

1-20-2006

## **Gun Control Policy Preference in Context: A Contextually Sensitive Model of Gun Control Policy Preferences**

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GUN CONTROL POLICY PREFERENCES IN CONTEXT:  
A CONTEXTUALLY SENSITIVE MODEL OF GUN CONTROL POLICY PREFERENCES

A Dissertation

Submitted to the Graduate Faculty of the  
University of New Orleans  
in partial fulfillment of the  
requirements for the degree of

Doctor of Philosophy  
in  
The Department of Political Science

by

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B.A. Moody Bible Institute, 1991  
M.A. University of New Orleans 1999

December 2005

## DEDICATION

I would like to dedicate this research to two individuals. First, to my grandmother, Eunice G. Pierce; the time that we shared together allowed me to pursue this dream. Second, to my daughter, Hannah Adele Vile; each day I returned home from work and you greeted me at the door with a smile was one more reason to keep striving to finish this project.

## ACKNOWLEDGEMENT

While there are far too many individuals who aided and supported my work on this project to thank, I would like to acknowledge the following people for their love and understanding through this process: my loving wife, Karen, who has waited patiently for this for six years; Dr. Susan Howell and the rest of my graduate committee, who worked with me over distance and through the devastation of hurricane Katrina; the staff of the American National Election Studies, who answered my requests for clarification quickly and professionally; the staff of the New Orleans office of the Federal Bureau of Investigation; Mr. Kenneth Voytek, who gave me the space and time necessary to complete this research while fulfilling my duties to Goodwill Industries International. Finally, I would like to thank the Lord for restoring my health and allowing me the time to complete this project.

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## ABSTRACT

Using data from the 2000 American National Election Study and the Uniform Crime Reports, this research studies the impact of core values and contextual effects on gun control policy preferences. The research seeks to produce a contextually sensitive model of gun control policy preferences that accounts for the nature of the elite message war regarding the issue of gun control and for both long and short-term contextual factors that might sway individual opinions at the point of stimulus (e.g., the survey question). While the analysis does find conditioning effects, the effects do not conform to the theoretical expectations, and they are generally weaker than expected. In contrast, the research demonstrates the strong connections that formed in the public's mind between ideological, partisan and gender-based core values and gun control policy preferences. These results are consistent with research that found the effects of political messages often vary in counterintuitive ways due to variance in the strength of the message and political awareness (Zaller 1992). Replicating this research across various time periods permits the investigation of the decay rate of impacts on individual policy preferences created by substantial, one-time contextual effects. It may be that contextual effects have a substantial impact in the short-term, but these short-term impacts are mitigated over the long-term by continual reinforcement of the basic themes employed by elites in the message war surrounding the issue.

## INTRODUCTION

Each year, pollsters tell us that the public continues to support increased restrictions on the sales and ownership of firearms. In fact, for the past twelve years support for increased restrictions on the sale and ownership of firearms has never fallen below 50 percent (Gallup 2002). Nevertheless, gun control legislation continues to face serious hurdles in both the national and state legislatures. Thus, it is easy to conclude that public support for gun control does not translate into the political capital necessary to pass laws.

While many others have written eloquently about the special interests involved in gun control legislation debates – political capital disconnect (see Spitzer 1998), I will pursue a different argument. It is true that support for gun control has been fairly consistent throughout the years, but I question the meaning and depth of this support. It may be that the support for gun control legislation in the public opinion polls is a political mirage, a phantasm created by simply asking about the subject. Put another way, do people really think about gun control policy or do they give answers from a hasty search of any relevant data in their minds?

Using data collected by the 2000 American National Election Study, I examine the patterns of relationships between ideology, partisan identification, crime-related concepts, and gun control policy preferences. If the gun control debate is to be resolved, public opinion research eventually must produce a explanation for the support – political capital disconnect that goes beyond the special interest politics explanations. It must explain how the public thinks about the issue.

## CHAPTER ONE: THINKING ABOUT GUN POLICY

In the 1989 movie *Pink Cadillac*, Clint Eastwood unwittingly encapsulated the essential division of gun control policy. While preparing for a raid on the white supremacists' training camp to retrieve her kidnapped baby, Bernadette Peters expresses a desire to carry a gun. Eastwood, playing a bounty hunter named Tommy Nowak, replies, "I have a strict policy on gun control; if there's a gun around I want to control it," expressing the gun owners' belief that they are perfectly capable of owning and using a firearm. They will brook no outside interference in their area of expertise. At the same time, Eastwood's reply also represents the pro-gun control sentiment that untrained, emotionally overwrought individuals have no business possessing a deadly weapon.

Since the late 1960s, the division represented by this statement has played an important role in defining the shape and flow of political battles. A quick search of the *Federal Register* reveals thousands of regulations regarding the manufacture, use, transportation, and sales of firearms. For example, the federal government has established waiting periods imposed by the Brady Bill and banned the sale of "assault weapons" with the 1994 Violent Crime Control Act (expired in 2004). It also regulates the formatting of the serial number stamped, engraved or cast into each gun sold in the United States (27 C.F.R. pts. 178-179 (2001)). Finally, it mandates export controls that define the barrel length of shotguns manufactured for export (22 C.F.R. pt. 121 (2002)). These examples do not include the myriad of state and municipal regulations. In short, gun control policy continues to ferment major political debate.

The gun control debate, in turn, affects the views of the general public. Even though the question of gun control primarily revolves around the simple regulation of firearms, the rhetoric of groups such as the National Rifle Association and Handgun Control, Inc. has given the public

debate an all or nothing “rights” tone. This, in turn, has drawn much of the public into the discussion of rights and safety. As Spitzer notes (1998, 67), the “white-hot rhetoric” of the gun debate is “symptomatic of social regulatory policies, where the primary focus is on social relationships rather than economic transactions.” In such policy arenas, one finds a predominance of single-issue groups, each trying to mobilize a public that is opinionated, but only sporadically interested (Spitzer 1998, 68). The result is a public that is broadly aware of the topic but one that is rarely treated as an equal partner in the debate.

Nevertheless, the public’s view on the issue is important. Both pro- and anti-gun control advocates appeal to the public in order to advance their agendas. The failure, or success, in mobilizing the public in any particular legislative battle can have broad repercussions for the issue groups involved. Understanding the public’s mood on the issue is often the key to a successful mobilization. While many researchers have sought to analyze the specific points of controversy in the gun control debate, few have studied the public’s perception of the issue in depth and even fewer have attempted to demonstrate the complex web of elite framing, societal conditions, and individual convictions that make up each person’s thoughts on the issue. I suggest that this oversight places elites “in the dark” regarding the public’s gun control policy preferences. I hope to rectify this omission through this research.

I seek to answer a number of questions relating to the public’s views on the issue of gun control. 1) What core values constrain gun control policy preferences? 2) How do environmental conditions affect these preferences? 3) How do environmental conditions affect the relationships between core values and gun control policy preferences? 4) How does the model change when we selectively consider the politically unsophisticated versus the politically

sophisticated? Answering these questions will illuminate the ways in which the public thinks about the issue of gun control, aiding policy makers who design appeals to the public.

The remainder of this chapter discusses the history of gun control policy by focusing on the elite debate. Following this discussion, I review the competing explanations of public attitudes. I conclude with an individual-level model of gun control policy preferences that includes both characteristics and attitudes of individuals and includes environmental influences. The remaining chapters proceed to describe the data and methods used in this analysis, the various tests of the model proposed in this chapter, and the conclusions we may draw from the results. Paying more attention to the ways in which the public thinks about the issue will help both sides to find mutually acceptable solutions.

#### ELITE MESSAGES AND THE GUN CONTROL POLICY DEBATE

Before turning to public opinion on gun control policy, we must develop an understanding of the issues raised by the elites in the policy debate. Practically everyone agrees that the issue of gun violence in the United States is a severe domestic problem (Walker 2001, 185). Beyond this general consensus, however, the pro-gun and anti-gun sides find little agreement. Because of this, both sides engage in a war of messages, each appealing to the data, and interpretations thereof, that best reinforces their position (Walker 2001, 186). In this environment, the public cannot tell which side is more “right,” leading to an abundance of equally plausible but mutually exclusive answers (Zaller 1992). If the public is aware of, but not intimately involved in, the policy problem, we presume that the arguments used to discuss these issues have filtered down to the average citizen (Zaller 1992). These arguments inform the public as to which issues are important and which do not relate to the policy problem. Therefore,

a firm grasp of the elite policy debate should help to guide our investigation of the public's views.

While the number of books, articles, speeches, and flyers produced by both sides of the gun control debate is enormous, the issues they raise may be categorized into three broad groups: those based on legal issues, those based on market principles, and those based on utilitarian concerns. As with any typology, one should expect some degree of blurring when considering a specific argument. In fact, the elites often combine the issues into various mutually reinforcing arguments. For instance, gun control opponents will often cite research demonstrating the benefits of increased gun ownership (such as Lott 2000) while simultaneously asserting that, "Even if [research shows] guns are harmful, I have a right to own and lawfully use them as I see fit" (Spitzer 1998, 44). Certainly, these cross-issue appeals do little to clarify the debate to the public; nevertheless, they clearly contain "points" that the public can grasp.

### Legal Principles

The quintessential legal principle argued in the gun control literature is the interpretation of the Second Amendment to the U.S. Constitution. The point of constant debate in the message war is the presence or absence of an individual right to own a gun, as opposed to a collective right of the states to maintain militias (Spitzer 1998, 17-18). Both gun control proponents and opponents cite legal analyses that respectively contract or expand the language of Second Amendment. While each side proclaims the veracity of its interpretation, the truth of the matter remains that the legal *community* has not settled the issue (Heath 2001, 42).<sup>1</sup>

Reviewing the actual text of the Amendment illustrates why both sides use this sentence to bolster their position: "A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed." On the one hand, the

Article clearly relates the possession of firearms to the defense of the state, a provision no longer necessary given current military doctrine (Spitzer 1998, 29). On the other hand the Article clearly relates this possession of firearms to “the people,” a phrase typically used to imply citizens (Tribe 2000, 989-903). In summary, both the actual text of the Second Amendment and the legal interpretations thereof remain unclear, allowing elites to present competing messages to the public.

### Market Principles

Another key issue both gun control proponents and opponents raise in the message war is the issue of market principles. They argue that government can apply economic pressure to reduce gun ownership; however, as with the arguments about the meaning of the Second Amendment, each side chooses to emphasize different interpretations of basic economic principles. Furthermore, the arguments used in this debate serve as a good example of those statements that intentionally seek to blur the line between normative principles and the good, such as reduced crime, produced by the practice of those principles.

Gun control proponents argue that “supply reduction” will reduce gun violence (Walker 2001, 188). For this faction, the principle in question is the existence, or availability, of firearms, in general.<sup>2</sup> Statements by noted gun control proponents such as Pete Shields, “Guns don’t die – people do,” (Spitzer 1998, 43) illustrate this idea, implying that the appropriate “price” to increase is that of the guns themselves. The most well-known policy options associated with this version of deterrence involve banning various types of guns (Walker 2001, 189-195) and the “bad persons” regulations. Banning the sale of certain types of particularly destructive guns increases the “cost” of acquiring these weapons through black market pressures. This should deter all but the most committed purchasers from acquiring these weapons. Likewise, restricting

certain classes of individuals, usually defined by society as lacking the basic sense of responsibility required for the exercise the privilege of gun ownership, should deter these individuals from acquiring weapons.

In contrast, gun control opponents assert that the best method for reducing gun violence is through “demand reduction” (Walker 2001, 189). For this faction, the principle in question is not the existence of firearms but their use in crimes. They assert that increasing the “price” of the criminal use of guns will decrease the “demand” by criminals. Control opponents offer some specific policy options based upon this interpretation of deterrence through cost manipulation. For instance, they argue that mandatory sentencing policy for gun crimes (Walker 2001, 202) or an increased rate of gun usage among law-abiding citizens, through “concealed carry permits,” etc. (Lott 2000) will deter the less committed criminals from using guns.

In summary, the elites involved in the gun control policy debate also present competing messages regarding the best methods for ensuring that gun ownership is restricted to socially acceptable limits. Based on equally plausible presumptions about the laws of supply and demand, these messages present a confusing picture to the public and do little to settle the policy debate.

### Utilitarian Issues

If the quintessential normative issue in the gun control policy debate is the interpretation of the Second Amendment, the quintessential utilitarian issue is the effect of gun control on crime. As with the normative issues raised in the elite debates, neither side is willing to concede their basic presumptions regarding the causes of crime. This leads to a debate of what “good,” if any, can come from limiting access to firearms.



Believing that crime and the availability of firearms are “inextricably linked,” gun control proponents argue that the benefits of gun control policy justify restricting private ownership of firearms (Spitzer 1998, 64). While they readily admit that this linkage does not imply that the mere existence of guns causes crime, they assert that the presence of firearms increases the degree of devastation from crime (Spitzer 1998, 65-66). This leads to a conclusion that, regardless of any normative questions, the reduction of available firearms will lead to a reduction in the violence of crime. Based on this conclusion, control proponents assert, “The regulation of guns is a rational policy step, not because it represents a panacea or because the research all points in the same direction, but because the weight of the evidence favors *societal benefits* [emphasis added] significantly over the likely costs” (Spitzer 1998, 66).

Until recently, the approach of gun control opponents to the debate regarding the relationship of gun control and crime focused on highlighting the deficiencies in the research demonstrating the societal benefits of gun control policies. They point to research that shows that policies banning “Saturday Night Specials,” assault weapons, and handgun ownership in general have all failed to significantly reduce the crime rate (Walker 2001, 190, 192-193). However, the most recent arguments from the gun control opponents have emphasized the social costs of gun control. For instance, using county-level data, Lott (2000, 199) reports that the enactment of waiting periods and safe storage laws actually increases the incidence of rapes, robberies, and burglaries.<sup>3</sup> Based upon these assertions, gun control opponents conclude that gun control policies “disarm honest citizens” and “embolden the criminals” (Poe 2001, 109).

In conclusion, debate regarding the utilitarian benefits of gun control suffers from the same flaw as the debate regarding the normative issues. Both sides wage a message war in which they discount the opposition’s evidence and inflate the importance of their own statistics.

This strategy subjects the public to competing messages that appear to be equally valid. Thus, one may conclude that the sum of the elite message war is a self-contradictory hodgepodge of sound bites. The remaining question, of course, is how do individuals absorb this information?

## ELITE MESSAGES AND PUBLIC OPINION

For the past ten years, public opinion scholars have had a ready answer to the question posed above. The Receive, Accept, Sample (RAS) model proposed by Zaller (1992) has been the primary tool for understanding the interface, or information flow, between elite messages and public opinion. However, continuing research into ambivalence and memory structure has forced revisions to the basic RAS model. Currently, many scholars reject Zaller's more pessimistic assertions regarding the nature of public opinion (Kuklinski 2001).

### The RAS Model and Public Opinion

The basic presupposition of Zaller's (1992, 6) RAS model asserts that an overwhelming proportion of the population lacks both the interest and sophistication necessary to hold stable and "real" opinions on specific political issues. Rather, it presumes that members of the public tend to operate as information sponges, selectively absorbing the messages produced by the elites. Thus, the general conclusion of the RAS model asserts that public opinion is a mirror of the elite discourse.

The process whereby elite messages are transformed into individual level "considerations," using Zaller's terminology, is fairly straight-forward (Zaller 1992). First, politically motivated elite make a statement, with valence, which enters the information stream via either word-of-mouth or mass media dissemination. Then, an individual *receives* the message, meaning understands it in such a manner as to see the relationship between it and his or her store of politically related information. Increasing political *awareness*, meaning the degree

to which the individual pays attention to the political information stream, increases the likelihood that a particular individual will *receive* the message. Next, the individual *accepts* the message, believing and incorporating it into his or her store of political information bits. Political *awareness*, meaning the degree to which the individual has prior political information that allows that person to reject the message as inconsistent with their beliefs, also determines which individuals permanently store the message, rather than merely hearing and forgetting it.<sup>4</sup> From this point forward, Zaller (1992) refers to the accepted message as a “consideration” and consigns the bit of information, and its valence, to a mental bin holding all the considerations on a particular topic. Finally, when the individual needs to make a judgment on a particular political topic, he or she *samples* the most accessible considerations in the bin, averaging their valences, and returns a summary judgment.

In summary, Zaller’s RAS model draws two pessimistic conclusions regarding the nature of public opinion, which might serve as answers to my research questions. First, “public opinion” is nothing more than the aggregation by pollsters of a number of top-of-the-head responses to a particular question at a particular point in time. Second, since the content of the individuals’ mental bins is determined by what the elites say, “public opinion” is really nothing more than an accumulation of what the public has heard (Zaller 1992, 265-266).

If this is the case, then the research questions posed herein are superfluous. What the public thinks about gun control has no more value to the debate than the scores of the latest sports event. The near continuous support for “stricter” gun control laws (Spitzer 1998, 93) is a result of the fact that most individuals, regardless of how self-contradictory the message war has been, have *accepted* the message that gun controls are a good thing. Therefore, Zaller would say that such support does not imply that the public really thinks gun control should be stricter

because most of the public fails to fully consider the topic (1992, 265). However, research does offer a more optimistic view of public opinion, one which can incorporate the basic RAS model of information flow into a framework that accounts for deeply held beliefs among some citizens and interpretation of new information. If this view is a better representation of public opinion, then the research questions posed herein are critical.

### The Value Pluralism Model and Public Opinion

At the time of its publication, scholars hailed the RAS model as the greatest advance in public opinion research in many decades. However, Zaller admits that the RAS model more closely resembles a model of information flow and not a complete explanation of attitudes (1992, 272-273). He notes that the model presupposes “a large degree of simple randomness in the memory search process,” implying a distinct lack of structure in people’s memory (Zaller 1992, 277). By integrating the concepts of the Value Pluralism (VP) model into the basic RAS structure, one can address this omission.

Initially driven by researchers in the field of psychology, the Value Pluralism model argues that core beliefs and values constrain more peripheral elements such as policy attitudes (Feldman 1988). Unlike the RAS model, VP posits a filtering system where general attitudes develop over time based on both elite messages and certain deeply held psychological tendencies (Feldman 1988; Hurwitz and Peffley 1987; Tetlock 1986). For example, Hurwitz and Peffley (1987, 1112) see core values as asserting vertical constraint on the range of “postures” an individual may adopt toward foreign policy. These postures, in turn, are “crucial [beliefs] in guiding an individual’s preferences on a variety of concrete issues.”<sup>5</sup>

In contrast to the RAS model’s randomness presupposition (i.e., information bits floating in a mental bin), the VP model asserts relationships among an individual’s political values and

beliefs (some of which may be in conflict) (Tetlock 1986). These relationships serve as mental pipelines such that thinking about one item in the chain increases the likelihood of remembering any item in the chain. Thus, attitudes are not merely aggregations of disconnected, parroted elite messages, though they incorporate elite messages and can affect the ultimate attitude expression. Attitudes represent a partial sum of the individual's mental network. The work of Tourangeau, Rasinski and D'Andrade (1991) confirms this assertion. With multidimensional scaling techniques, these authors demonstrate that "distinct topical clusters" organize attitudes regarding abortion and welfare, and these clusters help to constrain the responses of the individuals. This reinforces the idea of vertical constraint asserted by Hurwitz and Peffley (1987) because it demonstrates the fact that responses to survey items flow through the memory structure in relatively predefined paths.

Another difference between Zaller's parroted elite and the VP model's vertical constraint is the assertion that the subconscious nature of some values insures that some responses are "really" what the individual believes and not just what they have heard. Because of this, I must slightly expand the meaning of core values to include not only those ideals to which individuals consciously ascribe worth but also to include those deep-rooted orientations that subconsciously color an individual's perceptions and reactions to the environment. For example, racism, social disconnectedness, authoritarianism, and distrust all affect the way in which an individual relates to the world; however, individuals are rarely aware of the degree to which these attitudes color their thoughts and perceptions. For this reason, core values must be more than just voiced ideals.

In summary, the Value Pluralism model asserts that public opinion is more than the mirror of the elite debate. The model views individual memory structures as being organized thematically (Conway 1996), and it recognizes that any particular response must be the product

of competition between the various themes. This implies that an attitude may be explained as the manifestation of the balance of core values related to (or stimulated by) a particular issue area.

The question, therefore, becomes how to combine the strengths of the RAS and VP models into a general explanation of public opinion.

### The RAS and VP Models and Public Opinion

The key to combining the RAS and VP models lies in the question, what, exactly, does the individual *receive* when he or she encounters an elite message? Does this person perfectly record the content of the message? This seems highly unreasonable; even Zaller (1992, 274) admits that two individuals exposed to the same message might *receive* it in exactly opposite terms. Rather, as Zaller notes, it is possible that “elite cues functioned to activate ideological predispositions among the politically aware” (275).

Public opinion researchers have recognized for some time that elite messages, in the form of either media coverage or direct conversation, can serve as an information source (Iyengar 1987, 816). More recently, however, researchers have come to recognize that the public often uses elite messages as explicit clues about the relationship between core values and policy areas (Chong 1993; Chong 1996, 199-200). The multitude of possible frames of reference on any political issue requires the existence of some clarification mechanism because there can be no meaningful discussion without common reference points. “Political discussion partitions or winnows this set of frames by suggesting how to interpret the issue” (Chong 1996, 201).

The changing explanations of racial attitudes are a good example of this process. Kellstedt (2000, 253) demonstrates an irregular, but increasing, focus on individualistic concerns in news stories about civil rights beginning around 1950. He shows that this change in the composition of the information stream causes swings in general public support for racial policies,

with zeniths in individualistic themed reporting preceding high points of conservative sentiment. Overall, however, Kellstedt's findings highlight how the changing themes of civil rights media coverage help the public to see the connection between a particular core value and the policy.

