaphors among low-aggression citizens: for this group, which already expresses nearly universal rejection of this kind of violence, exposure to mild violent metaphors significantly decreases support for violence against political authority by 10% on the 0 to 1 index. Separate analyses show that the effects of viewing one or two violently-worded ads are indistinguishable for these attitudes, which suggests that mere exposure to violent cues is sufficient to generate the effect.

The TESS study provides a second opportunity to conduct similar tests with a more streamlined design and a larger sample size, though with a smaller set of violence items in the index. The TESS study employs the baseline 1-message design with no partisan cues. To simulate exposure to violent political rhetoric, I presented subjects with text from an ostensible television advertisement for a U.S. House candidate who was not identified by name or party. Each respondent was randomly assigned to read a violent or non-violent ad for the candidate. The text matches Candidate A in the Ford-Marsh study.

In the absence of exposure to violent metaphors, the relationship between trait aggression and support for violence against political authority surpasses even the strong results found in the Ford-Marsh study, providing resounding evidence in support of Hypothesis 1. Citizens with high levels of trait aggression express support for this violence that average *forty points* higher on the 0 to 1 index than their low-aggression peers. In contrast, the evidence for Hypothesis 2 on the effects of violent metaphors is far weaker. Although the interactive effects show a small increase in support for violence among trait-aggressive subjects, the difference is insubstantial when compared to the massive treatment effects found in the Ford-Marsh study. Among this group, support for

violence increases five points when subjects are exposed to mild violent metaphors. Low-aggression subjects show zero movement in response to violent metaphors.

What might explain the stronger results for H1 and weaker results for H2 in the TESS study? First, although the TESS study has fewer items for the dependent variable, a reanalysis of the Ford-Marsh study with a 3-item index yields identical results to the five-item index, so the index do not appear to be responsible. Another suspect may be the difference in the violent treatments. The TESS study uses the same text as Candidate A, but not the text for Candidate B. Do the violent and non-violent versions of Candidate A's message in the Ford-Marsh study have reduced effects compared the violent and non-violent messages for Candidate B? Apparently not. The effects for each of the three violent treatment conditions are indistinguishable when compared to their non-violent counterparts. The close proximity of both studies being in the field—July and August 2010—suggests the difference isn't in the political context. With these design-related differences out of the way, the difference could plausibly be attributed to random noise.

Since both national studies share similar designs and sample compositions, I merge the data from both to improve the reliability of estimates for both hypotheses. Trait aggression and exposure to violent metaphors are measured and modeled as they were in the individual studies. Because each of the five violent items tap the latent construct of support for violence against political authority, these continue to be represented by the index of all five items in the Ford-Marsh study and all three items in the TESS study. The results for this combined analysis are presented in the third column of Table 6.3

This pooled analysis of nearly 900 subjects reveals strong support for both hypotheses. Consistent with Hypothesis 1, in the absence of violent metaphors, changing levels of trait aggression correspond to an average shift in support across about one-third of the violence index. Hypothesis 2 also receives substantial support, with exposure to violent metaphors increasing support for violence among the most trait-aggressive subjects by 18 points. We also observe a statistically-significant negative reaction to violent metaphors from low-aggression subjects, who express lower levels of support for violence when exposed to the violent rhetoric.

To provide additional evidence for a more definitive conclusion about Hypothesis 2, I replicate the basic experimental design elements for violent metaphors, trait

aggression, and support for violence against political authority with the student sample in the Michigan study. The results are presented in the fourth column of Table 6.3. Here, trait aggression has a small positive relationship with support for violence, as expected, though the difference does not reach statistical significance. Although the reasons for the smaller size are not immediately clear, it is consistent with some media violence studies using student subjects (e.g. Bushman 1995). More importantly, randomized exposure to mild violent metaphors dramatically increases support for violence among trait-aggressive subjects, shifting attitudes among this group by a statistically-significant 22 points. As in the pooled national data, low-aggression subjects respond in the opposite direction to violent metaphors, though the difference is not statistically-significant in this case.

The Michigan Study also provides an opportunity to test the effects of violent metaphors when the partisanship of the source is known. Due to the relatively small sample size, tests for partisan dynamics are hindered by low statistical power, especially since partisan effects are probably conditioned by the partisanship of both the source and the viewer. In results presented in supplemental materials, I estimated four OLS models for the violence index, separating Democratic and Republican treatments and the two sets of self-identified partisans. This approach is easier to interpret than a fully interacted model, but is substantively equivalent.

In each model, trait-aggressive subjects expressed more support for violence, and the violent treatment consistently boosted this difference, but only one of the differences is statistically reliable. When the models are re-estimated pooling across partisanship of subjects due to the substantial similarity across partisans in the separate tests, the Republican source model showed significant positive effects of exposure to violent metaphors among trait-aggressive subjects and marginally-significant negative effects of the same among low-aggression subjects. The Democratic source model shows directionally-similar but non-significant effects, but was also statistically indistinct from the Republican source model.

Unexpectedly, I also found significant differences in support for violence between the two non-violent partisan treatments that were moderated by trait aggression but not by partisanship. Trait-aggressive subjects in the non-violent Democrat condition were

significantly more supportive of violence than in the non-violent Republican condition, but low-aggression subjects in the former were significantly less supportive of violence than those in the latter.

## Conclusion

Three survey experiments—including two with nationally-representative samples—tested whether the mildest, most common forms of violent political rhetoric increase public support for violence against political authority, including threats against leaders, property violence, and physical violence against leaders. Together, the three studies point to the same conclusion: citizens with aggressive personality traits express greater support for violence against political authority, and their support is magnified when exposed to violent political metaphors.

Interestingly, these results also show a significant opposing reaction among low-aggression citizens who expressed even lower support for violent against political authority when exposed to violent political language. This evidence suggests a backlash among this group that results in a polarization of violent attitudes across the trait-aggression spectrum, much like that observed in the state violence attitudes of Democrats in the Michigan study (Chapter 5). This reaction may be driven by ‘aggression anxiety’ in which some people respond to violent content with anxiety and distaste (Bushman 1996).

These studies also demonstrate that violent rhetoric affects millions of Americans, not just a handful of unstable individuals. The numbers are sobering. Generalizing from the national studies, we see tens of millions of U.S. adults endorse sending threats to intimidate leaders, support smashing political windows with bricks, and advocate using bullets to solve political problems. Tens of millions more choose neutrality or slight disagreement for these items, despite their extremity. For many of them, exposure to violent political rhetoric boosts support for violence even further. Few will carry out violent acts, but their views are still cause for concern.

### *Violence, Incivility, & Legitimacy*

These findings demonstrate that violent political rhetoric has unintended negative consequences. Although these studies cannot speak to the direct relationship between

violent rhetoric and violent political behavior, support for this violence is a probable risk factor for violent behavior against political authority. The relationship between attitudes and behavior is well-established in aggression research and other domains (e.g. Anderson and Bushman 2001; Archer 2004; Azjen and Fishbein 1980; Bushman 1995), but additional research is needed to establish the relationship in the political domain, and to identify the targets and misdeeds that seem to deserve violent retribution. To this end, I have begun collecting similar experimental data focused on milder forms of aggressive political behavior that personally implicate the subject.

Support for violence against political leaders may also generate a toxic political environment that tolerates violence by others. Even when most citizens refrain from violence, citizens with less restraint may be encouraged to act in a political atmosphere that condones and legitimates violence as an acceptable response to frustrating political outcomes. Democracy depends on the peaceful resolution of political differences, which may be thwarted when leaders and citizens endorse violence in politics and when others fail to denounce it.

Finally, the prevalence of these attitudes indicates an extraordinary level of political incivility. Many citizens seem comfortable wishing physical harm on their political opponents and they willingly endorse intimidation through violence. These views present a major challenge to representative government by rejecting the legitimacy of democratic mechanisms and proposing to supplement them with violence.

#### *The Ideological Neutrality of Violence against Political Authority*

Much of the recent concern about violent rhetoric and violence in politics has been voiced by partisans on the ideological Left, focused on the political Right. Yet political violence in America has always been a flexible weapon wielded across ideological lines—including the 1919 anarchist bombings, violence on the fringes of the anti-war movement during the Vietnam War, the Oklahoma City bombing of 1996, violence against abortion doctors, and recent anti-globalization riots.

The results here rebut partisan interpretations of support for violence against political authority. In both national studies, Republicans and Democrats were equally likely to endorse violence, had similar distributions of trait aggression, and showed

equivalent reactions to violent rhetoric. Democrats and Republicans differ in many ways, but support for violence against political authority and reactivity to violent political rhetoric are not among them.

### *Opinion Leadership and Violent Rhetoric*

Public opinion is regularly driven by opinion leaders: citizens follow trusted sources, moderating the influence of political communication (e.g. Miller and Krosnick 2000; Zaller 1992). Are citizens similarly guided when encountering violent rhetoric? The automatic effects of violent primes seem to suggest otherwise (Bushman 1998).

The evidence here is preliminary, but seems to cast doubt on opinion leadership in this context. First, the Michigan Study showed no evidence that source partisanship guides partisans to accept some violent messages and reject others. Second, trait-aggressive subjects reacted strongly to violent rhetoric in the absence of partisan or ideological cues about the source, indicating that source cues are not a necessary condition. Third, equal levels of support for violence among Republicans and Democrats in the national samples constrains the opinion leadership model by requiring balanced messages from both sides, but doesn't rule it out.

Political guidance may be lacking for reactions to violent rhetoric, but citizens are not victims of arbitrary communication effects. Like many media effects, violent rhetoric works by boosting the strength of existing predispositions. In this case, violent rhetoric amplifies the natural inclinations of aggressive people. So, while political predispositions may be sidelined, other predispositions stand in to guide citizens' attitudes and behavior. That may provide little normative comfort when the trait is aggression, but citizens are not overtaken by whatever messages they happen to receive.

This chapter suggests that political leaders unwittingly mobilize aggression in audiences with violent rhetoric. Workable solutions for this problem with protected speech are hard to find, beyond self-restraint by leaders. Perhaps the evidence here will encourage political leaders to think twice about infusing violent language into communication, particularly when citizens are already brimming with hostility.

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Aggression is a fundamental component of human behavior with likely implications for political behavior beyond violent attitudes. Leaders take great care in crafting strategic communication, so the prevalence of violent metaphors is unlikely to be coincidental. In the next two chapters, I take up the power of violent metaphors to mobilize electoral participation and shape candidate evaluations in concert with trait aggression in audiences.

**Ford-Marsh Study Supplemental Analysis:**

Table 6.4 Effects on Violence against Political Authority Attitudes—Ford-Marsh Items

	Threaten	Brick	Force	Bullets	No Violence (reversed)	VAPA Index
Trait Aggression	.30* (.12)	.27* (.11)	.28* (.11)	.10 (.10)	-.01 (.16)	.19* (.09)
Violent Ad(s)	-.06 (.05)	-.09* (.04)	-.09^ (.05)	-.12* (.04)	-.13* (.06)	-.10* (.04)
Trait Aggression* Violent Ad(s)	.30* (.14)	.36* (.12)	.33* (.13)	.45* (.12)	.32^ (.18)	.34* (.11)
Constant	.07 (.04)	.05 (.04)	.08^ (.04)	.08* (.04)	.26* (.06)	.10* (.03)
$R^2$	.17	.22	.18	.17	.03	.21
$N$	403	403	403	401	403	401

Note: OLS models, standard errors in parentheses. ^  $p < .1$  \*  $p < .05$ , two-sided. Models include education and income as controls for treatment imbalances.

**TESS Study Supplemental Material:**

Table 6.5 Effects on Violence against Political Authority Attitudes—TESS Items

	Brick	Bullets	No Violence (reversed)	VAPA Index
Trait Aggression	.50* (.10)	.49* (.08)	.21* (.09)	.40* (.07)
Violent Ad	.01 (.05)	.02 (.04)	-.03 (.04)	-.00 (.03)
Trait Aggression* Violent Ad	.03 (.14)	.03 (.11)	.08 (.13)	.05 (.10)
Constant	.09* (.03)	.01 (.02)	.13* (.02)	.07* (.02)
$R^2$	.10	.14	.03	.13
$N$	501	499	502	498

Note: OLS models, standard errors in parentheses. ^  $p < .1$  \*  $p < .05$ , two-sided.

**Michigan Study Supplemental Material:**

Table 6.6 Distribution of Support for Violence against Political Authority—Michigan

Response Scale	Threaten	Brick	Force	Bullets	No Violence
Strongly Disagree	39.7%	54.6%	36.0%	64.7%	2.2%
Somewhat Disagree	41.3	29.9	33.6	25.3	6.0
Neither Agree nor Disagree	11.1	11.1	19.2	7.1	18.4
Somewhat Agree	5.2	2.7	10.0	2.7	38.4
Strongly Agree	2.7	1.6	1.1	0.0	35.1
<i>N</i>	368	368	369	368	370

Table 6.7 Effects on Violence against Political Authority Attitudes—Michigan Items

	Threaten	Brick	Force	Bullets	No Violence (reversed)	VAPA Index
Trait Aggression	-.04 (.12)	.02 (.11)	-.02 (.12)	.17 <sup>^</sup> (.09)	.12 (.12)	.07 (.08)
Violent Ad	-.07 (.05)	-.07 (.05)	-.07 (.06)	-.07 <sup>^</sup> (.04)	-.01 (.05)	-.05 (.04)
Trait Aggression* Violent Ad	.21 (.16)	.28 <sup>^</sup> (.15)	.35* (.17)	.24* (.12)	.11 (.16)	.22* (.11)
Constant	.24* (.04)	.16* (.03)	.25* (.04)	.07* (.03)	.21* (.04)	.18* (.03)
<i>R</i> <sup>2</sup>	.01	.02	.03	.07	.02	.04
<i>N</i>	366	366	367	366	368	362

Note: OLS models, standard errors in parentheses. <sup>^</sup> *p*<.1 \* *p*<.05, two-sided.

Table 6.8 Effects on VAPA—Michigan Treatment Variations by Partisanship

	Democratic Ad		Republican Ad	
	VAPA Index (Democrats)	VAPA Index (Republicans)	VAPA Index (Democrats)	VAPA Index (Republicans)
Trait Aggression	.18 (.14)	.28 (.121)	-.07 (.12)	-.24 (.24)
Violent Ad	.08 (.06)	-.09 (.11)	-.10 <sup>^</sup> (.06)	-.12 (.14)
Trait Aggression* Violent Ad	-.16 (.20)	.16 (.32)	.35* (.17)	.44 (.40)
Constant	.11* (.04)	.15 <sup>^</sup> (.08)	.19* (.04)	.32* (.08)
<i>R</i> <sup>2</sup>	.04	.09	.06	.04
<i>N</i>	90	61	93	48

Note: OLS models, standard errors in parentheses. <sup>^</sup> *p*<.1 \* *p*<.05, two-sided.

## Chapter 7

### Mobilizing Electoral Participation

*Politics is a battle, and the best way to fire up your troops is to rally them against a visible opponent on the other side of the field. If a loyal supporter will fight hard for you, he will fight twice as hard against your enemies.*

Richard Nixon, *In the Arena: A Memoir of Victory, Defeat, and Renewal* (1990)<sup>27</sup>

*Every fight consists of two parts. (1) The few individuals who are actively engaged at the center and (2) the audience that is irresistibly attracted to the scene.*

E.E. Schattschneider, *The Semi-Sovereign People* (1960)

Politicians on the campaign trail regularly frame their messages with metaphors of fighting and war, yet little is known about how citizens respond to such appeals. Are violent political metaphors empty rhetorical flourishes or do they serve as effective tools for attracting and mobilizing supporters, shaping fundamental democratic behaviors?

Scholars have devoted considerable attention to the ways campaigns influence voter turnout through communication strategies, including direct voter contact (Nickerson 2008; Rosenstone and Hansen 1993), negative advertising (Ansolabehere and Iyengar 1995; Freedman and Goldstein 1999; Krupnikov 2011; Lau et al. 1999), and emotional appeals (Brader 2006; Marcus et al. 2000; Valentino et al. 2011). But despite the prevalence of violent metaphors in campaigns, no attention has been paid to the mobilizing capacity of these fixtures of political communication.

Here, I take the first steps toward identifying the electoral impact of violent metaphors by grounding the phenomenon in the psychology of media violence and metaphorical thinking. In doing so, I integrate insights from recent research on the

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<sup>27</sup> Quoted in Pitney (2000).

interactive effects of situational factors (e.g. exposure to political messages) and fundamental personality traits on political behavior (Mondak et al. 2010; Stenner 2005). I take this framework further by demonstrating the utility of modeling personal traits and political attributes together in interactions with campaign features. In this chapter, I focus on the potential mobilizing power of aggression in electoral participation, including voting, volunteering or contributing financially to campaigns, attending rallies, publicly expressing support for a candidate, persuading others how to vote, and talking about the campaign with others.

I begin by showing the empirical correspondence between violent metaphors and aggregate turnout among voting-eligible adults across 60 years of U.S. presidential campaigns and candidates from 1948 through 2008. Next, I analyze two nationally-representative survey experiments that isolate the causal effects of violent metaphors on voting. These tests provide some of the first experimental evidence of interactive trait-situation effects involving electoral behavior. In the third section, I present complementary evidence from the American National Election Studies (ANES) showing sizable shifts in individual voting behavior related to violent campaign rhetoric spanning five decades. In all three tests, the electoral impact of violent metaphors depends jointly on audience personality traits and political orientations. I conclude by examining the observational impact of trait aggression on electoral participation in the absence of violent metaphors. Consistent with related research by Fowler and Dawes (2008), I find that trait aggression is negatively related to participation, particularly among citizens who express confidence that the government is responsive to electoral outcomes. Taken together, these studies emphasize how individual differences between citizens condition the mobilizing power of campaign messages, and they identify the previously undocumented role aggression plays in driving political participation.

This multi-method approach goes further toward revealing the real-world impact of violent metaphors by modeling dynamics of communication exposure (Druckman et al. 2012; Kinder 2007; Hovland 1959) and by presenting evidence on the substantial durability of these campaign effects. The observational analysis suggests reinforcing political communication environments that use repetition to extend the effects of metaphors beyond any single exposure (Chong and Druckman 2010; Gerber et al. 2011).

These tests uncover new mechanisms through which political campaigns mobilize citizens—dynamics that candidates and advisers may intuitively employ without detailed knowledge of the underlying processes.

## Violent Metaphors in Presidential Campaigns

Violent campaign metaphors are deployed on the campaign trail for many reasons, but the most compelling explanation involves their potential strategic benefits. I define violent political metaphors as figures of speech that cast non-violent elements of politics in violent terms. This language recurs regularly in politics, including in concert with explicit calls for electoral participation. For example, during the 2010 midterm election campaign, President Barack Obama rallied students at the University of Wisconsin with a speech using a dozen violent metaphors, such as “I am going to get out there and **fight** as hard as I can—and I know you are too.” He concluded:

Get out there and **fight** for it. I need your help, Madison. We need you to commit to vote. We need you to pledge to vote. We need you to knock on doors. We need you to talk to neighbors. We need you to make phone calls. We need you to bring energy and passion and commitment. Because if we do, ... we will not just win this election—we are going to restore our economy, we are going to rebuild the middle class. We will reclaim the American Dream for this generation (9/28/10).

Two years earlier, Senator John McCain concluded his presidential nomination acceptance speech, containing 34 violent metaphors, with a similar call to Republicans:

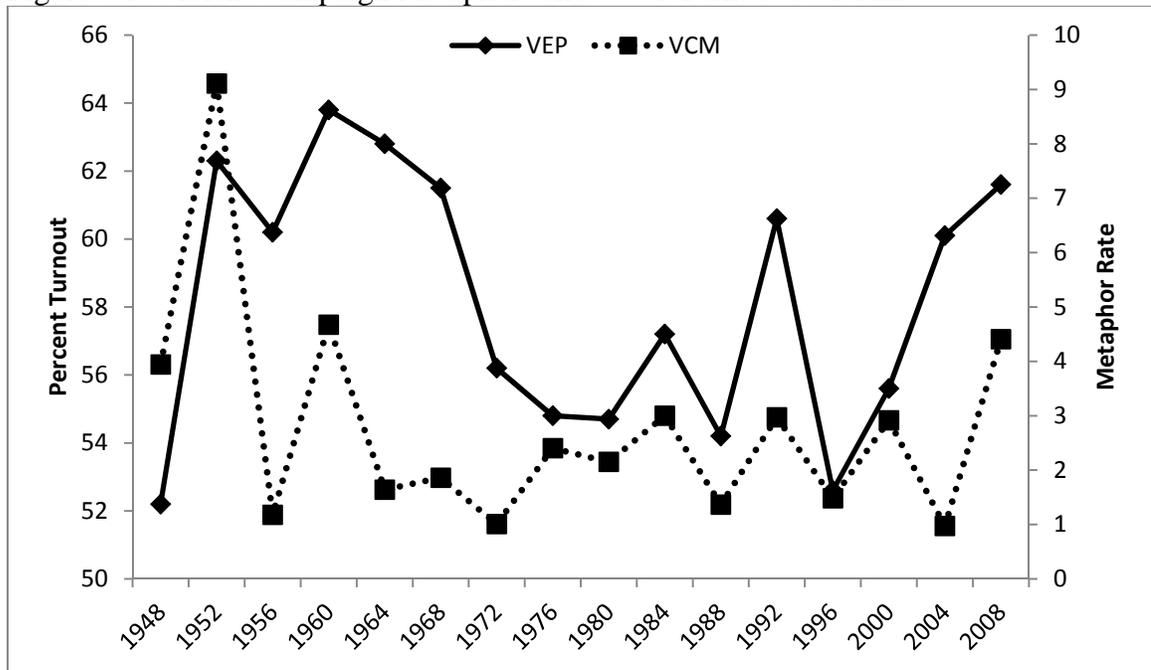
**Fight** with me. **Fight** with me. **Fight** for what’s right for our country. **Fight** for the ideals and character of a free people. **Fight** for our children’s future. **Fight** for justice and opportunity for all. ... Stand up, stand up, stand up, and **fight** (9/4/08).

Given the widespread use of violent metaphors in campaigns, we might reasonably infer that political leaders view this language as a means to improve their odds for electoral victory. Whether or not violent metaphors actually serve this purpose remains to be seen, since no systematic analysis of its consequences has been conducted.

Knowing the prevalence of violent campaign metaphors is useful in itself for understanding the breadth of the phenomenon and, consequently, the extent of its potential electoral effects, but a methodical tracking of its use also enables observational estimates of its impact on voting behavior. To this end, I return to Chapter 4’s content analysis of violent metaphors in presidential nomination acceptance speeches from 1932 through 2008, spanning the duration of the modern presidency.

For a first cut at the electoral impact of violent metaphors in presidential campaigns, I test the bivariate relationship between the total rate of violent metaphors per 1000 words by both major-party candidates and the voting-eligible (VEP) turnout rate for the elections from 1948 through 2008.<sup>28</sup> Across these 16 elections, use of violent metaphors by presidential candidates varies between 1.0 and 9.1. This variance exhibits a surprisingly strong positive correlation with voter turnout (Pearson’s  $r = .34$ ), with violent metaphors and voting rising and falling together. If this relationship is to be believed, more than 11% of the variation in voter turnout is attributable to the prevalence of violent metaphors in presidential campaigns.

Figure 7.1: Violent Campaign Metaphors and Voter Turnout over Time



<sup>28</sup> VEP turnout data are drawn from Table 1 of McDonald and Popkin (2001) and from Michael McDonald’s website ([http://elections.gmu.edu/voter\\_turnout.htm](http://elections.gmu.edu/voter_turnout.htm)).

Of course, there are several plausible alternative explanations for this relationship involving some third factor that drives both voter turnout and the use of violent campaign metaphors. Unfortunately, given the abundance of potential confounds and the limited number of elections, a more substantial parsing is impossible with aggregate election data. Nonetheless, the sizable basic relationship between voting and violent campaign metaphors is promising.

## Metaphorical Resonance and Voter Mobilization

Before proceeding with more nuanced individual-level analysis, I step back to consider the mechanisms through which violent metaphors may influence voting behavior. I start by briefly reviewing how metaphors shift the considerations citizens bring to bear on social judgment and the ways that metaphors resonate more with some people than others, along with insights derived from psychological models of media violence and aggressive behavior. With that foundation in place, I integrate these theoretical components into current models of political participation and mobilization, yielding hypotheses about the conditional impact of violent campaign metaphors on electoral participation.

Violent political metaphors encourage citizens to think of political processes as forms of aggression, rendering the complexities of politics in easy-to-understand narratives of conflict and violence. Violent political metaphors imply levels of intensity and action that are designed to attract attention and interest, motivating greater engagement with politics. This is in keeping with Schattschneider's (1960) extended metaphor of politics as a street brawl, attracting the attention of bystanders and potentially swinging the outcome based on who and how many of those bystanders are pulled into the fray.<sup>29</sup> Violent metaphors also suggest greater levels of effort required in situations with higher stakes, all of which has clear implications for citizens considering the costs and benefits of political action.

As described in Chapter 2, metaphors powerfully influence how people think about social interactions and make social judgments, consistent with the metaphors people employ to talk about intangible concepts (see Landau et al. 2010). Moreover, the

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<sup>29</sup> Schattschneider may have chosen this metaphor to attract attention in academics as well as politics.

effects of metaphors on social behavior often vary based on individual characteristics of audience members. In particular, people with special interest in the metaphorical domain pay more attention to persuasive arguments, express more interest in them, and process the arguments more systematically (Ottati et al. 1999). I expect violent campaign metaphors to be particularly appealing among people who enjoy other representations of violence, like those found in violent entertainment.

Much of the literature on media violence effects focuses on its behavioral effects, but this work also ascertains the kinds of people most likely to seek out and enjoy violent entertainment. Trait aggression stands out as both a predictor for seeking out violent content and as a moderator that amplifies the effects of that media violence on aggressive behavior (Anderson and Bushman 2002a, 2002b; Bushman 1995, 1996; 1998; Caprara et al. 1983; Felsten and Hill 1999; Marshall and Brown 2006). Among trait-aggressive citizens, exposure to violent content causes particularly strong affective activation and physiological arousal, which may explain part of the enhanced appeal of violent entertainment among this group. At the other end of the trait aggression spectrum are citizens who find violent content less appealing or even repulsive. Among this group, exposure to violent content produces unpleasant emotional reactions of anxiety or fear (Bushman 1996). These contrasting reactions at each end of the aggression scale correspond to propensities for responding to violent cues with fight or with flight. Moreover, these effects are not limited to violent entertainment—they extend to a wide assortment of violent cues, including pictures, music, text, and speech, even with subconscious exposure (Anderson et al 2003; Bargh and Pietromonaco 1982). Based on these regularities, I expect trait aggression to sort citizens into groups that find violent metaphors especially appealing and groups that find them distasteful and unpleasant.