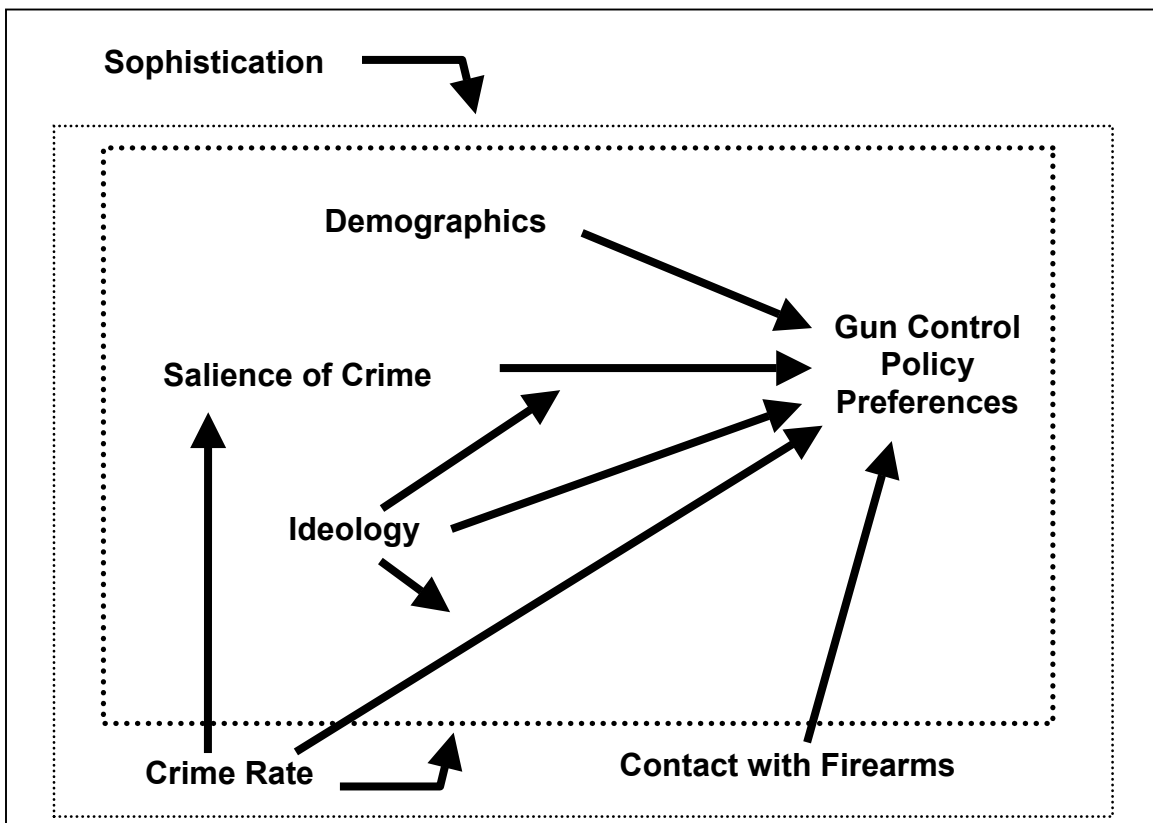
Given this, there is no real inconsistency between the RAS and VP models. Zaller's (1992, 277) randomness presumption was only a concession to parsimony. Individuals may *accept* elite messages as new information; however, they are just as likely to use the message as a cue, relating the issue to their values. In fact, it seems likely, as Zaller (1992, 279) admits, that the true process is a combination of these two options. The individual *receives* the gist of the information, interpreted through his or her core values, and potentially stores this information, with a variable degree of accuracy, by integrating it into the mental web established by the linkages the message suggests.

In conclusion, the elite message war is an important component of the public's gun control policy preferences because the themes in the war educate the public about the values and beliefs that relate to the issue, as well as provide specific arguments. One would not expect the core value of egalitarianism to affect gun control policy preferences because the elites, to date, have not used "fair play" themed appeals. By analyzing the themes in the gun control arguments presented above, I can begin to develop a model of the gun control policy question and its related core values.

But, the elite message war on gun control policy is a complex montage of conflicting assertions and arguments. This situation must leave the public with a confused picture of the "best" answer to the issue of guns in society. Therefore, it is unlikely that the public's attitudes on gun control are well reasoned or even stable. I posit gun control policy preferences are likely to be the product of a vertically constrained, contextually-conditioned response process.

Presuming that most individuals do not have a “file drawer” in their minds where they keep a pre-made, consistent opinion on gun control, a plausible presumption given by Tourangeau (1992), ideological values, concern about crime, and life experiences will govern how an individual answers. The contextually-biased accessibility of each of these factors, meaning how easy they come to mind, will govern the degree to which each affects the individual’s final, expressed opinion. The following diagram illustrates my expectations:

FIGURE 1.1: AN INTEGRATED MODEL OF GUN CONTROL POLICY PREFERENCES



Note: Demographics include measures of gender, education, race, income, and party identification. The heavy dotted line surrounds the main psychological components of the model. The lighter dotted line surrounds the contextual components which should influence the psychological components. Sophistication governs the manner in which the individual perceives the world and, therefore, influences all factors.

## VALUES AND GUN CONTROL POLICY PREFERENCES

Relatively little research has been done on the values that relate to gun control policy preferences. Since Schuman and Presser’s (1978) investigation of question frames and response



intensity, gun control policy preferences typically have been treated as either a natural outgrowth of individual ideology (Gimpel and Wolpert 1998) or as the result of authoritarian personality traits (Bernard and Lester 1998). However, some authors have started trying to identify values related to the gun control policy preferences.

Returning to the elite messages, ideology plays a clear role in structuring the gun control policy debate with gun control proponents and gun control opponents often split along ideological lines (Spitzer 1998, 98). However, there are many components to ideology (Carmines and Stimpson 1980; Jacoby 1990) and the strongest theme in the message war deals with ideological commitments to individual rights. According to Kopel (1992), the success of gun control programs in other countries hinges on the degree to which residents of those countries are accustomed to governmental interference in their daily lives.<sup>6</sup> Schuman and Presser (1978) lend empirical support to Kopel's arguments. By introducing an experimental question forcing the respondent to consider the trade off between increased restrictions on the gun ownership and decreased individual rights, the authors produced a substantial reduction in support for a proposition banning handgun ownership. The constant bickering over the question of individual rights and gun ownership between gun control proponents and opponents must have produced a connection in the collective public mind between liberal notions of acceptability of increased government intervention into individual's lives and support for gun control.

Another clear theme in the elite messages is the inextricable linkage between gun control policy and crime control. Tyler and Lavrakas (1983), extending the assumptions of research in the field of presidential support, hypothesize that attitudes toward gun control policies may exhibit the same kind of personal versus "sociotropic" dichotomy. Through a series of surveys, they demonstrate that support for gun control relates directly to the "anticipated influence upon

the crime rate” and that this sociotropic concern exerts stronger influence on gun control policy preferences than “personal concerns” such as past victimization or fear of such (1983, 403). The message war created a link between an individual’s opinions on gun control, the conjunction of their desire for public safety, and perceptions of their community (see also Smith 1980).

Nevertheless, the elite messages regarding the relationship between gun control policy and crime control policy are not so clear as to predict that increasing salience of crime always leads to increasing support for gun control. Recall that both gun control proponents and opponents make arguments about the methods and benefits of reducing gun violence. Given the conflicting messages regarding the most effective ways to reduce crime, an individual’s concern over crime need not directly translate into support for gun control measures. It seems likely that the individual’s predisposition to believe one group over the other conditions the relationship between the salience of crime and gun control policy preferences.

The research of both Tyler and Lavrakas (1983) and of Haider-Markel and Joslyn (2001) support the idea that the linkage between concern about crime and gun control policy preferences is not simple. The key association in Tyler and Lavrakas’s research (1983) lies between support for gun control and the belief that it will have an affect on the crime rate, implying a belief that government policies can affect the crime rate. Since conservatives would be prone to “know” (Iyengar 1987) that the causes of violent crime go beyond the availability of firearms, they would be prone to “know” that restrictions on the ownership of firearms will not affect the crime rate positively. This, in turn, suggests that concern about crime would have an opposite effect among liberals and conservatives.

Haider-Markel and Joslyn (2001) show that Republicans are cross-pressured by a general predisposition to conservative beliefs about property rights and community safety (i.e.,

Republicans simultaneously support limited government in the realm of property rights and unlimited government in the realm of public safety). As a result, they posit and find a conditional relationship between partisan identification and the effect of their experimental treatment on gun control policy preferences, an experiment that framed the gun control debate either in terms of property rights or personal safety. This conditional relationship reduces the impact of making crime salient among Republicans. Thus, the research supports a direct relationship between the salience of crime and support for gun control policies and a conditioning effect of ideology on this relationship.

### Demographics

As noted earlier, values must mean more than expressed opinions. Public opinion research often uses demographics as measurable indicators of these unknown and sub-conscious attitudes since these values are often the product of early socialization.<sup>7</sup> While Tyler and Lavrakas (1983) generally demonstrate the importance of controlling for demographic characteristics when predicting gun control policy preferences, several specific relationships seem crucial.

The relationship between gun control policy preferences and gender continues to pose problems for the research community. As Howell and Day (2000) demonstrate, even controlling for several intervening variables (e.g., socialization towards care-giving, employment status, egalitarianism, and being married with or without children), gender still has a significant impact on policy preferences in this issue area. While differences captured by the proposed model may subsume the effect of gender, it seems appropriate to control for this effect.

Likewise, the results of previous studies continue to create questions regarding the relationship between education and gun control policy preferences. Both Erksine (1972) and

Tyler and Lavrakas (1983) show that increasing education levels lead to support for increased restrictions on hand gun ownership. In contrast, Lizotte, Bordura and White (1981) finds no support for education/protective gun ownership relationship and, Erksine's results show little differentiation by education on the key question of support for the principle of gun control. Including education in the model is expected to shed some light on these conflicting findings.

One finds significant differences between whites and blacks and between Republicans and Democrats on many gun control related issues (Erksine 1972). In one sense, these differences are almost synonymous, given the overwhelming Democratic identification among blacks. Yet, the prevalence of interest groups in the gun control debate implies that group identifications are a powerful tool for shaping gun control policy preferences (Spitzer 1998, 134). While it seems likely that these differences are due, in part, to the ideological commitments of these groups, it seems reasonable to include controls for these effects (see Secret and Johnson 1989).

In summary, the psychological component of the gun control policy preference model mimics the model of vertical constraint offered by Hurwitz and Peffley (1987). It implicitly presumes that gun control policy preferences are not core values for a large segment of the population, that they fall somewhere between "postures" and "issue preferences," in their terminology. Therefore, core values must constrain gun control preferences. The following hypotheses should clarify the expected relationships.

*H1. A liberal interpretation of the role of government will relate positively to support for gun control policy.*

*H2. Among liberals, the impact of the salience of crime on gun control policy preferences will be positive, and it will be negative among conservatives.*

*H3. Women will display a greater degree of support for gun control policies than men.*

*H4. Increasing education will produce increasing support for gun control policy.*

*H5. Blacks will express more support for gun control policy preferences than non-blacks.*

*H6. Democrats and independents will express more support for gun control policy than Republicans.*

## CONTEXT AND GUN CONTROL POLICY PREFERENCES

Zaller's RAS model suggests, however, that any expression of a policy preference is constrained by far more than individual internal beliefs and subconscious characteristics. Recall that the "sample phase" of Zaller's model explicitly argues that the expression of a policy preference is the aggregation of whatever information is readily available to the individual at that time. Previously, public opinion research had only recognized the psychological components, such as values or beliefs, as being available. However, the discipline now concedes that humans are constantly processing and updating information from their environment. Therefore, the context of any particular stimulus, meaning both the immediate and lifetime environments, will also affect any expression of a policy preference.

Context may directly affect the response by fulfilling the role of new information. Reviewing the totality of Zaller's model, one clearly can see that a contextual effect, messages in the media, functions as the primary source of new considerations (see also Miller and Krosnik 2000). Even at the point of stimulus, the individual is receiving cues from the environment about the subject at hand. In a classic article on African-American politics, the poverty level of the neighborhood exerts a distinct and direct effect on the opinions and on the behaviors of its residents, beyond their personal income levels (Cohen and Dawson 1993). Thus, the context of the stimulus helps to inform the individual as to the proper response.

Likewise, context will make some ideas more or less easy to remember. Vast amounts of research have documented contextual effects within the response process that constrain or condition the ultimate judgments of the respondent. For instance, experiments, designed to lead

respondents to think about a particular personality trait (e.g., kindness, depression, or detachment), have consistently shown that priming a personality trait leads to an increased tendency to perceive that trait in others and to react to that person based upon the perceived trait (Srull and Wyer 1979; Higgins, Rholes, and Jones 1977). Finkel, Guterbock and Borg (1991) show that race of interviewer effects occur because the respondent makes assumptions about the opinions of the person asking the questions and either actively or subconsciously seeks to make their answers pleasing to the interviewer. Thus, context helps to bring some ideas to the “top-of-the-head” (Zaller 1992, 36) simultaneously pushing others to the bottom of the bin.<sup>8</sup>

In summary, contextual influences will both condition and, in part, determine the influence of values on policy preferences. Yet, very few researchers have included contextual measures in their studies of gun control policy preferences. The implications for this model are clear: 1) contextual influences, which I represent with the crime rate in the respondent’s community and the respondent’s socialized familiarity with firearms, should influence the individual’s expressed gun control policy preferences, and 2) the crime rate should condition the impact of the values discussed above on gun control policy preferences.

#### Direct and Indirect Impacts of Crime on Gun Control Policy Preferences

The focus of the debate on the relationships between the proliferation of guns in America and violent crime suggests that the actual crime rate of the respondent’s social milieu may influence the individual’s gun control policy preferences. Since increasing neighborhood poverty causes an individual’s social policy preferences to become more liberal regardless personal circumstance (Cohen and Dawson 1993), it seems likely that the crime rate of a neighborhood will affect the individual’s gun control policy preferences. However, there is no reason to believe that the relationship between the actual crime rate and an individual’s gun

control policy preferences will be simple as this. Individuals interpret the environment around them based upon preconceived notions (Kuklinski and Hurley 1996, 126-127). Therefore, I assert a relationship between the crime rate and the policy preference similar to the relationship between salience of crime and the policy preference. The actual crime rate will have a direct impact on gun control policy preferences. However, among liberals, increasing crime will produce increasing support for gun control since increasing crime implies a proliferation of firearms (Walker 2001, 188). Among conservatives, increasing crime will produce decreasing support for gun control since it implies a lack of firearms in the right hands (Walker 2001, 189).

Another manner in which the actual crime rate may affect the psychological component of the model is its indirect influence through the salience of crime. As the rate of crime increases, both perceptions and fear of crime increase (Lizotte, *et al.* 1981; Haider-Markel and Joslyn 2001; Unter 2001). Thus increasing crime may indirectly affect gun control policy preferences through the mediating variable of salience.

#### Conditioning Effects of the Crime Rate on Gun Control Policy Preferences

It is very difficult to predict which concepts will be easier to remember due to the crime rate. Because violent crime and gun control relate so closely in the elite policy debate, actual crime relates to all the concepts in the model.

The crime rate may strengthen the relationship between saliency of crime and gun control policy preferences. The logic of this assertion is simple. Regardless of how salient crime is to the individual (i.e., how often the individual thinks about crime, in general) a high crime rate will temporarily increase the salience of crime when the individual thinks about gun control, strengthening the effect of the saliency of crime on the response.

On the other hand, increasing crime, especially violent crime, may increase the salience of the “gun control issue” in general. If this is the case, each of the relationships in the model will be stronger in high crime areas than in low crime areas because all the values and sub-conscious characteristics will be more accessible. Limited research in cognitive psychology lends support to this proposition. One of the most likely contextual effects is that of *semantic priming*, meaning activation of all memory clusters related to the subject of the question (Strack 1992).

#### Socialized Familiarity with Firearms and Gun Control Policy Preferences

In addition, research into the gun culture of the United States suggests that the type of experiences an individual has with firearms may influence the individual’s gun control policy preferences. Not all contacts with or use of firearms are criminal or even related to a criminal act. Though the use of firearms in hunting and sport shooting is declining, most people still encounter firearms in a non-threatening environment (Smith 2001). Thus, it seems likely that some individuals may still regard firearms as tools rather than weapons. This, in turn, implies individuals who are familiar with or have regular contact with firearms in a non-threatening environment will have significantly different views on gun control from those who do not. Limited evidence supports this view. Individuals who live in rural areas, where people most commonly use firearms for hunting or pest control, are less likely to express support for restrictions on firearms than urban residents (Smith 2000). Therefore, contact with firearms may directly affect gun control policy preferences.<sup>9</sup>

In summary, the contextual component of the gun control policy preference model mimics the accessibility model offered by Zaller (1992). It implicitly presumes contextual effects, represented by the crime rate and socialized familiarity, have direct, indirect, and



conditioning effects on the core values constraining gun control preferences. The following hypotheses should clarify the expected relationships.

*H7. As the crime rate increases, the saliency of crime will increase.*

*H8. Among liberals, the impact of the crime rate on gun control policy preferences will be positive, and it will be negative among conservatives.*

*H9. Those individuals who tend to use firearms as tools, rather than as weapons, will oppose gun control policies more than those who tend encounter firearms in violent situations.*

*H10. As the crime rate increases, the relationship between the saliency of crime and gun control policy preferences will become stronger.*

*H11. As the crime rate increases, all relationships in the psychological component of the model will become stronger.*

## SOPHISTICATION AND GUN CONTROL POLICY PREFERENCES

Until this point, the populace of the United States was considered to be divided it into two groups. The elites directly participate in the political process as elected officials, highly visible opinion leaders (e.g., politically advisors, pundits, and analysts), or media personalities. The public does not directly participate in the political process; instead, they engage in their daily activities and occasionally comment on the political process by voting. I also implied that membership in these groups is relatively stable and mutually exclusive.

Yet, public opinion research shows this picture of the body politic is overly simplistic. Since some members of the public rival political elites in their ability to consider issues and policy options (Jacoby 1995; Luskin 1987), treating the public as a homogenous mass is a serious misrepresentation of its capabilities. Recall that the RAS model predicts that individuals will *accept* an elite message based on the degree to which they hold contrary information. This implies that an individual's degree of sophistication, meaning the individual's store of political information and ability to think in abstract terms, will radically influence the ways in which that individual thinks about political issues see also Althaus 1998; Bobo and Licari 1989; Sniderman, Griffon and Glaser 1990).

In what ways might sophistication affect gun control policy preferences? Since the earliest conceptions of sophistication tended to equate it with the use of ideology to structure political thoughts (Campbell Converse Miller and Stokes 1960; Converse 1964; Hagner and Pierce 1982), increasing sophistication might simply increase the impact of ideology on gun control policy preferences. On the other hand, more recent research has shown that an increase in sophistication typically increases the homogeneity of the individual's considerations, meaning the degree to which an individual's ideas tend to be mutually reinforcing (Hamill and Lodge 1986). Given this, increasing sophistication might simply increase the consistency of all relationships in the model, effectively increasing the model's ability to explain individual preferences. Finally, the most recent research has shown that sophisticates tend to approach problems with a more nuanced outlook and the unsophisticated tend to approach problems in a more simplistic manner (Althaus 1995; Bartels 1996).<sup>10</sup> For instance, sophisticates can use hard issues such as economic impact and the concept of equality, rather than symbolic issues such as race, to guide their voting behavior (Carmines and Stimpson 1980). Given this, increasing sophistication might increase the strength of all the relationships in the model (Sniderman, Brody and Tetlock 1991), since the sophisticates will be able to consider a broader range of their values and will also be able to balance the implications of their values against their context.

In summary, the literature provides good reason to suspect that the sophisticated and unsophisticated segments of the population will display significant disparity in the ways in which they approach the question of gun control policy. The following hypotheses should clarify the expected relationships.

*H12. The impact of ideology within the model will be stronger among sophisticated individuals than among unsophisticated individuals.*

*H13. Among sophisticated individuals, the model will produce better goodness-of-fit measures.*

*H14. Increasing sophistication will increase the strength of all relationships in the model.*

## A CONTEXT-SENSITIVE MODEL OF GUN CONTROL POLICY PREFERENCES

In conclusion, my model of gun control policy preferences is a combination of the psychological and contextual models of attitude formation. Referring back to Figure 1.1, the heavy dotted line represents the psychological segment of the model, consisting of concepts that reside wholly within the individual's psyche. While some of these items may be conscious attachments (e.g., ideology, party identification, or race), others (e.g., education and gender) exert their influence sub-consciously. The light dotted line represents the contextual segment of the model. Two concepts, the crime rate and the degree of contact with firearms, reside outside the individual's psyche but still impinge on the individual's attitudes. Finally, a psychological trait, sophistication, governs how individuals approach the world in general, affecting the entire model.

## END NOTES

<sup>1</sup> On its face, the statements by the Supreme Court would seem to have settled the issue. In the latest Second Amendment case to appear before the Supreme Court, *U.S. v. Miller*, 307 U.S. 174, 178 (1939), the Court clearly held that the ownership of a firearm was predicated upon its relationship to "the preservation or efficiency of a well regulated militia" (Spitzer 1998, 33). Furthermore, two other cases, *Adams v. Williams*, 407 U.S.143 (1972) and *Lewis v. U.S.*, 445 U.S. 95 (1980), have followed this reasoning, though the *Adams* opinion was a dissent (Spitzer 1998, 164). Yet, as Heath notes (2001, 42), both the lower courts and several legal scholars have interpreted *Miller* to either support the proposition that the Congress can *only* regulate "the possession of firearms in actual, government-sponsored militia service, or the possession of those kinds of firearms which might be useful in a citizen militia." In short, the legal community suffers from division and the Supreme Court has not definitively ruled on the issue.

<sup>2</sup> The reasoning of the control proponents seems to be thus, if guns, especially handguns, are available, someone will use them in a crime, eventually (Poe 2001, 17).

<sup>3</sup> These results support sociological explanations for international differences in the types of crimes committed. Kopel argues (1992), that the high burglary rates in most other western democracies (only Switzerland has a rate lower than the United States) are attributable to the absence of personally owned firearms and the corresponding lack of deterrence.

<sup>4</sup> The dual meaning of political awareness in Zaller's work can be one of the most difficult concepts in the model to understand. In essence, awareness is no more complex than paying attention; however, because the model presumes that the individual will accept any message for which he or she lacks countervailing information, the model must

presume that only those who have been paying attention will possess such countervailing information. Therefore, being politically aware is equivalent to being politically sophisticated (Zaller 1992, 44).