### **Predictions for Electoral Behavior**

The preceding review situates violent campaign metaphors in the broader context of metaphors and media violence, and it identifies the kinds of people most likely to find violent representations appealing. In this section, I integrate these dynamics into current models of political participation and mobilization, yielding hypotheses about the conditional impact of violent campaign metaphors on voter mobilization. In particular, I

predict that the electoral impact of violent campaign metaphors depends jointly on aggressive personality traits and orientations toward the electoral process.

A rich literature in political science identifies the diverse ingredients that drive political participation, including citizens' attributes, the electoral environment, and mobilization efforts by political campaigns. Participation is typically modeled as a function of electoral structure and conditions, individual resources, mobilization by peers and elites, psychological engagement in politics, and even personality traits (e.g. Mondak 2010; Rosenstone and Hansen 1993; Verba, Schlozman, and Brady 1995). Violent campaign metaphors fit within this framework as a mobilization tactic that stimulates attention, evokes participation-related emotions, and alters the perceived costs and benefits of political action.

Political communication effects and elite mobilization efforts have gained increasing attention in recent years. Rosenstone and Hansen (1993) find that campaigns seek out socially-connected supporters to extend the impact of mobilization messages, especially among unlikely voters, and experiments provide causal evidence of significant mobilization effects transmitted to others through those who are contacted directly (Nickerson 2008). These efforts are most effective in face-to-face contacts compared to telephone or mail (Gerber and Green 2000). This literature emphasizes a seemingly-intuitive but often-overlooked point: people participate more when they are asked to.

The content of campaign messages matters too. A conflicted literature on negative television advertising argues that negative ads demobilize voters (Ansolabehere and Iyengar 1995), mobilize voters (Goldstein and Freedman 2002), or have no participation effects (Lau et al. 2000). More recent analysis explains these contradictions with contingent effects that turn based on whether citizens see negativity before or after making a candidate choice: negativity before choice is mobilizing but negativity toward a chosen candidate is demobilizing (Krupnikov 2011). Relatedly, news representations of the campaign focusing on the strategic implications of campaign events promote cynicism in citizens and depress participation (Cappella and Jamieson 1997), especially among citizens with lower baseline levels of participation (Valentino et al. 2001).<sup>30</sup>

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<sup>30</sup> Among several tests on the effects of strategic news frames, Valentino and colleagues (2001) attempt to isolate the effects of violent metaphors, but that particular analysis is limited by small samples that yield

Political messages that evoke discrete emotions can also be mobilizing. For example, Brader (2006) finds that TV ads arousing enthusiasm in audiences are mobilizing compared to identical ads with less emotive content, as are ads inducing anxiety to a lesser extent. These experimental findings are similar to observational results from Marcus and colleagues (2000) showing that self-reported enthusiasm and anxiety both independently increase the likelihood of participation beyond voting. Employing both methodologies, Valentino and colleagues (2011) find mobilizing effects for political anger, but mixed or weak results for enthusiasm and anxiety.

### *Hypotheses*

As described above, I expect the effects of violent campaign metaphors to be conditioned by the audience's levels of trait aggression because violent content is generally more appealing to trait-aggressive people (Bushman 1995), and because trait aggression indicates an attraction to the violent domain invoked by metaphors, encouraging more attention and systematic processing among this group (Ottati et al. 1999). These dynamics alone suggest one route by which violent metaphors could mobilize electoral participation among trait-aggressive citizens, attracting interest and focusing attention on the content of mobilizing messages. Conversely, violent metaphors will be uninteresting at least or even off-putting for citizens low in trait aggression.

Another route for participatory effects from violent metaphors may be through emotions, particularly anger and anxiety. Violent cues prime anger among trait-aggressive people (Anderson and Bushman 2002a), and anger is a powerful motivator for participation in politics (Valentino et al. 2011). Among low-aggression people, violent content produces anxiety (Bushman 1996), which has mixed implications for participation. If anxiety is mobilizing alongside anger, we should observe a non-monotonic pattern of mobilization in which people at both ends of the trait-aggression scale are mobilized by violent metaphors more than people in the middle.

A third way political leaders could shape participation with violent metaphors is by reducing the perceived costs of action and increasing the perceived benefits (Gerber et

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statistically-insignificant results. The authors speculate that war language in news stories distracts audiences from issue-based content, especially for non-partisans and those without a college degree.

al. 2008) through emotional reactions and through their metaphorical implications. Anger and anxiety are linked to diverging perceptions of risks and rewards in decision-making processes about taking action, with anger reducing perceived costs and anxiety increasing them (Druckman and McDermott 2008; Huddy et al. 2007). To the extent that violent metaphors induce anger or anxiety in citizens based on levels of trait aggression, these emotions will weigh on judgments about the costs of participation. Metaphorically, war language suggests higher stakes and, consequently, a greater need for costly action to achieve vital goals. In this sense, violent metaphors imply greater rewards for successful action, but the frames may only persuade citizens who find their application to politics appealing (i.e. high trait aggression). Since electoral participation places moderate demands on the material, temporal, and cognitive resources of citizens, reduced perceptions of cost are likely to increase participation. Each of these mechanisms point in the same direction, leading to the first prediction:

*H1: Violent metaphors mobilize electoral participation in trait-aggressive citizens, but have null or negative effects on participation among low-aggression citizens.*

To this point, the account of mobilization by violent campaign metaphors involves interactions with a fundamental personality trait, but makes no reference to citizens' *political* attributes. Should we expect the uniform predictions of Hypothesis 1 regardless of how citizens feel about the electoral process? Presumably, the predictions above diverge when citizens see the elections as a meaningless exercise compared to those who see it as a valuable instrument of democracy.<sup>31</sup> Beliefs about electoral responsiveness provide insight into the value citizens place on elections, and by extension, the benefits of electoral action. Those who believe government is largely unresponsive to electoral outcomes will see far lower stakes in the election than those who view

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<sup>31</sup> Views about electoral responsiveness may be one part of a broader construct of attachment to the political system. Indeed, when I replace electoral responsiveness in the analysis below with an index that combines these views with partisan strength and ideological extremity, I find nearly identical results.

government as highly responsive to elections, and these perceptions will shift the cost-benefit calculus for voting.<sup>32</sup>

With this in mind, I propose that the influence of violent metaphors on electoral participation depends jointly on trait aggression *and* citizens' attitudes about the electoral process—namely, their perceptions of government's responsiveness to elections.<sup>33</sup> Among citizens with strong beliefs in electoral responsiveness, I expect the predictions in Hypothesis 1 to hold—violent metaphors mobilize trait-aggressive citizens and leave low-aggression citizens either unmoved or demobilized. But among citizens with doubts about electoral responsiveness, the expectations are more complicated. Within this group, violent metaphors could attract trait-aggressive citizens and bring them back into the fold. More likely, though, the anger cued by violent metaphors (and by the implicit illegitimacy of their source) will push trait-aggressive citizens in the opposite direction, reinforcing their doubts and reducing their participation further. For low-aggression citizens with doubts about elections, violent metaphors may be doubly demobilizing—turning them off further from a domain they already doubted.

*H2: Hypothesis 1 holds for citizens who believe government is responsive to elections, but violent metaphors are uniformly demobilizing among citizens with doubts.*

But there may be a more intriguing route by which violent metaphors *mobilize* low-aggression citizens: the anxiety they feel from encountering violent metaphors may encourage attention to the mobilizing message and a reconsideration of their electoral predispositions. This would be in keeping with the persuasive power of anxiety, which disrupts habitual responses and encourages new appraisals of the situation (Brader 2006; Marcus et al. 2000). Moreover, an emotional perspective on the application of electoral attitudes would yield theoretical consistency across all of the predictions, since anger tends to reinforce habits by discouraging effortful reconsideration (Huddy et al. 2007). Thus, the mix of anger and enthusiasm among trait-aggressive citizens reinforces their

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<sup>32</sup> Even among citizens with doubts about elections, other factors may still compel them to vote (e.g. social pressure, Gerber et al. 2008). Indeed, voting levels are surprisingly high among this group in each of the studies presented here.

<sup>33</sup> Responsiveness beliefs are conceptually and empirically distinct from internal efficacy and trust in government, and they comprise the institutional subcomponent of external efficacy (Niemi et al. 1991).

confidence in, or doubts about, the electoral process, and the anxiety felt among low-aggression citizens leads them to reconsider their confidence in or doubts about elections.

*H3: Violent metaphors reinforce attitudes about government's responsiveness to elections for trait-aggressive citizens but disrupt them for low-aggression citizens.*

The empirical tests in the next section adjudicate between these competing predictions, but the most plausible may be the model put forth in Hypothesis 3, which takes both personality and political orientations into account in a way that is consistent with previous research on the power of emotional appeals. This perspective emphasizes the joint importance of personal *and* political attributes in shaping the direction of campaign effects on voting behavior.

## Research Designs

To test the conditional effects of violent campaign metaphors on voter mobilization, I return to the Ford-Marsh and TESS Studies.<sup>34</sup> Both studies began with items measuring political and social predispositions, including trait aggression and beliefs about electoral responsiveness, followed by the treatment text. Questions about voting intentions and other forms of electoral participation were assessed shortly after the randomized treatments. The key moderating variable is trait aggression, which serves to distinguish citizens for whom violent metaphors will resonate from those who find them unappealing. Trait aggression is measured with the full 12-item BPAQ-SF.

One advantage of the Ford-Marsh study is that it permits a test for whether violent metaphor effects are amplified when subjects are exposed to two violently-worded ads (coded 1) versus one ad with violent content (coded .5), compared to no ads with violent metaphors (coded 0).<sup>35</sup> All of the treatments in both studies include mobilizing appeals that encourage political participation from the audience. Since both experiments are nearly identical in design, I present the results from both studies side by side.

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<sup>34</sup> The Michigan study did not include items measuring attitudes about electoral responsiveness, so it is excluded from analysis.

<sup>35</sup> Separate tests with indicator variables for the treatments support this linear-additive coding: the effect of exposure to one violent ad is approximately half the effect of two violently-worded ads.

## Measuring Participation Intentions

The Ford-Marsh study includes six standard campaign participation items, including vote intention, persuading others how to vote, attending a political rally or meeting, wearing a button or putting up a sign, discussing the campaign with others, and a hybrid item that combines volunteering for a campaign or contributing money.

Question wording for each of the items is presented in the Table 7.1.

Participants were asked to estimate the likelihood that they would engage in each activity during the 2010 midterm election campaign, with five-point response scales ranging from “definitely yes/will vote” to “definitely not/will not vote” coded 0 to 1. This mix of items enables tests beyond voting to include non-voting forms of participation. I combine the non-voting participation items into an additive index to measure the underlying construct more reliably (Cronbach’s alpha = .88). Due to limited space, the TESS study included just two electoral participation questions: vote intention and the hybrid item combining volunteering for a campaign or contributing money, measured the same as in the Ford-Marsh study.

Table 7.1: Question Wording for Electoral Participation

<ol style="list-style-type: none"><li>1. So far as you know now, do you expect to vote in the national election this coming November or not? [Includes “Not eligible to vote”, coded as missing]</li><li>2. During the election campaign, do you think you will try to persuade people why they should vote for or against one of the parties or candidates?</li><li>3. During the campaign, do you expect to contribute time or money to a political party or candidate?</li><li>4. During the campaign, do you expect to wear a campaign button, put a campaign sticker on your car, or place a sign in your window or in front of your house?</li><li>5. During the campaign, do you expect to go to any political meetings, rallies, speeches, dinners, or things like that in support of a particular candidate or party?</li><li>6. During the campaign, do you expect to discuss politics with your family and friends?</li></ol> <p>Response scale: Definitely yes, Probably yes, Maybe, Probably not, Definitely not</p>
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Participation intentions are a valid and frequently-used measurement strategy that provides substantive benefits. First, voting intentions months before the election strongly predict self-reported voting behavior after the election (85 to 90% consistency, Achen and Blais 2010). Second, the predictors for intended behavior and reported actual behavior are similar in kind and effect size (Achen and Blais 2010). Third, while some may object to the validation of intentions with self-reports in place of government records, errors in government record-keeping may make self-reported behavior nearly as reliable as validated votes, suggesting that deception may not be the main source of discrepancies between self-reported and “validated” behavior (Berent et al. 2011). Fourth, studying participation intentions puts the focus on the psychological processes motivating voting behavior before an election and underlying campaign communication effects (Hillygus 2005). In sum, in addition to providing a practical measurement strategy, participation intentions provide a reasonable means for assessing predictors of campaign behavior.

## Results

I begin by testing Hypothesis 1, which predicts greater mobilization from violent metaphors among trait-aggressive citizens but does not consider beliefs about elections. I estimate an ordered probit model of voting intentions, reflecting an ordinal dependent variable with potentially unequal intervals. In the TESS study, the model includes an indicator variable representing the treatment condition, the trait aggression index, and an interaction between the two. In the Ford-Marsh study, the three-point treatment variable replaces the indicator variable. Table 7.2 present the results.

In the TESS study, trait aggression shows a strong negative relationship with voting intentions, but the linear effects of exposure to violent metaphors are null. The non-voting participation item moves in the directions predicted by Hypothesis 1, but the results are substantively small and do not approach statistical significance. In contrast, the vote intention results for the Ford-Marsh study show a marginally-significant positive effect of violent metaphors among low-aggression subjects ( $p < .10$ ), but the effect reverses among high-aggression subjects, yielding a marginally-significant *demobilizing*

effect of metaphors among this group ( $p < .10$ ).<sup>36</sup> Results for the non-voting participation index move in the same direction as the voting item but fail to reach significance. The inconsistent results clearly do not support Hypothesis 1.

Table 7.2: Violent Metaphor Effects on Electoral Participation Intentions

	TESS		Ford-Marsh	
	Vote Intention	Non-Voting Item	Vote Intention	Non-Voting Index
Violent Metaphors	-.02 (.19)	-.13 (.17)	.57 <sup>^</sup> (.29)	.11 (.07)
Trait Aggression	-1.20* (.39)	-.39 (.36)	-.56 (.47)	.05 (.12)
Violent Metaphors* Trait Aggression	.02 (.55)	.45 (.52)	-1.66* (.84)	-.20 (.20)
Cut 1/Constant	-2.11 (.16)	-.28 (.12)	-1.65 (.19)	.19* (.04)
Cut 2	-1.60 (.14)	.58 (.12)	-1.32 (.18)	
Cut 3	-1.14 (.13)	1.20 (.13)	-1.00 (.18)	
Cut 4	-.64 (.13)	1.70 (.15)	-.35 (.18)	
Pseudo $R^2$	.02	.00	.03	.01
$N$	496	502	396	399

Note: Ordered probit models for vote intention, OLS for non-voting index. \*  $p < .05$  ^  $p < .1$ , two-sided.

### ***The Role of Electoral Orientations***

To test Hypotheses 2 and 3, I add electoral beliefs to the model. Both studies included a variation on the standard ANES question asking, “Do you think elections make the government pay attention to what the people think?” Responses were given on a five-point scale from “definitely yes” to “definitely not,” coded 0 to 1. The ordered probit models for the voting intention items add electoral responsiveness and its full interactions with the treatment and trait aggression to models in both studies. All variables are coded 0 to 1. The results are presented in Table 7.3.

<sup>36</sup> Net treatment effects are null for both experiments. OLS models for non-voting participation show the same patterns as the vote intention models in both studies.

To aid the interpretation of three-way interactions, I present the marginal effects of violent metaphors on voting intentions in both studies, as conditioned by trait aggression and electoral responsiveness (Figure 7.2). The gray and black bars represent treatment effects at the 5<sup>th</sup> and 95<sup>th</sup> percentiles of trait aggression, respectively. The y-axis shows the size of the effect on voting intentions. The bars on the left side indicate treatment effects for *low-responsiveness* citizens (0) and those on the right indicate the same for *high-responsiveness* citizens (1).

Table 7.3: Metaphor Effects on Electoral Participation—The Electoral Connection

	TESS		Ford-Marsh	
	Vote Intention	Non-Voting Item	Vote Intention	Non-Voting Index
Violent Metaphors	.74* (.35)	.67* (.34)	1.09* (.55)	.16 (.11)
Trait Aggression	.49 (.68)	.82 (.65)	.88 (.82)	.24 (.17)
Electoral Responsiveness	2.13* (.10)	1.89* (.40)	1.53* (.68)	.24^ (.13)
Trait Aggression* Responsiveness	-4.37* (1.48)	-2.38^ (1.28)	-3.78* (1.81)	-.42 (.37)
Violent Metaphors* Trait Aggression	-2.14* (1.02)	-1.73 (1.00)	-4.21* (1.56)	-.49 (.32)
Violent Metaphors* Responsiveness	-1.83* (.71)	-1.52* (.60)	-1.53 (1.13)	-.11 (.22)
Violent Metaphors* Trait Aggression* Responsiveness	5.39* (2.08)	4.34* (1.86)	7.23* (3.33)	.78 (.66)
Cut 1/Constant	-1.29 (.24)	.64 (.22)	-1.09 (.32)	.12^ (.06)
Cut 2	-.74 (.23)	1.54 (.23)	-.74 (.31)	
Cut 3	-.26 (.23)	2.20 (.24)	-.41 (.31)	
Cut 4	.25 (.23)	2.72 (.25)	.25 (.31)	
Pseudo R <sup>2</sup>	.04	.04	.04	.06
N	496	502	396	403

Note: Ordered probit models for vote intention and TESS non-voting item, OLS model for non-voting participation index in Ford-Marsh study. ^  $p < .1$  \*  $p < .05$ , two-sided.

In contrast to the previous analysis, taking beliefs about electoral responsiveness into account reveals strikingly consistent patterns of violent metaphor effects in both national experiments. These significant effects are most consistent with the predictions in Hypothesis 3. Violent metaphors appear to reinforce the electoral beliefs of trait-aggressive subjects, mobilizing those who have confidence in electoral responsiveness and demobilizing those with doubts. The reverse is true among low-aggression subjects: violent metaphors disrupt electoral predispositions, mobilizing those who had doubts about elections. Interestingly, low-aggression subjects with confidence in elections seem unaffected.<sup>37</sup> The substantive sizes of these treatment effects are surprisingly large, moving voting intentions across 20 to 50% of the scales. Notably, the effects in the Ford-Marsh study are approximately double those in the TESS study because movement from 0 to 1 on the treatment variable indicates exposure from 0 to 2 violently-worded ads.

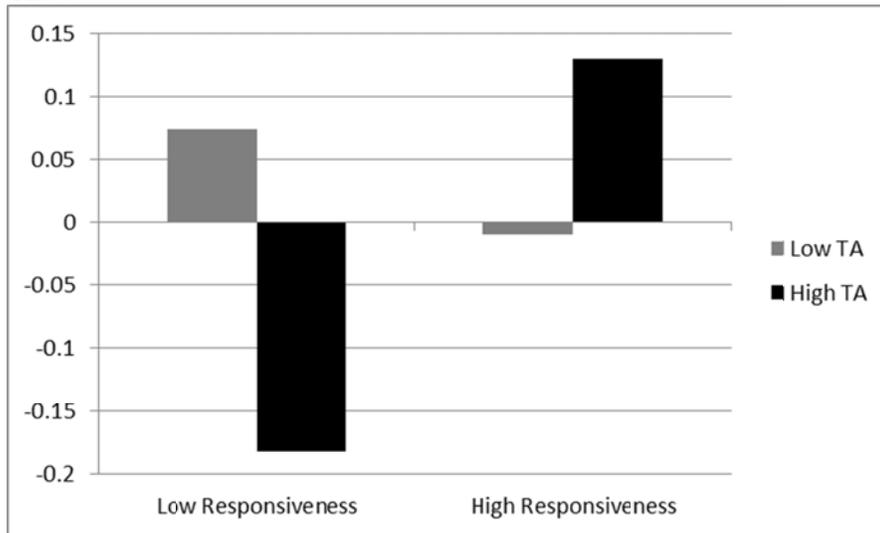
These results are consistent with a pattern of emotional responses with reinforcing and disrupting effects of anger and anxiety. Trait-aggressive citizens appear to be barreling ahead with their old participatory routines, and low-aggression citizens appear to be taking a sober second thought, reconsidering their habits, though the null effects among low-aggression citizens with confidence in elections partly temper this latter conclusion. Results for non-voting participation follow the same patterns, but are not statistically or substantively as strong as those for voting intentions (Table 7.3), though the effects for the non-voting participation item in the TESS study do reach significance.

In sum, both national studies show consistent, substantively large, statistically-significant effects of violent metaphors on voting intentions, conditioned jointly by trait aggression and beliefs about electoral responsiveness. As predicted in Hypothesis 3, exposure to violent metaphors reinforces electoral predispositions among trait-aggressive citizens, but disrupts those predispositions among low-aggression citizens who have doubts about electoral responsiveness.

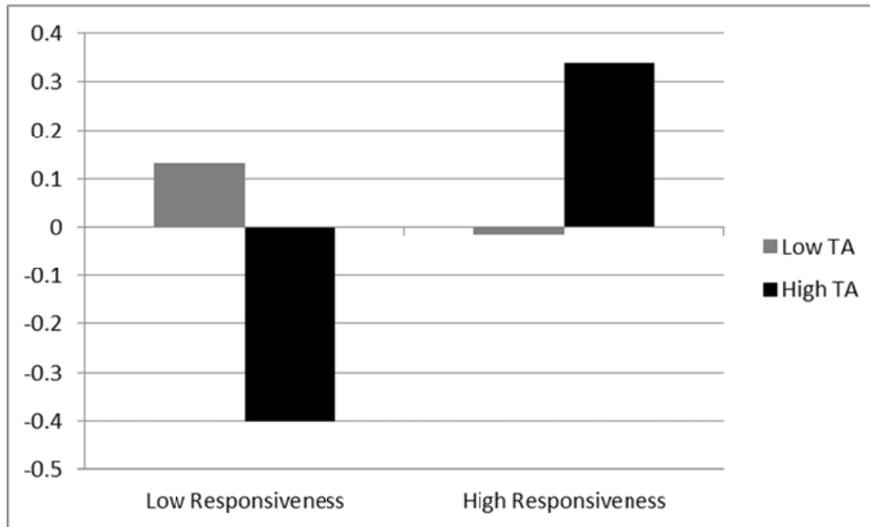
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<sup>37</sup> When OLS models are estimated in place of ordered probit, the results show demobilization effects among low-aggression citizens with confidence in governmental responsiveness to elections. Although these results are even more consistent with Hypothesis 3, the ordered probit estimates avoid OLS assumptions of linearity in the dependent variable and are therefore preferable specifications.

Figure 7.2: Marginal Treatment Effects on Voting Intentions  
TESS



Ford-Marsh



Note: Trait aggression and responsiveness attitudes at 5<sup>th</sup> and 95<sup>th</sup> percentiles.

### Evidence from the ANES: 1968-2008

The content analysis presented in the Chapter 4 enables a test of the real-world effects violent metaphors have on voter behavior by merging these scores with decades of individual-level survey data from the American National Election Studies. Although the estimates in this analysis are necessarily rough, they provide important supplemental evidence that sheds light on several important questions. In particular, these data include measures of self-reported voter turnout in every election cycle, which alleviates any

lingering concerns about the validity of vote intentions in the TESS and Ford-Marsh studies. Several waves also include validated votes, permitting further tests.

The shift from the survey-experiment environment to real-world campaigns has implications for how exposure to violent metaphors is operationalized and how its effects are measured. Whereas the experiments included a brief exposure to one or two messages and measured voting intentions immediately after, the campaign environment captures cumulative exposures to violent metaphors and their effects on behavior that occurs after a long season of political messages. To identify communication effects in this environment is to suggest a campaign in which violent metaphors are reinforced through repetition, since communication effects are thought to be relatively short-lived (Chong and Druckman 2010; Gerber et al. 2011).

Of course, the move to observational data from the world of experiments changes other patterns of exposure, too. In the experiments, all subjects were exposed to political messages with no opportunity to abstain. That is the beauty of experiments, but it poses a liability for predicting the real-world implications of communication that is not universally seen (Kinder 2007; Hovland 1957). In campaigns, some citizens tune in and others tune out. If exposure to violent campaign metaphors influences voter turnout, we should look for its effects among citizens most likely to be exposed to it. To model this dynamic, I focus particular attention on citizens who are most likely to be exposed to campaign messages: the politically-knowledgeable (Price and Zaller 1993). Although the precise relationship between knowledge and communication exposure depends on the “volume” of the message (Zaller 1992)—the extent to which the message saturates media—citizens with high political knowledge are always more likely to be exposed. By showing results for this subset next to those for everyone, we get a clearer view of how self-selected exposure shifts the effects of violent metaphors in real campaigns.

The first step in this analysis is to identify the relevant measure of violent campaign metaphors from the content analysis. The Ford-Marsh study demonstrates that the effect of violent metaphors is amplified as the volume of violent metaphors by both candidates increases. Accordingly, I use the total count of violent metaphors per 1000 words in convention speeches by both candidates.

To measure beliefs about electoral responsiveness, I use the ANES item that nearly matches those from the two national experiments. Since 1964, respondents have been asked, “How much do you feel that having elections makes the government pay attention to what the people think, a good deal, some or not much?” I code these three response options between 0 and 1, with ‘don’t know’ responses (1.6%) coded in the middle. Results are substantively identical when non-response is excluded. This item is similar to the 5-point agree/disagree items in the experiments, but is less discriminating because of the 3-point response scale. Distributions of this item in the ANES have remained steady over time, with nearly 50% responding “a good deal.” Comparatively, the measures in Ford-Marsh and TESS show less than 10% in the top category, and it takes a combination of the top three categories of this item in Ford-Marsh and TESS to accumulate half the sample. I address the implications of this difference below.

To sort respondents by likelihood of campaign exposure, I use interviewer ratings of political knowledge in respondents, which has been gauged since 1968.<sup>38</sup> Interviewers rated respondents on a five-point scale, ranging from “Very low” to “Very high.” To preserve statistical power with noisy measures, I divide the sample into high-knowledge—those rated above “average” in the top two categories (40%)—and low-knowledge for the rest. Availability of survey items focuses analysis on presidential elections from 1968 to 2008. Trait aggression is last component needing to be measured, and it presents a serious roadblock—it has never been included in the ANES.

### **Imputing Trait Aggression**

To circumvent this problem, I employ an imputation strategy to generate predicted values of trait aggression using demographic and socioeconomic attributes. First, I combined the nationally-representative samples from the two national experiments to maximize sample size. Then I estimated an OLS model of trait aggression that includes age, sex, age\*sex interaction, education, region, race/ethnicity, and region as independent variables, each chosen for its theoretical and empirical relationships with trait aggression. The coefficients from these predictors were used to generate the

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<sup>38</sup> Direct measures of political knowledge vary over time, limiting longitudinal comparisons. Interviewer ratings are well-validated proxies (Delli Carpini and Keeter 1996; Zaller 1992).

estimated trait aggression scores in the pooled ANES data using identically coded variables. The correlation between the trait aggression measure and the imputed measure in the combined data from the Ford-Marsh and TESS studies is moderate ( $r=.41$ ). This is an admittedly noisy approach, but imputation is the only way forward. Future versions of this work may try an alternate imputation or instrumenting approach (e.g. Franklin 1989).

Of course, this strategy assumes that these correlates of trait aggression have been relatively constant in their influence over the past 40 years, but this is a reasonable assumption given demographic patterns known to be stable across much of history (e.g. age, sex). It also virtually ensures that the imputed measure of trait aggression will be related to vote turnout, given the close relationship between voting and the individual characteristics used for imputation. However, the relevant test here is how this variable responds conditionally to the rhetorical context.

## **Results**

I estimate a probit model of self-reported vote participation as predicted by the violent metaphor count, electoral responsiveness, the imputed measure of trait aggression, and all two- and three-way interactions between them. The specification is equivalent to the Table 7.3 models from the experimental studies. Survey weights are applied to adjust for oversamples in some years, and I cluster standard errors by year. To focus on citizens most likely to be exposed to violent metaphors, I restrict estimates to high-knowledge respondents. Results are presented in Table 7.4.

At first blush, the observational estimates among high-exposure respondents look nearly identical to the experimental results. Each of the coefficients moves in the same direction with large, statistically-significant magnitudes. However, a closer look at the marginal “treatment” effects shows the replication is only partial (Figure 7.3). These values, which plot a change from the lowest level of violent metaphors (.97) to the highest (4.41), show replication of the experimental results among people who doubt government’s responsiveness to elections. For them, campaigns with more violent metaphors significantly demobilize high-aggression citizens and mobilize those who are low in trait aggression. However, among people who believe government is responsive, the effects are uniformly null.

Table 7.4: Violent Metaphor Effects on Real-World Electoral Participation

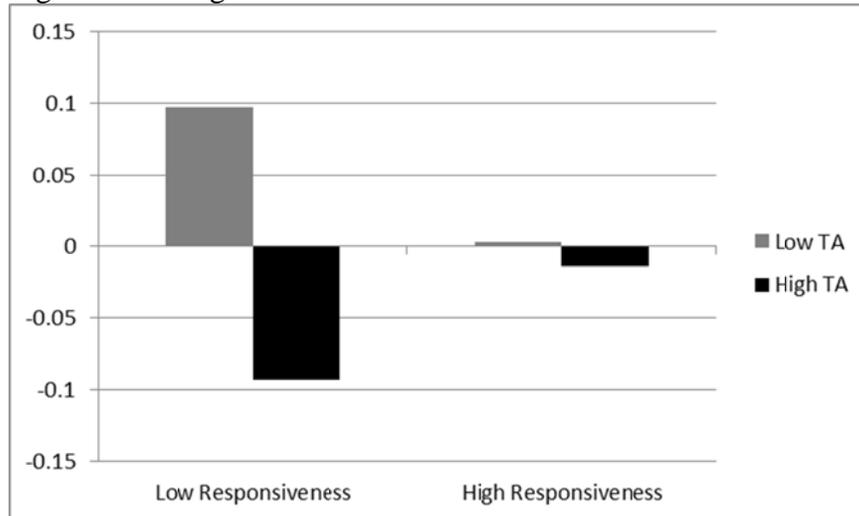
	Most Knowledgeable			All		
	Reported Vote	Validated Vote	Non- Voting Index	Reported Vote	Validated Vote	Non- Voting Index
Violent Metaphors	.45* (.18)	.87* (.09)	.31* (.12)	.29* (.15)	.13^ (.07)	.23* (.11)
Trait Aggression	-1.50 (2.08)	3.23* (1.27)	1.83 (1.36)	-2.92^ (1.53)	-3.69* (1.87)	.04 (1.19)
Electoral Responsiveness	1.39* (.41)	2.44* (.67)	.50^ (.29)	.99* (.32)	.34 (.35)	.38 (.29)
Trait Aggression* Responsiveness	-2.86^ (1.69)	-7.70* (2.45)	-1.28 (1.35)	-1.38 (.98)	-.31 (1.57)	.11 (.97)
Violent Metaphors* Trait Aggression	-1.32* (.65)	-2.76* (.36)	-1.06* (.53)	-.84^ (.48)	-.36 (.76)	-.57 (.40)
Violent Metaphors* Responsiveness	-.42* (.13)	-1.04* (.25)	-.16 (.10)	-.15 (.11)	-.14 (.15)	-.03 (.09)
Violent Metaphors* Trait Aggression* Responsiveness	1.21* (.54)	3.35* (.79)	.73 (.50)	.45 (.33)	.38 (.64)	.13 (.31)
Constant	1.17* (.57)	-.32 (.36)	-.49 (.30)	1.06* (.46)	1.37 (.18)	-.62 (.33)
$R^2$ /Pseudo $R^2$	.06	.02	.01	.07	.04	.02
$N$	7,616	2,454	7,588	20,074	7,510	19,956

Note: Probit models. Sample is restricted to respondents with above-average interviewer knowledge ratings. Models include sample weights to correct for oversamples, and standard errors are clustered by year. \*  $p < .05$  ^  $p < .1$ , two-sided.

Although this initially appears to be a failure to replicate among this subgroup, further analysis of the Ford-Marsh and TESS studies shows that when the 5-point electoral responsiveness item is collapsed into a 3-point scale mimicking the distributions found with the 3-point item in the ANES data (i.e. 50% in the top category), the experimental results show a similar null result among citizens who believe government is responsive to elections. Experimental results remain the same as before among citizens who doubt government responsiveness. In other words, differences between the experimental analyses and the observational analysis appear to be attributable to the less-discriminating ANES instrumentation. If that item could sensitively parse differences among the full-half of the sample choosing the top response like the modified item in

Ford-Marsh and TESS, we would expect to find the same effects of violent metaphors in the observational among citizens with strong confidence in electoral responsiveness that we see in both experiments.

Figure 7.3: Marginal Treatment Effects on Real-World Voter Turnout



Note: Trait aggression and responsiveness attitudes at 5<sup>th</sup> and 95<sup>th</sup> percentiles.

The results for the validated vote analysis in Table 7.4 are limited to only four elections. Nonetheless, they show the same substantively strong and statistically-significant effects of violent metaphors among respondents most likely to be exposed to them. Results for non-voting participation—an index of six campaign behaviors<sup>39</sup>—move in the same direction, but are weaker than vote intentions and validated turnout, just like the experiments.

What of the observational results for the full sample? Given a lack of likely exposure to campaign messages, we should expect diminished effects. Table 7.4 shows the estimates for self-reported turnout, validated turnout, and non-voting participation. In each case, the coefficients move in the same direction as those for voting behavior, but are uniformly smaller and mostly non-significant. Moreover, when the most knowledgeable are excluded (not shown), metaphor effects drop to nothing. These null findings stand in stark contrast to the strong results identified among respondents most

<sup>39</sup> These items are nearly identical to those in Study 2: persuading others how to vote, campaign contributions, volunteering, attend a rally, and showing off signs or buttons (alpha = .62).

likely to see campaign messages: we see consistent signs of violent metaphor effects among citizens most likely to be exposed to them, and there is no sign of effects among people who are unlikely to see them. But before concluding, a few additional alternative explanations for the observational results need to be addressed with the experimental data.

First, the experimental results persist in substantively identical form when the actual measure of trait aggression is replaced by an imputed version in the national experiments, though the results are statistically weaker due to the introduction of substantial measurement error. These additional findings help to validate the use of imputed trait aggression in the observational data, and they provide further evidence that the impressive observational results may understate the true magnitude of violent metaphor effects on voter turnout.

Second, the TESS and Ford-Marsh studies provide corroborating evidence that the observational differences across levels of political knowledge are attributable to levels of campaign exposure, and not to some other dynamic involving knowledge (e.g. message acceptance; Zaller 1992). Subsequent analysis in both experiments (not shown here) reveals consistent treatment effects across levels of political knowledge. If anything, results are slightly stronger among subjects with *less* knowledge, which is consistent with the muted influence of campaigns among sophisticated citizens, given exposure (Zaller 1992). This evidence suggests that the focus on high-knowledge citizens as a proxy for campaign exposure does not skew the data toward my hypotheses, and may actually make a more conservative test. These results rule out the alternative explanation that observational differences by knowledge reflect the substantive impact of knowledge itself (or some correlate), rather than relative levels of campaign exposure.

Taken on its own, the observational analysis would be unpersuasive: it fails to rule out alternative factors that could drive both the use of violent political metaphors and voter turnout among these particular subpopulations. But taken together with the experimental evidence, these data provide surprisingly strong real-world evidence of voting turnout effects from violent campaign metaphors. The patterns observed in two experimental settings are replicated in in presidential election campaigns across five decades, and the very persistence of these patterns despite the noisiness of the observational measures attests to the robust effects of violent metaphors. Moreover, the

replication materializes exactly where we would expect to see it—among citizens who are most likely to be exposed to campaign rhetoric.

### Aggressive Roots of Political Participation

Beyond the effects of violent campaign metaphors, the analysis above provides us with an opportunity to assess the impact of trait aggression in the absence of violent metaphors. The widespread use of violent metaphors in politics encourages us to consider whether some forms of political behavior have aggressive roots, and the moderating role of trait aggression on violent metaphor effects suggests that aggression dynamics play an important role in elections. Other political behavior research supports this new direction by providing suggestive evidence of a link between aggression and political participation, though none of the studies explicitly connect their findings to aggression dynamics.

First, studies on political anger demonstrate anger's power to motivate participation in politics, particularly when citizens have the skills needed for successful action (Valentino et al. 2011). Anger comprises a key emotional accelerant promoting and facilitating aggressive behavior, along with cognitive and physiological factors (see Anderson and Bushman 2002a). Evidence supporting the integration of political anger into a broader aggression framework is provided in Chapter 3, where trait-aggressive citizens report significantly more frequent episodes of political anger.

In particular, Valentino and colleagues (2011) find that political anger significantly predicts several forms of political participation beyond voting. However, anger primarily mobilizes participation among citizens who possess key political skills, resources, and efficacy beliefs that enable participation. These patterns may emerge because anger reduces perceived costs of action as described above, and they fit well with the notion of aggressive participation implied by the use of violent campaign metaphors.

The connection between aggression and political action is also supported by recent research on the effects of specific aggression-related genotypes on political action, though these effects run in the opposite direction of those found for political anger. People with the “low” version of the MAOA gene tend to behave more aggressively toward others in everyday life, especially when provoked (McDermott et al. 2009). Fowler and Dawes (2008) find that people with this genotype are 5% *less* likely to vote,

even after controlling for important covariates like income, education, age, and partisan strength. In MAOA studies, the proposed causal mechanism is hypersensitivity to aversive and threatening stimuli caused by differences in the ability to break down serotonin in the brain. Fowler and Dawes explain the participation difference as an anticipatory effect in which hypersensitive citizens abstain after considering how they will feel if their favored candidate loses. To avoid these negative feelings, they choose instead to disengage from politics. Although Fowler and Dawes note the relationship between low MAOA and anti-social behavior in general, they do not discuss aggression in particular.<sup>40</sup> Here, we see that people predisposed to interpersonal aggression seem to shy away from political participation, not be drawn to it. Although we might not normally think of aggressive people as being particularly sensitive to disappointment, especially over something like an election, research on aggression and self-esteem shows that narcissists—not those with low self-esteem—are most likely to behave aggressively: they have inflated but precarious views of themselves, which transform even the smallest perceived slight against their inflated self-image into a serious provocation warranting retaliation (Bushman and Baumeister 1998).

A third way that aggression may be implicated in political participation is through aggression's place within a broader action-orientation. Recent research in psychology shows that a general predisposition for action of any kind—including impulsiveness, pace of life, and physical activity—increases voting participation, as does experimental exposure to action words representing situational primes (Noguchi et al. 2010). To the extent that participation and aggression are both action-oriented, both should be predicted by this broader action tendency, resulting in a positive relationship between the two. Together, these diverse strands of research suggest a plausible link between aggression and political action, but each identifies distinct mechanisms and directions for effects.

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<sup>40</sup> The conflicting participation effects of political anger and the MAOA-Low genotype may be due in part to domain specificity. People who get angry about politics are likely to have higher levels of political engagement to begin with. Thus, the participation effect can be reinterpreted as the influence of anger among those who are already engaged. The interactive effects of political anger reinforce this point further. In contrast, aggression-related genes imply no inherent level of political engagement. Although Fowler and Dawes (2008) interact genotype with church attendance, they might have found more conditional effects with interactions by level of political sophistication. Also, Fowler and Dawes test voting, whereas Valentino and colleagues test non-voting participation.

## Hypotheses

The effects of trait aggression in the absence of violent cues can be inferred from previous aggression-related participation research. Although political anger is a strong predictor of participation (Valentino et al. 2011) and trait aggression predicts political anger (see Chapter 3), trait aggression is conceptually more akin to the broader aggression-related individual difference found in the MAOA genotype research (Fowler and Dawes 2008). This work leads us to expect a negative relationship between trait aggression and political participation, at least for voting, which was the focus of the Fowler and Dawes study.

*H4: Citizens with higher levels of trait aggression participate less in campaigns.*

However, if Fowler and Dawes are correct in attributing the effect to greater concerns about the disappointment of losing the election, we should see the strongest negative relationship for trait aggression when citizens believe elections matter (e.g. electoral responsiveness), because these citizens will see higher stakes in the contest and the greater risks for disappointment. In contrast, those who don't think elections make much of a difference are unlikely to fear disappointment based on the outcome.

*H5: Trait aggression decreases campaign participation, but has its strongest effects on citizens who believe that elections hold public officials accountable.*

## Results

I begin by considering the basic observational relationship between trait aggression and voting intentions in the absence of violent metaphors. Consistent with Fowler and Dawes (2008), trait aggression predicts reduced intentions to vote. These results are substantively large and statistically significant in the TESS study ( $b = -.29$ ,  $p = .002$ ,  $N = 252$ ). The results in the Ford-Marsh study are statistically weaker due partly to the smaller number of subjects in the non-violent treatment condition, but the relationship is also substantively smaller ( $b = -.11$ ,  $p = .457$ ,  $N = 98$ ). Bivariate results for

non-voting participation are null in both studies.<sup>41</sup> Thus, Hypothesis 1—that trait aggression is negatively related to voting participation—appears to receive some weak support for voting behavior only, and more evidence is need for a definitive conclusion.

To test Hypothesis 5—that trait aggression effects are moderated by beliefs about electoral responsiveness—I estimate a series of OLS regression models for individual participation items in both studies and the additive participation indices, restricting the analysis to subjects viewing non-violent ad treatments. These models include the trait aggression index, electoral responsiveness, the two-way interaction between them, and controls for race, sex, and age. Scholars studying the political effects of personality traits exclude controls that are not biologically-fixed, arguing that adding other “downstream” factors like attitudes and experiences risks stripping away covariance that rightly belongs to personality traits, given personality’s highly heritable roots (e.g. Mondak 2010). The results are substantively similar with a more comprehensive set of controls. All variables are coded 0 to 1, including the participation indices. Table 7.5 presents the results.

The results for trait aggression and electoral responsiveness in Table 7.5 are strikingly similar across nearly all of the items in both studies, with the exception of persuading others. Since interactive effects can be difficult to interpret, Figure 7.4 presents the marginal effects of trait aggression on the vote intention models, showing values at the 5<sup>th</sup> and 95<sup>th</sup> percentiles of trait aggression and electoral responsiveness. Voting results are highlighted here because of the unique importance of voting among democratic behaviors, but also because the results are directionally similar to those for other items, though substantively stronger.

As predicted in Hypothesis 5, trait-aggressive individuals are significantly less likely to report intentions to vote if they believe in government’s responsiveness to elections in the TESS study ( $p < .002$ ), and the results are substantively identical in the Ford-Marsh study.<sup>42</sup> In fact, the negative relationship attributable to trait aggression far outweighs the mobilizing effects of responsiveness beliefs. This demobilizing effect for trait-aggressive citizens is large, reducing vote intentions across 1/3 of the participation

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<sup>41</sup> The Michigan study is less informative for observational analysis because it comes from an unrepresentative sample, but trait aggression is null for predicting vote choice and significantly *positive* for other participation items.

<sup>42</sup> Due to small sample size in the Ford-Marsh study ( $N = 98$ ), the negative effects of trait aggression do not reach statistical significance ( $p = .13$ ).

scale. A similar though weaker effect is observed for non-voting forms of participation in the TESS study ( $p = .11$ ) and smaller still in the Ford-Marsh study. Although the Ford-Marsh study plot in Figure 7.5 seems to suggest that trait aggression effects reverse among citizens with doubts about elections, it does not approach statistical significance.

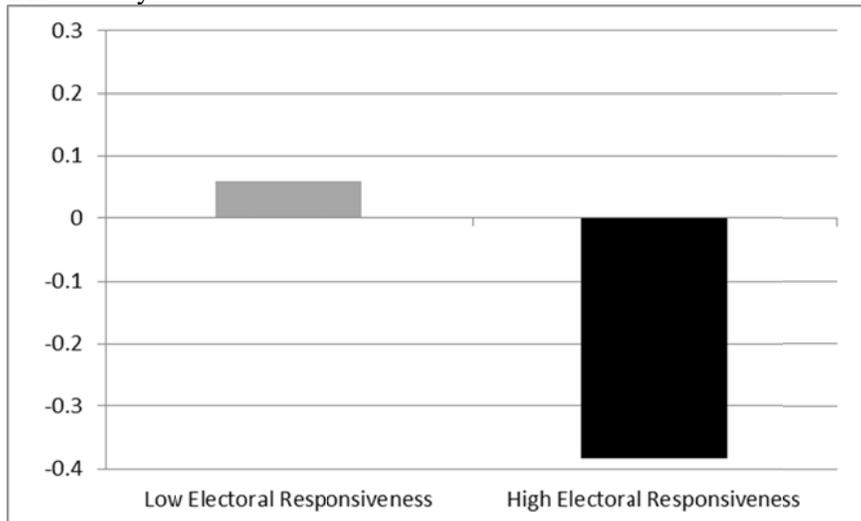
In sum, we see some support for Hypothesis 4—that trait-aggressive citizens have reduced intentions for voting participation, though not for other forms of political action—and stronger support for Hypothesis 5—that trait aggression effects are conditioned by electoral responsiveness, with large demobilizing effects among those with confidence in government’s responsiveness to elections.

Table 7.5: Observational Analysis—Trait Aggression and Electoral Participation

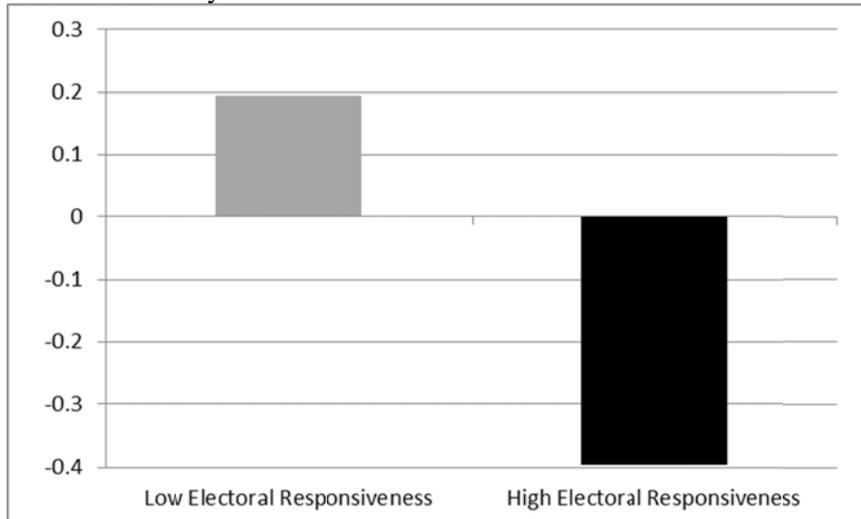
	TESS Study		Ford-Marsh Study	
	Vote	Non-Voting Item	Vote	Non-Voting Index
Trait Aggression	.58 (.69)	.13 (.14)	.97 (.98)	.27 (.18)
Electoral Responsiveness	1.94* (.09)	.38* (.09)	1.48^ (.82)	.20 (.14)
TA* ER	-3.95* (1.52)	-.45 (.30)	-3.59^ (2.14)	-.42 (.38)
Age	1.73* (.40)	.14^ (.08)	.96^ (.58)	.18^ (.10)
White	.07 (.20)	-.05 (.04)	.07 (.28)	.03 (.05)
Female	.18 (.16)	-.01 (.03)	-.28 (.24)	.00 (.04)
Cut 1/Constant	-.78 (.33)	.07 (.06)	-.80 (.49)	.09 (.09)
Cut 2	-.05 (.31)		-.31 (.48)	
Cut 3	.53 (.31)		-.01 (.48)	
Cut 4	1.04 (.31)		.52 (.48)	
Pseudo $R^2$	.10	.13	.04	.07
$N$	252	255	98	100

Note: Ordered probit and OLS models. \*  $p < .05$  ^  $p < .1$ , two-sided.

Figure 7.4: Marginal Effects of Trait Aggression on Voting Intentions  
TESS Study



Ford-Marsh Study



Note: Marginal effects of trait aggression at 5<sup>th</sup> and 95<sup>th</sup> percentiles of responsiveness.

## Discussion and Conclusion

This chapter investigated the effects of exposure to violent campaign metaphors on voting participation, with special attention to the aggressive personality traits that give resonance to the language and the electoral orientations that provide direction to the participatory effects. I tested the effects of violent metaphors on electoral participation in two nationally-representative survey experiments. In both studies, exposure to violent metaphors significantly reinforced electoral orientations among citizens high in aggressive personality traits, either mobilizing or demobilizing them based on their

beliefs about government's responsiveness to elections. In contrast, violent metaphors led low-aggression citizens with doubts about elections to rely less on these predispositions, resulting in mirror-image mobilizing and demobilizing effects. Low aggression citizens who trust government responsiveness were unaffected—a puzzle for future research. Finally, I replicated these findings in five decades of the American National Election Studies (ANES) after merging them with data from the content analysis of violent campaign metaphors. In all three tests, the electoral impact of violent metaphors depends jointly on their resonance with audience personality traits and political orientations. Taken together, these studies emphasize how individual differences between citizens condition the mobilizing power of campaign messages.

Importantly, the relationships identified in the observational analysis align most closely with the experimental results when focusing on the subset of citizens most likely to encounter political messages—the most knowledgeable (Price and Zaller 1993). The mutually-supporting evidence from both methods goes further in revealing the real-world implications of violent metaphors by getting outside the artificial world of experiments in which all subjects are exposed to political messages through interventions (Kinder 2007; Hovland 1959). The observational evidence also speaks to the durability of these political communication effects, suggesting campaign environments that reinforce metaphor effects through repetition in ways that extend their influence beyond any single exposure (Chong and Druckman 2010; Gerber et al. 2011).

I also assessed the observational impact of trait aggression on electoral action. In the absence of violent metaphors, higher levels of trait aggression corresponded with significantly depressed participation intentions, especially for voting. However, trait aggression influence on participation is conditioned by attitudes toward government's responsiveness to elections, with large demobilizing effects among citizens who have both high levels of trait aggression and strong confidence in government responsiveness.

In contrast to Chapter 6, the present study shows how aggression and violent metaphors can produce democratically desirable behavior in the form of electoral participation. While it may not be surprising that aggression dynamics can have undesirable outcomes, it may surprise some that aggression can also produce laudable ends. Ultimately, violent political metaphors—and the broader aggression processes at

work in political behavior—may be a double-edged sword capable of encouraging outcomes that are celebrated along with those that are feared. But no matter which normative conclusions we draw from these relationships, this work provides a new way of understanding political behavior by linking timeless human predispositions toward aggression with the most basic and fundamental processes in democratic societies.

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This chapter identified how campaign messages and audience personality traits interact to produce electoral behavior, with a focus on participation. In the next chapter, I take up the other side of electoral behavior, examining the conditional effects of violent metaphors on candidate evaluations.

## Chapter Appendix

### ANES Analysis

Table 7.6: Violent Metaphor Effects on Real-World Turnout—Basic Model

	ANES (Most Knowledgeable)	
	Reported Vote	Validated Vote
Violent Metaphors	.17 <sup>^</sup> (.09)	.03 (.28)
Trait Aggression	-3.32* (1.05)	-3.37* (1.52)
Violent Metaphors* Trait Aggression	-.54 <sup>^</sup> (.30)	.14 (.77)
Constant	2.11* (.31)	1.60* (.57)
Pseudo $R^2$	.05	.02
$N$	7,677	2,577

*Note:* Probit models. Sample is restricted to respondents with above-average interviewer knowledge ratings. Model includes sample weights to correct for oversamples, and standard errors are clustered by year. \*  $p < .05$  <sup>^</sup>  $p < .1$ , two-sided.