<sup>5</sup> The image of a spider web is a simplistic visual representation of vertical constraint. At the center of the individual's self image are the core values, such as partisan identification, ideology, egalitarianism, and individualism. The points at which strands of the web connect are "postures" (Hurwitz and Peffley 1987) and represent general beliefs, such as support for abortion, women's rights, or isolationism. The points at which the web connects to the tree branches represent concrete policy preferences, such as support for a partial-birth abortion ban, quotas, or withdrawing from the United Nations.

<sup>6</sup> For example, Japan's strict weapons control policies produce very little cognitive dissonance among the general public because such policies have been in effect since 1588. On the other hand, a very powerful symbol of American values always has been the armed individual who protects his interests at any cost.

<sup>7</sup> Dalton (1980) identifies the basis for this assertion. As he shows parental influence exerts a constraining effect on the range of orientations a person may develop in much the same manner as it constrains the demographic characteristics the individual displays. Likewise, Conover (1984) demonstrates the strong relationship that group membership, often best illustrated by demographics, has on self-identity and, ultimately, on attitudes.

<sup>8</sup> Of course, as the VP model argues, if the individual remembers one item in a particular mental chain, it is likely that person will be able to remember others. Therefore, it is better to argue that context helps make entire mental chains more or less available. When probing makes autobiographical themes accessible, they do exert vertical constraint on the elicited response (Menon, Raghubir and Schwarz 1995; see also Kuklinski, *et al.* 1991). Belli, Shay and Stafford (2001) also offers evidence of this phenomenon. Testing the accuracy of autobiographical memory, they find that organizing autobiographic questions around typical life-path events produces significant improvement in accuracy of reporting those events. This indicates that the information necessary to answer autobiographical questions is often available and that error is typically the result of accessibility issues.

<sup>9</sup> The difficulty in including this concept in the model lies in the fact that urbanization connects to a number of concepts already included in the model. Certainly, the crime rate and the level of urbanization are highly related. The logic of including this concept, however, follows the logic of Cohen and Dawson (1993). I wish to know if the social milieu socializes the individuals to a particular view of gun control policy beyond whatever effect it may have on the psychological and other contextual influences in the model.

<sup>10</sup> Research hints at this possibility (Hamill and Lodge 1986). Accepting the implication that sophistication and schematic thought are essentially the same, these authors find that the additional information provided by the organization of the schema allows sophisticates to solve problems with a more nuanced approach.

## CHAPTER TWO: MEASURING THOUGHTS ABOUT GUN POLICY

Unfortunately, no academically recognized, national-level public opinion survey asks all the questions necessary to fully test a model of gun control policy preferences. Those surveys that collect data on political topics necessary for the psychological component of the model often fail to ask detailed questions about contact with firearms or gun control policy preferences. Surveys dedicated to the study of gun control policy preferences often ask very detailed questions about the respondent's contact with firearms, but they often fail to ask about political topics such as ideology, etc.

The data collected during the 2000 American National Election Study begin to overcome these limitations.<sup>11</sup> The 2000 ANES covers a broad range of subjects, including all of the concepts outlined in Chapter One. Furthermore, most scholars recognize the quality of the data collected by the ANES, making findings derived from them more credible than those produced from data collected by interest groups or private foundations.

The 2000 Presidential election cycle also provides a good environment in which to begin the investigation of gun control policy preferences. A combination of campaign features and an absence of any sensational incidences of gun violence conspired to reduce the salience of the gun issue at the national level. This, in turn, implies that the public's preferences on gun control policy in 2000 probably more closely reflect a baseline condition rather than a temporarily induced awareness stemming from a recent debate or tragedy. Illustrating this, the 2000 ANES estimate of the public's mean preference closely matches the estimates produced by Gallup for the past ten years (Gallup 2001).

However, using the data from the 2000 national elections poses some problems as well. Budget cuts for the American National Election Study forced a shift from the traditional face-to-

face interviewing mode to a blended face-to-face and random-digit-dialing telephone survey. This change introduced minor difficulties with question wording and technical difficulties during the administration of the survey. Advanced statistical techniques can overcome these issues, but the problems imply that my research is hardly the last word on the topic.

## ATTRIBUTES OF THE 2000 PRESIDENTIAL ELECTION

While most will remember the 2000 Presidential election for the unprecedented legal battles that followed the poorly administered elections in Florida, analysts of public opinion know that the political maneuvers and media frames throughout the campaign were much more influential in deciding the outcome. The media in the 2000 presidential election campaigns focused on the personalities, rather the issue positions, of the candidates (Hershey 2001). While this type of coverage has been a growing trend, its net result was a minimization of the issue positions taken by the campaigns (Dionne 2001) in favor of personality advertising (Hershey 2001).

Recalling the discussions regarding the effects of elite discourse on public opinion in Chapter One, this minimization of issues in the 2000 election meant that the public was not generally hearing messages about issues, and specifically, the issue of gun control. Of course, some interest groups are always placing messages into the information stream. However, current events during the 2000 presidential election did not contain any sensational incidents that might have affected the public's gun control policy opinions. By this time, the country was six months past the one-year anniversary of the massacre at Columbine High School. A review of the major newspapers shows that the single national event relating to gun control during the year, the Million Mom March, disappeared as a main topic from national news coverage shortly after the beginning of the presidential campaign.

Since it is clear that the national media did not influence public opinion on gun control during the 2000 presidential election, gun control opinions most likely represent beliefs and reactions to local conditions, rather than some national spectacle. A search of major newspapers during the year prior to election produced several thousand hits on stories pertaining to gun control, but most dealt with local rather than national conditions.

#### PROBLEMS IN THE 2000 ANES

Two features of the 2000 American National Election Study require special attention. First, the blending of face-to-face and random-digit-dialing interview methods during the administration of the survey forced the survey designers to vary the wording of the questions based on the survey mode. For example, in the face-to-face mode, survey administrators often make use of flash cards as aids; obviously, a telephone interviewer cannot use this technique. Since the logic of a survey requires that each respondent receive the same question (Fowler 1993, 74), this change requires a demonstration that the various versions of each question elicit the same basic idea in the respondents. Second, a number of respondents did not receive all the questions in the survey. The standard procedure for ANES surveys is to identify a random half of the respondent for follow-up interviews after the election, reducing the sample size. Additionally, problems with the programs used to administer the survey resulted in a substantial number of these post-election interviews to skip important questions in the instrument (Burns, Kinder, Rosenstone and Shapiro 2001).

#### Question Wording Problems in the 2000 ANES

The goal of any survey research agenda is to produce a collection of comparable responses that relate to the concept the researcher is interested in measuring (Fowler 1993, 74). Typically, researchers attempt to ensure this result through the process of standardization,

meaning asking the exact same question and response categories for each respondent. By minimizing the amount of latitude respondents have in answering the questions, the researchers force comparability on the answers. The ANES choice to forgo standardization, due to the aforementioned survey mode considerations, may reduce the utility of the data.

Yet, standardization is no guarantee of comparability if you begin with a flawed question. For example, a researcher is interested in measuring the perceived state of the economy, and that researcher asks a number of respondents, “what do you think of the market, good or bad?” the answers the respondents provide may or may not have anything to do with the economy. For instance, one respondent might understand the question to relate to the stock market in New York city, while another might understand the question to relate to the quality of the housing market, the grocery, the local flea market, etc.

In contrast to the belief that standardization is an absolute guarantee of the validity for survey research, variation in question wording within a survey instrument only produces a problem if the variation causes respondents to think about topics that are not relevant to the concept the researcher wants to measure (Schober 1998, 528). If a researcher were to ask half his respondents, “what do you think of the state of the stock market in New York city, better same or worse?” and the other half, “what do you think of the level of unemployment in the country, better same or worse?” and were to treat these questions as equivalent, the answers might be a better measure of the perceptions of the economy than the “market” measure in the preceding paragraph, even though they use completely different questions. Thus, the various question wordings used in the 2000 ANES are not as problematic as they might appear at first glance. Reviewing the actual question wordings (see Appendix A), it is obvious that each version (face-to-face or telephone) relates to the same subject.



For instance, the traditional measure of ideology in the 2000 ANES employed a flash card showing a seven point scale anchored with the labels, 1) extremely liberal 2) liberal 3) slightly liberal 4) moderate 5) slightly conservative 6) conservative 7) extremely conservative 8) don't know 9) refused 0) haven't thought about this. Approximately half of the respondents received this primary version of the question, by either viewing the flash card or by listening to the categories over the phone. The other half of the respondents received an alternate branching format question that asked, "We hear a lot of talk these days about liberals and conservatives. When it comes to politics, do you usually think of yourself as a liberal, a conservative, a moderate, or haven't you thought much about this?" Then, based upon the initial answer, interviewers probed each respondent as to the strength of his or her identification (i.e., extreme, moderate, or slight), producing a 7-point scale very similar to the primary version.

In fact, the only difference this question wording might produce is in intensity of attachment. It seems likely that individuals who were on the border between one category and the next most extreme category would find it easier to express more extreme attachment in the branching format since the end points of the scale (i.e., the numerals one and seven) are not mentioned (Schwarz, Grayson and Knäuper 1999). A table of the scale frequencies (see Appendix A) shows that the alternate branching formats used in many of the questions did not predispose respondents to more extreme attitudes.

#### Missing Data Problems in the 2000 ANES

Another goal of any survey research agenda is to produce a collection of comparable responses that is sufficiently representative, and large enough, to justify generalizing the results to the population as a whole (Fowler 1993, 10-11). Two features of the 2000 ANES conflict with this goal.

First, the ANES typically conducts the survey in a pre-election, post-election format; and in the case of the 2000 ANES, many of the better measures of concepts in my model appear only in the post-election survey instrument. Restricting the analyses to the respondents who received these questions would reduce the sample size from 1807 to a maximum of 1555. Second, and perhaps most important, the design of 2000 ANES restricted the number of respondents receiving the open-ended “most important problem questions” to a random half of the sample, resulting in the loss of approximately 900 cases. Coupled with general problems of non-response, listwise deletion of these cases with missing data would reduce the available sample to an n of less than 400.<sup>12</sup> Since these “most important problem” items are essential to the measurement of the saliency of crime, this research must deal with this missing data problem.

Recent advances in the science of multiple imputation offer a potential solution to this difficulty. As King, Honaker, Joseph and Scheve (2001) note, statisticians, for some time, have had access to procedures that permit the imputation of data to missing cells in the matrix; however, the computational difficulties involved in the application of these methods have precluded their use in most survey research contexts. In response, King, *et al.* (2001) have developed the Expectation Maximization with Importance Resampling (EMis) algorithm.<sup>13</sup> As they assert, a broad segment of the discipline accepts this method of imputation because of the robust results it produces and its ease of implementation. Other researchers have demonstrated that EMis is robust in cases where up to 45 percent of the data are missing (Scheve and Slaughter 2001); therefore, it offers the best method for dealing with the missing data problems in the 2000 ANES.

Generally speaking, the EMis algorithm produces imputations for each missing data point, while accounting for the uncertainty present in the existing data. This routine uses a

likelihood maximization procedure to estimate the coefficients in the following linear imputation model:  $D_{ij} = D_{i,-j}\beta + \epsilon_i$  (where  $D_{ij}$  denotes the missing data point for the  $i^{\text{th}}$  case on the  $j^{\text{th}}$  variable,  $D_{i,-j}$  denotes all other observed variables in the  $i^{\text{th}}$  case, and  $\epsilon_i$  denotes a normally distributed error.).<sup>14</sup> While this process is similar to traditional linear interpolation, it diverges from such as follows:<sup>15</sup>

1. The algorithm calculates the estimates of the means, standard deviations, and the estimate of the variance/covariance matrix for the non-missing data.
2. The sampling stage draws a *random* approximation of these values for each variable.
3. The importance resampling treats these random draws as an approximation of the true (finite sample) parameter and employs an iterative procedure to refine them until the joint distribution maximizes the likelihood of producing the original variance/covariance matrix for the non-missing data.
4. The algorithm calculates the  $\beta$  for the  $i^{\text{th}}$  case in the above equation based upon the parameter estimates from stage 3, inserts the values of the remaining observed variables into the linear prediction model, and produces an estimate of the value of the missing data point. It repeats this process for each missing data point in the dataset.
5. The routine repeats steps one – four several times (a factor specified by the user), producing a series imputed datasets.

In summary, the final product of the multiple imputation process is a series of datasets containing both the original data and the stochastically imputed values. The key difference between multiple and linear imputation is that multiple imputation allows the imputed values to vary across datasets, allowing uncertainty in the imputation. One may then execute the necessary estimations over all of the datasets, relying on the central limit theorem to insure convergence and taking the mean results of the estimations as an indicator of the true value of the relationships.

Even if the mathematical algorithms used in EMis seem relatively bizarre, the actual process of using the routine is fairly simple. The researcher specifies an “imputation model” which includes all the variables, up to 40, in the analysis model and any other variables that

might be related to those concepts. The inclusion of these additional variables does not affect the relationships in the analysis model. After specifying for each variable the level of measurement, and additional information such as which variables contain no missing data, the routine handles all necessary calculations and output procedures.

According to King, *et al.* (2001), multiple imputation is appropriate only for data that are truly missing. Since, in many cases, a researcher may reasonably treat “don’t know” responses as an ambivalent answer (Schuman and Presser 1981), the researcher must analyze the data and recode these answers into a neutral category. After this, the researcher may confidently impute answers to all remaining missing data. I will proceed in this fashion. For each concept, I will indicate whether I recode the “don’t know” responses or treat them as missing data. In every case except the measure of the salience of crime, I treat “refusals” as missing data.

## CONCEPT MEASUREMENTS<sup>16</sup>

I intend to use the data collected during the 2000 American National Election Study to test the hypotheses in Chapter One. Most of the operationalizations I employ follow the typical practice of the field. The reader should remember, however, that many of these concepts are not, strictly speaking, concrete phenomena that one can simply count. Rather, the measurement of public opinion lies in making connections between things that are countable, such as the response to survey questions, and the unseen concepts that relate to them. In several cases, I use multiple-item measures, meaning measures produced by combining the answers of several questions in the survey or an index. A scale made up of multiple measures of a single concept will likely be a better measure of the concept than any single item measure (Carmines and Zeller 1979, 30).

## Gun Control Policy Preferences in the United States

A large segment of the population can express some form of consistent and meaningful attitude related to the issue of gun control. The results of national surveys for the past several years show consistent support for the concept of gun control among the general public. As Gallup (2001) reports, since 1993, support for increased regulation of firearms has ranged from a high of 70 percent to a low of 53 percent, averaging 63 percent. During this same time period, 41 percent of the population reported owning any type of firearm.

However, support for specific proposals varies because preferences relating to concrete issues are often the result of competition among various values and beliefs (Hurwitz and Peffley 1987). As Gallup (2001) found during a series of surveys in 1999, a majority (68%) of the population supports a ban on the manufacture, sale, and possession of semi-automatic assault “guns.” Likewise, an overwhelming majority (82%) supports the Brady Bill that imposes a five-day waiting period on the purchase of a firearm. At the same time, a majority (62%) of the population opposes a ban on the ownership or possession of handguns. This response ambivalence suggests that measures of gun control policy preferences that tap concrete issues also tap different underlying values and beliefs held by segments of the public. A general measure, therefore, is more desirable for this analysis because it reduces the likelihood of such complications.

Another consideration related to the measurement of gun control policy preferences is the range of the response categories provided in the question. As Schwarz, *et al.* (1999) assert, the response process involves the generation of an answer that the individual must map onto (i.e., fit into) the provided response categories. While their research addresses the effects of numerical values on ambiguously labeled scale endpoints, other public opinion research clearly has

demonstrated that respondents will select the value that most closely represents their ideal point and that a restricted range of response categories can artificially reduce variance in the measure (Schuman and Presser 1981). A polychotomous, rather than a dichotomous, measure of gun control policy preferences is, therefore, more desirable for analysis because it expands the range of options open to the respondent, allowing for greater measurement precision.

The measure employed in the 2000 ANES is ideal for this analysis because it clearly taps a general attitude and codes it on a 5-point scale, ensuring a large range of variance on the measure. Specifically, the measure employs a branching format to ascertain whether the respondent feels that the government “should make it more difficult for people to buy a gun than it is now, make it easier for people to buy a gun, or keep these rules about the same [as they are now].” It then assesses the attitude strength of the respondents not opting for the status quo category by allowing them to select either “a lot more” or “somewhat more” options.

In this measure, the most liberal response (i.e., the government “should make it a lot more difficult for people to buy a gun than it is now) receives a five. The most conservative response (i.e., the government “should make it a lot easier for people to buy a gun than it is now) receives a one. Since the question wording does not specifically offer the option “don’t know,” it is reasonable to treat these responses as equivalent to an ambivalent answer and recode them to the middle of the scale (Schuman and Presser 1981).

Thus, I measure general support for the idea that the government should pass more restrictive gun control policies versus relaxing the current policies. This measure does not tap any attitudes towards the form of specific policies designed to implement this goal. Neither does this measure tap any attitudes related to additional policies the public might desire (e.g., mandatory sentencing, mandatory firearms training, etc.). From the standpoint of the elite

debate, this measure taps the baseline opinion as to whether the public favors more or fewer restrictions on guns, relegating the details to a later time.

### Ideology

Judging the degree to which ideology is a core value that works to constrain peripheral concepts, or an identification with little content, makes measuring the concept difficult. The Michigan School, in practice, treats ideology as core value, presuming that ideology should function as a structuring principle (Chubb Hagen and Sniderman 1991). At the same time, the revisionist movement, has adopted an operational definition that tends towards group identification rather than core value. Indeed, the core presumption of Sniderman's (1993) likeability heuristic asserts that the politically unsophisticated still use ideology but they only use it in the sense that these individuals know they "like" a particular ideological label, apply it to themselves, and process information bearing that label in a positive light. Likewise, the literature in sociology explicitly uses ideology as an identification-related construct rather than a core value (e.g., Bawn 1999; Fine and Sandstrom 1993). While one may certainly argue that self-identification has an influence on an individual's policy preferences (see Dalton 1980; Brewer 2001), both the Value Pluralism (VP) paradigm and the RAS model would argue that a self-identification is as much a product of self-image as it is a measurement of core values.

The logic of Value Pluralism does suggest an alternative to the typical ideological self-placement measures. If ideology is an "enduring system of *beliefs* [emphasis added], prescribing what action to take in variety of political circumstances" (Bawn 1999, 305), then one may logically ask which beliefs are the core of this system and which measures of those beliefs are indicators of the ideological core values of the individual.

Arguing that previous research has shown that different political objects vary in the degree to which they contain ideological information (see Carmines and Stimpson 1980; Jacoby 1990), Jacoby (1995) identifies a series of objects with scalable ideological content, and orders them by the amount of ideological information they contain. This reveals that a series of policy preferences relating to government intervention in society has a degree of ideological consistency suggestive of core value stability. For instance, in both 1984 and 1988 approximately one quarter of the population produces ideologically consistent judgments relating to government spending, social engineering, and economic engineering.

Simultaneously, Bennett (1995) extends Luttbeg and Gant's (1985) research into the accuracy of usage of the labels "liberal" and "conservative." He shows that, between 1980 and 1992, approximately 37 percent of the population displayed a reasonable ability to apply the terms "liberal" and "conservative." More importantly, however, the content of these responses shows a great deal of similarity to Jacoby's results. Of all the responses given to these questions, 29 percent spontaneously mention a topic related to "big" government or social engineering. The fact that these topics often were ascribed inaccurately (i.e., ascribing a liberal stance on a hypothetically conservative topic) only reinforces the assertion that they carry intrinsic ideological weight beyond self-categorization.

Given this evidence, I intend to use a multiple-item measure of respondent preferences regarding the involvement of the government in domestic affairs to measure their ideological commitments to the role of government in the regulation of daily life. The 2000 ANES includes a series of five items that tap general support or opposition to the size and expansion of the federal government. These items seem to be the best candidates for measuring the underlying belief system noted by Bawn (1999).



First, the study measures on a 5-point scale the degree to which an individual supports change in the services the federal government offers and the spending necessary to sustain these services. For this item, a score of 5 represents the desire to greatly increase both spending and services, a 3 represents support for the status quo, and a 1 represents the desire to greatly decrease both services and spending. Second, the survey measures the degree to which respondents support federal intervention to insure both employment and a good standard of living for every individual in the country. For this item, a score of 5 represents strong support for government non-intervention, a 3 represents support for the status quo, and a 1 represents a strong support for government intervention.<sup>17</sup>

On these items, the questions allowed the respondent to assert that he or she had given “little thought” to this issue. This response indicates a true lack of opinion rather than ambivalence, implying it is “truly” missing data. Those few who chose the response category, “don’t know,” appeared to be expressing ambivalence. I recode these “don’t know” responses to the middle category and treat all remaining missing data as truly missing.

The remaining three items are dichotomous measures that tap support for “big” government, a free market economy, and the notion that government is “meddlesome.” Each of these items forced respondents to select between competing options; thus, “don’t know” responses represent either a refusal to answer or a true lack of opinion. As such, I treat “don’t know” responses and refusals as missing data.<sup>18</sup>

Averaging each respondent’s answers on these five items produces a composite measure of the degree to which the individual supports the idea that the federal government has a responsibility to regulate, interfere, or get involved with economic affairs. From the standpoint

of the elite debate, this measure taps, in the public, a generalized American tendency towards individualism, or the belief that government should leave well enough alone.

### Salience of Crime

The measurement of concern over crime also poses a significant challenge to this research on both theoretical and practical grounds. Theoretically, concern about crime is a concept very susceptible to priming effects. Aggregate levels of concern about crime are loosely related to the degree of visibility crime has in the media (Erbring, Goldenberg and Miller 1980). Although the actual probability of victimization in the United States is very low, measures of the fear of victimization are typically much higher than this likelihood warrants (Lewis and Salem 1998). Investigating the effects of exposure to news about crime on Presidential popularity, Valentino (1999, 305-306) found that simple exposure to a story about crime reduced support for President Clinton and exposure to news about minority crime reduced such support even farther by activating racial stereotypes detrimental to his image. This implies that respondents react more strongly to the thought of crime than circumstances dictate. Thus, direct questions about crime may inflate the degree of expressed concern by simply mentioning the word “crime” in the question stem.