## Chapter 8

### Violent Campaign Metaphors and Vote Choice

*We shall fight on the beaches, we shall fight on the landing grounds, we shall fight in the fields and in the streets, we shall fight in the hills; we shall never surrender...*

Winston Churchill (U.K. prime minister, 1940)

*We're fighting for people. ... We're fighting for everyone who just wants to do the right thing, to do the best for their families and to make a difference to our country. That's why we're fighting for change. That's why we're fighting to win.*

David Cameron (campaigning to become U.K. prime minister, 2010)

The previous chapter shows for first time how campaigns influence the electoral participation of audiences by deploying violent metaphors, both in controlled experiments and real-world elections. In this chapter, I take up another case of violent metaphors serving strategic campaign goals as candidates seek to win over voters. Here, I predict similar psychological mechanisms and apply similar models that continue to reveal the essential interactive nature of fundamental democratic behavioral effects, as generated by the interplay of campaign messages, audience personality traits, and political orientations. Remarkably, both national experiments and the ANES analysis yield effects that are nearly identical in form to those seen for electoral participation, providing further evidence supporting the proposed mechanisms.

I begin by showing the empirical correspondence between violent campaign metaphors and aggregate presidential voting outcomes spanning the modern presidential era from 1932 through 2008. Next, I analyze two nationally representative survey experiments that isolate the causal effects of violent metaphors on candidate evaluation and vote choice, both in isolation and in competitive contexts. In the third section, I

present complementary evidence from the American National Election Studies (ANES) showing sizable shifts in individual voting behavior related to violent campaign rhetoric across 11 presidential election cycles. In all three tests, the electoral impact of violent metaphors depends jointly on audience personality traits and political orientations. Taken together, these studies provide further evidence of how individual differences between citizens condition the electoral impact of campaign messages, and they identify yet another domain in which aggression plays a pivotal role.

### Violent Metaphors and Vote Choice

For a first cut at the effects of violent campaign metaphors on candidate preferences among voters, I return to the Chapter 4 content analysis, combined with data on the two-party popular vote share for presidential candidates, Electoral College votes, and vote share relative to presidential approval ratings just before the party conventions.

Figure 8.1: Violent Campaign Metaphors and Presidential Vote Choice over Time

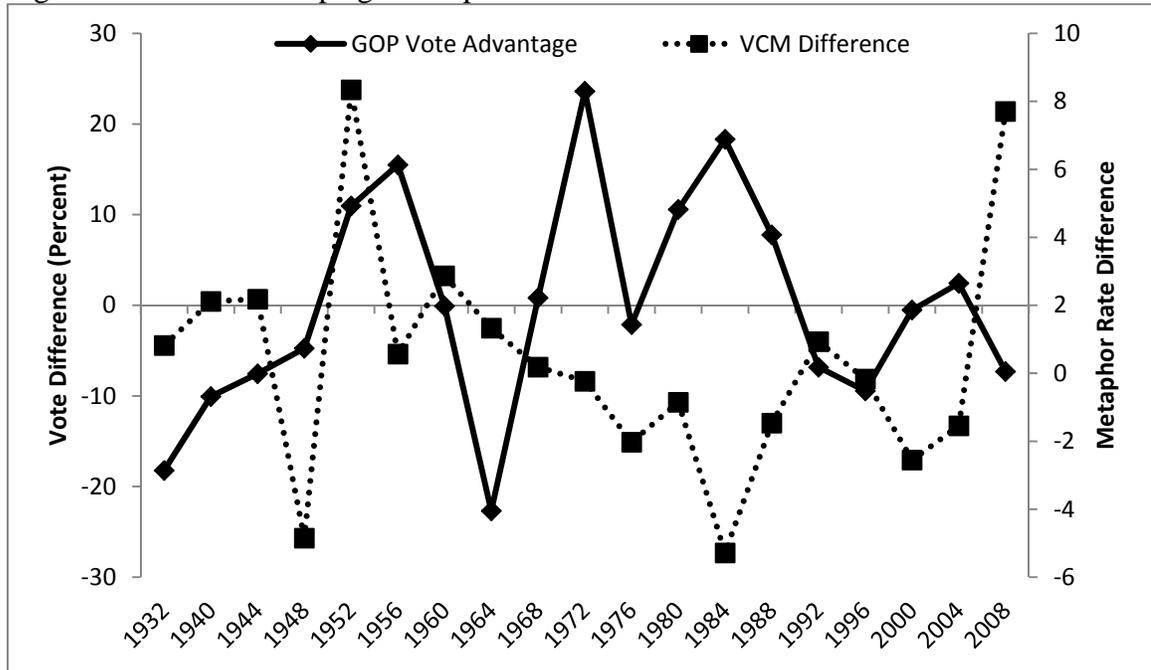


Figure 8.1 plots the relationship between the partisan difference in violent campaign metaphors and the difference in two-party vote share for each election. Positive values of vote difference indicate a Republican advantage, and positive values of violent

metaphor difference indicate heavier usage by Republican candidates. As described in Chapter 4, the correlation between these two measures is modestly negative ( $r = -.19$ ) suggesting that the candidate who uses more violent metaphors generally performs less well. The same relationship can be found between the difference in violent metaphors and the difference in Electoral College votes ( $r = -.21$ ). Additionally, the difference in use of violent metaphors yields virtually no improvement in vote share relative to the pre-convention presidential approval in the Gallup poll ( $r = .04$ ). This final result suggests that violent campaign metaphors do not change the trajectory of a candidacy in the eyes of voters, at least not in terms of net votes. Unlike the vote participation analysis, the net relationship between violent metaphors and votes appears to be negative or null.

### Campaign Communication and Electoral Choice

Citizens derive their presidential vote preferences from a mix of long-standing and short-term factors. Partisan attachments serve as the most potent force guiding vote choice, not just through direct benefits for the candidate carrying the party standard, but also through indirect influence via issue attitudes and perceptions of national conditions (Bartels 2002; Campbell et al. 1960; Green et al. 2002; Lodge and Hamill 1986; Zaller 1992). Short term forces like national economic conditions play a key role too (Fiorina 1981; Hibbs 1987; Kinder and Kiewiet 1981; Sears et al. 1980). But accounts that focus exclusively on macro-partisanship and national well-being miss the vital role campaigns play in determining each candidate's support.

The content of political messages shapes candidate evaluation and vote choice by activating latent preferences that bring likely supporters back into the fold (Ansolabehere and Iyengar 1995; Gelman and King 1993; Lazarsfeld et al. 1944), by providing new information (Ansolabehere and Iyengar 1995; Geer 2005), by emphasizing favorable issues in domains of personal or partisan expertise (Ansolabehere and Iyengar 1994; Iyengar and Kinder 1987; Petrocik 1996), by subtly priming social and political predispositions (Valentino et al 2002), and by striking emotional chords that reinforce or weaken political habits (Brader 2006; Marcus et al. 2000). Even when the details of campaign messages fade from memory, voters retain the affective reactions to those messages and candidates (Lodge and Steenbergen 1995).

## **Violent Metaphors, Candidate Evaluation, and Vote Choice**

As in previous chapters, I conceptualize violent political metaphors as mild violent cues, which produce similar cognitive, emotional, and physiological responses to other forms of violent media content (Anderson and Bushman 2001). Media violence effects frequently have varying effect depending on individual characteristics of the audience, particularly levels of aggressive personality traits (Bushman 1995). The shape of the interaction between traits and situational cues depends on the strength of the provocation in aggression research (Marshall and Brown 2006). Since mild cues tend to have the strongest effects among people with high levels of trait aggression, and since the violent metaphors employed here are mild, I expect aggressive reactivity to violent political rhetoric to be strongest among trait-aggressive citizens.

In the analyses that follow, trait aggression continues to play an important role as a moderator of metaphor effects but, unlike previous chapters, it is not employed a substantive predictor in its own right. In the experiments, candidates reveal little about themselves beyond campaign boilerplate, and the only substantial variation between them is the randomization of violent metaphors. On the other hand, the imputed construction of trait aggression in the ANES analysis makes it an unreliable predictor in real elections. Trait aggression may independently predict vote choice, but that is for another day.

### ***Hypotheses***

Among the simplest routes, violent political metaphors may appeal to citizens who find violent content entertaining. In this scenario, trait-aggressive citizens respond to the superficial style of the rhetoric, with some positive affect transferring onto the leader using it. However, the violent content probably cuts both ways: just as trait-aggressive people enjoy violent content *more* than non-violent content, low-aggression citizens may enjoy it *less* and find it off-putting (Bushman 1995, 1996). This kind of attraction and repulsion may also draw interest in, attention to, and more systematic processing of the content of a candidate's message (Ottati et al. 1999), which inevitably favor the candidate.

Citizens may also draw inferences about the leadership style and levels of commitment in leaders who use violent metaphors. Indeed, these are probably the effects that strategic political leaders are aiming for when they use violent language. Violent

metaphors can signal commitment to the cause by demonstrating an understanding of the elevated stakes and indicating a willingness to make personal sacrifices to achieve victory. Violent metaphors also suggest an aggressive leadership style in which a leader is willing to—or even enthusiastic about—mixing it up with the enemies standing in the way of progress. While aggressive leadership styles may be appealing to trait-aggressive citizens and encourage positive candidate evaluations among this group, citizens low in trait aggression probably prefer alternative leadership styles, reducing support for candidates emphasizing leadership styles that are perceived as aggressive.

Relatedly, citizens may draw inferences about the leader's personality outside of politics, inferring that violent metaphors indicate an aggressive persona. Since citizens often find relatable leaders more appealing—the candidate you'd most like to get a beer with—we might expect aggressive citizens to express greater support for a leader who shares their aggressive traits, while low-aggression citizens may balk at supporting a leader they probably wouldn't get along with. Each of these routes point to the same basic expectation of polarization in leader evaluations:

*H1: Violent metaphors increase candidate support in trait-aggressive citizens but have null or negative effects on support among low-aggression citizens.*

As with effects on electoral participation, evaluative responses to candidates using violent metaphors may be more nuanced than blanket enthusiasm among trait-aggressive citizens and nonchalance or negativity among the others. Once again, I bring politics back in by reincorporating political attitudes about the extent to which political leaders are responsiveness to the concerns of citizens. But whereas the last chapter focused narrowly on attitudes about electoral responsiveness, I focus here on the broader concept of external efficacy, which includes attitudes about the degree to which public officials care what ordinary citizens think (Niemi et al. 1991). This shift acknowledges that our attention has turned from participation in electoral institutions to evaluations of the leaders themselves. In this domain, I expect external efficacy to act as a benchmark for judging the credibility and merit of political leaders as a class, in place of views about the stakes of elections that guide electoral participation. Citizens who generally see leaders as

caring and responsive are predisposed to feel more positively about particular leaders, while those with doubts may consider individual candidates with a baseline of distrust or even hostility. Of course, these two interpretations of efficacy attitudes may not be entirely exclusive as they influence both forms of electoral behavior.

Among citizens with high external efficacy beliefs, I expect the predictions in Hypothesis 1 to hold—violent metaphors increase support among trait-aggressive citizens and depress support among low-aggression citizens. But among citizens with doubts about the sensitivity of leaders in government, the anger cued by violent metaphors (and by the implicit illegitimacy of their source) will push trait-aggressive citizens in the opposite direction, reinforcing their doubts and depressing evaluations of the leader further. For low-aggression citizens with doubts about leaders, I return to the anxiety-based expectations borne out in the participation analysis: violent metaphors may lead this group to direct greater attention to the electioneering message and reconsider their habitually negative evaluations, at least for this individual. This counter-intuitive effect is consistent with the persuasive power of anxiety, which disrupts habitual responses and encourages new appraisals of the situation (Brader 2006; Marcus et al. 2000). Altogether, I expect the mix of anger and enthusiasm felt among trait-aggressive citizens to reinforce their confidence in, or doubts about, political leaders, and the anxiety felt among low-aggression citizens would lead them to reconsider the confidence in or doubts about leaders. These expectations of contingent communication effects fit well with a sizable literature showing that the effects of political messages often depend upon attitudes and orientations tied to the source (Druckman 2001; Lupia and McCubbins 1998; Miller and Krosnick 1996; Zaller 1992). Once again, this perspective emphasizes the joint importance of personal *and* political attributes in shaping the direction of campaign effects on electoral behavior.

*H2: Violent metaphors reinforce general attitudes about leaders among trait-aggressive citizens but disrupt them for low-aggression citizens.*

## Research Designs

To assess the causal impact of violent metaphors on candidate evaluations and vote choice, I turn one last time to the TESS and Ford-Marsh experiments.<sup>43</sup> The TESS study provides a basic test of effects from a single message, with analysis across three variations on candidate approval. The Ford-Marsh study provides an especially useful opportunity for replication and extension by presenting two ads in a competitive context between two candidates, enabling tests for individual evaluations, relative favoritism of one candidate over the other, and a direct choice between the two. This environment is especially suited for assessing dynamic candidate evaluation and choice. Beyond enabling relative judgments between candidates, we can test whether the effects of violent metaphors differ depending on the opponents use or non-use of the same. Finally, the ANES analysis provides a third set of complementary tests, showing the impact of real-world violent campaign metaphors on evaluations of the candidates and, ultimately, on vote choice across 11 presidential election cycles. Once again, the consistency across measures, methods, and decades is remarkable.

In all three studies, I measure trait aggression with the full BPAQ-SF measure (or its imputation). In the TESS study, external efficacy is necessarily measured with the single ‘electoral attention’ item from the participation analysis (the only item available). In the Ford-Marsh study, external efficacy is measured with both available items: the electoral attention item and a standard ANES question about whether public officials care about people like you, producing a modestly reliable additive index ( $\alpha = .50$ ). The ANES analysis provides additional opportunities for efficacy. I stick with the same two items for consistency with the Ford-Marsh study—electoral responsiveness and public officials caring about you ( $\alpha = .40$ ). However, I also repeat the analyses with a four-item index that adds items about not having “any say about what government does” and an impression of the attention that “government pays to what the people think when it decides what to do.” These items complement the other two, but lose the explicit focus on elections and public officials. Each of these items has been asked since 1964, so their addition does not limit the analysis. The four form a reliable additive index ( $\alpha = .65$ ).

### **Measuring Candidate Evaluations & Choice**

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<sup>43</sup> The Michigan study did not include items measuring external efficacy, so it is excluded from analysis.

The TESS study included three questions evaluating the candidate represented in the political ad seen by the subjects. First, they were asked, “Based on this ad, do you have a favorable or unfavorable impression of the candidate?” Response options ranged from “strongly favorable” to “strongly unfavorable” on a 5-point scale. Next, subjects were asked two more specific evaluative questions: “Does the candidate seem like someone you can relate to personally?” and “If elected, do you think the candidate would act forcefully against the interests that are preventing progress on important problems?” Both had 5-point response scales ranging from “definitely yes” to “definitely not.” These questions could help determine whether the effects of violent metaphors on general candidate evaluations are consistent with more specific evaluations of how personally relatable the candidate seems and the extent to which citizens perceive the candidate will bring an aggressive style to governance. Additionally, since all three items in the TESS study seem to tap a broader evaluative construct, I also combine the items into a reliable additive index ( $\alpha = .79$ ), coded 0 to 1. Despite the general lack of specifics in the candidate’s ad, ratings were fairly broadly distributed across the range of evaluations (mean = .53, s.d. = .19).

The Ford-Marsh study included the same general favorability question as the TESS study following the ad text for each candidate. Importantly, the order of presentation for the two candidates was constant, so subjects always saw Candidate A’s ad first and evaluated A before moving on to Candidate B. These evaluations showed wide-ranging distributions like those in the TESS study. In addition to analyzing individual evaluations of the two candidates, I create a difference measure by subtracting the second candidate’s evaluation from the first, recoding the variable between 0 and 1. Across the mix of violent and non-violent conditions, subjects showed a slight preference for the first candidate (mean = .56, s.d. = .14). This overall favorability may be due to small differences in the bland content or to the order of presentation. For example, the second candidate alludes to years of service in a way that implies incumbency, a status which suffered higher than usual turnover in the 2010 midterms. Methodologically, subjects may have paid greater attention to the first ad than the second, or subjects may have reacted more negatively upon reading a *second* bland political text.

After reading the text for each ad and individually evaluating both candidates, subjects were asked to choose between the two candidates: “Which candidate do you prefer: Candidate A (the first ad) or Candidate B (the second ad)?” Responses were given on a 6-point scale ranging from “strongly prefer Candidate A” to “strongly prefer Candidate B.” The absence of a midpoint forced subjects to claim at least a slight preference for one of the candidates. Here again, subjects revealed a slight preference for the first candidate (mean = .61, s.d. = .26). The difference measure and the direct comparison provide additional opportunities to test the effects of violent metaphors after stripping away the influence of general tendencies toward positive (or negative) ratings.

## Results

The analysis begins with the basic tests from the one-message TESS study. I estimate a series of ordered probit models for the three individual evaluation items and an OLS model for the additive index. The models include independent variables representing the violent metaphor treatment, trait aggression, external efficacy, and all of the two- and three-way interactions for those measures. The leftmost columns of Table 8.1 present the results.

The analysis is strongly consistent with expectations across all four models. Exposure to violent metaphors significantly alters evaluations of the candidate behind the message, with large effects that are moderated by levels of trait aggression and external efficacy. Since three-way interactions are difficult to interpret in table form, I present the marginal treatment effects for the index in Figure 8.2, showing effects at the 5<sup>th</sup> and 95<sup>th</sup> percentiles of trait aggression and efficacy.

As the figure shows, exposure to violent metaphors significantly increased favorable attitudes toward the candidate among efficacious trait-aggression citizens but had the opposite effect among trait-aggressive citizens with low external efficacy. As expected, low-aggression citizens showed a mirror image of these effects, with efficacious citizens expressing less favorable impressions and low-efficacy citizens reporting significantly more positivity. Each of these effects is substantively large, shifting candidate favorability across 10 to 15% of the evaluation index, which approaches one standard deviation, even as the estimates are limited to the 5<sup>th</sup> and 95<sup>th</sup>

percentiles. Each of these treatment effects is significant at the  $p < .05$  level or better. Importantly, the results in Table 8.1 also confirm that external efficacy functions as a strong predictor of favorability in the absence of violent metaphors and trait aggression.

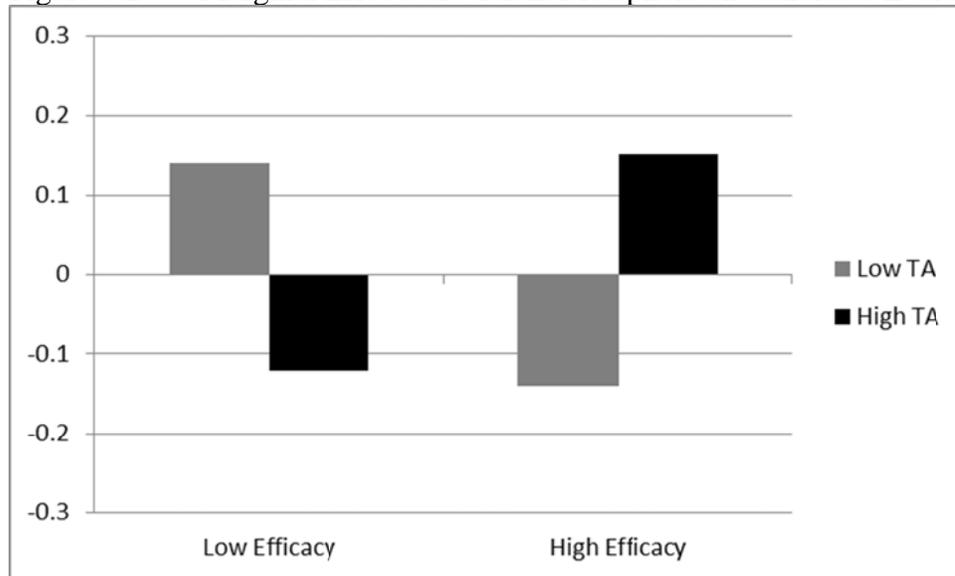
Table 8.1 Violent Metaphor Effects on Candidate Evaluations

	TESS Study				Ford-Marsh Study	
	Evaluation Index	Favorability	Relate	Forceful	Candidate A Rating	Candidate B Rating
Violent Ad	.14* (.05)	.62* (.31)	.80* (.31)	.73* (.31)	.06 (.37)	.82* (.36)
Trait Aggression	.13 (.10)	.44 (.61)	.63 (.61)	.95 (.61)	.73 (.57)	1.98* (.64)
External Efficacy	.25* (.06)	1.30* (.38)	1.20* (.38)	1.31* (.38)	.69 (.53)	2.40* (.57)
TA* Efficacy	-.32 (.21)	-2.22^ (1.25)	-1.40 (1.23)	-1.36 (1.25)	-1.29 (1.51)	-4.88* (1.55)
Violent Ad* TA	-.42* (.15)	-1.47 (.91)	-2.36* (.91)	-2.57* (.92)	-.97 (.96)	-1.90* (.90)
Violent Ad* Efficacy	-.28* (.09)	-1.47** (.57)	-1.55* (.57)	-1.30* (.57)	-.33 (.81)	-1.78* (.79)
Violent Ad* TA*Efficacy	.89* (.29)	4.30* (1.77)	4.87* (1.75)	4.40* (1.77)	2.08 (2.38)	4.56* (2.24)
Cut 1/Constant	.42* (.03)	-1.43 (.23)	-1.17 (.22)	-1.22 (.22)	-1.86 (.28)	-.76 (.27)
Cut 2		-.80 (.21)	-.17 (.21)	.14 (.21)	-1.23 (.25)	.14 (.26)
Cut 3		.65 (.21)	1.14 (.21)	1.50 (.21)	-.11 (.24)	1.21 (.26)
Cut 4		1.75 (.22)	2.19 (.22)	2.74 (.24)	1.09 (.25)	2.29 (.27)
$R^2$	.07	.02	.02	.03	.01	.02
$N$	505	505	505	505	404	404

Note: OLS and ordered probit models, standard errors in parentheses.

\*  $p < .05$  ^  $p < .1$ , two-sided.

Figure 8.2 Marginal Effects of Violent Metaphors on Candidate Evaluation—TESS



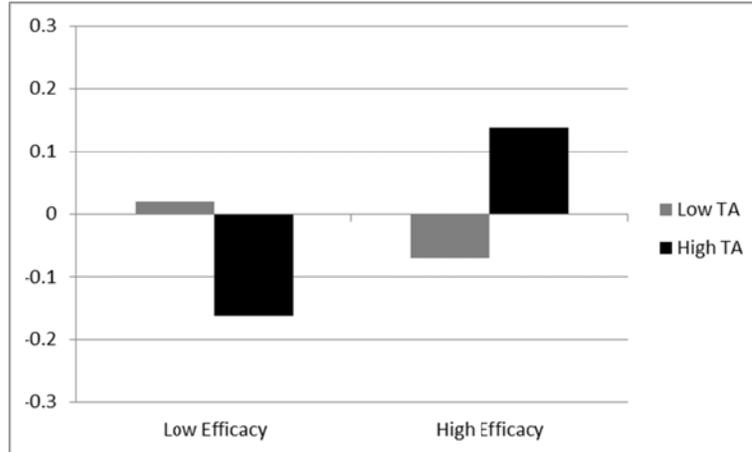
Note: From Table 8.1 index, trait aggression and external efficacy at 5<sup>th</sup> and 95<sup>th</sup> percentiles.

To what extent are these patterns replicated in the competitive Ford-Marsh design? To find out, I begin by examining each candidate’s favorability rating independently as a function of their use of violent metaphors, along with trait aggression and external efficacy levels among subjects, replicating the specifications from the TESS study. The results of these two ordered probit models are presented in the rightmost columns of Table 8.1. To aid interpretation, Figure 8.3 presents the marginal treatment effects for evaluations of Candidates A and B.

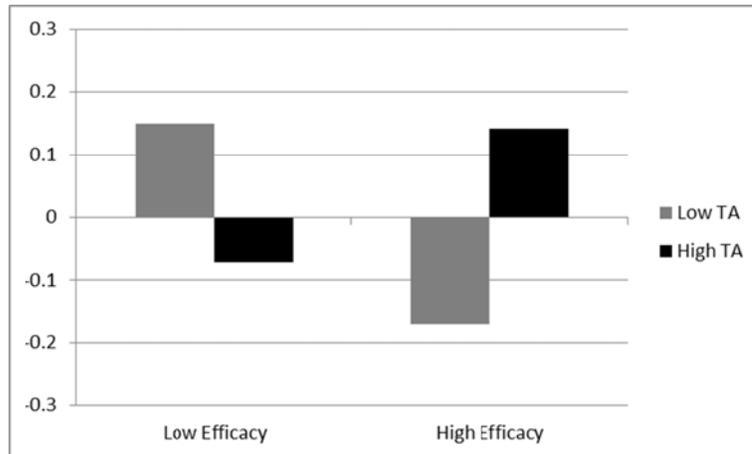
Dynamics driving favorability ratings for both candidates in the Ford-Marsh study are substantively consistent with the TESS study in size and direction, but with less statistical differentiation due to smaller sample size. I assess the effects for Candidate A first. For trait-aggressive subjects, exposure to violent metaphors increases favorability for the efficacious and decreases favorability for the cynical, each by about 15%. These effects just miss marginal significance. Results for low-aggression subjects are smaller but directionally consistent with predictions and TESS results.<sup>44</sup>

<sup>44</sup> TESS treatments are identical to those for Candidate A in the Ford-Marsh study.

Figure 8.3 Marginal Effects of Metaphors on Candidate Evaluations—Ford-Marsh Candidate A



Candidate B



Note: From Table 8.1, trait aggression and external efficacy at 5<sup>th</sup> and 95<sup>th</sup> percentiles.<sup>45</sup>

Effects for Candidate B are consistent with predictions and TESS and statistically stronger than those for Candidate A. Violent metaphors increase approval among efficacious trait-aggressive subjects and decrease it among with low trait aggression (both  $p < .10$ ). Effects are weaker among trait-aggressive subjects low in efficacy, but are positive and significant among those low in aggression and efficacy ( $p < .05$ ). For three of four groups, violent metaphor effects move subjects across 15% of the scale.

Since each candidate is being evaluated in a competitive context, we can turn next to the effects of violent metaphors on relative evaluations of the candidates. For the first test, I estimate an OLS model for the difference in evaluations, subtracting Candidate B's

<sup>45</sup> Marginal effects for ordered probit were estimated with Stata 11, "mfx, predict (p outcome (1))"

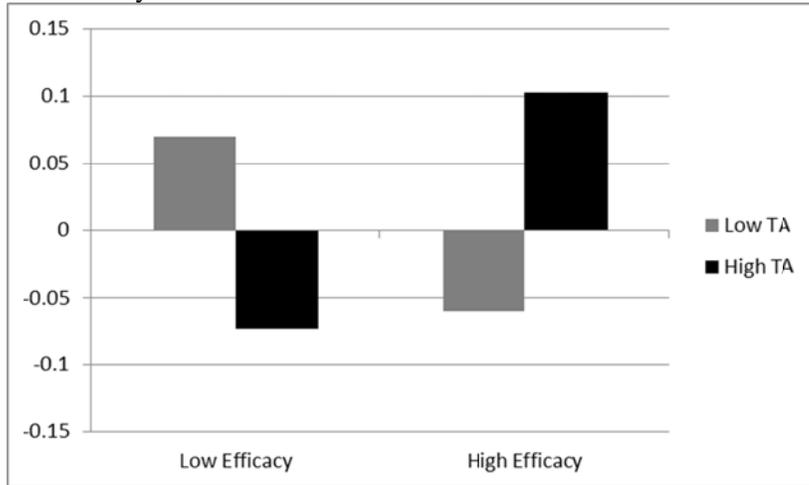
favorability from Candidate A's rating and rescaling it between 0 and 1. For the second test, I estimate an ordered probit model for an explicit choice between the two candidates, with higher values on the 6-point scale indicating favoritism for Candidate A for each dependent variable. The basic structure of independent variables is the same as before, except now the violent ad variable is replaced by a new 3-point indicator, with values of 1 when only Candidate A uses violent metaphors, -1 when only Candidate B uses them, and 0 when neither candidate does, or when both use the same language. The results from these models are shown in Table 8.2. Figure 8.4 presents the marginal treatment effects.

Table 8.2 Violent Metaphor Effects on Competitive Candidate Evaluations & Choice

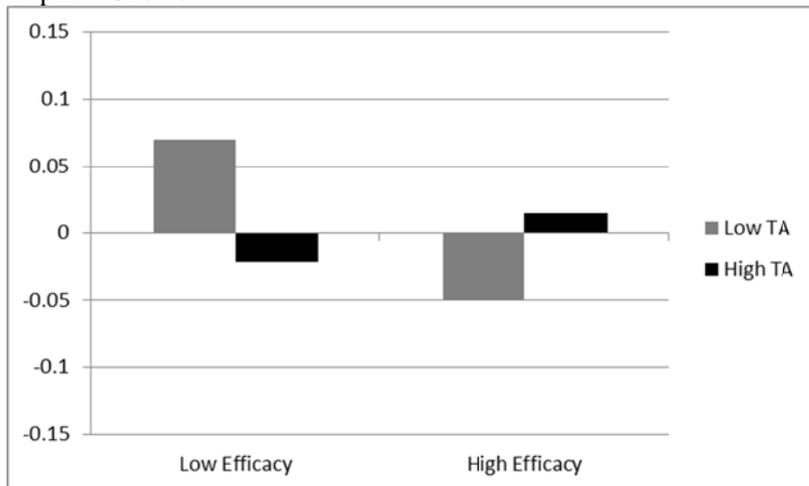
	Favorability Difference (A-B)	Explicit Candidate Choice (A not B)
Violent Ad Difference (A-B)	.07* (.03)	.32 (.25)
Trait Aggression	-.11^ (.06)	-.68 (.45)
External Efficacy	-.13* (.05)	-.69^ (.39)
TA* Efficacy	-.31* (.21)	2.43* (1.25)
Violent Ad* TA	-.22* (.07)	-.64 (.57)
Violent Ad* Efficacy	-.13^ (.09)	-.55 (.53)
Violent Ad* TA*Efficacy	.47* (.19)	1.08 (1.37)
Cut 1/Constant	.61* (.02)	-1.98 (.21)
Cut 2		-1.44 (.19)
Cut 3		-.71 (.19)
Cut 4		.08 (.18)
Cut 5		.86 (.19)
$R^2$	.03	.00
$N$	404	394

Note: OLS and ordered probit models, standard errors in parentheses. \*  $p < .05$  ^  $p < .1$ , two-sided.

Figure 8.4 Marginal Effects of Violent Metaphors on Competitive Candidate Choice Favorability Difference



Explicit Choice



Note: From Table 8.2, trait aggression and external efficacy at 5<sup>th</sup> and 95<sup>th</sup> percentiles.

For the favorability difference measure, the effects of differences in violent metaphors used by each candidate reveal the same pattern we have seen all along. Violent metaphors reinforce general attitudes about political leaders among trait-aggressive subjects, but disrupt them for low-aggression subjects. These effects are statistically-significant in both directions for low-efficacy subjects ( $p < .05$ ), and they are marginally significant among trait-aggressive subjects high in efficacy ( $p < .10$ ). Although the substantive size of the effects is somewhat smaller than before, the figures show a change of one unit in violent metaphors. A move from only Candidate A using them to only Candidate B using them would double the effect sizes.

The explicit choice measure produces similar results, though they are substantively and statistically weaker. In particular, the effects for low-efficacy subjects are almost identical in size, but just barely miss marginal statistical significance. Nonetheless, the effects of violent metaphors on candidate evaluations are strikingly similar in both studies, even when set in a competitive context.

## **Summary**

Candidate evaluations in both studies show substantial consistency with the predictions of Hypothesis 2. Exposure to violent metaphors substantially reinforced general attitudes about leaders among trait-aggressive citizens but disrupted them for low-aggression citizens. These dynamics appeared for individual candidate evaluations in both experiments, and they persisted when the analysis accounted for the competitive environment provided by the Ford-Marsh study. Although both studies showed substantively similar effect sizes, the results were statistically stronger in the TESS study due to added sample sizes and a reliable index.

## **Evidence from the ANES: 1968-2008**

In the previous chapter, I combined the results from Chapter 4's content analysis with several decades' worth of survey data from the American National Election Studies to test the real-world impact of violent metaphors on electoral participation. The same data provide additional opportunities to test the real-world effects of violent campaign metaphors on presidential vote choice at the individual level. The estimates in this analysis remain rough, but they provide important supplemental evidence on several important questions. In particular, this analysis focuses on self-reported presidential vote choice, replacing alternative evaluations of anonymous candidates found in the TESS and Ford-Marsh studies. Here, we observe the effects of violent metaphors on voting in the chaotic rough-and-tumble of real presidential campaigns.

Once again, the shift from experiments to real-world campaigns alters the conceptualization and measurement of violent campaign metaphors. To operationalize the use of violent campaign metaphors, I utilize the difference between the candidates' scores in each election cycle (i.e. violent metaphors per 1000 words) with the Democrat's score

subtracted from the Republican score (without standardization). Thus, positive values indicate a greater rate of violent metaphors from the Republican and negative values indicate the same for the Democratic candidate. This specification closely follows the measurement strategy in the competitive context of the Ford-Marsh study. The measure of real-world violent metaphors captures cumulative exposure over the campaign and their accumulated effects on behavior. To find effects in this environment suggests a campaign in which violent metaphors are reinforced through repetition, since communication effects are thought to be relatively short-lived (Chong and Druckman 2010; Gerber et al. 2011).

External efficacy is measured with the two-item index nearly identical to that in the Ford-Marsh study. Although this index has a bit more variation than the measure employed in Chapter 7, it still falls short of the sensitivity demonstrated by the TESS and Ford-Marsh measures, with 29% of the sample clustering at the top and 45% in the top quarter of the scale. The four-item ANES external index does somewhat better in this regard, with distributions of 8% and 27%, respectively, making it an informative alternative. Comparatively, the equivalent distributions are 8% and 27% in the TESS study, and 2% and 6% in the Ford-Marsh study. Given that the experiments appear to distinguish those at the highest levels of efficacy more clearly, we may again see muddled results at efficacy's high end. Trait aggression is imputed with procedures described in Chapter 7.

Ideally, we would begin the replication by looking at candidate evaluations measured by thermometer ratings, both for the individual candidates and as a difference measure between them. This approach would allow a more comprehensive comparison with the experimental analyses, and it might simplify the tests by minimizing the dynamic competitive component involved in relative evaluations. However, the ANES dataset mixes pre- and post-election ratings and provides only the pre- measures when both are available. Given that the measure of violent campaign metaphors here is meant to reflect their use throughout the campaign (not just the convention speech *per se*), pre-election measures are not helpful for this purpose.<sup>46</sup> Instead, I focus on the most important candidate evaluation of all, self-reported presidential vote choice.

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<sup>46</sup> Given more time, I could conceivably merge in all the post-election evaluations year-by-year, though I don't know if there are enough years with post- ratings to make it worthwhile. In any case, vote choice provides the most important test because of its normative importance.

One other key difference between the national experiments and the real-world use of violent campaign metaphors is the prominence of partisanship. Whereas the candidates in the experiments were not identified by name or party, the presidential candidates in the real world most certainly are. The participation analysis in Chapter 7 partly circumvented this issue by examining the effects of violent metaphors pooled across both candidates. Here, when assessing differences between candidates within an election, we have to confront the issue head on. The interplay between the partisanship of a leader and the audience is fundamental in many studies of communication effects and public opinion dynamics (Zaller 1992). Partisanship could conceivably play a role as a key political moderator in this analysis. This would require further analysis if the data enabled tests of violent metaphors and ratings for individual candidates. However, the relative measures of violent campaign metaphors and vote choice render the issue moot.

Finally, I repeat the modeling of campaign exposure found in Chapter 7, focusing analysis on respondents with the above-average levels of political knowledge, as rated by interviewers. Unlike the experiments, real-world campaign messages are only received by a fraction of the population. Many citizens tune out when politics takes center stage, or change the channel. This dynamic means that the effects of real-world violent campaign metaphors should appear among the segment of the citizenry most likely to be exposed to campaign messages. Price and Zaller (1993) argue persuasively that political knowledge is the best proxy for the likelihood of campaign exposure, with the knowledgeable exposed most. I re-estimate both models for the full sample to show the differences produced by targeting the analyses more carefully.

## **Results**

To estimate the relationship between violent campaign metaphors and self-reported presidential vote choice, I estimate probit models following the specification of independent variables in the two experimental studies above. Survey weights are applied to adjust for oversamples in some years, and I cluster standard errors by year. Vote choice is coded 1 for Republicans and 0 for Democrats. Non-voters and third-party voters are excluded. Table 8.3 presents the results for presidential vote choice among the most-knowledgeable respondents (left), showing estimates for both two- and four-item efficacy.

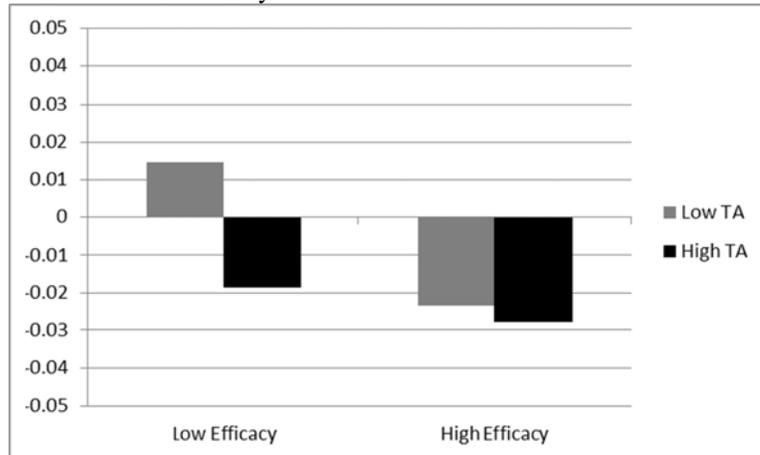
Table 8.3 Effects of Violent Metaphors on Real-World Presidential Vote Choice

	Vote Choice (Republican)			
	Most-Knowledgeable		Full Sample	
	2-item Efficacy	4-item Efficacy	2-item Efficacy	4-item Efficacy
Violent Metaphor Difference (Rep-Dem)	.11* (.03)	.10* (.04)	.11* (.02)	.10* (.02)
Trait Aggression	-.56 (.67)	-.85 (.77)	-.16 (.31)	-.07 (.37)
External Efficacy	-.14 (.24)	-.17 (.32)	.17 (.16)	.30 (.21)
TA*Efficacy	.99 (.61)	1.52^ (.82)	-.25 (.40)	.15 (.49)
Violent*TA	-.39* (.09)	-.32* (.11)	-.35* (.04)	-.30* (.05)
Violent*Efficacy	-.15* (.03)	-.13* (.04)	-.14* (.03)	-.13 (.03)
Violent*TA* Efficacy	.33* (.08)	.22* (.11)	.31* (.05)	.23* (.07)
Constant	.17 (.21)	.18 (.22)	-.08 (.10)	-.16 (.12)
Pseudo $R^2$	.01	.01	.01	.01
$N$	6,272	6,274	12,776	12,781

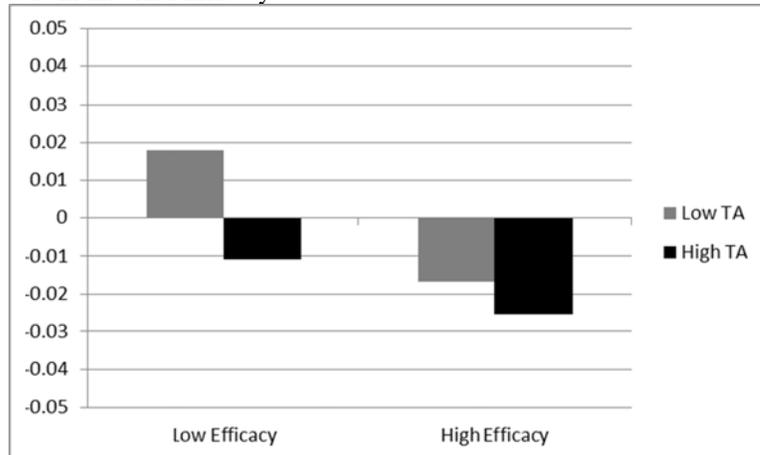
Note: Probit models, robust standard errors in parentheses, clustered by year. \*  $p < .05$   
^  $p < .1$ , two-sided.

The first glance at Table 8.3 suggests patterns nearly identical to those found in the experiments. Each of the coefficients involving violent metaphors moves in the same direction as the experiments, and each is statistically significant. This is true whether external efficacy is measured with two items like the Ford-Marsh study or with a broader four-item index, which yield virtually the same results. Figure 8.5 presents the marginal “treatment” effects of the difference in violent metaphors, which provide a clearer view. These values show the effect of one additional violent metaphor per 1000 words used by the Republican candidate, relative to the Democratic candidate, on vote choice favoring the Republican. The difference measure for violent metaphors between 1968 and 2008 runs from -5.3 to 7.7, so a 1-unit change is relatively small compared to the range of 13.

Figure 8.5 Marginal Effects of Metaphors on Real-World Presidential Vote Choice  
2-item External Efficacy



4-item External Efficacy



Note: From Table 8.3, trait aggression and external efficacy at 5<sup>th</sup> and 95<sup>th</sup> percentiles.

Upon closer inspection, violent metaphors produce consistent effects among low-efficacy respondents, matching predictions and the experimental tests. Among this group, violent metaphors appear to attract the votes of low-aggression citizens and repel the votes of those high in trait aggression, and each of these effects is statistically-significant ( $p < .05$ ). The results are also consistent for low-aggression respondents who are efficacious, significantly reducing their support for the candidate using more violent metaphors ( $p < .05$ ). However, the effects for trait-aggressive respondents who are high in efficacy move against expectations. Here, trait aggressive respondents appear to vote less for the candidate using more violent metaphors, regardless of efficacy, and the difference is statistically-significant ( $p < .05$ ).

In the voting participation analysis of Chapter 7, the relative truncation of the ANES electoral responsiveness measure was responsible for the non-replication among the most efficacious citizens. In other words, when the experiments were reassessed with a similarly-truncated measure, the results fell in line perfectly with the observational analysis. In that case, though, ANES results among the non-replicating subgroup were null. Here, we see significantly consistent results among efficacious citizens who are low in trait aggression and significantly *inconsistent* results among those trait-aggressive responsive. That pattern may be harder to explain with an argument of truncated measures. I repeat the truncation analysis for the candidate evaluation results in the TESS and Ford-Marsh studies. To do so, I recode the external efficacy measures to match the distribution of efficacy in the ANES. For the single TESS item, this meant collapsing the top two categories (totaling 27%) and stretching the rest of the scale to remain between 0 and 1. For the Ford-Marsh study, the top third of the efficacy index is collapsed (totaling 18%) and the remainder of the scale is stretched. In the TESS study, this change reduces by half the positive effect of violent metaphors among trait-aggressive efficacious subjects, but does not touch the effects for other subgroups. In the Ford-Marsh study, the substitution reduces the effects among efficacious subjects to a third of their original size, regardless of trait aggression levels. Although not as conclusive as the similar analysis in Chapter 7, these results suggest that distributional differences in external efficacy measures between the ANES and the experiments may account for the differences in violent metaphor effects observed among trait-aggressive efficacious respondents in the ANES. In any case, the ANES results are consistent for three of the four subgroups.

In contrast to the participation analysis, estimating the ANES models with the full sample yields the same results. Even when excluding the most knowledgeable from the models (not shown), the estimates are only slightly diminished in size. This homogeneity across the sample may encourage more tentative conclusions about the replication in the ANES data. Alternatively, although the dynamics of exposure would be no different for the participation analysis compared to vote choice, perhaps the diffusion of vote choice effects generated by violent metaphors is greater for candidate choice than for participation (Nickerson 2008). Further future analysis may help sort out this difference.

In keeping with the participation analysis, the results in both experimental studies replicate strongly when the actual measure of trait aggression is replaced with an imputed version, with statistically-significant effects that are only substantively diminished by one quarter. Similarly, the effects of violent metaphors among the most knowledgeable experimental subjects are not greater than the full sample—they are actually somewhat reduced. These additional findings continue to validate the use of imputed trait aggression in the observational data, and they provide further evidence that the observational results on presidential vote choice may understate the true magnitude of violent metaphor effects.

Overall, the observational analysis provides a very rough cut at the real-world influence of violent campaign metaphors on presidential vote choice over five decades. However, it provides evidence coinciding splendidly with the experimental analysis, which is strong on causality but sterile in its relation to real campaigns. The replication may not be quite as clean as in Chapter 7, and the relationships seem to persist among citizens unlikely to have heard the messages, but the results remain impressive in light of all the factors stacked against to finding them.

## Discussion and Conclusion

This chapter tested the effects of violent campaign metaphors on candidate evaluation and vote choice, examining the conditional effects produced by interactions with the personality traits represented by trait aggression and the political attitudes of external efficacy. The results presented here from two survey experiments strongly support the prediction that, like participation intentions, exposure to violent metaphors reinforces habitual responses to political candidates based on external efficacy among trait-aggressive citizens, but weakens the power of those same orientations among citizens with low levels of trait aggression, including among those who feel quite efficacious (in contrast to Chapter 7).

I replicated these findings again in five decades of American National Election Studies (ANES) data after merging them with content analysis of violent campaign metaphors from Chapter 4. All three tests demonstrate that the impact of violent

metaphors on electoral behavior depends on their resonance with audience personality traits and political orientations.

One of the great strengths of the observational tests in this chapter and the previous one is that each operationalizes violent metaphors in a different way. In Chapter 7, the key measure assessed the number of violent metaphors utilized by both candidates. In this chapter, the key measures look at the rates of violent metaphors by individual candidates *and* the difference between them. If there were doubts about the validity of the content analysis as applied to electoral participation, they are largely quelled by this successful test that parses violent metaphors in a completely different way.

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This chapter expanded on the analysis of aggression in electoral behavior by identifying the conditional effects of violent metaphors on candidate evaluation and vote choice in experimental setting and in real-world campaigns. In the next chapter, I conclude with a review of the theory and evidence covered in this dissertation, along with discussion of its broader implications and next steps in this research agenda.

## Chapter 9

### Conclusions

*We will both trivialize real wars and exaggerate other conflicts and problems our society faces, by our reckless and irresponsible use of the war metaphor.*

James Childress, *War in Reality and Metaphor* (1992)

*Anybody who's been on a battlefield, whether it's a real battlefield or a political battlefield, or a game, will know this: There's the smell, the odor, the feel that draws you back after it's done. They say in war it's the smell of cordite, of gunpowder. It stays in the air.*

James Carville, *All's Fair: Love, War and Running for President* (1994)<sup>47</sup>

Aggression is a fundamental component of human behavior, produced by the interaction of individual predispositions and situational provocations. But despite its importance in human behavior, research on political behavior has given little attention to aggression dynamics. The work presented here highlights the importance of aggressive personality traits in politics, reveals the aggressive effects of violent metaphors in a political communication, and demonstrates the utility of applying interactive models from aggression research for understanding a new set of aggression-related political behavior, including essential democratic behaviors of candidate evaluation and vote participation, and anti-democratic attitudes about violence against political authority.

### New Evidence

#### ***Representative Tests with Trait Aggression***

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<sup>47</sup> Both quoted in Pitney (2000).

Trait aggression is a stable individual personality factor indicating a predisposition to behave aggressively in everyday interpersonal life. The Ford-Marsh study in this dissertation provides the first representative tests of trait aggression's relationship with state violence attitudes, and both national studies provide the first tests of any kind on its relationships with support for violence against political authority, electoral participation, and other political correlates. Across each of the analyses, the substantive political strength of trait aggression is especially impressive given that it is measured without reference to politics.

Trait aggression is strongly correlated with attitudes about violence related to politics, even after statistically controlling for potential confounds. These relationships hold for support across an assortment of domestic and foreign examples of state violence (Chapter 5). Interestingly, these results suggest that differences in aggressive personality between men and women fail to account for the gender gap in state violence attitudes. Trait aggression also strongly predicts support for violence against political authority, including political leaders and government itself (Chapter 6). Less intuitively, trait aggression also predicts electoral participation intentions, though these relationships are conditioned by external efficacy. In particular, trait aggression reduces participation intentions among citizens who feel efficacious, but boosts them among those who don't (Chapter 7). Trait aggression is mostly orthogonal to political staples like partisanship and authoritarianism, but it shows a modest relationship with self-identified liberalism (Chapter 3).

### ***Evidence on the Prevalence, Form, and Use of Violent Campaign Metaphors***

The content analysis in Chapter 4 demonstrated the widespread use of violent metaphors by candidates in U.S. presidential campaigns spanning the duration of the modern presidency from 1932 through 2008, but it also showed that the language varies across candidates and contexts. Candidate with a military background, or who were challengers, or whose electoral odds seemed long were more likely to use violent metaphors. Their use corresponded with greater aggregate turnout, but not with electoral fortune for the candidates using them. The analysis also showed that 'fight' is far and away the most common violent metaphor used. When combined with ANES survey data

on electoral behavior, these measures performed surprisingly well as a proxy for the use of violent metaphors throughout each campaign.

### ***Experimental & Observational Evidence on the Impact of Violent Metaphors***

Although political leaders regularly frame their messages with metaphors of fighting and war, little is known about how citizens respond to such appeals. These tests are the first to demonstrate the effects of violent metaphors on political behavior, which turn out to be wide-ranging and surprisingly strong.

The first test, on state violence attitudes in Chapter 5, was disappointing. Despite a strong relationship between trait aggression and these preferences, randomized exposure to violent metaphors did not consistently budge the attitudes. In contrast, violent metaphors had strong, significant effects on attitudes about violence against political authority among trait-aggressive subjects, substantially increasing their support. The difference in effects across these two domains is difficult to account for.

The second set of tests, on electoral behavior, was successful. As expected the effects of violent metaphors on electoral participation, candidate evaluation, and vote choice depended on individual levels of trait aggression. However, the patterns of consistent effects did not become clear until *political* attitudes related to external efficacy were accounted for. In particular, exposure to violent metaphors substantially increased efficacy-based habitual responses to voting and to candidates among trait-aggressive citizens, but significantly disrupted them among low-aggression citizens. (For electoral participation, efficacy serves as a baseline judgment about the stakes of an election. For candidate evaluation, it serves as a broad judgment about political leaders as a class, which reflects on the individual candidates.) These patterns replicated consistently across both national experiments and in the fifty-year analysis of electoral behavior found in ANES surveys merged with the content analysis from Chapter 4.

The effects found for electoral behavior (and indeed for attitudes about violence against political authority as well) are broadly consistent with emotional effects in which enthusiasm and anger reinforce habits while anxiety breaks them, encouraging reappraisal and persuasion (Brader 2006; Huddy et al. 2007; Marcus et al. 2000). These dynamics, in turn, are consistent with diverging reactions to violent content based on trait

aggression (Bushman 1995, 1996). Additional research may help clarify the cognitive, emotional, and physiological mechanisms at work in the effects of violent metaphors.

### **Methodological Strengths & Limitations**

The evidence presented here is substantially strengthened by a multi-method approach. In this effort, I combined the mutually-supportive insights from two nationally-representative survey experiments, one local experiment with University of Michigan undergraduates, content analysis covering every presidential nomination acceptance speech from 1932 through 2008 (and a host of additional anecdotes), and individual-level analysis of electoral behavior in the American National Election Studies (ANES) from 1968 through 2008. Here, I take a moment to reflect on the benefits of this approach, along with the limitations of specific designs.

The two national experiments conducted in the summer leading up to the 2010 midterm elections provide the backbone of the analysis. These studies leverage the power of randomization to draw causal inferences about the effects of treatments—in this case, exposure to political messages with or without violent metaphors. In the context of political messages, randomization is critical for eliminating of political exposure (or non-exposure) that interfere with inferences about the effects of messages. This level of control over the content of messages and their assignment makes strong causal claims possible. The combination of multiple experiments with corresponding results reduces the probability of faulty causal inferences close to zero.

The national experiments benefitted from nationally-representative subjects, thanks to Knowledge Network's robust sampling program. As a consequence, we can generalize the causal claims to the national population as a whole. Subjects completed the online surveys in whatever environment they chose and at a time of their choosing, which made the setting less artificial. Presumably, this home or office environment is where they encounter many real-world political messages. Of course, the survey itself is an artificial environment, but the only other recourse is field experiments, which were not logistically feasible for this project when the data were collected.