I measure the salience of crime with the question, “What do you think are the most important problems facing this country?” This question prompted respondents for up to four discreet “mentions” of their impressions. Thus, both the number of times the respondent mentioned a crime-related topic and the order in which he or she recalled various issues serve to indicate the salience of crime to the individual. It seems appropriate to treat any response that included any mention of crime, personal safety, narcotics, drug-related crime, or law and order as an indication of thought about crime. For this measure, I assign a value of 4 to any response that

mentioned these topics first, 3 to any response that mentioned these topics second, 2 to any response that mentioned these topics third, and 1 to any response that mentioned these topics fourth. I code all other responses, including those who refuse to answer or “don’t know” as zero. Summing across these mentions will, therefore, produce a scale that ranges from 10 (most salient) to zero (least salient).

Accessibility relates to attitude salience (see Bassili and Fletcher 1991; Bassili 1993). Therefore, my measure of the salience of crime to the individual is the likelihood that he or she will offer the concept spontaneously when given the opportunity to do so in an unstructured question.

While survey methodologists have long argued that such “open-ended” questions are replete with contextual and question-wording effects, a close review of these criticisms shows that the primary concern with these measures lies in the potential for the context of the interview (i.e., the order of the questions in the instrument, the physical conditions at the time of the interview, etc.) to stimulate a response (Sudman, Bradburn and Schwartz 1996). Given the broad scope of the 2000 ANES, it seems highly unlikely that respondents would be primed disproportionately to thinking about the issue of crime during the interview. Also, this item appeared in the survey after a series of questions measuring affect towards the presidential candidates, further reducing the likelihood of an artificial increase in the salience of crime.

Practically, it is important to note that my theory does not imply that concern about crime equates to fear of victimization. While such fear may be a component of concern over crime, it is not readily apparent that an increase in the salience of crime issues will always produce an increase in the fear of victimization (Ferraro 1995). This implies that the salience of the issue of

crime and the fear of victimization are related concepts; however, measuring these concepts requires separate items.

For the measure of the fear of victimization, the 2000 ANES survey asked respondents to rate the degree to which they were afraid that a member of their family, a close personal friend, or themselves “would be assaulted” in the next year. As Unter (2001) asserts, the inclusion of the word “assault” in the question stem should focus the respondent on the idea of violent crime, and it ensures that the question actually measures fear of crime and not generalized anxiety. For this variable, individuals who declare they are “very afraid” receives a score of 7, “somewhat afraid” receives a score of 5, “a little bit” receives a score of 3, and “not afraid” receives a score of 1. As with the dichotomous measures in the scale of ideology, it seems inappropriate to consider “don’t know” responses as an ambivalent answer. On this variable, I treat “don’t know” responses as truly missing data.

The salience of crime is measured in two distinct ways. The first measure taps the degree to which the idea of crime pops into the respondent’s head when he or she thinks about problems in the country. Furthermore, the first measure taps the degree to which crime-related thoughts dominated the respondent’s thinking, since a hypothetical respondent mentioning “crime” second and third would receive the same score as a respondent mentioning crime first in a given series of problems. The second measure taps personalized fear. Taken together, the measures provide an approximation of the degree to which the individual thinks about crime on a daily basis. From the standpoint of the elite debate, this measure taps the baseline degree of attention the public pays to the issue of crime.

### Crime Rate

This research will use the Uniform Crime Report's (UCR) violent crime rate statistic to operationalize the crime rate of the respondent's environment. I base my decision to use the violent crime index, composed of all reports of murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault, on the insight of Lott (2000). As he asserts, certain types of crime are not associated with the use of firearms. For instance, a high rate of fraud in a locality would not necessarily be associated with a high rate of gun-related crime. Since the UCR's Crime Index includes non-violent crimes and only thirty states participate in the program that would permit direct analysis by type of crime (Uniform Crime Report 2000), the UCR violent crime index offers the best surrogate measure of those crimes most likely to involve firearms.

The remaining question regarding the operationalization of "the crime rate" concerns the appropriate level of aggregation for the measure. Aggregation to the level of the neighborhood is unacceptable because, regardless of the rate of crime in the neighborhood, all respondents are likely to receive information about the crime rate from one media source. Conversely, aggregation to the level of Primary Metropolitan Statistical Areas or Consolidated Metropolitan Statistical Areas is unacceptable because a significant portion of the sample resides in suburban or even rural communities. Residents of these communities often experience less crime than residents of the central city area, even though MSA's group them together. Therefore, aggregation to a level somewhere in between, such as county, seems appropriate.<sup>19</sup> Respondents in rural communities are most likely to base their information about crime on the conditions of the nearest population center, such as a county seat, where residents must often travel for services.

Since county level data are readily available from the FBI and the county codes are the easiest locality data to obtain from the American National Election Study, I will measure the crime rate experienced by the individual as the county violent crime rate (violent crimes per 1000 individuals) reported by the national UCR program.

### Sophistication

Because of the long-standing, but implicit, presumption that ideology and sophistication were synonymous, the literature discussing the measurement of sophistication is bound to the literature on ideology. The focus of the levels of conception measure led to the equating of the use of ideology and sophistication (Hagner and Pierce 1982). However, with the demise of the levels of conception measure, discussions of the measurement of sophistication reverted to their original focus as the “breadth and depth” of an individual’s thought processes (Luskin 1986). The force of this discussion focused on the idea that sophisticated individuals not only thought about a wide range of topics, but also considered the broad range of possible views on these topics.

Using this conceptual definition, several authors proposed alternate measurement strategies. For instance, Bobo and Licari (1989) assert that the breadth of an individual’s vocabulary may measure sophistication, presuming that a large vocabulary is a necessary prerequisite for the integration present in sophisticated thought. With that said, the work of Luskin (1986) remains the standard to evaluate measures of sophistication. As he shows, the concept of sophistication contains two dimensions, density and organization. His most important contribution demonstrates that the scale measuring density, operationalized as the ability to answer correctly a number of factual questions regarding political conditions, also functions as a

composite density/organization scale. This implies that a variable measuring the amount of political information a respondent holds will serve as a measure of sophistication.

Based upon Luskin's (1986) findings, the most common measurement of sophistication used in the American National Election Study has been the number or proportion of correct identifications of the offices of a set of four political figures. In 2000, these figures were Trent Lott, William Rehnquist, Tony Blair, and Janet Reno. In order to be counted as a correct response, the respondent was required to identify the office exactly (i.e., identifying Tony Blair as the "leader" or "president" of Britain would be counted as incorrect). I code a correct answer for these variables as 1 and an incorrect answer as 0. Summing the variables produces a scale ranging from 0 to 4, with a 4 indicating the highest degree of sophistication.

However, as part of an experiment imbedded in the 2000 ANES, a random half of the respondents received an additional probe when they offered an initial answer of "don't know" to these items. The rationale of experiment flows from the insight that an initial answer of "don't know" could still indicate knowledge of the topic but a refusal to respond based on the fear of being wrong (Burns, *et al.* 2000). Therefore, for the individuals who received the probe, a second response of "don't know" is an incorrect response. The portion of respondents who did not receive the probe and answered, "don't know" should receive a score that reflects the uncertainty in their answers. As such, I code a final response of "don't know" after probing as zero and a final response of "don't know" without probing as one-half.

### Familiarity with Firearms

For the variable measuring familiarity with firearms, a question asking about the presence of guns in the home during both childhood and the present would probably provide the best measure. However, on this concept the 2000 ANES survey finally fails. In fact, the last time the

American National Election Study asked about this topic was during the 1996 presidential election survey, and then only to those individuals receiving the post-election interview via the telephone.

However, the theoretical focus of this concept is not simple contact with firearms; rather, as stated in Chapter One, the focus of this concept is familiarity with firearms in a non-violent or, more specifically, non-criminal setting. I will use the 2000 ANES measure of the level of urbanization of the respondent's childhood residence to operationalize familiarity with firearms. This question asked the respondents to judge the size of the place in which they grew up and to place themselves on a multi-point scale that ranges from "on a farm" to "in a very large city."

It seems likely that the cultural context in which the individual matured will determine the typical mode of contact any given respondent might have with firearms. If the respondent grew up in a rural or semi-rural environment, it is much more likely that he or she will consider firearms as a more commonplace implement. Conversely, if the respondent grew up in an urban environment, it seems likely that he or she will link firearms more closely with criminal violence. Thus, the level of urbanization the respondents experienced during childhood will serve as surrogate measure for their contact with firearms. For this measure, I treat "don't know" response as truly missing data.

#### Demographics and Party Identification

Given the existence of long-established measures of all demographic characteristics and partisanship, I will devote little time to their discussion. I intend to use a dichotomous measure of race (i.e., a dichotomous variable indicating black, non-black racial group membership), ordinal level variables for age, gender, education, and income, and the traditional 7-point party identification scale.



## ESTIMATION PROCEDURES

Since the theory laid out in Chapter One specifically asserts that competition between core values and contextual concerns produces a respondent's general gun control policy preferences, I must employ some form of multivariate estimation technique to model the trade-offs between these concepts each respondent makes when thinking about gun control.

Fortunately, the measurement of gun control policy preferences lends itself, in the psychological component of the model, to the most common and readily understood form of multivariate analysis, Optimal Least Squares (OLS) Regression (Gujarati 1995).<sup>20</sup> I will evaluate the psychological component of the model expressed as the following structural equation using this procedure.

$$\begin{aligned} \text{Gun Control Policy Preferences} = & \alpha + \beta_1 \text{ Ideology} \\ & + \beta_2 \text{ Saliency of Crime} \\ & + \beta_3 \text{ Saliency of Crime} * \text{ Ideology} \\ & + \beta_4 \text{ Gender} \\ & + \beta_5 \text{ Education} \\ & + \beta_6 \text{ Race} \\ & + \beta_7 \text{ Party Identification} \\ & + v \end{aligned}$$

### Estimation of Contextual Effects

In evaluating the contextual model, because I specifically wish to account for the relationship between the actual crime rate and the salience of crime to the individual, I cannot use OLS regression.<sup>21</sup> The technical term applied to the arrangement of concepts in the contextual model is triangular, meaning that the model specifies at least one causal relationship between two predictor variables (in this case, the salience of crime and the crime rate) without specifying a reciprocal relationship. In this situation, OLS regression may inflate estimates of

the standard errors to twice their true value (Wiggins 2001). Thus, using OLS on a triangular system reduces the likelihood of finding significant relationships (Gujarati 1995).

Two-Stage Least Squares (2SLS) corrects this difficulty by dividing the regression process into an “instrumenting” stage and an analysis stage. This process is a limited information estimation technique, meaning that it includes all variables in the model to instrument the endogenous concept, the salience of crime, but ignores relationships between those predictor variables. The instrumenting stage produces a variable that replaces the endogenous concept with a predicted value, purging the effects of the other predictor variables from the endogenous variable. The analysis stage then uses the instrumental variable in place of the endogenous concept to estimate the relationships in the model. I will evaluate the contextual model expressed as the following structural equation using this procedure.

$$\begin{aligned} \text{Gun Control Policy Preferences} = & \alpha + \beta_1 \text{ Ideology} \\ & + \beta_2 \text{ Salience of Crime (instrumented)} \\ & + \beta_3 \text{ Salience of Crime (instrumented)* Ideology} \\ & + \beta_4 \text{ Gender} \\ & + \beta_5 \text{ Education} \\ & + \beta_6 \text{ Race} \\ & + \beta_7 \text{ Party Identification} \\ & + \beta_8 \text{ Crime Rate} \\ & + \beta_9 \text{ Crime Rate * Ideology} \\ & + \beta_{10} \text{ Crime Rate * Salience of Crime (instrumented)} \\ & + \beta_{11} \text{ Crime Rate * Gender} \\ & + \beta_{12} \text{ Crime Rate * Education} \\ & + \beta_{13} \text{ Crime Rate * Race} \\ & + \beta_{14} \text{ Crime Rate * Party Identification} \\ & + \beta_{15} \text{ Childhood Urbanization} \\ & + \beta_{16} \text{ Current Urbanization} \\ & + \nu \end{aligned}$$

#### Estimation of the Effects of Sophistication

Since I wish to focus on the differences between the politically sophisticated and unsophisticated, testing the effect of sophistication on the contextual model only requires a split

sample estimation technique. Essentially, this procedure divides the sample based upon the respondent sophistication scores and then duplicates the 2SLS estimation procedure for each group.

Since my measure of sophistication is an ordinal, five-category scale, it lends itself to a simple division strategy. Based on the distribution of the scale I will divide, as closely as possible, the sample into fourths.

Two points make this procedure more desirable than the traditional method of testing the sophistication interaction hypothesis, which specifies interactions between sophistication and every other concept in the model. First, the model already contains a large number of interactions due to the hypothesized effects on context on the psychological component. Specifying the additional sophistication interactions would further reduce the degrees of freedom available to model, potentially biasing significance tests. Furthermore, the product of interacting sophistication with the other interactions would produce a series of three-way interactions. The coefficients of these three-way interactions are notoriously difficult to interpret. Second, pooling the groups, as in the traditional method, constrains the error variance for each group to be similar. This is problematic because abnormalities in the error variance of any regression estimation bias the results in unpredictable ways. Thus, the pooling the groups can seriously compromise the results (Gould 1999).

The split sample technique described above does not suffer from either of these difficulties and will allow for comparisons of the relationships. Given the relative complexity of my estimation strategies, reducing the complexity of estimating this section of the model is desirable.

## A Concluding Note on Estimation Procedures

In one sense, my estimation strategies are complex and will probably leave the reader confused. It is important to note, however, that much of the complexity stems from methodologies required to compensate for problems in the data or the complexity of the model itself. An understanding of these methodologies, while important to the academic who wishes to check or replicate this analysis, is not necessary to the typical reader since the results they produce are interpreted in the same manner as the more common procedures used by the discipline.

## END NOTES

<sup>11</sup> The National Election Studies ([www.electionstudies.org](http://www.electionstudies.org)). THE 2000 NATIONAL ELECTION STUDY [dataset]. Ann Arbor, MI: University of Michigan, Center for Political Studies [producer and distributor]. These materials are based on work supported by, in alphabetical order: the National Science Foundation under grant SES-9707741, the Russell Sage Foundation under grant 82-00-01, and the University of Michigan. Any opinions, findings and conclusions or recommendations expressed in these materials are those of the author(s) and do not necessarily reflect the views of the funding organizations.

<sup>12</sup> In the case of the measure of fear of assault, a logic error in the randomization software further reduced the number of respondents receiving the question. After correcting this error, only approximately one third of the sample received this item.

<sup>13</sup> This routine, called Amelia, is available as a free download via King's website (<http://gking.harvard.edu/stats.shtml>).

<sup>14</sup> For a detailed explanation of the process, including computational algorithms, see King, *et al.* 2001. One should note that EMis differs significantly from OLS interpolation methods in that the imputed values are stochastically determined based upon the variance structure of the data rather than by simple linear combination. This implies that the full information model (i.e., including both right hand side and left hand side variables) used by EMis does not produce problems of reciprocal causation since the imputed values "do not change the joint distribution" (King, *et al.* 2001).

<sup>15</sup> I paraphrase the following explanation from both King, *et al.* (2001) and private conversations with and Kenneth Scheve, a co-developer of the Amelia program.

<sup>16</sup> See Appendix A for variable coding.

<sup>17</sup> I counter-code the variable during scale construction.

<sup>18</sup> For these dichotomous measures, I recoded the scale endpoints to match, numerically, the endpoints of the first two items, effectively equating the answers on the dichotomous measures with the extreme responses on the first two items.

<sup>19</sup> The only situation that might pose a problem for aggregating to the county level is when a particularly large county contains two population centers with radically different crime rates. In this instance aggregation to the county level will tend to misrepresent the actual experience of the crime rate for all respondents from this area.

<sup>20</sup> Strictly speaking the use of OLS Regression on an ordinal level dependent variable such as my measure of gun control policy preferences is inappropriate. However, the range of the variable (a five point scale) is large enough to

avoid the difficulties inherent in such an estimation procedure. In the interest of thoroughness, and to demonstrate that my results are not an artifact of sloppy statistics, I will estimate the relationships in the model with an ordinal-level routine such as ordered probit.

<sup>21</sup> Often, OLS regression estimations include weakly endogenous variables, ignoring procedural considerations because the relationships are uninteresting and are weak enough not to cause significant bias. In this case, I wish to test both the impact of the salience of crime and the actual crime rate, independent of each other.

## CHAPTER THREE: THE INNER THOUGHTS ABOUT GUN POLICY

What do individuals think about when they consider the question of the gun control policy? As discussed in Chapter One, the messages offered by the policy elites provide a good starting point for this investigation. However, these messages are not the only factor constraining gun control policy preferences. Below, I will first examine general support for gun control policy and then the values and deep-seated psychological tendencies that structure individual gun control policy preferences.

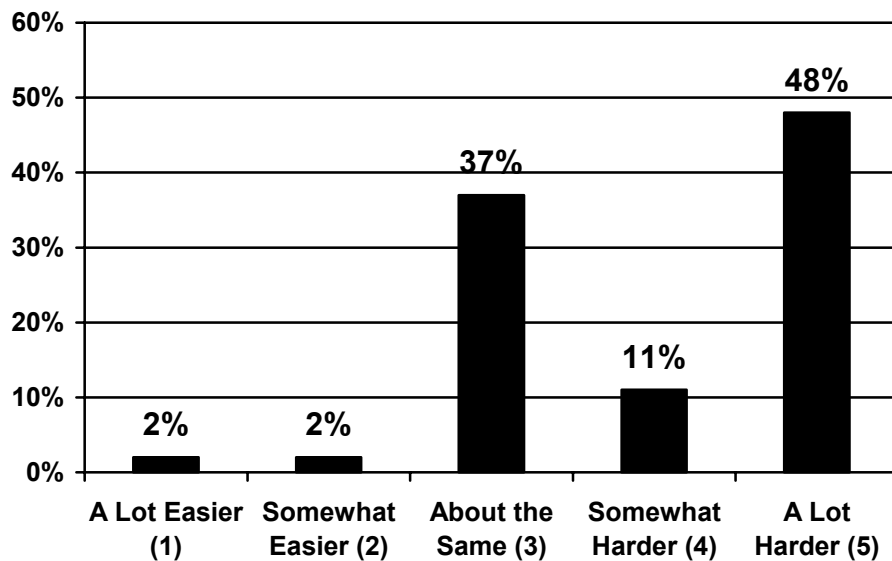
### GUN CONTROL POLICY PREFERENCES IN THE UNITED STATES

Developing an accurate picture of the public's gun control policy preferences is a difficult task for a number of reasons. First, support varies with the specific content of the proposal (Gallup 2001; Kates 1992). As noted in Chapter Two, within a single survey the majority simultaneously often expresses support for the idea of gun control and opposition to a specific proposal such as the banning of all handguns. Second, since the importance of the topic of gun control waxes and wanes with current events, researchers often only measure public attitudes toward gun control after high visible episodes of gun violence (Kates 1992). These, the sporadic measurements of the public's policy preferences do little to establish a reliable picture. Finally, only a few researchers have asked the same question with enough regularity to measure the trends in gun control policy preferences. In conclusion, the interpretation of gun control policy preferences in American is problematic.

Bearing the above in mind, public attitudes toward gun control in 2000 continued its long-running tendency to support greater restrictions. The multiple imputation estimate of the mean of this measure, 3.99 on a scale of 1 to 5, indicates that the public generally supports greater restrictions on gun ownership. In fact, 48 percent of those interviewed responded that, at

the very least, the government should make buying a gun “a lot harder” (see Figure 3.1). Overall 59 percent of the sample support increased restrictions on the purchase of firearms. This result compares well with recent measures of the national trend. Since 1993, support for increased restrictions has varied up and down between a high of 70 percent in March 1993 and a low of 60 percent in December 1999 (Gallup 2001). The level of support in 2000 is statistically indistinguishable from the average level of 64 percent across this period of time.

FIGURE 3.1: SUPPORT FOR RESTRICTIONS ON GUN OWNERSHIP  
 “THE GOVERNMENT SHOULD MAKE BUYING A GUN...” (2000 ANES)



Note: n = 1764. Multiple Imputation transforms the variable to interval level measurement. Categories shown based upon rounding to nearest category.

However, the picture is more complex than these statistics suggest. The distribution of responses on the measure is clearly bimodal, indicating a strong split of opinion in the public. As Figure 3.1 shows, 37 percent of the sample responds that government should keep gun control laws “about the same.” In contrast to the stability seen on the support side of other national measures, support for the status quo appears to be slightly, but steadily, increasing. Since 1993 support for the status quo has increased from a low of 24 percent in March 1993 to a

high of 31 percent in June 1999 (Gallup 2001).<sup>22</sup> Since June 1999, support for the status quo has dropped slightly, but it still remains above its 1993 low point (Gallup 2001).

This finding suggests that the gun control opponents' strategy of emphasizing enforcement of existing rules has influenced the ways in which individuals think about the issue (Spitzer 1998, 98). Thus, the finding buttresses the pivotal contention that the public is using elite messages as clues to the "correct" ways in which they should consider the issue.

The data also provide evidence that the opinions expressed in the policy preference question represent a baseline level of support or opposition rather than a response artificially inflated by a recent event. After asking the respondent's opinion on the direction of gun control policy, they are asked to rate the importance of the issue. After being primed in this manner, 65 percent of the sample responded that the issue of gun control was, at the least, "very important." In contrast, at an earlier point, the survey asked respondents to rate the "most important" problems facing the nation. For this measure, fewer than three percent of the concerns cited mentioned "gun control" in some form.

The vast difference between the open-ended responses and the primed importance question illustrate two points. First, respondents were not, generally, thinking about the issue of gun control prior to the opinion question. Thus, the data provide no evidence that a particularly sensational event biased respondent answers. Second, the issue of gun control is one on which the public has strong opinions. Given the large split in public support discussed above and given the huge jump in reported salience after being primed, the data suggest that the concept of gun control is one which is fairly important to individuals even if it is not especially (or chronically) salient.