The language of the treatments was informed by real-world campaign rhetoric found in the content analysis, adding a substantial degree of generalizability by

employing representative stimuli. On the other hand, the presentation of the treatments with virtually no information is quite artificial. Similarly, the text-based presentation maintains greater control over the content of treatments, but lacks the potential amplifying power of an impassioned delivery. The simplicity helps by clearing extraneous clutter, but real-world clutter may play an important role disrupting effects that would appear in a more pristine environment. Even when citizens know little about politics, the messages they encounter are not as sparse as this. Moreover, the measurement of outcomes occurred within a few minutes of exposure to the treatments, so the duration of effects is unclear. Recent research suggests the effects of political messages are relatively short-lived lasting only about a week at most (Chong and Druckman 2010; Gerber et al. 2011), so the effects of violent metaphors may be brief.

The ANES survey data provide valuable supplements for the experimental analysis in several respects. First, they cover several decades of elections, showing consistent effects over time in ways that the experiments from 2010 cannot. Second, they show the effects self-reported electoral *behavior*, whereas the experiments assessed attitudes and behavioral intentions. Third, the data provide evidence that the effects of violent metaphors are persistent, perhaps through repetition if not through duration. Rhetoric was measured in the summer; its apparent effects are found in November voting behavior. On the other hand, the analyses utilizing these data are limited by the noisy measures of violent campaign metaphors and imputed trait aggression, along with distributional limitations in external efficacy items. These assessments also made evidence-based assumptions about dynamics of exposure to political messages in the population (e.g. Price and Zaller 1993). The consistency between observational and experimental results is impressive, given these hurdles, and it reduces some of the concerns.

In sum, the suite of experiments, surveys, and content analysis provide a particularly strong evidence supporting causal claims for violent metaphors (and ruling out alternative explanations for trait aggression effects), while establishing reasonably strong external validity by showing effects with representative samples and treatments in naturalistic settings over the course of several decades of election campaigns.

## New Questions and New Directions

Three areas stand out as new directions for extending the research agenda started here. Plans for carrying out many of the components are already under way. I briefly describe each below.

### *The Character of Low Trait Aggression*

One of the most consistent empirical regularities in this dissertation is the seemingly aversive response of subjects low in trait aggression to violent campaign metaphors. The reaction is seen most clearly in the electoral behavior effects presented in Chapters 7 and 8, in which subjects with low levels of trait aggression and low levels of external efficacy respond in counter intuitive ways to violent metaphor exposure. A smaller but similar pattern is observed in the Chapter 6 analysis of support for violence against political authority. To explain these reversed effects in the dissertation analysis, I lean heavily on the concept of aggression anxiety and documented aversive reactions to violent content among people low in trait aggression. The effects I observe are broadly consistent with emotions effects found elsewhere in political science, namely with anxiety disrupting political habits and anger and enthusiasm reinforcing them.

However, the theoretical framework provided by the General Aggression Model (GAM; 2002a) and related work on media violence effects tend to emphasize cognitive priming processes in which the greater effects observed among the most trait-aggressive subjects are attributed to their more highly-developed aggression-related schemas. Even Marshall and Brown's (2009) account, which introduces more contingent effects at varying levels of trait aggression, never predicts that low-aggression subjects will move in the *opposite* direction from their high-aggression peers when exposed to violent cues.

The reversed effects I observe here suggest that low trait aggression may be more than just an absence of aggressive schemas. Instead, this type may possess pro-social schemas that are primed when exposed to violent cues, suggesting a bi-polar trait aggression concept. Additionally, the focus here on anxiety and enthusiasm along with anger may help build more complete aggression models. Although the GAM framework incorporates affective components alongside cognitive mechanisms (and affective primes), the research tends to emphasize anger alone. By devoting more attention to a

broader spectrum of emotions, building from results in a political domain, future research may reveal new insights into the character of trait aggression and broader aggression dynamics that apply across research domains utilizing the psychology of aggression.

### ***Connecting Violent Rhetoric with Aggressive Political Behavior***

Each of the outcomes studied here is interesting and important in its own way, but attitudes about violent against political authority may be especially so. Moreover, some of the limitations in the design of those items suggest room for additional study. In particular, I have in mind more explicit items that present violence explicitly and matter-of-factly rather than cloaking it in euphemisms and vague statements. I would also like to explore measures that use vignettes to personally implicate the respondent in aggressive behavior. Since so few would consider committing extreme acts of violence under any relatively ordinary circumstances, these vignettes would necessarily move away from violence to more moderate harm against political leaders and government officials. These could still include threats and property damage, but may also include throwing things, pushing, hitting, and insults. It may also be interesting to extend the analysis to include aggression against citizen-activists, who may provide the most accessible targets. Of course, measures of actual behavior would be the gold standard, but it is hard to imagine a design that could effectively carry out the tests without major ethical concerns.

The form of violent rhetoric could also be altered in additional tests. The language in the experimental treatments is mundane and seems innocuous. It avoids vivid details of violent acts, and the metaphorical targets are policy problems, not people or groups. Of course, the language causing most public concern is more extreme. If mild violent rhetoric increases support for political violence, what effects might hold for stronger language? Media violence research finds increased aggression as violent content intensifies (e.g. Barlett et al. 2008). The same ratcheting may apply to violent rhetoric.

### ***Violent Metaphors & Policy Preferences***

Another new direction may include a broader set of policy attitudes. After candidates have won seats in government, the violent metaphors they used on the campaign trail continue to appear as they govern. One context of particular interest is in

proposals of public policies. For example, presidents in State of the Union Addresses frequently describe the aims of policies in violent terms, like the wars on drugs, poverty, crime, hunger, disease ... the list goes on. What are the effects on policy preferences when violent metaphors are attached to policy domains? Policy attitudes related to help provide by the state, rather than harm, would also be interesting, given that the same dynamics that increase aggressive behavior also seem to reduce pro-social behavior, at least in interpersonal domains (Anderson and Bushman 2001).

### ***Dynamics of Intergroup Conflict***

Intergroup conflict may be the most promising venue for identifying aggression dynamics in political behavior. Like aggression, predispositions toward ethnocentrism are foundational elements of human behavior (Wilson 2002), and the two are closely linked. Presumably, trait-aggressive citizens who dislike an outgroup would make more of an effort to harm that group through public policy when given the opportunity, and these effects could be amplified by aggressive cues like violent metaphors.

Some of this work is already under way. For example, in a nationally-diverse survey experiment with Israeli young adults, Gubler and Kalmoe (2012) find that randomized exposure to policy questions framed in violent terms significantly increases support for policies that harm Arab-Israelis within Israel's borders, but only among those with *lower* levels of trait aggression. We argue that environments of intense intergroup leave high-aggression citizens feeling continually provoked, focusing the primary effects of violent cues at the low end of trait aggression scale (Marshall and Brown 2006). We will soon undertake similar tests of group conflict dynamics in India and the U.S.

## **Broader Implications for Politics**

### ***Anger in Politics***

Recent research identifies anger's expansive influence in politics, including electoral participation (Valentino et al. 2009, 2011), support for racialized policies (Kuklinski et al. 1997), risk-related policy preferences (Druckman and McDermott 2008), and state violence attitudes (Huddy et al. 2007; Kinder 1994). While most studies on the

political consequences of anger are framed with theories of cognitive appraisal (e.g. Huddy et al. 2007) or Affective Intelligence (Marcus et al. 2000), they might be enriched further by situating anger in the broader theoretical context of aggression dynamics. Anger is a key emotional antecedent of aggressive behavior, and some people are prone to more frequent and intense episodes of anger than others. This stable predisposition, known as trait anger, is a subcomponent of the trait aggression concept and measure (Buss and Perry 1992), representing the emotional and physiological components of aggressive behavior. Anger encourages aggressive behavior by reducing the inhibitions of moral reasoning and judgment that would otherwise prevent aggression (see Bandura et al. 1996 on moral disengagement), by focusing attention on provocations, by informing people about implications for culpability, and by priming aggressive cognitions and physiological arousal (Anderson and Bushman 2002a). Situating anger within a broader aggression framework supplements rather than replaces existing theory on the causes and political consequences of anger in appraisal and Affective Intelligence models.

### ***Personality in Politics***

Personality studies in politics are motivated in part by the idea that citizens think and act in the political world much as they do in everyday life. This study contributes to a revival of personality research in political science (Gerber et al. 2010; Mondak 2010; Mondak et al. 2010) in this respect. Recent scholarship on the role of personality traits in politics makes this point well by showing that five broad personality factors (i.e. Big Five), strongly predict a broad array of political attitudes and behaviors, including issue preferences, partisanship, and participation (Gerber et al. 2010; Mondak 2010; Mondak et al. 2010). Proponents of the Big Five model of personality argue that the regularity with which these five traits appear in factor analyses indicate that they are the central building blocks of human personality, with other stable personality traits representing subcomponents within individual Big Five factors.

Although Big Five factors parsimoniously account for a great deal of variation in personality and behavior, some important dimensions of personality—including trait aggression—do not fit comfortably under any single factor or hierarchy (Bettencourt et al. 2006; Sharpe and Desai 2001; Tremblay and Ewart 2005), demonstrating the utility of

alternative constructions of personality traits alongside the broad Big Five framework.<sup>48</sup> Trait aggression measures overlap significantly across multiple Big Five factors, consistently loading negatively on agreeableness and emotional stability, and negatively on extraversion and conscientiousness to a lesser degree (Bettencourt et al. 2006; Sharpe and Desai 2001; Tremblay and Ewart 2005). Interactive or additive approaches combining Big Five factors may provide a closer approximation, but trait aggression is conceptually and empirically distinct.

Authoritarianism is another stable individual trait with political consequences. Like the Big Five traits, it is measured with non-political questions (i.e. child-rearing values) and it appears to be sensitive to changing levels of threat in the environment (Feldman 2003; Feldman and Stenner 1997; Hetherington and Suhay 2010; Stenner 2005). Although this literature sometimes refers to “authoritarian aggression” (e.g. Altemeyer 1996), the phrase describes the outcome—support for violent policies—not the psychology of aggression that grounds the trait aggression concept. Not only is trait aggression theoretically distinct from authoritarianism, it is also empirically independent, as seen in Chapter 3.

Importantly, although the net effects of personality traits in political behavior are useful on their own, a more complete picture of traits in politics requires accounting for the interactions between personality and the political environment (Mischel and Shoda 1995; Mondak et al. 2010). In other words, the weight of personality in politics is often context-dependent, making trait effects contingent on factors like the content of campaign messages, and conversely, the effects of political contexts depend in large part on individual differences in the audience based on personality traits. The analyses presented here explicitly examined the interactive effects of aggressive personality traits and violent political metaphors, which acted as trait-relevant cues. As such, this work provides some of the first representative experimental tests of personality-situation interactions, particularly for electoral behavior.

### ***Biopolitics***

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<sup>48</sup> Mondak (2010) writes, “Proponents of five-factor approaches claim neither that only these five traits warrant study, nor that these dimensions fully capture all variance in personality. Instead, the Big Five are seen as broad domains, collectively representing a hierarchy that organizes and summarizes the vast majority of subsidiary traits,” (p. 25).

This work also speaks to an emerging literature on the influence of biology in politics (e.g. Oxley et al. 2008). Although this study does not include direct biological measures, the key independent variable—trait aggression—is highly heritable both in construct (Rushton et al. 1986) and operationalization (Coccaro et al. 1997). Specific genotypes predicting trait aggression have been identified (Caspi et al. 2002; McDermott et al. 2009), along with other biological markers (McIntyre et al. 2007; Siever 2008). In fact, twin studies suggest that the biological roots of aggressive behavior heavily outweigh environmental factors, with heritability accounting for as much as half to three-fourths of the additive variance in aggressive behavior (Cates et al. 1993; Coccaro et al. 1997; Mason and Frick 1994; Miles and Carey 1997; Rushton et al. 1986). These biological roots play an important role in shaping personality and, ultimately, political behavior (Smith et al. 2011). More broadly, the interconnections found in this work between political behavior, psychology, and biology point to the growing capacity to pursue consilience across the sciences.

### ***Consilience & Political Behavior***

From the beginning, scientists have sought to identify the mechanisms governing the behavior of galaxies and subatomic particles, of chemical reactions and electrical phenomena, of evolving species and ecosystems, and of individual animals and their collectives, including the social and political behavior of humans. Although routine science usually involves tiny advances within a small sliver of a sub-field in a discipline under one branch of the sciences, scientists have also sought to identify connections between fields and across orders of magnitude, with the ultimate goal of consilience—a unity of knowledge. E.O. Wilson (2004) is the most prominent recent advocate of this approach to science. In his view, the hard sciences are already making great strides toward consilience, and he sees social science and the humanities as promising sites for creating more comprehensive linkages across human knowledge.

From a political science perspective, Wilson might argue that macro political outcomes on the national and international scale (e.g. elections, wars) are the product of aggregated individual behaviors, that individual behavior is the product of the interactions between cognitive, emotional, and physiological states, that psychological

processes are the consequence of chemical and electrical interactions in the brain, that interactions between genes and environment generate these biochemical reactions, and that this biochemistry can be further decomposed into the physical interactions of molecules, atoms, and sub-atomic processes. Wilson acknowledges that consilience is far easier to articulate in principle than to establish in practice, particularly given the increasing complexity moving from micro to macro processes.

In the spirit of consilience, political psychologists have recently proposed a new kind of “funnel of causality” (Campbell et al. 1960), focusing on the path from genes to biological and psychological traits, which shape contemporary political predispositions, perceptions, attitudes, and behaviors (Smith et al. 2011). Despite these theoretical foundations, few studies have identified and tested more sophisticated interactions between deeply rooted personality traits and the political environment (Mondak et al. 2010). This dissertation provides some of the first such tests, assessing a new personality trait in political science and deploying experimental designs to rigorously identify interactive causal effects produced by the trait-relevant political environment.

Research on trait aggression fits well within this developmental model, with findings showing the broad heritability of aggression, specific genes related to aggression, and other biological and physiological correlates of aggressive behavior. By focusing on the aggressive predispositions that have strong genetic and biological roots, and by employing a comprehensive framework for understanding aggression dynamics more broadly, this dissertation indirectly contributes in a small way to the broader goals of consilience: connecting political behavior to the social, biological, and physical sciences.

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Despite the timeless importance of aggression in human behavior (Wilson 2004), political scholarship has largely ignored aggressive personality traits and the broader theoretical framework of aggression. The present study shows the empirical and theoretical value of incorporating aggression dynamics into models of political behavior. The evidence here shows that citizens draw heavily on aggressive predispositions when formulating political attitudes, when deciding whether and how to participate in politics, and when candidates to support in elections—relationships supported by theories of

aggression in everyday life. Moreover, this work shows how common political metaphors of fighting and war interact with aggressive personality traits to influence these critical democratic processes and behaviors. More work is needed to uncover aggression's broader role in politics and address new puzzles, but these first steps make the promise of modeling aggression dynamics in political behavior extraordinarily clear.

## Appendix: Question Wording

### **Ford-Marsh Study**

Welcome! This survey is part of a university research project on politics and current events. Answer each question with the response that most closely fits your opinion. Your participation is voluntary, and we really appreciate your help!

#### **[Party Identification]**

Generally speaking, do you think of yourself as a...

- Republican 1
- Democrat 2
- Independent 3
- Another party, please specify: \_\_\_\_\_ 4
- No preference 5

#### **[ASK Q2 IF Q1="REPUBLICAN"]**

Would you call yourself a...

- Strong Republican 1
- Not very strong Republican 2

#### **[ASK Q3 IF Q1="DEMOCRAT"]**

Would you call yourself a...

- Strong Democrat 1
- Not very strong Democrat 2

#### **[ASK Q4 IF Q1="INDEPENDENT" OR "ANOTHER PARTY" OR "NO PREFERENCE" OR REFUSED]**

Do you think of yourself as closer to the...

- Republican Party 1
- Democratic Party 2

#### **[BPAQ-SF Trait Aggression]**

##### **[randomize statements]**

For each of the following statements, indicate whether the statement is true or false for you.

	Completely true for me	Mostly true for me	Slightly true for me	Slightly false for me	Mostly false for me	Completely false for me
There are people who have pushed me so far that we have come to blows.						
Given enough provocation, I may hit a person.						
I have threatened people I know.						
I often find myself disagreeing with people.						
I can't help getting into arguments when people disagree with me.						
My friends say I'm somewhat argumentative.						
I have trouble controlling my temper.						
Sometimes I fly off the handle for no good reason.						
I flare up quickly but get over it quickly.						
At times I feel I have gotten a raw deal out of life.						
Other people always seem to get the breaks.						
I wonder why sometimes I feel so bitter about things.						

**[External Efficacy/Electoral Responsiveness]**

Do you think elections make the government pay attention to what the people think?

- Definitely yes . 1
- Probably yes . 2
- Maybe . 3
- Probably not . 4
- Definitely not . 5

Do you agree or disagree with the following statement? “Public officials don’t care much what people like me think.”

- Strongly agree . 1
- Somewhat agree . 2
- Neither agree nor disagree . 3
- Somewhat disagree . 4
- Strongly disagree . 5

**[Political Anger Frequency]**

Over the past year, how often have you felt angry about politics, including feeling angry at government, at a political party, or at specific leaders?

- Several times a week . 1
- About once a week . 2
- About once a month . 3
- About once every few months . 4
- A few times per year . 5
- About once per year . 6
- Never . 7

**[Authoritarianism]**

Although there are a number of qualities that people feel children should have, every person thinks that some are more important than others. For each question, which one do you think is more important for a child to have?

- 1. Curiosity or Good Manners?
  - Curiosity more important.....1
  - Good manners more important.....2
- 2. Obedience or Self-Reliance?
  - Obedience more important.....1
  - Self-reliance more important.....2

**[Political Knowledge]**

**[randomize the response order (not the question order)]**

For the following questions, please make your best guess, even if you’re not sure.

What office does John Roberts hold?

- Senate Majority Leader . 1
- Vice President . 2
- Supreme Court Justice . 3
- Secretary of Defense . 4

Whose responsibility is it to determine whether or not a law is constitutional?

- the Congress . 1
- the President . 2
- the Supreme Court . 3

the States . 4

What percent of the House and Senate must vote to override a presidential veto?

- More than 50% . 1
- More than 60% . 2
- More than 66.7% . 3
- More than 75%.....4
- 100%.....5

**[Randomized Treatments & Candidate Evaluations]**

Next, we will show the text from two campaign ads by opposing candidates for the U.S House of Representatives. After each ad, please give your impression of the candidate, then choose your favorite.

**[assign respondents to one of the four groups by rotation]**

**[if group=1; show vignette version 1 first and version3 second;**

**if group=2; show vignette version 1 first and version 4 second;**

**if group=3; show vignette version 2 first and version 3 second;**

**if group=4; show vignette version 2 first and version 4 second]**

[Version 1:] **Candidate A: “Fighting for America’s Future”**  
 “Americans today are fighting to keep their jobs and their homes. All you ever asked of government is to stand on your side and fight for your future. That’s just what I intend to do. I will fight hard to get our economy back on track. I will fight for our children’s future. And I will fight for justice and opportunity for all. I will always fight for America’s future, no matter how tough it gets. Join me in this fight.”

[Version 2:] **Candidate A: “Standing Up for America’s Future”**  
 “Americans today are struggling to keep their jobs and their homes. All you ever asked of government is to stand on your side and stand up for your future. That’s just what I intend to do. I will work hard to get our economy back on track. I will work for our children’s future. And I will work for justice and opportunity for all. I will always work for America’s future, no matter how tough it gets. Join me in this effort.”

Based on this ad, do you have a favorable or unfavorable impression of Candidate A?

- Strongly favorable . 1
- Somewhat favorable . 2
- Neither favorable nor unfavorable . 3
- Somewhat unfavorable .4
- Strongly unfavorable . 5

Next, the ad for the opposing candidate:

[Version 3:] **Candidate B: “Fighting for You”**  
 “For almost 25 years, I’ve been fighting hard for you. And with your support, I will continue to fight for you in Washington. In these tough times, we need to fight for what’s right for our country. That means fighting hard to ensure equal opportunities for everyone in life. As your representative, I promise to fight for all the people, not the powerful interests. But I can’t win this battle without your help. Together, we can build a better future.”

[Version 4:] **Candidate B: “Working for You”**  
 “For almost 25 years, I’ve been working hard for you. And with your support, I will continue to work for you in Washington. In these tough times, we need to do what’s right for our country. That means working hard to ensure equal opportunities for everyone in life. As your representative, I promise to work for all the people, not the powerful interests. But I can’t win this race without your help. Together, we can build a better future.”

Based on this ad, do you have a favorable or unfavorable impression of Candidate B?

- Strongly favorable . 1
- Somewhat favorable . 2
- Neither favorable nor unfavorable . 3
- Somewhat unfavorable .4
- Strongly unfavorable . 5

Which candidate do you prefer: Candidate A (the first ad) or Candidate B (the second ad)?

- Strongly prefer Candidate A . 1
- Somewhat prefer Candidate A . 2
- Slightly prefer Candidate A . 3
- Slightly prefer Candidate B . 4
- Somewhat prefer Candidate B . 5
- Strongly prefer Candidate B . 6

Now, we will ask some questions about the national election this coming November.

**[Partisan Preferences]**

If the elections for Congress were being held today, which party's candidate would you vote for in your congressional district—the Democratic Party's candidate or the Republican Party's candidate? If you don't plan to vote, which party's candidate would you prefer?

- Definitely Democratic candidate . 1
- Probably Democratic candidate . 2
- Undecided . 3
- Probably Republican candidate .4
- Definitely Republican candidate . 5
- Other candidate . 6

Overall, do you approve or disapprove of the way Barack Obama is handling his job as president?

- Strongly approve . 1
- Somewhat approve . 2
- Neither approve nor disapprove . 3
- Somewhat disapprove . 4
- Strongly disapprove . 5

**[Participation & Engagement]**

So far as you know now, do you expect to vote in the national election this coming November or not?

- Not eligible to vote . 1
- Definitely will vote . 2
- Probably will vote . 3
- Maybe will vote . 4
- Probably will not vote . 5
- Definitely will not vote . 6

During the election campaign, do you think you will try to persuade people why they should vote for or against one of the parties or candidates?

- Definitely yes . 1
- Probably yes . 2
- Maybe . 3
- Probably not . 4
- Definitely not . 5

During the campaign, do you expect to contribute time or money to a political party or candidate?

- Definitely yes . 1
- Probably yes . 2
- Maybe . 3
- Probably not . 4
- Definitely not . 5

During the campaign, do you expect to wear a campaign button, put a campaign sticker on your car, or place a sign in your window or in front of your house?

- Definitely yes . 1
- Probably yes . 2
- Maybe . 3
- Probably not . 4
- Definitely not . 5

During the campaign, do you expect to go to any political meetings, rallies, speeches, dinners, or things like that in support of a particular candidate or party?

- Definitely yes . 1
- Probably yes . 2
- Maybe . 3
- Probably not . 4
- Definitely not . 5

How much attention do you expect to pay to news about political campaigns this year, if any?

- A great deal . 1
- Quite a bit . 2
- Some . 3
- Very little . 4
- None . 5

During the campaign, do you expect to discuss politics with your family and friends?

- Definitely yes . 1
- Probably yes . 2
- Maybe . 3
- Probably not . 4
- Definitely not . 5

How much would you say that you personally care about the way the election to the U.S. House of Representatives comes out?

- Very much . 1
- Pretty much . 2
- Not very much . 3
- Not at all . 4

**[Violence Against Political Authority Attitudes]**

Do you Agree or Disagree with the following statements about politics?

Strongly	Somewhat	Neither agree	Somewhat	Strongly
agree	agree	nor disagree	disagree	disagree

When politicians are damaging the country, citizens should send threats to scare them straight.

The worst politicians should get a brick through the window to make them stop hurting the country.

Sometimes the only way to stop bad government is with physical force.

Some of the problems citizens have with government could be fixed with a few well-aimed bullets.

Citizens upset by government should never use violence to express their feelings.

**[State Violence Attitudes]**

Lastly, please answer a few questions about government policies and programs:

Do you favor the death penalty for persons convicted of murder, or do you favor life imprisonment without parole instead?

- Strongly favor death penalty .1
- Somewhat favor death penalty .2
- Somewhat favor life imprisonment . 3
- Strongly favor life imprisonment . 4

When the U.S. government has trouble capturing terrorist leaders in other countries, should the government be allowed to kill the terrorist leaders with missiles, or should the government continue trying to catch the leaders alive?

- Strongly favor killing terrorist leaders . 1
- Somewhat favor killing terrorist leaders . 2
- Somewhat favor trying to catch terrorist leaders .3
- Strongly favor trying to catch terrorist leaders . 4

When the U.S. government questions terrorist suspects, do you favor or oppose using methods that cause severe pain during questioning?

- Strongly favor painful questioning . 1
- Somewhat favor painful questioning . 2
- Somewhat oppose painful questioning . 3
- Strongly oppose painful questioning . 4

If Iran continues to make progress toward building a nuclear weapon, do you favor or oppose bombing military targets in Iran?

- Strongly favor bombing Iran . 1
- Somewhat favor bombing Iran . 2
- Somewhat oppose bombing Iran . 3
- Strongly oppose bombing Iran . 4

[Additional demographic variables provided from earlier profile waves include: Case ID, Final post stratification weight, start time, finish time, duration in minutes, age, education, race/ethnicity, gender, household head, household size, housing type, household income, marital status, region, ownership status, state, presence of children and adults, employment status, Internet access]

**TESS Study**

Welcome! This survey is part of a university research project on politics and current events. Answer each question with the response that most closely fits your opinion. Your participation is voluntary, and we really appreciate your help!

**[BPAQ-SF Trait Aggression]**

**[randomize]**

For each of the following statements, indicate whether the statement is true or false for you.

Completely true for me	Mostly true for me	Slightly true for me	Slightly false for me	Mostly false for me	Completely false for me
1	2	3	4	5	6

1. There are people who have pushed me so far that we have come to blows.
2. Given enough provocation, I may hit a person.
3. I have threatened people I know.
4. I often find myself disagreeing with people.
5. I can't help getting into arguments when people disagree with me.
6. My friends say I'm somewhat argumentative.
7. I have trouble controlling my temper.
8. Sometimes I fly off the handle for no good reason.
9. I flare up quickly but get over it quickly.
10. At times I feel I have gotten a raw deal out of life.
11. Other people always seem to get the breaks.
12. I wonder why sometimes I feel so bitter about things.

**[Electoral Responsiveness]**

Do you think elections make the government pay attention to what the people think?

- Definitely yes 1
- Probably yes 2
- Maybe 3
- Probably not 4
- Definitely not 5

**[Political Knowledge]**

**[RANDOMIZE]**

For the following question, make your best guess, even if you're not sure.