In conclusion, the empirical results surrounding gun control policy preferences in the 2000 ANES are appropriate for my research. As noted in Chapter Two, the gun control measure needs to tap general thoughts about gun control rather than concerns about specific implementation schemes. At the same time, the measure needs to tap thoughts that are relatively free from the effects of sensational news. Clearly this measure succeeds on both counts.

## VALUES AND TENDENCIES

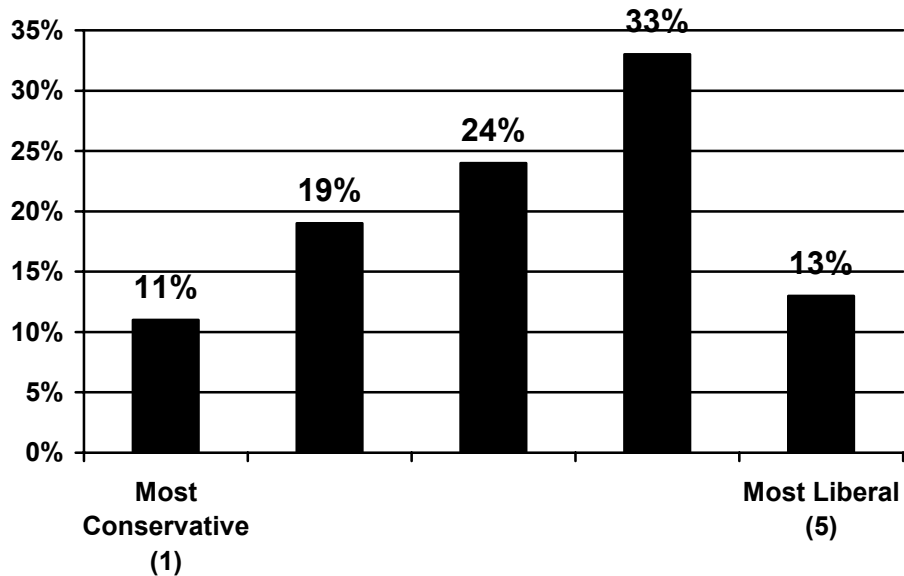
Before turning to the multivariate analysis, a review of the relationships I hypothesize in the psychological component of the model is in order. In this section I will briefly recap the theoretical linkages discussed in Chapter One and provide descriptive distributions of the scales.

### Ideological Ties

The tension in the gun control policy debate over the existence of a constitutional “right” of ownership leads individuals to structure their thoughts about gun control in the light of their ideological predispositions. These predispositions inform the individual about the proper nature of government involvement in everyday life and can color every aspect of the individual’s interaction with the political world. Thus, I expect that an increasing acceptance of government intervention in daily life will associate with an increasing acceptance of gun control.

In 2000, the public tended towards a liberal interpretation of the role government in daily life. While the multiple imputation estimate of the mean of the scale, 3.21 on a scale of 1 to 5, would seem to indicate a moderate mindset, the plurality of respondents express opinions that generally support the idea of big government (see Figure 3.2).

FIGURE 3.2: SUPPORT FOR “BIG” GOVERNMENT



Note: n = 1764. Multiple Imputation transforms the variable to interval level measurement. Categories shown based upon rounding to nearest category.

### Perceptions of Crime

In light of the debate over the linkage between crime (especially violent crime) and gun proliferation, perceptions of crime are generally hypothesized to affect individuals' gun control policy preferences. However, because ideological predispositions directly affect individuals' policy preferences, the relationships between perceptions of crime and gun control policy preferences will not be simple. Rather, I expect that perceptions of increasing crime will correspond to increasing support for gun control among the ideologically liberal and decreasing support among the ideologically conservative. I expect these relationships will hold for both measures of perceptions of crime, the “pure” salience measure (the number and order of mentions crime receives in the open-ended questions) and the “fear” measure (the respondent's self-reported fear of assault).

As I noted in Chapter Two, because both attitudinal and contextual variables shape perceptions of crime, an accurate assessment of the effects of these perceptions on gun control policy preferences must account for this fact. But, the interesting question is not simply “to what degree do perceptions of crime intervene between predispositions, such as ideology or partisan identification, and gun control policy preferences?” Both Tyler and Lavrakas (1983) and Haider-Markel and Joslyn (2001) have shown that perceptions of crime are endogenous in a model of gun control policy preferences. Rather, the interesting question is “what are the effects on gun control policy preferences of the portion of perceptions of crime that is not a function of concepts such as ideology, partisanship, actual crime rates, or gender (to name but a few)?”

This unexplainable variance in perceptions of crime may equate to the irrational fear of crime reported by Lewis and Salem (1998). Thus, demonstrating a linkage between the unexplained variance in the perception measures and gun control policy preferences will help to explain that portion of gun control policy preferences that flows from individuals’ visceral reactions to the violence in their communities.

The residuals of an OLS regression equate to the unexplained variance of dependent variable (Gujarati 1995); thus, the residuals from the first stage of a Two Stage Least Squares estimation of the psychological component of the model will measure the unexplained information in my measures of perceptions of crime. Examining the relationships between these residual crime perception measures and gun control policy preferences will produce useful information since, by definition, a residual is made up of random (error) variance and unexplained systematic variance (Jacoby 1988; Kugler 1983). Thus any relationship between these residual crime perceptions measures and gun control policy preferences must represent the

effect of thoughts about crime that are not the result of actual conditions, ideology, race, or gender.<sup>23</sup>

Table 3.1 lists the coefficients and model fit statistics from two regression estimations predicting the salience of crime and fear of assault measures. Two points deserve special attention. First, the estimation predicting the salience of crime measure is especially poor. The model barely achieves significance, the critical value of F being 1.96, and fails to predict approximately 98 percent of the variance in the measure. Second, neither the current nor the prior year's violent crime rates relate to either measure of perceptions of crime.

The finding that violent crime rates do not affect perceptions of crime is not wholly unexpected (Lewis and Salem 1998). However, the justification given in Chapter Two for using this process rests, primarily, on my desire to purge the effects of the actual rate of crime from the perception measures. Thus I must decide if using the residuals in my remaining analyses is even necessary. Obviously, the residuals from the estimation of the salience measure will offer no meaningful addition to the theoretical power of the model since the estimation that produced them is so weak. In essence, the residuals are the original measure because they would correspond to 98 percent of the variance in the original measure. It makes sense, therefore, not to use these residuals.

TABLE 3.1: OLS REGRESSION ESTIMATES INSTRUMENTING  
THE SALIENCE OF CRIME AND FEAR OF ASSAULT

	SALIENCE OF CRIME (Open Ended)	FEAR OF ASSAULT
Ideology	.012 (.030)	.107 * (.042)
Violent Crime 1999	.025 (.015)	.007 (.017)
Violent Crime 2000	-.008 (.017)	.022 (.022)
Age	-.073 (.072)	-.054 (.031)
Education	-.084 * (.038)	-.090 ** (.034)
Income	-.006 (.011)	-.021 (.017)
African-American	.274 (.143)	.180 (.208)
Childhood Urbanization	.001 (.017)	.011 (.024)
Number of Children	.002	.113 *
Living with Respondent	(.036)	(.050)
Female	.056 (.077)	.498 ** (.105)
Neighborhood Dissatisfaction	.002 (.022)	.164 * (.073)
Neighborhood Racial Makeup	-.011 (.022)	.059 (.033)
Sophistication	.027 (.037)	.036 (.052)
F	2.05 *	12.66 **
Adj. R <sup>2</sup>	.018	.088
Root Mean Square Error	1.286	1.387

Note: n = 1764. \* = p < .05, \*\* = p < .01. Cell entries are unstandardized regression coefficients, standard errors in parenthesis.

On the other hand, the estimation of the fear of assault measure is significantly stronger, and the residuals produced thereby purge the effects of a number of the other independent variables in the model, most notably gender, even though actual crime has no significant impact on fear of assault. Thus, using these residuals may add to the theoretical power of model by

being a more “pure” measure of *fear* of crime. It makes sense, therefore, to utilize these residuals in the estimation of the psychological component of the model.

Certainly, all three of the fear of assault measures (i.e., the original self-expressed measure, the instrument, and the residuals) are somewhat problematic; therefore, in the final estimations of the model, I will test all three versions. If the use of the residuals for fear of assault from the equation in Table 3.1 does not significantly detract from the model fit, then including them in the estimation is desirable because it will provide information about the affective aspects of gun control policy preferences.<sup>24</sup>

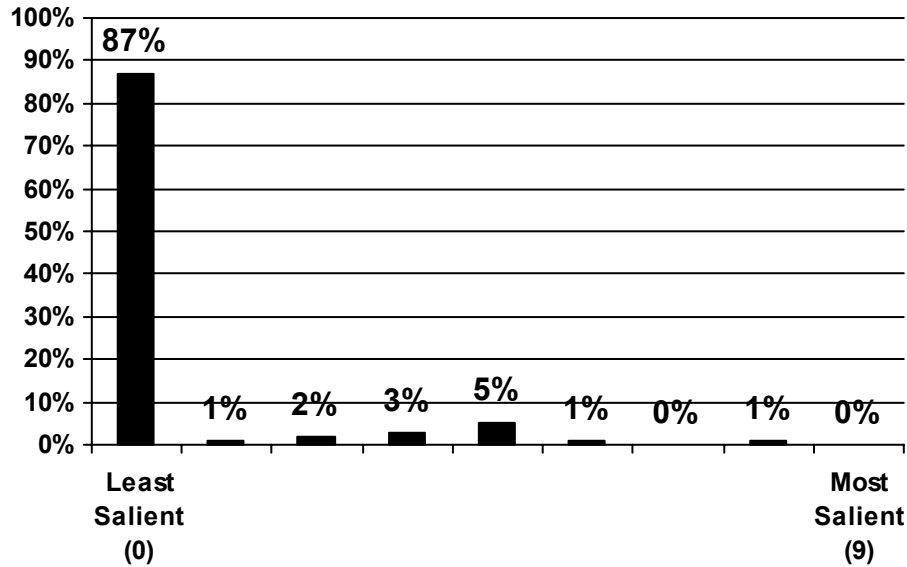
Turning to the univariate measures of these variables, in 2000 the public failed to perceive crime as an especially pressing problem. Only 13 percent of the respondents spontaneously mention crime when asked to enumerate the biggest national problems (see Figure 3.3). Since the national crime rate fell in 2000 to its lowest levels since 1973, this result is hardly surprising (Bureau of Justice Statistics 2003).

At the same time, the multiple imputation estimate of the median value of the fear of assault variable, 5.07 on a scale of 1 to 7, suggests that most respondents feel, at least, “somewhat afraid” of crime, regardless of how salient it is to them. As noted earlier, this too, is unsurprising; people are often more afraid of crime than either their situation or their attention to their situation warrants.

The results of the instrumentation of the measure of fear of assault further support this assertion. Respondents often irrationally inflate their fear of crime considered against their risk of victimization (Lewis and Salem 1998). The variables in the instrumenting model represent nominally “reasonable” justifications for being afraid of crime. For example, females are typically at a greater risk of victimization than males; therefore, including gender in a model

predicting fear of assault should help explain differences in levels of fear between males and females. Yet, the explanatory variables in the model fail to explain 92 percent of the respondents' fear. Thus, unreasonable, meaning gut-level affective, media-driven perceptions of the world probably best explain the respondents' unexplained fear.<sup>25</sup>

FIGURE 3.3: THE SALIENCE OF CRIME



Note: n = 1764. Multiple Imputation transforms the variable to interval level measurement. Categories shown based upon rounding to nearest category.

### Demographic Tendencies

Many groups exhibit different alignments in the gun control debate. For instance, African Americans are expected to express more support for gun control policies than non-African Americans. Likewise, women are expected to support it more than men. Finally, Democrats are expected to support gun control more than Republicans. Thus, these demographic variables are included in the analysis, as well as controls for age, education, and income, to estimate their independent effects.

## VALUES, TENDENCIES AND GUN CONTROL POLICY PREFERENCES

A preliminary bivariate analysis of the relationships between gun control policy preferences and the measures of core values seems to confirm the assertion that the elite message war has penetrated the public awareness and structured its thinking on the issue (see Table 3.2). The Pearson'  $r$  for the relationship between ideology and gun control policy preferences (.35,  $p < .001$ ) indicates that as an individual moves towards a more expansive interpretation of the government's role in managing daily life, that person moves towards favoring gun control. Furthermore, dropping those few respondents who prefer "easing" restrictions does not substantially affect the magnitude of the relationship; thus, the basic divide in policy preferences seems to be between those who wish to restrict ownership and those who feel the current laws are fine the way they are.

Likewise other basic predictors of gun control policy preferences behave in the expected manner. The relationships between the standard measures of demographics and gun control policy preferences exhibit their expected relationships. All are signed properly and significant with the exception of income and age, both of which have insignificant bivariate relationships with gun control policy preferences.

The similar strength of the relationships of gender and party identification to gun control policy preferences deserves consideration. In the bivariate case, the gender of a respondent, essentially, is as good a predictor of gun control preferences as that individual's party identification. Some gun control opponents have argued that the issue of gun control has, at its heart, strong feminist overtones (Poe 2001). The theme of these arguments focuses on the contention that guns, for some segments of the feminist movement, have become symbolic of the differences between the sexes, and control represents an equalization of the power distribution



(Poe 2001, 213). In contrast, others have argued that gender differences on gun control represent a divide between the sexes on the appropriateness of use of force (Howell and Day 2000). Based upon this discrepancy in explanations, a comparison of the effects of gender and party identification in the multivariate model bears close scrutiny.

TABLE 3.2: MULTIPLE IMPUTATION ESTIMATES OF BIVARIATE RELATIONSHIPS BETWEEN PSYCHOLOGICAL PREDICTORS AND GUN CONTROL POLICY PREFERENCES

	PEARSON'S R
Ideology	.3534 ***
Saliency of Crime	.0048
Unexplained Fear of Assault	.0506
Age	-.0066
Education	.0702 **
Income	.0122
African-American	.0540 *
Female	.2640 ***
Party Identification	.2691 ***

Note: n = 1764. \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$ . Multiple Imputation transforms the variable to interval level measurement; therefore, Pearson's  $r$  is an appropriate measure of association.

In contrast, the tests of the bivariate relationships between perceptions of crime and gun control policy preferences do not behave as expected. While the measure of unexplained fear of assault does significantly correlate with gun control policy preferences at the  $p < .10$  level, neither measure achieves normal levels of significance. While several statistical artifacts could explain this result, the most likely theoretical explanation is the hypothesized conditioning effect of ideology on the relationships. If the effects of the crime-based factor on gun control policy preferences are in opposite directions for conservatives and liberals, then these effects could cancel each other in a bivariate test.

## Estimations of the Psychological Component<sup>26</sup>

This section provides some answers to the question posed in Chapter One, “What core values constrain gun control policy preferences?” The bivariate relationships do indicate that the values of ideology and partisanship, perceptions of crime, and gun control policy preferences are connected; however, they cannot illustrate the kinds of trade-off reasoning that Hurwitz and Peffley (1987) suggest must occur when respondents generate responses to opinion questions. The psychological processes that produce gun control policy preferences tap a number of core values in a complex web of relationships. Only a multivariate methodology can unravel this web and estimate the relative impact of each core value.

Simultaneously controlling for all of the predictor variables in an equation clarifies the relationships a great deal. In Table 3.3, the coefficients for Model 1 represent the results of regression containing all predictor variables, and the hypothesized conditional relationships. While the model is significant ( $F = 23.71, p < .001$ ) and explains a reasonable amount of the variance in gun control policy preferences, only a few of the variables of interest have significant coefficients. It seems likely that the insignificant conditional relationships included in the model may bias the standard errors of their associated direct effects, precluding the perceptions of crime measures from achieving significance.

In order to test the effects of dropping insignificant variables in the model, I employ a reverse-stepwise procedure whereby the most insignificant coefficient from the model are removed, the relationships are re-estimated, and the results are compared to the original estimations, looking for coefficient stability. If the coefficients remain stable (i.e., their values do not fluctuate beyond their 95 percent confidence intervals) I conclude that the removal of the insignificant terms does not affect the model fit. I then repeat this process for the next most

insignificant variable, continuing until all variables are significant or the removal produces instability in the main effect coefficients. Dropping the insignificant interaction terms allows the coefficient for unexplained fear of assault to become significant (Model 2). Furthermore, dropping the insignificant terms does not substantially influence the predictive power of the model, as evidenced by the stability of both the adjusted  $R^2$  and the root mean squared error statistics.

TABLE 3.3: OLS MULTIPLE IMPUTATION ESTIMATES OF THE PSYCHOLOGICAL COMPONENT OF THE MODEL GUN CONTROL POLICY PREFERENCES

	MODEL 1	MODEL 2	VARIABLE IMPACT
Ideology	.28 ***(.04)	.22 ***(.02)	.88
Saliency of Crime	.01 (.06)	--	--
Unexplained Fear of Assault	-.02 (.06)	.04 **(.01)	.47
Party Identification	.08 **(.02)	.08 ***(.01)	.58
Age	.01 (.02)	--	--
Education	.05 (.03)	.05 **(.01)	.29
Income	.03 *(.01)	.02 **(.01)	.61
African-American	-.28 **(.16)	-.27 **(.14)	-.27
Female	.46 ***(.09)	.46 ***(.05)	.46
Saliency of Crime X Ideology	-.01 (.01)	--	--
Unexplained Fear of Crime X Ideology	-.01 (.01)	--	--
Constant	2.53	2.49	--
F	23.71 ***	46.25 ***	
Adj $R^2$	.20	.20	
Root Mean Square Error	.9349	.9345	

Note: n = 1764. \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$ . Contextual components included in the model for purposes of specification are not shown. Cell entries are unstandardized regression coefficients with Standard Errors in parenthesis. All cell values are rounded to the nearest hundredth. Variable Impact represents the change in the predicted score on the five point gun control policy preference scale, given a change from the minimum to the maximum values of the predictor variable.

The significant relationship between ideology and gun control policy preferences in Model 2 confirms the expectation that increasing acceptance of government intervention in daily

life will correspond to an increasing acceptance of gun control. It is important to note, however, that the relationship is not merely an artifact caused by the conjunction of simple ideological self-identification and an opinion. Rather, since the measure of ideology taps support for “big” government and is composed of five core value indicators, the relationship between the two concepts actually reflects the connections between core values and policy “postures” hypothesized by Hurwitz and Peffley (1987).

The results in Table 3.3 demonstrate the impact of the ideology measure on gun control policy preferences. The values in column three represent the maximum change the predictor variable can create (by shifting from its minimum to maximum values and holding all other variables at their means). Of course, one might argue that this kind of ideological change (from the most ardent conservative to the most ardent liberal) is an unrealistic measure of the impact of the variable since there are relatively few such ideologues in the country. However, even a more realistic change from a moderate conservative to a moderate liberal still produces a change of .44 on the 5-point scale of the dependent variable. While this degree of change may seem small, it still (potentially) represents a reversal of position on the gun control issue because the major division on gun control policy lies between those who support increased restrictions and those who support the status quo. An ideological shift from a moderate liberal to a moderate conservative (moving from a 4 to a 2 on the ideology scale) would produce enough change in the gun control policy preferences scale to account for half the distance between support for expansion (a 4 or 5 on the scale) and opposition to expansion of gun control (a 3 on the scale).

In contrast, the relationships between perceptions of crime and gun control policy preferences do not behave as expected. Rather than finding the conditional relationships found by Haider-Markel and Joslyn (2001), I find no relationship between the measure of salience of

crime and I find a direct, positive impact of unexplained fear on gun control policy preferences.<sup>27</sup> There are two possible explanations for this result. First, the weakness of the model predicting salience of crime suggests that the measure itself is less than optimal. Certainly, respondents often perceive crime as a local, rather than a national, problem; therefore, respondents may have subconsciously (or consciously) suppressed thoughts about local crime when answering the question since the question stem specifically asked for *national* problems. Second, regardless of the weakness of the salience measure, criminological research has shown that the salience of crime does not relate to fear of crime (Lewis and Salem 1998). In other words, regardless of the degree to which individuals think about crime, they are afraid of crime. Therefore, it may be that the salience of crime, the degree to which individuals *think* about crime, is a non-concept because individuals typically do not think about crime. If that is the case, then fear of assault becomes the important “perception” of crime and, consequently, the only crime-based factor related to gun control policy preferences.

The maximum impact of unexplained fear (that is, fear that is not explained by ideological, partisan, gender, or neighborhood characteristics), .47 on a –5 to 5 scale is comparable to the impact of gender, .46. Therefore, these results show that the difference in gun control policy preferences among the least fearful (that is, being less afraid than individual characteristics predict) and the most fearful (that is, being more afraid than individual characteristics predict) is comparable to the difference in gun control policy preferences between women and men.

As mentioned above, the relative impacts of party identification and gender prove interesting. Confirming the assertion that gun control is as much a partisan issue (Spitzer 1998), as ideological, the relationship between party identification and gun control policy preferences

remains when ideology is controlled. Gender also remains an influential concept in gun control policy preferences even when ideological, partisan, and criminological factors are control. The interesting point of this finding is the stability of gender coefficient in the face of the remaining predictor variables. A bivariate regression estimation of the relationship between gender and gun control policy preferences (not shown) reveals that 82 percent of the total effect of gender on gun control policy preferences is not a result of ideological or partisan differences. In other words, contrary to the assertions of some gun control opponents, the vast majority of support for gun control among women is neither ideological nor partisan.

Finally, all things being equal, African Americans *oppose* gun control to a greater degree than non-African Americans. Obviously, this result contradicts every piece of previous research on racial differences in gun control policy preferences (see, for example, Erskine 1974). While discussion of this result properly belongs in the contextual component chapter, a preliminary explanation is offered here. In order to avoid the bias created when estimating an OLS regression on an underspecified model, I estimated the equation with all the terms in the model given in Chapter One, including the contextual components; however, in this chapter I only report those coefficients relating to psychological components. As I will report later, contextual factors do affect the relationships in the psychological component of the model. In fact, context alters the relationship of race and gun control policy preferences and the coefficient given in Table 3.2 represents the effects of race in the context of average levels of violent crime.<sup>28</sup>

## DISCUSSION OF THE PSYCHOLOGICAL COMPONENT FINDINGS

The estimations of the relationships in the psychological component confirmed many of the expectations posited in Chapter One and, simultaneously, provided a few surprises that warrant a further discussion. Overall, the results show that core values and psychological

tendencies have a substantial impact on gun control policy preferences. It is apparent that the initial presumption of this investigation, that the dominant themes of the elite message war have led to the association of particular values and tendencies with the gun control policy, is substantively correct. At the same time, it is also apparent that the presumed complexities of the model differ from those hypothesized.

The strength of the connection between ideological core values and gun control policy preferences is not surprising. The initial battles over gun registration during the 1930s pitted the government's desire to regulate society against questions of individual rights (Spitzer 1998). As noted in Chapter One, many of the overtly non-ideological appeals made in the gun control debate still contain ideological overtones due to each side's propensity to combine different themes into one appeal. Because of this propensity, the ideological divide in the gun control policy debate is consistently re-enforced, rather than minimized.

What is interesting about the connection between ideological values and gun control policy preferences is the strength of the connection in the face of the other explanatory variables in the model. An occasionally volunteered explanation for the divide in the gun control policy debate is a "culture" of guns based upon differences in education and socialization (Lizotte, *et al.* 1981). Since ideological values drive gun control policy preferences even when differences in education, gender, and perceptions of crime are controlled, this cultural explanation only partially explains the differences.

The robust influence of ideology also implies that the vitriol of the gun control policy debate is unlikely to diminish. Since ideological core values are relatively stable constructs established by young adulthood (Dalton 1980), the continued reinforcement of the ideological divide by the constant appeals to different interpretations of the government's role in daily life

will lead individuals to understand the debate in ideological terms. Thus, the typical actions of the elites in the debate actually work to reduce the possibility of consensus rather than improve it.

The lack of conditional relationships between the measures of perceptions of crime and gun control policy preferences may mitigate the self-sustaining debate discussed above. Since the failure of the salience measure was discussed, it serves no purpose to belabor that point here. The real finding relating to perceptions of crime is that an increasing fear of crime (especially that component of fear of crime that is not explainable by ideological, demographic, or actual conditions) increases a respondent's support for gun control, regardless of an individual's ideological predispositions. Therefore, as fear of victimization spreads, support for more restrictions on firearm ownership will likely increase, regardless of the population's ideological tendencies.

The lack of a conditional relationship also implies that the balance of messages relating crime and gun control policy somehow favors gun control proponent's "supply reduction" argument. As Zaller (1992, 64) asserts, when the populace's policy preferences are essentially conflicted, any imbalance in the valence of the message stream will tend to produce a shift in the direction of the prominent message. The empirical results demonstrate that increasing fear of violent crime affects gun control policy preferences directly (and in a single direction), rather than conditionally based on ideologically driven policy preferences. Therefore, it is reasonable to deduce that a significant portion of conservatives and moderates are not accepting the gun control opponents' message that guns reduce rather than increase crime (Zaller 1992, 51).

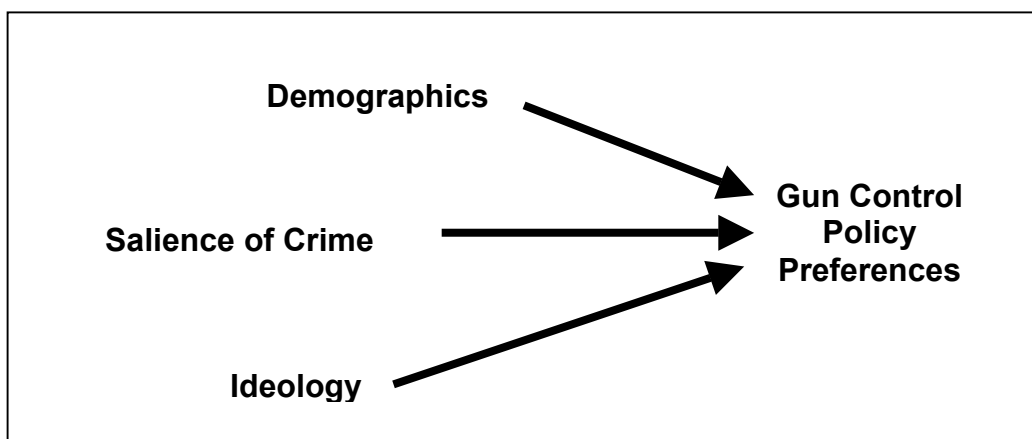
A comparison of the impact of partisanship and gender demonstrates the complex web of relationships these concepts have with each other and with gun control policy preferences. The



fact that gender maintains much of its impact despite the presence of controls for partisanship, fear of assault, and other demographic factors suggests that the gender gap on gun control policy preferences stems from a source that is deeper than simple political convictions. Given that others (e.g., Howell and Day 2000) have demonstrated that the gender gap on gun control policy is not due to socialization towards care giving, it is not far fetched to assert that this gender based difference must be rooted in basic differences between males and females regarding the use of force.

In conclusion, the psychological component of the model actually turns out to be much less complex than hypothesized. Rather than numerous conditional relationships between ideological core values and the other independent variables (see Figure 1.1), the relationships are direct and unconditioned. This result is fortunate because it simplifies the interpretation of the contextual model immensely. Figure 3.4 graphically sums up the findings of this section. Each of the psychological components (ideology, fear of assault, and demographic measures such as partisanship, race, income, education and gender) exerts a direct impact on gun control policy preferences.

FIGURE 3.4: EMPIRICAL RESULTS FROM ESTIMATIONS OF THE PSYCHOLOGICAL COMPONENT



## END NOTES

<sup>22</sup> This trend extends to even earlier polls. As Gallup (1978) reports, 24 percent of the public in 1975 felt that “the laws covering the sale of handguns should be kept about the same as they are now.”

<sup>23</sup> Since, by definition, random error will never significantly relate to a non-random measurement, any relationship between the residuals and gun control policy preferences must represent a relationship between the non-random components of the two measurements. While it is possible to argue that the non-random component of the residuals contains systematic bias (such as satisficing, acquiescence, and social desirability) (Holbrook, Green, and Krosnick 2003), the discipline has usually chosen to presume that the degree of this problem is minimal.

<sup>24</sup> In this case, model fit serves as a measure of the value of the procedure. Theoretically, using the residuals makes the most sense; however, my theory may be incorrect. Thus, testing the model fit for a negative impact when using the residual fear measure serves as a form of null hypothesis testing. If using the residuals does not detract from the model fit, then I can only gain by using them, since they represent new information. On the other hand, if using the residuals produces in reduction in the explanatory power of the model, their use becomes suspect regardless of the theory supporting such use.

<sup>25</sup> The distribution of the residuals from the instrumental estimation ranges from a multiply imputed estimate of – 5.42 to 5.52.

<sup>26</sup> All model estimations in this section include both psychological and contextual components of the model. I control the effects of the contextual components of the model by setting the contextual variables at their means and adjusting either the conditioned coefficients (in the case of those psychological component variables that are conditioned by contextual variables) or the constant. For instance, in the contextual model, violent crime both directly affects gun control policy preferences and conditions the relationships between race and familiarity with firearms and gun control policy preferences. To account for these effects in my presentation of the psychological component, I set violent crime to its mean, calculate the impact on  $y$  (i.e., multiple the coefficient and the mean), and add this value to the constant term. I then modify the coefficient of the race variable by the effect of the interaction term and report this value. Finally, I modify the coefficient of the familiarity term by the effect of the interaction term, set the familiarity variable to its mean (since it is a contextual variable) calculate the impact on  $y$  and add this value to the constant term. These steps are necessary because omitting the contextual variables would (theoretically) intentionally bias the estimates of the coefficients and produce results that are not the best linear unbiased estimates (Gujarati 1995).

<sup>27</sup> Using the original fear of assault variable rather than the unexplained fear residuals variable does not substantially alter these findings.

<sup>28</sup> As I will discuss in chapter 4, the National Election Study data, being nationally representative, “misses” a large portion of inner-city minorities. Thus, the sample is biased towards rural African Americans. The results of the interaction show that the policy preferences of African Americans who live in higher crime areas (i.e., 13 violent crimes per thousand) are statistically indistinguishable from non-African Americans. African Americans who live in the highest crime areas actually support gun control more than non-African Americans do by a factor of .50.

## CHAPTER FOUR: CONTEXTUAL EFFECTS THAT IMPACT THOUGHTS ABOUT GUN CONTROL POLICY

What contextual factors influence the ways in which people think about gun control policy? As discussed in Chapter One, the clearest contextual factor that should impact gun control policy preferences is the violent crime rate experienced by an individual. Also, the context in which a person was socialized should have a significant impact on judgements about gun control policy. It is unclear, however, to what degree these contextual factors will directly influence policy preferences versus conditioning the relationships between core values and policy preferences. Before the various contextual impacts on gun control policy preferences are examined, I will explore the distribution of these contextual influences and review the theoretical linkages between them and the remainder of the model.

### VIOLENT CRIME RATE IN THE UNITED STATES

As noted in Chapter One, the various effects of the violent crime rate in one's locality on gun control policy preferences are potentially complex and overlapping. The conclusions of Zaller's RAS model suggest that contextual information can function both as an independent effect (Miller and Krosnick 2000) and as a conditioning effect (Srull and Wyer 1979; Zaller 1992). The lack of gun control policy preference research that includes measures of violent crime precludes theoretical arguments regarding the most likely impact of violent crime on the model. Thus, I argue that there is no *a priori* rationale for asserting that one particular type effect will take supremacy over another.

Violent crime may affect the psychological component of the model in three distinct ways. First, I hypothesize that violent crime will directly impact gun control policy preferences by increasing support for gun control as the violent crime increases. In Chapter One, I originally

hypothesized that the respondent's ideology would condition this relationship since liberals and conservatives tend to differ in their understandings of the causes and effects of crime. However, based on the finding in Chapter Three that unexplained fear of crime directly impacts gun control policy preferences rather than being conditioned by ideological values, and the findings of Cohen and Dawson (1993) that a respondent's social preferences become more liberal as neighborhood poverty increases. There is enough evidence to presume a direct, rather than conditioned relationship.<sup>29</sup>

Second, violent crime may serve to prime some concerns and magnify their impact in the model. The presence (or absence) of a particular condition may work to bring a consideration, or a group of related considerations to the "top of the respondent's head." Under conditions such as these one would expect these considerations to exert an influence that is proportionally greater than they would under "normal" conditions (Zaller 1996; Strack 1992). The difficulty in investigating this particular relationship lies in the fact that previous research provides no guidance in relation to the question of which considerations are most likely to be primed by violent crime.

One likely candidate to be primed by violent crime is perceptions of crime. It seems likely that respondents who reside in areas that experience higher rates of violent crime will be much more likely to be "aware" of that crime rate in the sense that thoughts about crime will come more quickly to their minds. If this were true, then it is very likely that these respondents' perceptions about violent crime will assert a larger effect on their gun control policy preferences than the perceptions of those respondents who reside in lower crime areas.

It is reasonable to presume that other considerations also will be primed by high rates of violent crime. This conclusion is especially plausible given the conclusions of Chapter Three.

In Chapter Three, the results of the estimations of the psychological component of the model suggested that elite discourse on gun control did serve to inform individuals as to which core values apply to the gun control debate. As previously noted, the nature of the elite debate on gun control is such that many of the arguments used by both sides of the debate are multi-faceted. For instance, a typical communication from gun control opponents might appeal to ideological values, the desire for self-sufficiency as demonstrated by the ability to protect one's property, and a sense of history or nostalgia. Thus, as these multi-faceted arguments and considerations permeate the public's conscience, all of these core "values" become linked to each other in schematic memory structures (Hamill and Lodge 1986).

Third, high rates of violent crime may serve to make the issue of gun control more salient. Under this condition, the consistency of the model should improve, producing an increase in the explained variance of the model. The theoretical justification for this expectation lies in the work of Zaller and Feldman (1992) and Tourangeau, *et al.* (1991). These authors show that the likelihood of a respondent "guessing" based upon concerns that are immediately salient but bear little relevance to the survey is greatly reduced when the subject of the survey is primed by local conditions. Therefore, one would expect respondents in high crime areas to produce answers that are more consistent with their core values when surveyed regarding gun control policy.<sup>30</sup>

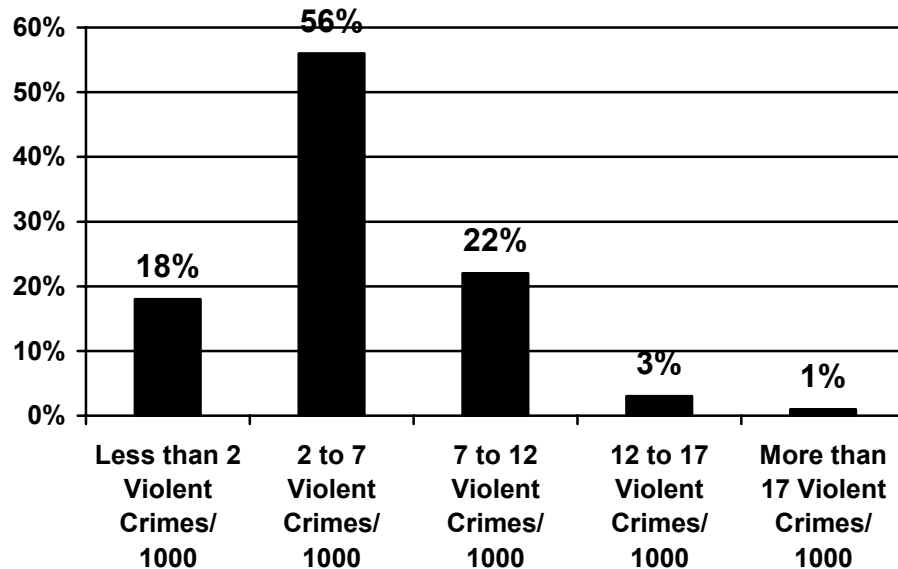
In summary, the effects of the local violent crime rate on gun control policy preferences should be varied and complex. This will begin to identify the extent of these effects.

#### Distribution of Violent Crime Rate Variable

Recall, for the purposes of this study, that violent crime is measured as the number of violent crimes in a county per 1,000 inhabitants reported to the Uniform Crime Reports. The

multiple imputation estimate of the average 2000 county crime rate is 5.0825 violent crimes per 1,000 individuals, a decrease of 7.6 percent from 1999.

FIGURE 4.1: PERCENT OF RESPONDENTS BY VIOLENT CRIME RATE CATEGORIES



Note: n = 1764. Multiple Imputation transforms the variable to true interval (decimal) level measurement. Categories shown based upon rounding to nearest category.

In 2000, violent crime in the United States was at its lowest point in decades (Bureau of Justice Statistics 2003). In addition, the trend in national violent crime during 2000 was essentially flat. Across the United States the total number of violent offenses decreased by .1 percent and the rate per 1,000 inhabitants actually fell 3.2 percent from 5.228 to 5.061 (Federal Bureau of Investigation 2000, 11). Metropolitan areas reported a small decrease in violent crime but continued to have the highest rates in the nation (5.614 per 1,000). Smaller population areas (cities with a population of 10,000 to 24,000 persons) reported the largest increases in the violent crime rate (2.2 %) (FBI 2000, 12).

Because the 2000 ANES is based on a sample of the eligible electorate (Burns, *et al.* 2001), the aggregation of the county crime rates of the survey respondents differs from the national totals reported above. For example, the 2000 ANES sampling process tended to select

more individuals in large metropolitan areas.<sup>31</sup> Since the largest metropolitan areas accounted for the greatest number of crimes but reported small decreases in the violent crime rate and mid-sized metropolitan areas actually reported increases, both the crime rate of the sample and the decline in the rate are slightly larger than their respective national averages.

## SOCIALIZED FAMILIARITY WITH FIREARMS

Attitudes formed throughout the course of an individual's childhood can have a far reaching and profound impact on adult political attitudes (Dalton 1980). Therefore, an established familiarity with firearms, created by interacting with them during one's childhood, should work to reduce the perceived necessity of increased restrictions on their purchase and ownership.

Several lines of argument support this hypothesis. First, as noted in Chapter One, Smith (2000) has shown that individuals who currently reside in rural areas are less likely to support restrictions on firearm ownership. Second, as was demonstrated in Chapter Three, fear of assault is related to support for increased gun control. Since national crime statistics show that most crimes involving firearms occur in urban regions (Bureau of Justice Statistics 2003), it stands to reason that individuals who grew up in rural areas would be less likely to develop a mental connection between guns and crime. If this were the case, a significant number of arguments used by the proponents of gun control would lose impact with these individuals.

As noted in Chapter Two, the available measures in the 2000 ANES and the concept of socialized familiarity with firearms do not exactly overlap. The presumption made in linking the level of urbanization of the respondent's childhood home and socialized familiarity with firearms is that, even in 2000, individuals in rural areas are more likely to own and use firearms in a manner not related to crime.

Several research streams support this contention. In 1996, Cook and Ludwig (1996) found that the distribution of rural to urban residents is a strong predictor of firearm ownership. Likewise, Azrael, Cook and Miller (2001) report that patterns of gun ownership, while becoming more slightly more homogenous, have remained very stable since the 1980s. These authors report that gun ownership is concentrated in more rural areas such as the South. Based on these findings, it is reasonable to use the level of urbanization of the respondent's childhood home as a surrogate for non-violent contact with firearms during childhood.

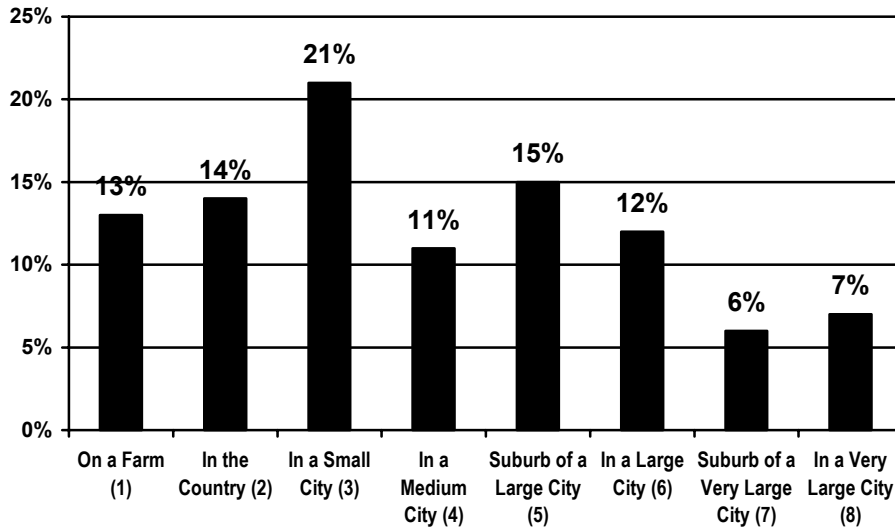
To reiterate for the sake of clarity, as the urbanicity of a respondent's childhood home decreases, the likelihood that the respondent will develop a socialized familiarity and comfort with firearms increases, and the individual will see less of a need for gun control. Therefore, as the urbanicity of a respondent's childhood home decreases, the respondent's support for gun control will decrease.

#### Distribution of Places of Childhood Socialization

A large segment of the U.S. population has its roots in rural America. Although the U.S. Census does not track migration patterns across a person's lifespan, data available from the 1998 General Social Survey (GSS) indicate that a quarter of the population of the U.S. reported living on a farm or in the "open country" immediately prior to reaching adulthood. In fact, the 1998 GSS figures show that a majority of the population of the U.S. lived in non-urban areas such as small cities or towns (i.e., an area with less than 50,000 residents) during their formative years. Data from the 2000 ANES closely match these results. As with the 1998 GSS, a quarter of all respondents report growing up on a farm or in the country. Likewise, slightly less than half of all respondents report growing up in a "small city or town" or more rural area (see Figure 4.2).



FIGURE 4.2: PLACE OF CHILDHOOD SOCIALIZATION



Note: n = 1764. Multiple Imputation transforms the variable to interval level measurement. Categories shown based upon rounding to nearest category.

#### CONTEXTUAL EFFECTS AND GUN CONTROL POLICY PREFERENCES

A preliminary bivariate analysis of the relationships between gun control policy preferences and contextual effects supports the assertion that environmental context can affect the attitudes and opinions of the public (see Table 4.1). The Pearson's  $r$  of the relationship between the violent crime rate in the county of the respondent and the gun control policy preferences of the respondent ( $.04, p < .05$ ) indicates that as violent crime increases in a given area, respondents in that area tend to increase their support for stricter controls on firearm ownership. Likewise, the bivariate relationship between the urbanicity of the respondent's childhood home (serving as a proxy for socialized familiarity with firearms in a non-violent/criminal setting) and that respondent's gun control policy preferences ( $.14, p < .001$ ) demonstrates that individuals who grew up around firearms that primarily were used as tools see less of a need for stricter gun control laws.

TABLE 4.1: MULTIPLE IMPUTATION ESTIMATES OF BIVARIATE RELATIONSHIPS BETWEEN CONTEXTUAL PREDICTORS AND GUN CONTROL POLICY PREFERENCES

	PEARSON'S R
County Violent Crime Rate (2000)	.0483 *
Urbanicity of Childhood Home	.1416 ***

Note: n = 1764. \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$ . Multiple Imputation transforms the variable to interval level measurement; therefore, Pearson's  $r$  is an appropriate measure of association.

The magnitude of the crime/policy preference relationship comports with Zaller's *RAS* model (1996, 207, 213). After thirty-plus years of debate on the issue of gun control, there is still no consensus regarding the relationship between crime and guns. Both sides continue to make statements that contradict the others and, predictably, the public is left with a fuzzy picture of the "real" nature of the issue (Walker 2001, 186). Therefore, with so many contradictory messages, we should not be surprised by the relatively low strength of the relationship.