What office does John Roberts hold?

- Senate Majority Leader 1
- Vice President 2
- Supreme Court Justice 3
- Secretary of Defense 4

**[RANDOMIZE]**

For the following question, make your best guess, even if you're not sure.

Whose responsibility is it to determine whether or not a law is constitutional?

- the Congress 1
- the President 2
- the Supreme Court 3
- the States 4

For the following question, make your best guess, even if you're not sure.

What percent of the House and Senate must vote to override a presidential veto?

- More than 50% 1
- More than 60% 2
- More than 66.7% 3
- More than 75% 4
- 100% 5

**[Randomized Treatment & Candidate Evaluation]**

Next we will show the text from a campaign ad by a candidate running for the U.S. House of Representatives. After the ad, please give you impressions of the candidate.

**RESPONDENTS SHOULD BE RANDOMLY ASSIGNED TO EITHER VIGNETTE1 (ASSIGN\_VIG=1) OR VIGNETTE2 (ASSIGN\_VIG=2)]**

**[VIGNETTE 1]**

**“Fighting for You”**

“Americans today are fighting to keep their jobs and their homes. All you ever asked of government is to stand on your side and fight for your future. That’s just what I intend to do. I will fight hard to get our economy back on track. I will fight for our children’s future. And I will fight for justice and opportunity for all. I will always fight for America’s future, no matter how tough it gets. Join me in this fight.”

**[VIGNETTE 2]**

**“Working for You”**

“Americans today are struggling to keep their jobs and their homes. All you ever asked of government is to stand on your side and stand up for your future. That’s just what I intend to do. I will work hard to get our economy back on track. I will work for our children’s future. And I will work for justice and opportunity for all. I will always work for America’s future, no matter how tough it gets. Join me in this effort.”

Based on this ad, do you have a favorable or unfavorable impression of the candidate?

- Strongly favorable 1
- Somewhat favorable 2
- Neither favorable nor unfavorable 3
- Somewhat unfavorable 4
- Strongly unfavorable 5

Does the candidate seem like someone you can relate to personally?

- Definitely yes 1
- Probably yes 2
- Maybe 3
- Probably not 4
- Definitely not 5

If elected, do you think the candidate would act forcefully against the interests that are preventing progress on important problems?

- Definitely yes 1
- Probably yes 2
- Maybe 3
- Probably not 4
- Definitely not 5

**[Participation & Engagement]**

So far as you know now, do you expect to vote in the national election this coming November or not?

- Not eligible to vote 1
- Definitely yes 2
- Probably yes 3
- Maybe 4
- Probably not 5
- Definitely not 6

During the election campaign, do you expect to contribute time or money to a political party or candidate?

- Definitely yes 1
- Probably yes 2
- Maybe 3
- Probably not 4
- Definitely not 5

How much attention do you expect to pay to news about political campaigns this year, if any?

- A great deal 1
- Quite a bit 2
- Some 3
- Very little 4
- None 5

In general, how do you feel when thinking about politics?

- Very positive 1
- Somewhat positive 2
- Neither positive nor negative 3
- Somewhat negative 4
- Very negative 5

**[Partisan Preferences]**

If the elections for Congress were being held today, which party's candidate would you vote for in your congressional district—the Democratic Party's candidate or the Republican Party's candidate? If you don't plan to vote, which would party's candidate would you prefer?

- Definitely Democratic Party's candidate 1
- Probably Democratic Party's candidate 2
- Undecided 3
- Probably Republican Party's candidate 4
- Definitely Republican Party's candidate 5
- Other party's candidate 6

**[Violence Against Political Authority Attitudes]**

Do you agree or disagree with the following statements about politics?

Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
1	2	3	4	5

1. The worst politicians should get a brick through their window to make them stop hurting the country.

2. Some of the problems citizens have with government could be fixed with a few well-aimed bullets.
3. Citizens upset by government should never use violence to express their feelings.

[Additional demographic variables provided from earlier profile waves include: Case ID, Final post stratification weight, start time, finish time, duration in minutes, age, education, race/ethnicity, gender, household head, household size, housing type, household income, marital status, region, ownership status, state, presence of children and adults, employment status, Internet access]

[TESS also allowed the choice of three additional items from earlier waves. Through an error, a presidential approval item from an earlier wave was included rather than asking the question following the treatment as planned. Religion was not requested but was provided. These items were asked at the end of the TESS instrument if they had not previously been recorded for the respondents. I have no data for whom this applies to.]

**[Party Identification]**

Generally speaking, do you think of yourself as a...

- Republican 1
- Democrat 2
- Independent 3
- Another party, please specify: \_\_\_\_\_ 4
- No preference 5

**Ask PARTY2 if “Republican” at PARTY1.**

Would you call yourself a...

- Strong Republican 1
- Not very strong Republican 2

**Ask PARTY3 if “Democrat” at PARTY1.**

Would you call yourself a...

- Strong Democrat 1
- Not very strong Democrat 2

**Ask PARTY4 if “Independent”, “Another party”, or “No preference” or skip at PARTY1.**

Do you think of yourself as closer to the...

- Republican Party 1
- Democratic Party 2

**[IDEOLOGY]**

In general, do you think of yourself as...

- Extremely liberal 1
- Liberal 2
- Slightly liberal 3
- Moderate, middle of the road 4
- Slightly conservative 5
- Conservative 6
- Extremely conservative 7

**[RELIGION1]**

What is your religion?

- Baptist—any denomination 1

Protestant (e.g., Methodist, Lutheran, Presbyterian, Episcopal)	2
Catholic	3
Mormon	4
Jewish	5
Muslim	6
Hindu	7
Buddhist	8
Pentecostal	9
Eastern Orthodox	10
Other Christian	11
Other non-Christian	12
None	13

**[RELIGION2]**

How often do you attend religious services?

- More than once a week 1
- Once a week 2
- Once or twice a month 3
- A few times a year 4
- Once a year or less 5
- Never 6

Thank you for your participation! Your help in this research project is greatly appreciated.

[Knowledge Networks didn't provide data for the following open-ended question.]  
Thinking about this topic, do you have any comments you would like to share?

**Michigan Study**

**Consent to Participate in a Research Study**

Study Title: Evaluating Society & Politics

Research Purpose & Procedures: This study is a survey of social and political preferences. The survey takes less than 30 minutes. For your participation, you will receive credit for 0.5 study hours for PSYCH 111 or COMM 102.

Risks & Discomforts: The risks associated with this study are minimal. Among many types of questions, the survey will ask for your general opinions about different racial and ethnic groups (white, black, Hispanic). If you think you would find answering such questions upsetting, we recommend that you not participate in the study.

Benefits to Subjects or Others: This work may benefit society by improving our understanding of how social views and political preferences are related.

Confidentiality of Subject Records: Your responses will be completely anonymous; no identifying information will ever be collected. All data collected will be held securely behind username and password protections.

Contact Information: If you have questions about the study or procedures, please contact:

Principal Investigator:  
Nathan P. Kalmoe (kalmoe@umich.edu)  
5700 Haven Hall  
505 S. State St.  
Ann Arbor, MI 48109  
[phone number included]

Faculty Adviser:  
Dr. Donald R. Kinder (drkinder@umich.edu)  
5700 Haven Hall  
505 S. State St.  
Ann Arbor, MI 48109

Should you have questions regarding your rights as a participant in research, please contact the Institutional Review Board, Behavioral Sciences, 540 E. Liberty #202, Ann Arbor, MI 48104, (734) 936-0933, email: irbhsbs@umich.edu

Study reference # HUM00036204

Voluntary Participation: Clicking the “>>” button to begin the study indicates you are over the age of 18 and you voluntarily consent to participate in this study, in exchange for class credit. You can withdraw from the study at any time and still receive credit for participating. You may decline response to any question for any reason. If you do not voluntarily consent to participating or are under the age of 18, exit from the website.

This survey focuses on social and political attitudes. There are no right or wrong answers. Don't spend too much time on any one question, and give your best guess if you're not sure.

**[Party Identification]**

Generally speaking, do you usually think of yourself as a Democrat, a Republican, and Independent, or what?

- Strong Democrat
- Democrat
- Independent, lean toward Democrats
- Independent
- Independent, lean toward Republicans
- Republican
- Strong Republican
- Other Party
- Don't know

**[Ideological Identification]**

On a scale of political views from extremely liberal to extremely conservative, where would you place yourself? Or haven't you thought much about this?

- Extremely Liberal
- Liberal
- Slightly Liberal
- Moderate, Middle of the road
- Slightly Conservative
- Conservative
- Extremely Conservative
- Haven't thought much about it

**[BPAQ-SF Trait Aggression]**

**[Randomized]**

For each of the following statements, indicate whether the statement is true or false for you, from completely true for you to completely false for you.

Completely true for me	Mostly true for me	Slightly true for me	Slightly false for me
Mostly false for me	Completely false for me		

- I flare up quickly but get over it quickly.
- I have threatened people I know.
- I can't help getting into arguments when people disagree with me.
- My friends say I'm somewhat argumentative.
- I wonder why sometimes I feel so bitter about things.
- Given enough provocation, I may hit a person.
- I have trouble controlling my temper.
- Sometimes I fly off the handle for no good reason.
- I often find myself disagreeing with people.
- There are people who have pushed me so far that we have come to blows.
- Other people always seem to get the breaks.
- At times I feel I have gotten a raw deal out of life.

**[Racial Attitudes]**

Agree or Disagree? Irish, Italians, Jews and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

How often have you felt admiration for blacks?

- Often
- Sometimes
- Rarely
- Never

How often have you felt sympathy for blacks?

- Often
- Sometimes
- Rarely
- Never

Rate your feelings toward blacks using a feeling thermometer. Ratings above 50 degrees mean that you feel favorably toward the group (warm). Ratings below 50 degrees mean you don't feel favorable toward the group (cool). 50 degrees means that you feel neutral toward the group.

Cold					Neutral					Warm
0	10	20	30	40	50	60	70	80	90	100

Agree or Disagree? It's really a matter of some people not trying hard enough; if Hispanics would only try harder they could be just as well off as whites.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? Over the past several years, Hispanics have gotten less than they deserve.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

How often have you felt admiration for Hispanics?

- Often
- Sometimes
- Rarely
- Never

How often have you felt sympathy for Hispanics?

- Often
- Sometimes
- Rarely
- Never

Rate your feelings toward Hispanics using a feeling thermometer. Ratings above 50 degrees mean that you feel favorably toward the group (warm). Ratings below 50 degrees mean you don't feel favorable toward the group (cool). 50 degrees means that you feel neutral toward the group.

Cold					Neutral					Warm
0	10	20	30	40	50	60	70	80	90	100

Rate your feelings toward whites using a feeling thermometer. Ratings above 50 degrees mean that you feel favorably toward the group (warm). Ratings below 50 degrees mean you don't feel favorable toward the group (cool). 50 degrees means that you feel neutral toward the group.

Cold					Neutral					Warm
0	10	20	30	40	50	60	70	80	90	100

**[Political Knowledge]**

For the following questions, make your best guess, even if you're not sure. There are no trick questions.

**[Randomized response order]**

What office does John Roberts hold?

- Senate Majority Leader
- Supreme Court Justice
- Vice President
- Secretary of Defense

**[Randomized response order]**

Whose responsibility is it to determine whether or not a law is constitutional?

- the States
- the Supreme Court
- the Congress
- the President

What percent of the House and Senate must vote (at minimum) to override a presidential veto?

- More than 50%
- More than 60%
- More than 66.7%
- More than 75%
- 100%

**[Randomized Treatments & Candidate Evaluations]**

Read the following text from a recent TV ad for a **[Republican/Democratic]** candidate for the U.S. House of Representatives.

**[Vignette 1]**

"Fighting for America's Future"

Americans today are fighting to keep their jobs and their homes. In Washington, I intend to stand on your side and fight for your future. I will fight hard to get our economy back on track. I will fight for our children's future. And I will fight for justice and opportunity for all. I will always fight for America's future, no matter how tough it gets. Join me in this fight.

**[Vignette 2]**

"Working for America's Future"

Americans today are struggling to keep their jobs and their homes. In Washington, I intend to stand on your side and stand up for your future. I will work hard to get our economy back on track. I will work for our children's future. And I will work for justice and opportunity for all. I will always work for America's future, no matter how tough it gets. Join me in this effort.

Based on this ad, do you have a favorable or unfavorable impression of this candidate?

- Very Favorable
- Somewhat Favorable
- Neutral
- Somewhat Unfavorable
- Very Unfavorable

Does the speaker seem like the kind of political leader you would support?

- Definitely yes
- Probably yes
- Maybe
- Probably not
- Definitely not

Does the candidate seem like the kind of person you can relate to personally?

- Definitely yes
- Probably yes

Maybe  
Probably not  
Definitely not

If elected, do you think the candidate would act forcefully against the interests that are preventing progress on important problems?

Definitely yes  
Probably yes  
Maybe  
Probably not  
Definitely not

**[Partisan Attitudes & Participation]**

So far as you know now, do you expect to vote in the national election this coming November or not?

Not eligible to vote  
Definitely yes  
Probably yes  
Maybe  
Probably not  
Definitely not

If the election for the U.S. House of Representatives in your district were held today, would you rather see a Republican or a Democrat win?

Strongly prefer Republican  
Prefer Republican  
No preference  
Prefer Democrat  
Strongly prefer Democrat

Overall, do you approve or disapprove of how Barack Obama is handling his job as President?

Strongly Approve  
Somewhat Approve  
Neither Approve nor Disapprove  
Somewhat Disapprove  
Strongly Disapprove

During the election campaign, do you think you will try to persuade people why they should vote for or against one of the parties or candidates?

Definitely yes  
Probably yes  
Maybe  
Probably not  
Definitely not

During the campaign, do you expect to contribute time or money to a political party or candidate?

Definitely yes  
Probably yes  
Maybe  
Probably not

Definitely not

During the campaign, do you expect to go to any political meetings, rallies, speeches, dinners, or things like that in support of a particular candidate or party?

- Definitely yes
- Probably yes
- Maybe
- Probably not
- Definitely not

During the campaign, do you expect to discuss politics with your family and friends?

- Definitely yes
- Probably yes
- Maybe
- Probably not
- Definitely not

**[Policy Attitudes related to Hispanics]**

Now, please answer the following questions about your preferences on various policies.

Agree or Disagree? Election ballots should be made available in English only.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? Public schools in communities with many immigrants should only teach in English.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? The U.S. should prevent illegal immigrants from access to health and education services.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Illegal immigrants should be deported when found.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

**[Policy Attitudes related to blacks]**

Agree or Disagree? Police departments should fire officers who act with prejudice against blacks.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? Ann Arbor city officials should ban the KKK and other racist groups from holding rallies against blacks in Ann Arbor.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? The federal government should enact policies that ensure fair treatment for blacks in jobs.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? Qualified black students should receive preference in college admissions.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

Agree or Disagree? The government should spend more on urban education to increase high school graduation rates in Detroit and other urban areas.

- Strongly Agree
- Agree
- Neither Agree nor Disagree
- Disagree
- Strongly Disagree

**[State Violence Attitudes]**

Do you favor the death penalty for persons convicted of murder, or do you favor life imprisonment without parole instead?

- Strongly favor death penalty
- Somewhat favor death penalty
- Favor both equally
- Somewhat favor life imprisonment
- Strongly favor life imprisonment

When police are chasing a suspect who is thought to have a gun, should police shoot the suspect to stop them?

- Strongly favor shooting the suspect
- Somewhat favor shooting the suspect

Neither favor nor oppose shooting the suspect  
Somewhat oppose shooting the suspect  
Strongly oppose shooting the suspect

When the U.S. government has trouble capturing terrorist leaders in other countries, should the government be allowed to kill the terrorist leaders with missiles, or should the government continue trying to catch the leaders alive?

Strongly favor killing terrorist leaders  
Somewhat favor killing terrorist leaders  
Favor both equally  
Somewhat favor trying to capture terrorist leaders  
Strongly favor trying to capture terrorist leaders

When the U.S. government questions terrorist suspects, do you favor or oppose using methods that cause severe pain during questioning?

Strongly favor painful questioning  
Somewhat favor painful questioning  
Neither favor nor oppose painful questioning  
Somewhat oppose painful questioning  
Strongly oppose painful questioning

If Iran continues to make progress toward building a nuclear weapon, do you favor or oppose bombing military targets in Iran?

Strongly favor bombing Iran  
Somewhat favor bombing Iran  
Neither favor nor oppose bombing Iran  
Somewhat oppose bombing Iran  
Strongly oppose bombing Iran

**[Pro Social State Attitudes]**

Should the government do more to help cancer research, do less, or do about the same?

Do much more to help cancer research  
Do somewhat more to help cancer research  
Do about the same to help cancer research  
Do somewhat less to help cancer research  
Do much less to help cancer research

When severe storms hit parts of the U.S., should the federal government do more to help storm victims, do less, or do about the same?

Do much more to help storm victims  
Do somewhat more to help storm victims  
Do about the same to help storm victims  
Do somewhat less to help storm victims  
Do much less to help storm victims

Should government do more to help battered women's shelters, do less, or do about the same?

Do much more to help women's shelters  
Do somewhat more to help women's shelters  
Do about the same to help women's shelters  
Do somewhat less to help women's shelters  
Do much less to help women's shelters

Should the government do more to help people in poor countries get access to clean drinking water, do less, or do about the same?

- Do much more to help with clean water
- Do somewhat more to help with clean water
- Do about the same to help with clean water
- Do somewhat less to help with clean water
- Do much less to help with clean water

**[Actual Participation Item]**

Would you like to contact your representatives in government to express your views about these or other issues? If yes, you'll find contact information for your representatives at the end of the survey.

- Yes
- No

**[Violence Against Political Authority Attitudes]**

Do you agree or disagree with the following statements about politics?

Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, Strongly Disagree

Some politicians deserve a good punch in the face. [excluded from analysis due to poor empirical fit]

When politicians are damaging the country, citizens should send threats to scare them straight. The worst politicians should get a brick through the window to make them stop hurting the country.

Sometimes the only way to stop bad government is with physical force.

Some of the problems citizens have with government could be solved with a few well-aimed bullets.

Citizens upset by government should never use violence to express their feelings.

**[Demographics]**

What is your sex?

- Male
- Female

What is your race/ethnicity? Check all that apply.

- Asian/Pacific Islands
- Black/African American
- Hispanic/Latino
- White/Caucasian
- Other

What region did you spend most of your childhood in?

- U.S. Midwest
- U.S. Northeast
- U.S. South
- U.S. West
- Outside the U.S.

**[Debriefing]**

[If checked "yes" for contact information]

Contacting your representatives in government:

To contact your member of the US House of Representatives, go to:  
<https://writerep.house.gov/writerep/welcome.shtml>

To contact your member of the US Senate, go to:  
[http://www.senate.gov/general/contact\\_information/senators\\_cfm.cfm](http://www.senate.gov/general/contact_information/senators_cfm.cfm)

To contact President Obama, go to:  
<http://www.whitehouse.gov/contact>

### Evaluating Society & Politics

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### Debriefing

The purpose of this study is to explore connections between social and political preferences. This work is interesting because it explores new ways in which social and political preferences may be related.

I would like to emphasize that there are no correct responses in this study. Also, your responses will be confidential because they will be analyzed as part of a group of responses. Thus, I would like to ask you not to mention anything about the study to anyone else. We would appreciate it if you did not tell others about the study. Do you have any questions? Thanks a lot for your help.

Should you have questions regarding your rights as a research participant, please contact the Institutional Review Board, 540 E. Liberty Street, Suite 202, Ann Arbor, MI 48104-2210, (734) 936-0933, email: [irbhsbs@umich.edu](mailto:irbhsbs@umich.edu).

Recommended readings:

Anderson, C. A., & Bushman, B. J. (2002). Human Aggression. *Annual Review of Psychology*, 53, 27-51.

Brader (2006). *Campaigning for Hearts and Minds: How Emotional Appeals in Political Ads Work*. Chicago: University of Chicago.

Bushman, B. J., & Anderson, C. A. (2001). Media violence and the American public: Scientific facts versus media misinformation. *American Psychologist*, 56, 477-489.

Iyengar, S. & Donald R. Kinder. 1987. *News That Matters*. Chicago: University of Chicago Press.

## Bibliography

- Alford, J., Funk, C., and Hibbing, J.. 2005. Are Political Orientations Genetically Transmitted? *American Political Science Review* 99(2): 153-167.
- Altemeyer, R. (1996). *The Authoritarian Specter*. Cambridge: Harvard University Press.
- Anderson, Craig A. 1997. Effects of violent movies and trait hostility on hostile feelings and aggressive thoughts. *Aggressive Behavior*, 23: 161-178.
- Anderson, K.B., Anderson, C.A., Dill, K.E., and Deuser, W.E. 1998. The interactive relations between trait hostility, pain, and aggressive thoughts. *Aggressive Behavior* 24: 161-171.
- Anderson, C.A, Deuser, W.E., and DeNeve, K. 1995. Hot temperatures, hostile affect, hostile cognition, and arousal: Tests of a general model of affective aggression. *Personality and Social Psychology Bulletin* 21: 434-448.
- Anderson, C.A., Anderson, K.B., and Deuser, W.E. 1996. Examining an affective aggression framework: Weapon and temperature effects on aggressive thoughts, affect, and attitudes. *Personality and Social Psychology Bulletin* 22: 366-376.
- Anderson, C. A., Benjamin, A. J., Wood, P.K., and Bonacci, A.M. 2006. Development and testing of the Velicer attitudes toward violence scale: Evidence for a four-factor model. *Aggressive Behavior*, 32(2), 122-136.
- Anderson, C.A., L. Berkowitz, E. Donnerstein, L.R. Huesmann, J.D. Johnson, D. Linz, N.M. Malamuth, and E. Wartella. 2003. The influence of media violence on youth. *Psychological Science in the Public Interest*, 4, 81-110.
- Anderson, Craig A., and Brad J. Bushman. 2001. Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological Science*, 12, 353-359.
- Anderson, Craig A., and Brad J. Bushman. 2002a. Human Aggression. *Annual Review of Psychology* 53: 27-51.
- Anderson, Craig A., and Brad J. Bushman. 2002b. The Effects of Media Violence on Society. *Science* 295: 2377-78.
- Anderson, Craig A., Nicholas L. Carnagey, and Jamie Eubanks. 2003. Exposure to Violent Media: The Effects of Songs with Violent Lyrics on Aggressive Thoughts and Feelings. *Journal of Personality and Social Psychology*, 84: 960-71.
- Anderson, Craig A., and Karen E. Dill. 2000. Video games and aggressive thoughts, feelings, and behavior in the laboratory and in life. *Journal of Personality and Social Psychology*, 78, 772-790.
- Ansolabehere, Stephen, and Shanto Iyengar. 1995. *Going Negative*. New York: Free Press.

- Achen, Christopher, and André Blais. 2010. Intention to Vote, Reported Vote, and Validated Vote. APSA 2010 Annual Meeting Paper. Available at SSRN: <http://ssrn.com/abstract=1642497>
- Archer, John. 2004. Which attitudinal measures predict trait aggression? *Personality and Individual Differences*, 36, 47-60.
- Archer, John. 2009. The Nature of Human Aggression. *International Journal of Law and Psychiatry* 32: 202-208.
- Archer, John, and Sarah M. Coyne. 2005. An Integrated Review of Indirect, Relational, and Social Aggression. *Personality and Social Psychology Review*,
- Atkin, C. 1983. Effects of realistic TV violence vs. fictional violence on aggression. *Journalism Quarterly*, 60: 615-21.
- Azjen, Icek, and Martin Fishbein. 1980. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A., C. Barbaranelli, G.V. Caprara, and C. Pastorelli. 1996. Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, 71, 364-374.
- Bandura, A., Ross, D., and Ross, S.A. 1963. Imitation of Film-Mediated Aggressive Models. *Journal of Abnormal and Social Psychology* 66(1): 3-11.
- Banks, Antoine J., and Nicholas A. Valentino. 2012. Emotional Substrates of White Racial Attitudes. *American Journal of Political Science* 56(2): 286-297.
- Bargh, John A., and Paula Pietromonaco. 1982. Automatic Information Processing and Social Perception: The Influence of Trait information Presented Outside Conscious Awareness on Impression Formation. *Journal of Personality and Social Psychology* 43: 437-49.
- Barlett, C.P., R.J. Harris, and C. Bruey. 2008. The effect of the amount of blood in a violent video game on aggression, hostility, and arousal. *Journal of Experimental Social Psychology*, 44, 539-546.
- Bartels, Larry M. 2002. Beyond the running tally: Partisan bias in political perceptions. *Political Behavior*, 24(2), 117-150.
- Berent, Matthew, K., Jon A. Krosnick, and Arthur Lupia. 2011. *The Quality of Government Records and Over-estimation of Registration and Turnout in Surveys: Lessons from the 2008 ANES Panel Study's Registration and Turnout Validation Exercises*, ANES Technical Report Series, No. nes012554.
- Berinsky, Adam J. 2009. *In Time of War*. Chicago: University of Chicago Press.
- Berkowitz, L. 1993. On the formation and regulation of anger and aggression: A cognitive-neoassociationistic analysis. *American Psychologist*, 45(4), 494-503.