Tracking national support for increasing gun control against the national violent crime rate reveals an interesting aspect of the relationship between the two variables (See Figure 4.3). As the violent crime rate declines, support for increased restrictions on firearms also declines. However, as this change occurs, aggregate support for the status quo rises while support for making the laws less strict remains practically level. Therefore, as noted in Chapter Two, the divide on gun control policy clearly lies between those who support increased restrictions and those who support the status quo.

More importantly, the correspondence between declining violent crime and increasing aggregate support for the status quo, as opposed to increasing support for relaxing firearm ownership restrictions, supports the concept that violent crime conditions the relationships in the psychological component of the model. In Chapter One, I hypothesized that it is very unlikely that many individuals spend their mental energy ruminating about the issue even though the elite

debate has “informed” the public as to which core values should be associated with the issue of gun control. Therefore, as declining crime works to remove the issue of gun control from the limelight, the linkages between gun control policy preferences and core values should begin to erode slightly. As these linkages erode, respondents lose their justifications for taking a policy stance that would require action; therefore support for the status quo should increase.

The theory of “satisficing” (i.e., short-cutting the cognitive processes that occur during survey response) supports this assertion. Krosnick asserts that, “Respondents’ dispositions are thought to interact with situational factors in determining the degree [of satisficing]” (Holbrook, Green, and Krosnick 2003, 82). Under the condition of falling, or low violent crime, individuals who have low interest in the topic would lack cues about the immediacy of the issue. In these cases, respondents apparently will seek reasonable response options that allow for generalized support without committing to specific positions that would require further mental energy to evaluate.<sup>32</sup> The status quo option fulfills this desired position nicely.

FIGURE 4.3: TRENDS IN NATIONAL VIOLENT CRIME RATE AND GUN CONTROL POLICY PREFERENCES



Note: National Violent Crime Rate is measured as the percentage of violent crimes reported to the Uniform Crime Reports (FBI 2000), standardizing for 1993 violent crime rates. For example, in 1994 the UCR received 97 percent of the reports of violent crime it received in 1993. Gallup (2001) provides the gun control policy preference data. Gaps in the gun control policy preference series are due to a lack of surveys on the topic during that year.

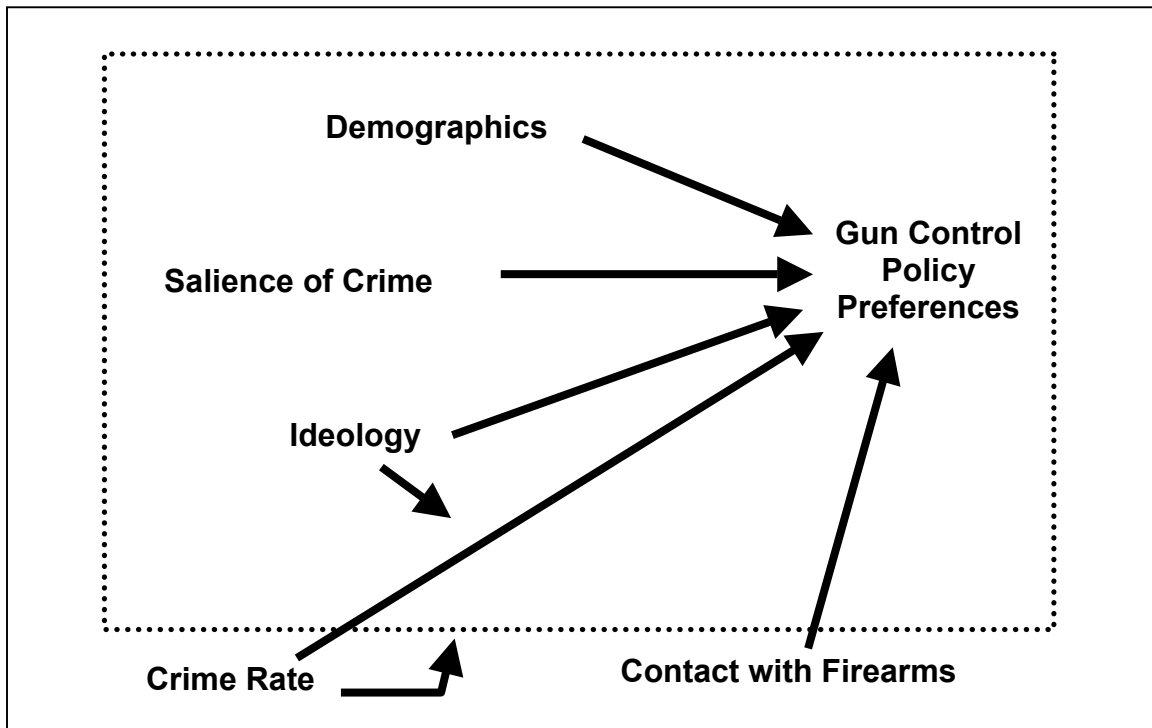
It is interesting to note that the magnitude and direction of the relationship between the county violent crime rate and the childhood urbanicity measure ( $r = .22$ ,  $p < .001$ ) supports the hypothesis that the urbanicity measure serves as a proxy for socialized, non-violent contact with firearms. Given Zaller's assertions, the lower strength of the bivariate relationship between violent crime and gun control policy preferences ( $p = .048$ ) indicates that the subconscious linkages respondents have between violent crime and gun control policy must be relatively conflicted.<sup>33</sup> In contrast, the larger coefficient of the relationship between childhood urbanicity and gun control policy indicates that childhood urbanicity taps a less conflicted value or perception. Given that the measure clearly operationalizes some aspect of childhood experience and given the fact that it is positively correlated with both support for gun control and the current county violent crime rate, the urbanicity measure, at some level, taps childhood experiences with guns.

#### Estimation of the Contextual Model of Gun Control Policy Preferences

In this section I will provide some answers to the questions posed in Chapter One, "How do environmental conditions affect gun control policy preferences," and, "How do environmental conditions affect the relationships between core values and these preferences?" The bivariate relationships do indicate that contextual factors such as the rate of violent crime and socialized familiarity with firearms are in some way connected to gun control policy preferences; however, these bivariate tests cannot illustrate the priming and filtering effects that Zaller (1996) suggests must occur when respondents generate responses to opinion questions. The psychological processes that produce gun control policy preferences tap a number of core values in a complex web of relationships, and contextual effects impact this web. Only a multivariate methodology can unravel this web and estimate the relative impact of each core value given local conditions.

The contextual model of gun control policy preferences is composed of all the hypothesized linkages described in Chapter One (minus the effect of sophistication which are explored in a later chapter). The figure below should help refresh the reader's memory regarding the hypothesized linkages and the findings of Chapter Three (Figure 4.4).

FIGURE 4.4: A CONTEXTUAL MODEL OF GUN CONTROL POLICY PREFERENCES



Note: Demographics include measures of gender, education, race, income, and party identification. The heavy dotted line surrounds the psychological components of the model.

Before turning to the full model, estimating the relationships of only the additive terms may provide helpful insights into the model's form. In Table 4.2, the coefficients for Model 1 represent the regression results containing only the direct effects of all predictor variables. Comparing the results to those found in Table 3.3 reveals very little difference between them and the psychological model, obviously due to the fact that the interactions between ideology and perceptions of crime in the psychological model failed to achieve significance. However, one of the two new additive terms (the violent crime rate and the urbanicity of the respondent's

childhood home) behaves contrary to expectations. There appears to be no direct, additive impact of violent crime on gun control policy preferences.

The coefficients for Model 2 represent the regression results containing all predictor variables and the hypothesized conditional relationships. While the model is significant ( $F = 23.71, p < .001$ ) and explains a reasonable amount of the variance in gun control policy preferences, only a few of the variables of interest have significant coefficients. Furthermore, only one of the hypothesized conditioning relationships achieves generally acceptable levels of significance. It seems likely that the insignificant conditional relationships included in the model may bias the standard errors of their component variables, precluding the component measures from achieving significance.<sup>34</sup> Also, the large number of interaction terms involving violent crime may preclude some of the interactions from achieving significance.

As in Chapter Three, a reverse-stepwise procedure was used to remove the most insignificant coefficient from the model, re-estimate the relationships, and compare the results to the original estimations, looking for coefficient stability. If the coefficients remain stable (i.e., their values do not fluctuate beyond their 95 percent confidence intervals), the removal of the insignificant terms does not affect the model fit and this process is repeated for the next most insignificant variable, continuing until all variables are significant or the removal produces instability in the main effect coefficients.

The coefficients reported under Model Three represent the results of the reduced form estimation of the contextual model of gun control policy preferences. Removing the insignificant interaction terms and insignificant main effect variables substantially improves the interpretability of the results and allows several of the variables of interest to achieve significance. Furthermore, the removal of the insignificant terms from Model 2 does not

significantly impact the model fit, as evidenced by the lack of change in the adjusted R<sup>2</sup> and root mean squared error.

TABLE 4.2: OLS MULTIPLE IMPUTATION ESTIMATES OF THE CONTEXTUAL MODEL OF SUPPORT FOR GUN CONTROL

	MODEL 1	MODEL 2	MODEL 3	VARIABLE IMPACT
Ideology	.22 *** (.03)	.23 ***(.02)	.22 ***(.02)	.88
Saliency of Crime	-.01 (.02)	.05 (.06)	--	--
Unexplained Fear of Assault	.04 * (.01)	-.01 (.06)	.04 **(.01)	.47
Party Identification	.08 *** (.01)	.07 **(.02)	.08 ***(.01)	.58
Age	-.01 (.01)	-.02 (.02)	--	--
Education	.04 ** (.01)	.05 (.03)	.05 **(.01)	.29
Income	.02 ** (.01)	.03 *(.01)	.02 **(.01)	.61
African-American	-.20 * (.08)	-.47 **(.16)	-.45 **(.14)	-.30
Female	.47 *** (.05)	.43 ***(.09)	.46 ***(.05)	.46
Saliency of Crime X Ideology	--	-.01 (.01)	--	--
Unexplained Fear of Crime X Ideology	--	-.01 (.01)	--	--
Violent Crime Rate	.01 (.01)	.04 (.04)	.04 *(.02)	1.08
Childhood Urbanization	.05 *** (.01)	.09 ***(.02)	.10 ***(.02)	.39
Violent Crime Rate X Saliency of Crime	--	-.01 (.01)	--	--
Violent Crime Rate X Un. Fear of Assault	--	-.01 (.01)	--	--
Violent Crime Rate X Ideology	--	-.01 (.01)	--	--
Violent Crime Rate X Chldh. Urbanization	--	-.01 *(.01)	-.01 **(.01)	-.27
Violent Crime Rate X Party Identification	--	.01 (.01)	--	--
Violent Crime Rate X Age	--	.01 (.01)	--	--
Violent Crime Rate X Education	--	-.01 (.01)	--	--
Violent Crime Rate X Income	--	-.01 (.01)	--	--
Violent Crime Rate X African-American	--	.03 (.02)	.03 *(.02)	.81
Violent Crime Rate X Female	--	.01 (.01)	--	--
Constant	2.26	2.10	2.07	
F	44.63 ***	23.71 ***	46.25 ***	
Adj R <sup>2</sup>	.19	.20	.20	
Root Mean Square Error	.9369	.9349	.9345	

Note: n = 1764. \* = p < .05, \*\* = p < .01, \*\*\* = p < .001. Cell entries are unstandardized regression coefficients with Standard Errors in parenthesis. All values are rounded to the nearest hundredth. Variable Impact represents the change in the predicted score on the five point gun control policy preference scale, given a change from the minimum to the maximum values of the predictor variable, with all other variables held at their means. The values for the impact of the interaction terms represent the maximum amount change in the main effect coefficient that can result from a change from the minimum to the maximum values of the interactive variable.

Before reviewing the findings relating to the contextual elements of the estimation, it may be useful to review the impact of key psychological elements already discussed in Chapter

Three. Ideology functions as a very significant driver in the model; individuals who generally oppose government intervention in daily life tend to oppose increased restrictions on the purchase of firearms. Party Identification and Gender also contribute strong effects; Democrats and females tend to support increased restrictions on the purchase of firearms. Unexplained fear of assault, fear that cannot be explained by local conditions or personal predispositions, increases the likelihood that the respondent will support increased gun control. Finally, increases in education and income both increase the likelihood that the respondent will support increased restrictions on the purchase of firearms.

As expected, violent crime appears to exert a direct and positive influence on gun control policy preferences. However, interpreting this coefficient is difficult for two reasons. First, the coefficient represents the impact of crime when the values of the variables that interact with crime (race and childhood urbanization) are zero (meaning the value represents the direct impact only among the most rural whites).<sup>35</sup> Second, the magnitude of the coefficient is deceptive. All other things being equal, an increase of just 25 violent crimes per 1,000 individuals will produce enough change in the dependent variable to move a respondent from supporting the status quo on gun control policy to actually supporting increases in restrictions. Yet, this increase in crime (from 0 to 25 crimes per 1,000 inhabitants) represents practically the entire range of the violent crime measure. In other words, an increase of 25 violent crimes per 1,000 inhabitants represents moving from the most peaceful, safest county in the United States to the most crime-ridden inner city. Given that the results of Model One show no direct impact of violent crime on gun control policy preferences, it is probably more appropriate to discount the significance of the violent crime main effect coefficient.

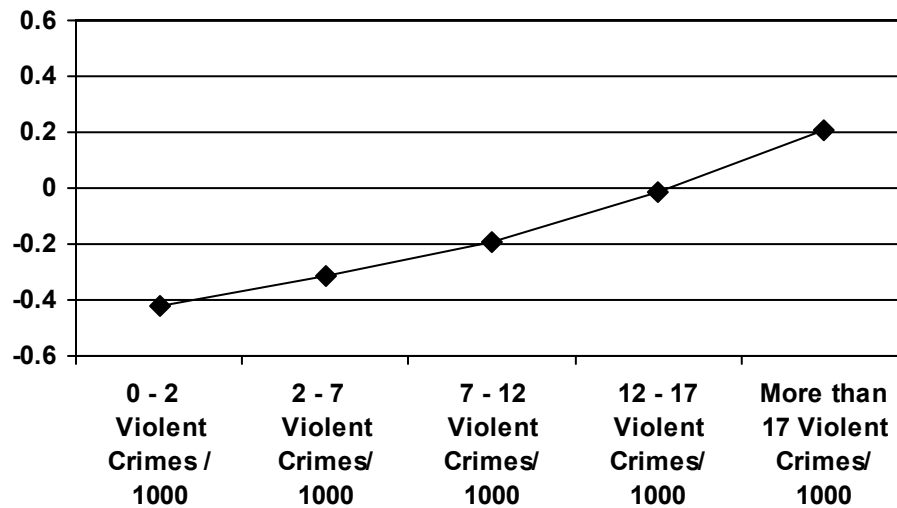


In contrast to the lack of substantive findings regarding a direct relationship between the violent crime rate and gun control policy preferences, the results clearly demonstrate the conditioning effects of violent crime on the relationships of other predictors in the model to gun control policy preferences. After reducing the full model, two interactive terms retain their significance, the interactive terms measuring the impact of violent crime on the relationship between race and gun control policy preferences and the interactive term impacting the relationship between socialized familiarity with firearms (childhood urbanization) and gun control policy preferences.

As hinted at in Chapter Three, the rate of violent crime in a county has a substantial impact on the relationship between a respondent's race and gun control policy preferences. The main effect coefficient of the race variable ( $-.45, p < .01$ ) indicates that, under the condition of zero violent crime, African Americans are less likely than non-African Americans to support increased restrictions on the purchase of firearms. However, the coefficient of the interactive term ( $.03, p < .05$ ) indicates that, as violent crime increases, the differences between African Americans and non-African Americans decrease to the point of negligibility and then, the relationship actually reverses (i.e., African Americans become more likely to support increased restrictions on the purchase of firearms (see Figure 4.5)).

Since the variable measuring African-American (race) is a dichotomy, the value of the coefficient equals the impact of the variable. Thus, in Figure 4.5 above, the values also represent the difference in opinion between African Americans and non-African Americans across levels of violent crime.

FIGURE 4.5: AFRICAN AMERICAN VARIABLE MAIN EFFECTS ACROSS VARIOUS LEVELS OF VIOLENT CRIME



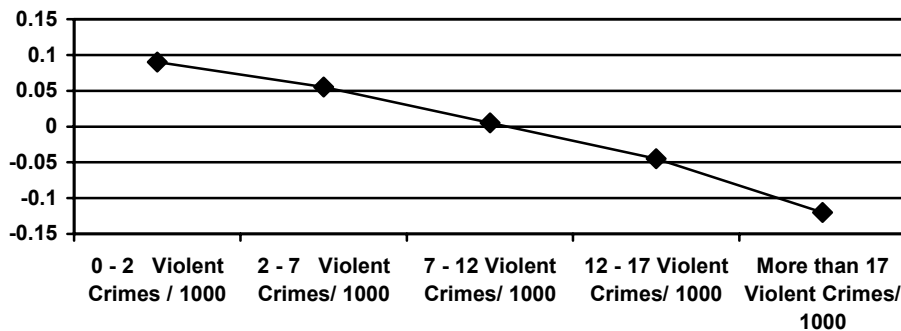
Note: Line represents the value of the main effect coefficient for the race variable at each level of the violent crime rate. I calculate the values by multiplying the value of the interactive coefficient (.03) and the mid-point value of each category of violent crime, and adding this product to the value of the main effect coefficient (-.45).

The second variable to significantly interact with county violent crime is childhood urbanization. The main effect relationship between socialized familiarity with firearms (i.e., childhood urbanization) and gun control policy preferences does comport with the expectations outlined earlier in this chapter. Individuals who grew up in urban areas, where firearms are both less common and more likely to be used in criminal activities, are more likely to support increased restrictions on the purchase of firearms. Furthermore, the impact of this variable on gun control policy preferences is comparable to the impact of the other measures in the psychological component of the model, indicating the strength of early-socialized attitudes. However, the current level of violent crime the respondent experiences radically alters this relationship.

As with the interaction between violent crime and race, the coefficient of the interaction between socialized familiarity with firearms and violent crime ( $-.01, p < .01$ ) indicates that, as

violent crime increases, the differences between those individuals who grew up in rural areas, presumably around firearms, and individuals who grew up in more urban areas decrease to the point of negligibility and actually reverse (see Figure 4.6).

FIGURE 4.6: SOCIALIZED FAMILIARITY WITH FIREARMS VARIABLE MAIN EFFECT COEFFICIENT VALUES ACROSS VARIOUS LEVELS OF VIOLENT CRIME



Note: Line represents the value of the main effect coefficient for the socialized familiarity with firearms variable at each level of the violent crime rate. I calculate the values by multiplying the value of the interactive coefficient (-.01) and the mid-point value of each category of violent crime, and adding this product to the value of the main effect coefficient (.10).

At the lowest level of violent crime, the relationship between socialized familiarity with firearms and gun control policy preferences behaves exactly as expected. A change from being socialized in a rural area to being socialized in the largest urban areas produces a .7 increase on the 5-point scale in support for increased restrictions on the purchase of firearms. Calculating the impact at this level of violent crime is simple because the effect of the interactive term on the main effect coefficient is zero (since zero violent crimes per 1,000 individuals times the interactive coefficient is still zero). Thus, I multiply the main effect coefficient (.10) and the range of the socialized familiarity with firearms variable (7 points) producing the .7 impact figure. Moving to average levels of violent crime (5 violent crimes per 1000 individuals) fails to change the direction of the relationship, but it attenuates the impact of a change from rural socialization to urban center socialization to .35 on the 5-point scale.<sup>36</sup> Moving to the highest levels of violent crime (27 violent crimes per 1,000 individuals) causes the direction of the

relationship to reverse. At this level, the maximum impact of a change from rural to urban socialization is -1.19, with individuals socialized in rural areas supporting increased restrictions on the purchase of firearms.<sup>37</sup>

In addition to expecting violent crime to condition the relationships of psychological factors and gun control opinions, I hypothesized that conditions of high violent crime would make the issue of gun control more salient in general and increase the overall consistency of the model. Testing this hypothesis can be difficult because direct comparisons of independent regressions generally look at regression model fit as opposed to quality of prediction. However, one statistic does offer the possibility of a test.

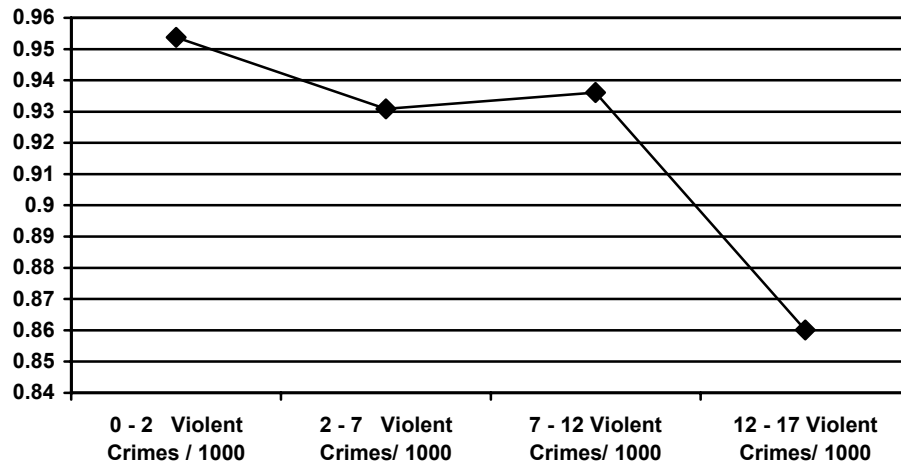
A reduction in the root mean square error (RMSE) of a model indicates a reduction in unexplained scatter (inconsistency) in the data (Hopkins 1997). The RMSE of a model is a measure of the error in prediction for any case and is given in the units of the dependent variable. Essentially, the RMSE is used to construct the confidence interval around each predicted value ( $\hat{y}$ ) produced by the model. The smaller the RMSE, the less unexplained scatter is present in the results. Unexplained scatter ( $u$ ) is a combination of both systematic and random error variance. Since systematic error is the result of biases that could be measured if they were known, it stands to reason that a change in RMSE across stratifications of the entire sample must indicate a reduction in the random error variance component in the error term, providing the model does not change by adding explanatory measures.