- Berkowitz, L. and J.T. Alioto. 1973. The meaning of an observed event as a determinant of its aggressive consequences. *Journal of Personality and Social Psychology*, 28, 206-217.
- Berkowitz, L., and Powers, P.C. 1979. Effects of timing and justification of witnessed aggression on the observers' punitiveness. *Journal of Research in Personality*, 13, 71-80.
- Bettencourt, B. A., and Miller, N. 1996. Gender differences in aggression as a function of provocation: A meta-analysis. *Psychological Bulletin*, 119(3), 422-447.
- Bettencourt, B. Ann, Amelia Talley, Arlin James Benjamin, and Jeffrey Valentine. 2006. Personality and Aggressive Behavior under Provoking and Neutral Conditions: A meta-analytic review. *Psychological Bulletin* 132(5): 751-777.
- Bjorkvist, K. 1994. Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles*, 30(3-4), 177-188.
- Brader, Ted. 2006. *Campaigning for Hearts and Minds: How Emotional Appeals in Political Ads Work*. Chicago: University of Chicago Press.
- Bryant, Fred B., and Bruce D. Smith. 2001. Refining the Architecture of Aggression: A Measurement Model for the Buss-Perry Aggression Questionnaire. *Journal of Research in Personality* 35: 138-67.
- Burns, Nancy, Kay Lehman Schlozman, and Sidney Verba. 2001. *The Private Roots of Public Action*. Cambridge: Harvard University Press.
- Bushman, Brad J. 1995. Moderating Role of Trait Aggressiveness in the Effects of Violent Media on Aggression. *Journal of Personality and Social Psychology* 69: 950-60.
- Bushman, Brad J. 1996. Individual Differences in the Extent and Development of Aggressive Cognitive-Associative Networks. *Personality and Social Psychology Bulletin* 22: 811-19.
- Bushman, Brad J. 1998. Priming Effects of Media Violence on the Accessibility of Aggressive Constructs in Memory. *Personality and Social Psychology Bulletin* 24: 537-45.
- Bushman, Brad J. and Roy F. Baumeister. 1998. Threatened Egotism, Narcissism, Self-Esteem, and Direct and Displaced Aggression: Does Self-Love or Self-Hate Lead to Violence? *Journal of Personality and Social Psychology* 75(1): 219-229.
- Bushman, Brad J., and Russell G. Geen. 1990. Role of Cognitive-Emotional Mediators and Individual Differences in the Effects of Media Violence on Aggression. *Journal of Personality and Social Psychology* 58: 156-63.
- Bushman, Brad J., and Rowell Huesmann. 2006. Short-term and Long-term Effects of Violent Media on Aggression in Children and Adults. *Archives of Pediatrics and Adolescent Medicine* 160: 348-52.
- Bushman, Brad J., and Gary L. Wells. 1998. Trait Aggression and Hockey Penalties: Predicting Hot Tempers on the Ice. *Journal of Applied Psychology* 83: 969-74.

- Bushman, B. J., Ridge, R.D., Das, E., Key, C.W., and Busath, G.L. 2007. When God sanctions killing: Effect of scriptural violence on aggression. *Psychological Science*, 18, 204-207.
- Buss, Arnold H., and Mark Perry. 1992. The Aggression Questionnaire. *Journal of Personality and Social Psychology* 63: 452-59.
- Cameron, D. David Cameron: Our contract for Northern Ireland. *Conservatives.com* 4 May 2010. Web. 30 Aug 2010 <<http://www.conservatives.com/>>
- Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. 1960. *The American Voter*. Chicago: University of Chicago Press.
- Canes-Wrone, Brandice and Kenneth W. Shotts. 2004. The Conditional Nature of Presidential Responsiveness to Public Opinion. *American Journal of Political Science* 48(4): 690-706.
- Cappella, Joseph N., and Kathleen Hall Jamieson. 1997. *Spiral of Cynicism: The Press and the Public Good*. Oxford University Press.
- Caprara, G. V., Renzi, P., Alcini, P., D'Imperio, G., and Travaglia, G. 1983. Instigation to aggress and escalation of aggression examined from a personological perspective: The role of irritability and of emotional susceptibility. *Aggressive Behavior*, 9, 345-351.
- Carnagey, N. L., and Anderson, C. A. 2007. Changes in attitudes toward war and violence after September 11, 2001. *Aggressive Behavior*, 33(2), 118-129.
- Caspi, Avshalom, Joseph McClay, Terrie E. Moffitt, Jonathan Mill, Judy Marin, Ian W. Craig, Alan Taylor, and Richie Poulton. 2002. Role of Genotype in the Cycle of Violence in Maltreated Children. *Science*, 297: 851-54.
- Chang, Linchiat, and Jon A. Krosnick. 2009. National Surveys via RDD Telephone Interviewing Versus. the Internet: Comparing Sample Representativeness and Response Quality. *Public Opinion Quarterly* 73: 641-678.
- Charney, Evan, and William English. 2012. Candidate Genes and Political Behavior. *American Political Science Review* 106: 1-34.
- Chong, Dennis, and James N. Druckman. 2007. Framing Public Opinion in Competitive Democracies. *American Political Science Review* 101(4): 637-55.
- Chong, Dennis, and James N. Druckman. 2010. Dynamic Public Opinion: Communication Effects over Time. *American Political Science Review* 104(4): 663-680.
- Coccaro, E. F., Bergeman, C. S., Kavoussi, R. J., and Seroczynski, A. D. 1997. Heritability of aggression and irritability: A twin study of the Buss-Durkee aggression scales in adult male subjects. *Biological Psychiatry*, 41(3), 273-284.
- Condon, S. Tim Pawlenty: Let's get the 9-iron, like Tiger Woods' wife. *CBS News*. 19 Feb. 2010. Web. 30 Aug. 2010. <<http://www.cbsnews.com/>>
- Converse, Philip E. 1964. The Nature of Belief Systems in Mass Publics. In D. E. Apter (Ed.), *Ideology and discontent*. New York: Free Press.

- Council on Foreign Relations. Republican Debate Transcript, South Carolina, January 2012. *Council on Foreign Relations*. 17 Jan. 2012. Web. 27 Jul. 2012. <http://www.cfr.org/>
- Delli Carpini, Michael X., and Scott Keeter. 1996. *What Americans Know About Politics and Why It Matters*. New Haven: Yale University Press.
- Dill, K.E., C.A. Anderson, and W.E. Deuser. 1997. Effects of aggressive personality on social expectations and social perceptions. *Journal of Research in Personality*, 31, 272-292.
- Donnerstein, E., Slaby, R. G., and Eron, L. D. 1994. The mass media and youth aggression. In L. D. Eron, J. H. Gentry, & P. Schlegel (Eds.) *Reason to hope: A psychosocial perspective on violence and youth* (219-250). Washington DC: American Psychological Association.
- Druckman, James N. 2001. On the Limits of Framing: Who Can Frame? *Journal of Politics* 63: 1041-1066.
- Druckman, James N. 2004. Political Preference Formation: Competition, Deliberation, and the (Ir)relevance of Framing Effects. *American Political Science Review* 98: 671-686.
- Druckman, James N., Jordan Fein, and Thomas J. Lapeer. 2012. A Source of Bias in Public Opinion Stability. *American Political Science Review* 106(2): 430-454.
- Druckman, James. N., and Rose McDermott. 2008. Emotion and the framing of risky choice. *Political Behavior*, 30(3), 297-321.
- Eagly, Alice H., and Valerie J. Steffen. 1986. Gender and Aggressive Behavior: A Meta-analytic Review of the Social Psychological Literature. *Psychological Bulletin* 100: 309-30.
- Eichenberg, R. C. 2003. Gender differences in public attitudes toward the use of force by the United States, 1990-2003. *International Security*, 28(1), 110-141
- Erikson, Robert. S., and Larua Stoker. 2011. Caught in the draft: The effects of Vietnam draft lottery status on political attitudes. *American Political Science Review*, 105(2): 221-238.
- Fearon, J.D. & D.D. Laitin. 2003. Ethnicity, Insurgency, and Civil War. *American Political Science Review*, 97, 75-90.
- Feldman, Stanley. 2003. Enforcing Social Conformity: A Theory of Authoritarianism. *Political Psychology*, 24(1), 41-74.
- Feldman, Stanley, and Karen Stenner. 1997. Perceived Threat and Authoritarianism. *Political Psychology*, 18(4), 741-770.
- Felsten, G. and Hill, V. 1999. Aggression Questionnaire hostility scale predicts anger in response to mistreatment. *Behaviour Research and Therapy* 37: 87-97.
- Fiorina, Morris P. 1981. *Retrospective voting in American national elections*. New Haven, CT: Yale University Press.

- Fox News Insider. Transcript: Fox News Channel & Wall Street Journal Debate in South Carolina. 17 Jan. 2012. Web. 20 Jan. 2012. <http://foxnewsinsider.com/>
- Franklin, Charles H. 1989. Estimation across Data Sets: Two-Stage Auxiliary Instrumental Variables Estimation (2SAIV). *Political Analysis* 1(1): 1-23.
- Franklin, Charles H., and John E. Jackson. 1983. The dynamics of party identification. *American Political Science Review*, 77(4), 957-973.
- Freedman, Paul, and Ken Goldstein. 1999. Measuring Media Exposure and the Effects of Negative Campaign Ads. *American Journal of Political Science* 43: 1189-1208.
- Fowler, James H., and Christopher T. Dawes. 2008. Two Genes Predict Voter Turnout. *Journal of Politics* 70(3): 579-594.
- Galesic, M., R. Tourangeau, and M.P. Couper. 2006. Complementing random-digit-dialing telephone surveys with other approaches to collecting sensitive data. *American Journal of Preventive Medicine*, 31, 437-443.
- Gamson, W. A., and McEvoy, J. 1970. Police violence and its public support. *Annals of the American Academy*, 391, 97-110.
- Gault, B. A., and Sabini, J. 2000. The roles of empathy, anger, and gender in predicting attitudes toward punitive, reparative, and preventative public policies. *Cognition and Emotion*, 14(4), 495-520.
- Geer, John G. 2006. *In Defense of Negativity*. Chicago: University of Chicago Press.
- Gelman, Andrew and Gary King. 1993. Why are American Presidential Election Campaign Polls so Variable When Votes Are So Predictable? *British Journal of Political Science* 23: 409-51.
- Gerber, Alan S., James G. Gimpel, Donald P. Green, and Daron R. Shaw. 2011. How Large and Long-lasting Are the Persuasive Effects of Televised Campaign Ads? Results from a Randomized Field Experiment. *American Political Science Review* 105(1): 135-50.
- Gerber, Alan S., Donald P. Green, and Christopher W. Larimer. Social Pressure and Voter Turnout: Evidence from a Large-Scale Field Experiment. *American Political Science Review* 102(February): 33-48.
- Gerber, Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling, and Shang E. Ha. 2010. Personality and Political Attitudes: Relationships across Issue Domains and Political Contexts. *American Political Science Review* 104: 111-33.
- Green, Donald, Bradley Palmquist and Eric Shickler. 2002. *Partisan Hearts and Minds: Political Parties and Social Identities of Voters*. New Haven, CT: Yale University Press.
- Hapkiewicz, W.G., and Stone, R.D. 1974. The effect of realistic versus imaginary aggressive models on children's interpersonal play. *Child Study Journal*, 4, 47-58.

- Harris, Julie A. 1997. A Further Evaluation of the Aggression Questionnaire: Issues of Validity and Reliability. *Behavioral Research and Therapy* 35: 1047-53.
- Hatemi, Peter K. and Rose McDermott. 2011. *Man is by Nature a Political Animal*. Chicago: University of Chicago Press.
- Hetherington, Marc and Elizabeth Suhay. 2010. Authoritarianism, Threat, and Americans' Support for the War on Terror. *American Journal of Political Science*, 55(3): 546-560.
- Hibbs, Douglas A. 1987. *The American Political Economy: Macroeconomics and Electoral Politics*. Cambridge: Harvard University Press.
- Hovland, Carl I. 1959. Reconciling Conflicting Results Derived from Experimental and Survey Studies of Attitude Change." *American Psychologist* 14(1): 8-17.
- Huddy, Leonie, Stanley Feldman, and Erin Cassese. 2007. On the distinct effects of anxiety and anger. In W. Russell Neuman, George E. Marcus, Michael MacKuen, and Ann N. Crigler (eds.) *The affect effect*. (pp. 202-230). Chicago: University of Chicago Press.
- Huesmann, L. Rowell, Leonard D. Eron, Monroe M. Lefkowitz, and Leopold O. Walder. 1984. Stability of Aggression over Time and Generations. *Developmental Psychology* 20: 1120-34.
- Hulse, Carl, and Kate Zernike. Bloodshed Puts New Focus on Vitriol in Politics. *New York Times*. 8 Jan. 2011. Web. 15 Feb. 2011. <<http://www.nytimes.com/>>
- Humphreys, M. and J.M. Weinstein. 2008. Who fights? The determinants of participation in civil war. *American Journal of Political Science*, 52, 436-455.
- Iqbal, Z. and C. Zorn. 2006. Sic semper tyrannis? Power, repression, and assassination since the Second World War. *Journal of Politics*, 68, 489-501.
- Iyengar, Shanto, and Donald R. Kinder. 1987. *News that Matters*. Chicago: University of Chicago Press.
- Jacobs, Lawrence R. and Benjamin I. Page. 2005. Who Influences U.S. Foreign Policy? *American Political Science Review*, 99: 107-123.
- Kalmoe, Nathan P. 2012. Moving from Violent Attitudes to Violent Behavior. Paper presented at the 2012 Midwest Political Science Association's Annual Meeting.
- Kalmoe, Nathan P. 2013. From Fistfights to Firefights: Trait Aggression and Support for State Violence. *Political Behavior* (forthcoming).
- Kinder, Donald. R. 1994. Reason and emotion in American political life. In R. Schank and E. Langer (eds.), *Beliefs, Reasoning, and Decision-making*. Hillsdale, NJ: Lawrence Erlbaum.
- Kinder, Donald R. 2007. Curmudgeonly Advice. *Journal of Communication* 57 (1): 155-162.

- Kinder, Donald R., and Cindy D. Kam 2009. *Us against them*. Chicago: University of Chicago Press.
- Kinder Donald. R., and D. Roderick Kiewiet. 1981. Sociotropic Voting: The American Case. *British Journal Of Political Science*, 11, 129-161.
- Kinder, Donald R. and Lynn Sanders. 1996. *Divided by Color*. Chicago: University of Chicago Press.
- Krupnikov, Yanna. 2011. When Does Negativity Demobilize? Tracing the Conditional Effect of Negative Campaigning on Voter Turnout. *American Journal of Political Science* 55(4): 796-812.
- Kuklinski, J. H., Sniderman, P. M., Knight, K., Piazza, T., Tetlock, P. E., Lawrence, G. R., and Mellers, B. 1997. Racial prejudice and attitudes toward affirmative action. *American Journal of Political Science*, 41(2), 402-419.
- Kurtz, Howard. Should We Blame Sarah Palin for Gabrielle Giffords' Shooting? Talking Points Memo. 8 Jan. 2011. Web. 10 Jan. 2011. <http://www.thedailybeast.com>
- Landau, Mark J., Brian P. Meier, and Lucas A. Keefer. 2010. A Metaphor-enriched Social Cognition. *Psychological Bulletin* 136(6): 1045-1067.
- Lau, Richard R., Lee Sigelman, Caroline Heldman, and Paul Babbitt. 1999. The Effects of Negative Political Advertisements: A Meta-analytic Assessment. *American Political Science Review* 93: 851-875.
- Lindsay, J.J., and Anderson, C.A. 2000. From antecedent conditions to violent actions: a general affective aggression model. *Personality and Social Psychology Bulletin* 26: 533-547
- Lippmann, Walter. 1922. *Public Opinion*. New York: Free Press.
- Lodge, Milton, and Ruth Hamill. 1986. A Partisan Schema for Information Processing. *American Political Science Review* 80(2): 505-19.
- Lodge, Milton and Marco Steenbergen. 1995. The Responsive Voter: Campaign Information and the Dynamics of Candidate Evaluation. *American Political Science Review* 83: 309-326.
- Lupia, Arthur, and Mathew D. McCubbins. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know?* Cambridge: Cambridge University Press.
- Marcus, George E., W. Russell Neuman, and Michael MacKuen. 2000. *Affective Intelligence and Political Judgment*. Chicago: University of Chicago Press.
- Marshall, M. A., and Brown, J. D. 2006. Trait aggressiveness and situational provocation: A test of the "Traits as Situational Sensitivities" (TASS) model. *Personality and Social Psychology Bulletin*, 32, 1100-1113.
- Martinez, Michael. Shooting Throws Spotlight on State of U.S. Political Rhetoric. *CNN.com*. 10 Jan. 2011. Web. 15 Feb. 2011. <http://www.cnn.com/>

- McDermott, R., D. Tingley, J. Cowden, G. Frazzetto, and D. D.P. Johnson. 2009. Monoamine Oxidase A gene (MAOA) predicts behavioral aggression following provocation. *Proceedings of the National Academy of Sciences*, 106, 2118-2123.
- McIntyre, M.H., E.S. Barrett, R. McDermott, D.D.P. Johnson, J. Cowden, and S.P. Rosen. 2007. Finger length ratio (2D:4D) and sex differences in aggression during a simulated war game. *Personality and Individual Differences*, 42, 755-764.
- Milgram, Stanley. 1963. Behavioral Study of Obedience. *Journal of Abnormal and Social Psychology*, 67(4): 371-378.
- Miller, Joanne M., and Jon A. Krosnick. 2000. News Media Impact on the Ingredients of Presidential Evaluations: Politically Knowledgeable Citizens are Guided by a Trusted Source. *American Journal of Political Science* 44(2): 301-315.
- Mischel, Walter, and Yuichi Shoda. 1995. A Cognitive-Affective System Theory of Personality: Reconceptualizing Situations, Dispositions, Dynamics, and Invariance in Personality Structure. *Psychological Review* 102: 246-268.
- Mondak, Jeffrey J. 2010. *Personality and the Foundations of Political Behavior*. Cambridge: Cambridge University Press.
- Mondak, Jeffrey J., Matthew V. Hibbing, Damarys Canache, Mitchell A. Seligson, and Mary R. Anderson. 2010. Personality and Civic Engagement. An Integrative Framework for the Study of Trait Effects on Political Behavior. *American Political Science Review* 104(1): 85-110.
- Montopoli, Brian. McCain: Sarah Palin is Not Inciting Violence. *CBS News*. 25 Mar. 2010. Web. 30 Aug. 2010. <http://www.cbsnews.com/>
- Nelson, Thomas E., Rosalee A. Clawson, and Zoe Oxley. 1997. Media Framing of a Civil Liberties Controversy and its Effect on Tolerance. *American Political Science Review* 91(3): 567-84.
- NYT Editorial Board. Bloodshed and Invective in Arizona. *New York Times*. 9 Jan. 2011. Web. 9 Jan. 2011. <http://www.nytimes.com/>
- Niemi, Richard G., Stephen C. Craig, and Franco Mattei. 1991. Measuring Internal Political Efficacy in the 1988 National Election Study. *American Political Science Review* 85(4): 1407-1413.
- Nickerson, David W. 2008. Is Voting Contagious? Evidence from Two Field Experiments. *American Political Science Review* 102(February): 49-57.
- Nisbett, Richard E., and Dov Cohen. 1997. *Culture of Honor: The Psychology of Violence in the South*. Oxford: Westview Press.
- Noguchi, Kenji, Ian M. Handley, and Dolores Albarracin. 2010. Participating in Politics Resembles Physical Activity: General Action Patterns in International Archives, United States Archives, and Experiments. *Psychological Science* 20: 1-8.

- Olweus, D. 1979. The stability of aggressive reaction patterns in males: A review. *Psychological Bulletin* 86: 852-875.
- Ottati, Victor, Susan Rhoads, and Arthur C. Graesser. 1999. The Effect of Metaphor in Processing Style in a Persuasion Task: A Motivational Resonance Model. *Journal of Personality and Social Psychology* 77(4): 688-697.
- Oxley, D. R., Smith, K. B., Alford, J. R., Hibbing, M. V., Miller, J. L., Scalora, M., Hatemi, P. K., and Hibbing, J. R. 2008. Political attitudes vary with physiological traits. *Science*, 321(5896), 1667-1670.
- Peters, Gerhard and John T. Woolley. The American Presidency Project, University of California—Santa Barbara <<http://www.presidency.ucsb.edu/>>
- Phillips, D. P., and Hensley, J. E. 1984. When violence is rewarded or punished: The impact of mass media stories on homicide. *Journal of Communication*, 34(3), 101-116.
- Pitney, John J. 2000. *The Art of Political Warfare*. Norman: University of Oklahoma Press.
- Popkin, Sam. 1991. *The Reasoning Voter*. Chicago: University of Chicago Press.
- Potter, W. J. 1988. Perceived reality in television effects research. *Journal of Broadcasting & Electronic Media*, 32: 23-41.
- Potter, W. J., and Ware, W. 1987. An analysis of the contexts of antisocial acts on prime-time television. *Communication Research*, 14, 664–686.
- Price, Vincent, and John Zaller. 1993. Who Gets the News: Alternative Measures of News Reception and their Implications for Research. *Public Opinion Quarterly* 57(2): 133-164.
- Putnam, Robert D. 2001. *Bowling Alone: The Collapse and Revival of American Community*. Simon and Schuster Press.
- Quinones, S., and Muskal, M. Jared Loughner to be charged in Arizona shootings targeting Gabrielle Giffords. *Los Angeles Times*. 9 Jan. 2011. Web. 9 Jan. 2011. <http://articles.latimes.com/>
- Reynolds, Glenn H. The Arizona Tragedy and the Politics of Blood Libel. *Wall Street Journal*. 10 Jan. 2011. Web. 10 Jan. 2011. <http://online.wsj.com/>
- Rich, Frank. The Rage is Not about Health Care. *New York Times*. 27 Mar. 2010. Web. 27 Mar. 2010. <http://www.nytimes.com/>
- Rosenstone, Stephen J., and John Mark Hansen. 1993. *Mobilization, Participation, and Democracy in America*. Longman Press.
- Rushton, J. P., Fulker, D. W., Neale, M. C., Nias, D. K., and Eysenck, H. J. 1986. Altruism and aggression: The heritability of individual differences. *Journal of Personality and Social Psychology*, 50(6), 1192-1198.

- Sapiro, Virginia, and Pamela J. Conover. 1993. Gender, feminist consciousness, and war. *American Journal of Political Science*, 37(4), 1079-1099.
- Sargent, G. Sharron Angle floated possibility of armed insurrection. *Washington Post*. 15 Jun. 2010. Web. 15 Feb. 2011. <http://www.washingtonpost.com/>
- Schattschneider, E. E. 1960. *The Semisovereign People*. Wadsworth Publishing.
- Sears, David O., Lau, R.R., Tyler T. and Allen, A.M., Jr. 1980. Self-Interest versus symbolic politics in policy attitudes and presidential voting. *American Political Science Review* 74: 670-684.
- Siever, Larry J. 2008. Neurobiology of Aggression and Violence. *American Journal of Psychiatry* 165: 429-442.
- Smith, Ben. Obama brings gun to a knife fight. *Politico.com*. (14 Jun. 2008). Web. 15 Feb. 2011. <<http://www.politico.com/>>
- Shapiro, R. Y., and Mahajan, H. 1986. Gender differences in policy preferences: A summary of trends from the 1960s to the 1980s. *Public Opinion Quarterly*, 50(1), 42-61.
- Sharpe, J. P., and S. Desai. 2001. The Revised Neo Personality Inventory and the MMPI-2 Psychopathology Five in the Prediction of Aggression. *Personality and Individual Differences* 31(4): 505-518.
- Siever, L. J. 2008. Neurobiology of aggression and violence. *American Journal of Psychiatry*, 165(4), 429-442.
- Smith, K.B., Oxley, D.R., Hibbing, M.V., Alford, J.R., and Hibbing, J.R. 2011. Linking genetics and political attitudes: Re-conceptualizing political ideology. *Political Psychology* 32: 369-97.
- Stenner, Karen. 2005. *The Authoritarian Dynamic*. Cambridge: Cambridge University Press.
- Sweet, Lynn. Obama at Madison rally: 'Keep believing...Change is possible' Transcript. *Washington Post*. 29 Sept. 2010. Web. 29 Sept. 2010. <<http://www.washingtonpost.com/>>
- James Stimson, Michael MacKuen and Robert Erikson. 1995. Dynamic Representation. *American Political Science Review* 89:543-65.
- Tedeschi J. T., and Felson R. B. 1994. *Violence, aggression, & coercive actions*. Washington, DC: American Psychological Association.
- Tessler, M., Nachtwey, J., and Grant, A. 1999. Further tests of the women and peace hypothesis: Evidence from cross-national survey research in the Middle East. *International Studies Quarterly*, 43(3), 519-531.
- Tremblay, Paul F., and Laura A. Ewart. 2005. The Buss and Perry Aggression Questionnaire and its Relations to Values, the Big Five, Provoking Hypothetical Situations, Alcohol Consumption Patterns, and Alcohol Expectancies. *Personality and Individual Differences* 38: 337-346.

- Washington Post. Obama's jobs speech in Elyria, Ohio: The prepared text. *Washington Post*. 22 Jan. 2010. Web. 30 Aug. 2010. <<http://www.washingtonpost.com/>>
- Valentino, Nicholas A., Matthew N. Beckmann, and Thomas A. Burr. 2001. A Spiral of Cynicism for Some: The Contingent Effects of Campaign News Frames on Participation and Confidence in Government. *Political Communication* 18: 347-367.
- Valentino, Nicholas A., Krysha Gregorowicz, and Eric W. Groenendyk. 2009. Efficacy, emotions and the habit of participation. *Political Behavior*, 31(3), 307-330.
- Valentino, Nicholas A., Ted Brader, Eric W. Groenendyk, Krysha Gregorowicz, and Vincent L. Hutchings. 2011. Election Night's Alright for Fighting: The Role of Emotions in Political Participation. *Journal of Politics* 73: 156-170.
- Valentino, Nicholas A., Vincent L. Hutchings, and Ismail K. White. 2002. Cues that Matter: How Political Ads Prime Racial Attitudes During Campaigns. *American Political Science Review* 96: 75-90.
- Verba, Sidney, Kay Lehman Schlozman, and Henry Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge: Harvard University Press.
- WSJ Staff. John McCain's convention speech. *Wall Street Journal*. 4 Sept. 2010. Web. 30 Aug. 2010. <<http://www.wsj.com/>>
- Walsh, Katherine Cramer. 2004. *Talking about Politics*. Chicago: University of Chicago Press.
- Wilson, E.O. 2004. *On Human Nature*. 2<sup>nd</sup> ed. Cambridge: Harvard University Press.
- Winter, David G. 1987. Leader Appeal, Leader Performance, and the Motive Profiles of Leaders and Followers: A Study of American Presidents and Elections. *Journal of Personality and Social Psychology* 52(1): 196-202.
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. Chicago: University of Chicago Press.
- Zillmann, Dolf. 1988. Cognition-excitation interdependencies in aggressive behavior. *Aggressive Behavior*, 14(1), 51-64.
- Zillmann, Dolf, and James B. Weaver III. 2007. Aggressive Personality Traits in the Effects of Violent Imagery on Unprovoked Impulsive Aggression. *Journal of Research in Personality*, 41: 753-71.