Dividing the sample by levels of violent crime and re-estimating Model 3 from Table 4.2 (excluding violent crime and its associated interactions) produces a series of regression results whose RMSE decline as violent crime increases (see Figure 4.7).<sup>38</sup> Thus, as violent crime increases, the degree of inconsistency in the models declines. This suggests that in addition to

conditioning some psychological relationships in the model, violent crime works to increase the salience of the issue of gun control in general and reduces the incidence of respondents

“guessing at survey answers.”

FIGURE 4.7: ROOT MEAN SQUARE ERROR FROM ESTIMATIONS OF MODEL ACROSS LEVELS OF VIOLENT CRIME



Note: Line represents the value of the root mean square error (standard error of the estimate) given in units of the dependent variable (5 point scale). There are too few ( $n < 25$ ) cases in the 17 or more Violent Crimes / 1000 individuals to warrant a separate regression analysis; combining these cases with the 12 –17 category does not substantively alter the results. It is interesting to note that graphing the adjusted  $R^2$ 's for each of these stratified regressions produces a near mirror image of the graph above, demonstrative further support of the increase in model “fit” at higher crime levels.

## DISCUSSION OF THE CONTEXTUAL COMPONENT FINDINGS

The results of the estimation of the full model of gun control policy preferences demonstrate that contextual considerations impact these policy preferences. Nevertheless, as with the results of the estimation of the psychological component in Chapter Three, the specific results, as often as not, run contrary to my expectations. The following section, will discuss the results in the context of specific hypotheses I made in Chapter One, paying special attention to the implications of the results.

In Chapter One it was hypothesized that ideology will condition the direct relationship between the rate of violent crime and gun control policy preferences. However, the results of the

contextual model estimations indicate very little support for even a direct relationship between the violent crime rate and gun control policy preferences because the results of the bivariate, additive and full models are so divergent. On the one hand, the full model and bivariate results support the expectation; however, the lack of controls make bivariate results inherently suspect, and the full model results include interactive terms which complicate the interpretation of significance statistics.<sup>39</sup> On the other hand, the estimation of the additive model produces a statistically insignificant relationship between violent crime rates and support for gun control. The ambiguity in the results makes the risk of asserting a false positive too great; I must conclude that these data show no evidence of a direct relationship between the violent crime rate and gun control policies, much less a relationship conditioned by ideology.

Given the emphasis placed on appeals to the relationship between violent crime and guns, the lack of even minimal evidence of some direct impact is itself surprising. The proponents of gun control often link the devastation of violent crime with the availability of firearms, arguing that victims would suffer fewer casualties if lethal weapons such as guns were less available (Spitzer 1998, 65-66). Likewise, opponents of gun control actively tout research that shows decreases in violent crime when guns are made more available (Lott 2000). One would expect at least some observable connection between the violent crime rate and gun control policy preferences.

Upon further consideration, this result is not so surprising at it might first appear. The research of Lewis and Salem (1998) and the results of Chapter Three have already demonstrated a discontinuity between the rate of violent crime and an individual's perceptions of crime. Since it is clear that individuals generally do not account for the actual rate of violent crime when thinking about crime, it is completely plausible that individuals would fail to take the actual rate

of violent crime into account when thinking about gun control policy. In fact, the direct impact of unexplained fear of assault on gun control attitudes (see Table 3.2) and the lack of impact of violent crime fully comports with the age-old adage that perceptions are reality. Recalling that unexplained fear of assault is that part of fear of assault that is not due to ideology, gender concerns, or evaluations of the respondent's neighborhood, this essentially irrational belief exerts almost as much impact on gun control policy preferences as does ideology, gender, or partisan identification. In contrast, the real world referent of violent crime appears to play no direct role in forming gun control policy preferences. The implication for elites in the gun control debate seems fairly clear; frame your messages so as to capitalize on the public's beliefs about crime rather than hard figures.

Individuals who were socialized to be familiar with firearms as tools (measured by the urbanicity of the respondent's childhood home) were hypothesized in Chapter One to be less supportive of gun control. Generally, this relationship holds; however, as violent crime increases, individuals who were socialized to be familiar with firearms become increasingly more supportive of new restrictions, changing to the point of supporting restrictions more fervently than individuals socialized in urban areas. This result has tremendous implications for the study of political socialization and the study of core values.

The perennial debate in political socialization research is the topic of changeability versus persistence of socialized political attitudes (Jennings and Niemi 1981, 380). The earliest conceptions of socialized political attitudes suggested that these deep-rooted psychological tendencies did not vary over time. Rather, these basic attitudes (such as ideology and party identification) were thought to be learned traits that *persisted* regardless of age. In time, changes in the political climate and intra-generational shifts caused a backlash that asserted a complete

lack of persistence and posited *openness* to change. After years of research, claims and counter-claims, Jennings and Niemi (1981, 386) summarize the consensus opinion as an ever-present *potential* for change, with marked stability.

In contrast to the question of change versus stability in deep-rooted psychological tendencies, my research demonstrates that a socialized tendency or familiarity can change its meaning or, more appropriately, its *impact*. It was hypothesized that a socialized familiarity with firearms would produce a consistent reduction in support for gun control policy. Instead, a relationship between socialized tendencies and current policy preferences was found to vary based on current crime conditions. Since it is unlikely that individuals who report growing up in a rural area would lose the cultural familiarities they established as children, the natural conclusion one can draw is that their socialized familiarities changed their meaning or salience as the individuals were confronted with environmental conditions that radically differed from the environmental conditions under which they were socialized.

By way of example, consider a pair of individuals consisting of a respondent who grew up in a rural area and a respondent who grew up in an urban area. If this pair of individuals currently lives in an area with relatively low violent crime, their individual gun control policy preferences fall exactly as expected. The individual socialized in the rural area is less likely to support gun control. However, if this pair lives in an area with a crime rate that is only slightly above average (7 to 12 violent crimes per 1000 inhabitants), the differences in gun control policy preferences between these two individuals vanish. Finally, if this pair lives in a high crime area, differences reappear in their gun control policy preferences; however, the individual socialized in the rural area is more likely to support gun control.



One extremely plausible explanation for this result is the extreme culture shock that would accompany a transition from a low-crime rural area to a high-crime, presumably, urban area. The individual socialized in the rural area would be forced to confront the disparity between the “gun culture” of that rural area and the radically different “gun culture” of an urban area. Such a confrontation could very easily create a backlash effect and lead the individual to support some form of restrictions on firearm ownership.

This conditional relationship suggests an interesting new line of research, the correlation of attitude change and geographic mobility. The Economic Research Service of the U.S. Department of Agriculture reports that despite the expansion of urban boundaries and the reclassification of several previously rural areas into urban areas, the rebound in rural population observed during the 1990s continues into the new century, albeit at a slower pace (Cromartie 2004). This urban out-migration trend, typified by “white-flight,” implies that many individuals will be experiencing cultural milieus that differ markedly from the urban culture they had been experiencing. If the conditional relationship found between socialized familiarity with firearms and gun control policy holds for other policy areas, accounting for trends in migration, it will take on new importance in understanding the policy preferences of the public.

The policy implications of this finding are more difficult to ascertain. At best, it seems reasonable to note that increasing violent crime will likely aid the proponents of gun control policy in their attempts to expand restrictions on fire arm ownership. As the declining trend in violent crime reverses itself, and violent crime begins to extend into suburban and other non-metropolitan areas, individuals who have been comfortable thinking about guns merely as tools will be forced to directly confront their preconceptions. In the event of a strong enough upswing in violent crime, this confrontation may drive individuals to reconsider their policy preferences.

Violent crime was hypothesized to condition the relationships of all the variables in the psychological component of the model in such way as to increase the impact of each variable on gun control policy preferences. The results of the estimation of the contextual model largely falsify this assertion. In fact, among the psychological components, only race is conditioned by the violent crime rate and that conditioning effect works to reverse the direction of the relationship rather than strengthen it.

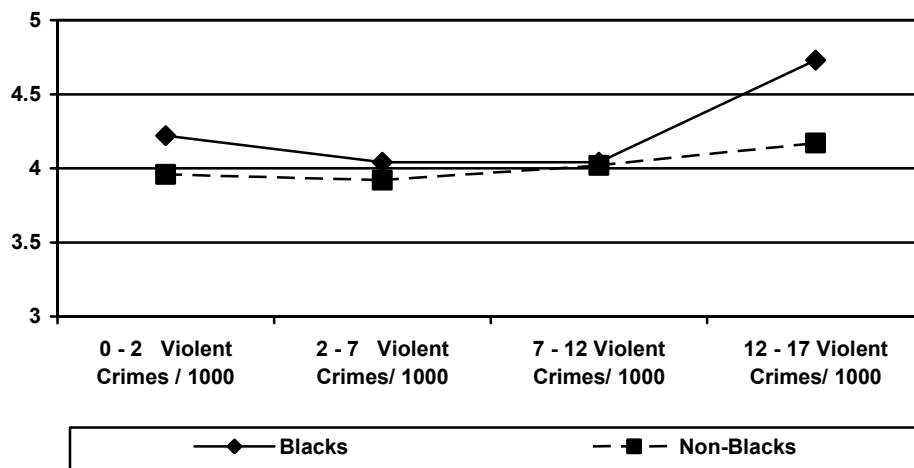
New research has shown that whites and non-whites often react differently to the crime rate (Howell, Perry and Vile 2004). The research shows that perceiving increases in the crime rate and actual victimization produces a decrease in the support of local police agencies among African Americans; among whites this change is even more pronounced, but it only occurs among those who reside in majority-minority cities. Therefore, it is not unreasonable that the actual violent crime rate should produce variability in the relationship between race and gun control policy preferences.

Changing levels of crime do not produce a large impact on the gun control policy preferences (see Figure 4.8) of whites.<sup>40</sup> In contrast, a slight tendency was found among blacks in high crime areas to support gun control more strongly than blacks in low crime areas. The differential between the level support among blacks in low crime areas and those in high crime areas creates the conditioning effect reported above.

Figure 4.8 may require some additional explanation since it appears to contradict Figure 4.5, which represents the estimated *impact* of the variable measuring African American race across levels of violent crime. As such, it represents the level of support African Americans lend to gun control, *all other effects being equal*. In contrast, Figure 4.8 does not control these “other effects.” In essence, the differences between Figure 4.5 and Figure 4.8 demonstrate that if the

distribution of ideology, partisan identification, gender, and childhood socialization (choosing the major drivers in the equation) of African Americans and non-African Americans were the same, African Americans would have more conservative opinions on gun control in low crime areas. However, because the distribution of these measures differs between African Americans and non-African Americans, the actual gun control policy preferences of African-Americans start out more liberal than non-African Americans and become even more liberal in high crime areas.

FIGURE 4.8: GUN CONTROL POLICY PREFERENCES AMONG BLACKS AND NON-BLACKS ACROSS LEVELS OF VIOLENT CRIME



Note: Lines represent the mean response on the 5-point gun control policy preference scale (where 1 equals strongest opposition to gun control and 5 equals strongest support). There are too few cases to justify calculating the average value.

Finally, even though the violent crime rate did not affect the strength of most the psychological component relationships, increasing violent crime could work to increase the entire model consistency without affecting the strength of the individual relationships. It is possible for a contextual variable to create systematic error in the measurement of a policy preference without affecting the relationships between that preference and its causes.

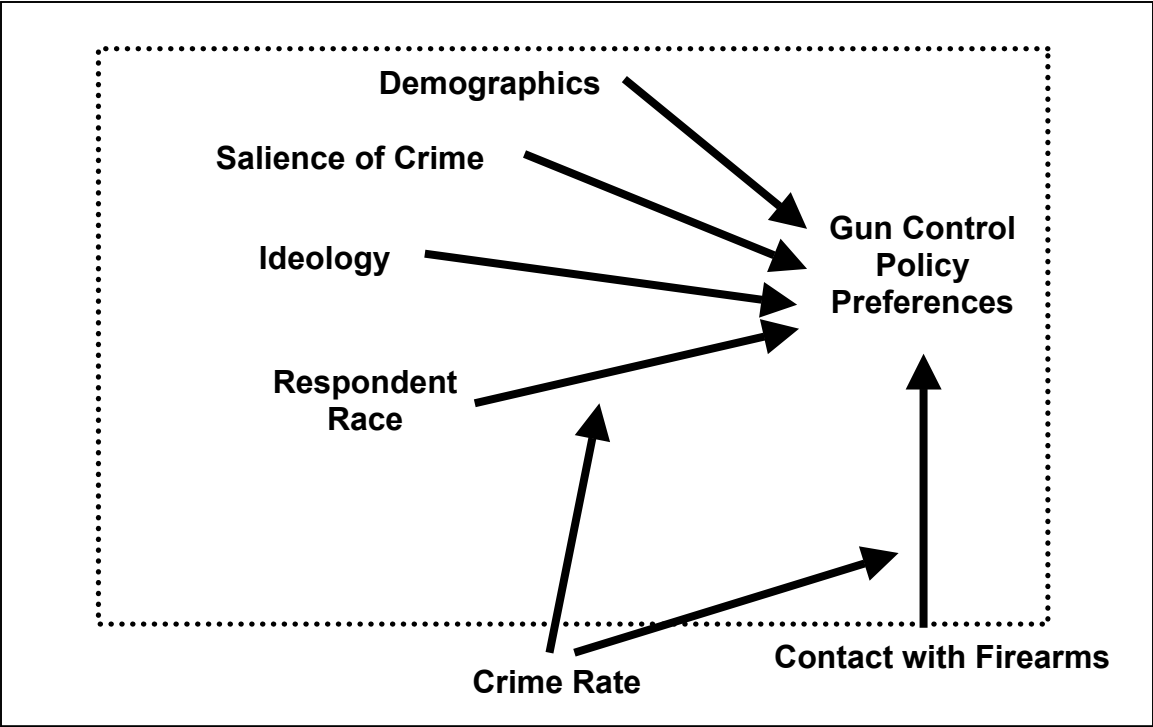
The findings above largely support this assertion (see Figure 4.7). The precipitous drop in root mean square error across the violent crime spectrum suggests that as violent crime increases, the incidence of random error due to guessing and other sources declines. However,

because this decline in random error occurs in a semi-linear fashion, it behaves as if it were systematic. If it were the case that many policy references wax and wane in salience based on the current context, then research that seeks to model policy preferences must account for systematic differences in random error.

This finding implies that the study of gun control policy preferences has missed a large component of the variability in those attitudes. Although the actual level of variation across levels of violent crime is rather small, a little less than one point on the 5-point policy preference scale, that one point difference is enough to move a respondent's predicted preference from supporting the status quo to supporting a modest increase in restrictions. Since even regional or local surveys on gun control policy preferences can cross areas with widely varying crime rates, the summary policy preference reported has the potential to be confounded with the sampling strategy and the current conditions.

In conclusion, this research began with the premise that gun control policy preferences are malleable, and often the product of incomplete memory searches conducted at the point of stimulus. This premise implies that core values, deep-rooted psychological tendencies, and contextual influences will shape the reported policy preference. The results of the estimation of the contextual component of the model clearly support this assertion. Figure 4.9 illustrates the findings of the estimation of the contextual model of gun control policy preferences.

FIGURE 4.9: FINDINGS OF THE ESTIMATION OF THE CONTEXTUAL MODEL OF GUN CONTROL POLICY PREFERENCES



Note: Demographics include measures of gender, education, income, and party identification. The heavy dotted line surrounds the psychological components of the model.

At the same time, the results also demonstrate the source of the remarkable stability in gun control policy preferences over time (Figure 4.3). The strength of the relationships between the predictor variables of ideology, gender, and partisan identification and gun control policy preferences demonstrates the strong ties that the elite message war has created between these psychological predispositions and gun control attitudes, even when controlling for a host of conditional relationships.

Thus, the results mesh well with the slow decline of support for gun control evidenced in Figure 4.3. The core values of ideology and partisan identification, and the proxy variable of gender, form building blocks that segregate the populace into staunch gun control opponents, staunch proponents, and weak proponents. As the level of violent crime has decreased, the weak proponents have slipped into supporting the status quo.

## END NOTES

<sup>29</sup> Even if the evidence points to the likelihood of a direct relationship, I will still test for the possibility of a conditional relationship. It may be that perceived conditions (such as the salience or crime and fear of assault) directly link to gun control policies exactly because they are (in part) products of a respondent's ideology.

<sup>30</sup> Statistical theory presumes that error is composed of systematic and random error, and the inverse of the explained variance in the model is equivalent to the amount of error in the model. Any effect that reduces random error (such as reducing the propensity to guess at answers) will increase explained variance.

<sup>31</sup> Approximately 60 percent of the sample reside in counties with a population greater than 200,000.

<sup>32</sup> The logic behind this assertion flows from the idea that almost all individuals know that gun control is a "hot topic," even if they currently have no cues to indicate the immediacy of the issue. Furthermore, media coverage has consistently reported widespread support for gun control based on polls. Therefore, most people should know that the average person should have an opinion on gun control and should generally support it. Thus, ambivalent individual in low crime areas should gravitate to the response option that allows them to express support (social desirability) without commitment (satisficing).

<sup>33</sup> Referring to Chapter One, I have shown that both proponents and opponents of gun control employ arguments based on violent crime. Therefore, Zaller's precondition (i.e., competing messages) is fulfilled.

<sup>34</sup> Because the interactive terms are created from the existing independent variables, they will introduce multicollinearity in the estimation. It is exactly because of this multicollinearity that I choose the backwards-stepwise variable testing method. By removing variables from an over specified model and watching for coefficient stability, I ensure that removal of the spurious interaction terms can in no way bias the efficiency of the estimation. By way of example, the average Variance Inflation Factor (VIF) for the model containing all interaction terms is 7.36. The average VIF for the reduced form model is 3.27. A VIF of 10 or greater will inflate a coefficient's standard error by an order or magnitude (i.e., a decimal shift right).

<sup>35</sup> Since theory suggests that violent crime conditions the relationships between childhood urbanization, race and gun control policy preferences (and not vice versa), it is really inappropriate to talk about the changing impact of violent crime.

<sup>36</sup> Calculated thus: 1 [the main effect coefficient] - .01 [the interaction term coefficient] \* 5 [the level of crime]) \* 7 [the range of the childhood socialization variable]

<sup>37</sup> Calculated thus: 1 [the main effect coefficient] - .01 [the interaction term coefficient] \* 27 [the level of crime]) \* 7 [the range of the childhood socialization variable]

<sup>38</sup> There are only 6 cases in the 17 – 27 violent crime per 1000 individual category. Obviously, this  $n$  is too small for analysis.

<sup>39</sup> Calculating all the possible values that the violent crime main effect coefficient might take, based on standard errors of the main effect coefficient and the interactions and their standard errors, demonstrates that every combination fails to achieve significance in a two-tailed test. The difficulty lies in determining whether a one-tailed or two-tailed test is more appropriate. Strictly speaking, since my theory argues that violent crime conditions other components rather than vice versa (i.e., violent crime's coefficient does not change regardless of the level of other variables in the model), a one-tailed test sufficiently guards against Type I error. However, it is not completely certain that the relationship between violent crime and gun control policy preferences is not conditioned. In fact, I hypothesized that ideology would condition it; therefore, a two-tailed test is more appropriate.

<sup>40</sup> Since, by definition, the vast majority of whites do not live in majority minority districts, one would expect the relationship between race and gun control policy preference to resemble the white/non-majority minority city results found by Howell, Perry and Vile.

## CHAPTER FIVE: SOPHISTICATED THOUGHTS ABOUT GUN CONTROL POLICY

Do politically sophisticated individuals think about gun control policy in ways that are markedly different from politically unsophisticated individuals? As I discussed in Chapter One, research on the distribution of cognitive abilities among the public has demonstrated that some individuals, though not actively engaged in politics as an elite, rival political elites in their ability to conceive and think about abstract topics (Jacoby 1995; Luskin 1987). Therefore, it is conceivable that the relationships in a model of gun control policy preferences may vary across levels of political sophistication. Before I examine the variation created by sophistication in the contextual model of gun control policy preferences, I will examine the distribution of political sophistication in the United States and review the theoretical linkages between it and the remainder of the model.

### SOPHISTICATION IN THE UNITED STATES

Since the advent of *The American Voter* and the dominance of the minimalist school of public opinion, researchers have struggled to define the concept of political sophistication and its impact on individual attitudes and survey responses. The current paradigm, defined by the sophistication interaction hypothesis, presupposes that individual decision-making and attitude formation processes covary with the breadth and depth of the individual's store of considerations (Sniderman 1993). An historical review of the processes and research program that led to the statement of the sophistication interaction hypothesis will help to illustrate the hypotheses I pose in Chapter One.

Following the behavioral revolution in political science, researchers began studying how individuals made political decisions or formed policy preferences. Originally, the discipline defined sophisticated individuals as those who displayed the ability and propensity to think about

politics in abstract terms. However, in practice, this definition devolved and the meaning of “the ability and propensity to think about politics in abstract terms” came to be synonymous with the use of ideology. Thus, the sophisticated became those who used ideology to structure their political thinking.

The search for ideologues began to produce findings that contradicted the presupposition that ideology had to be the main structuring principle in an individual’s political thoughts. In fact, few people used traditional ideological thinking to organize their political opinions (Campbell, *et al.* 1960). For instance, Jacoby (1995, 330) demonstrated that for some individuals, “political involvement and intensity of feelings toward political issues” led to “ideologically consistent” mental networks, one of the hallmarks of political sophistication. Likewise, the work of Hurwitz and Peffley (1987) demonstrated that not only baseline values such as egalitarianism and ideology but also mid range “postures” such as support for interventionism served as sources of structure for thinking about politics.

The net result of these research trends was the explicit acceptance of the concept that different individuals may arrive at the same decision using different reasoning strategies and that political sophistication has less to with the content of an individual’s mental networks than with the organization of those networks. Hamill and Lodge’s (1986) research on schema reinforces this conclusion, noting that the level of organization in an individual’s store of mental concepts relating to political topics is an indicator of that individual’s level of political sophistication, and it allows for more nuanced reasoning.

In summary, the currently accepted interpretation of the impact of political sophistication is that it is inextricably linked to the structure of an individual’s store of considerations. The more internally consistent and highly organized are an individual’s mental networks, the more



politically sophisticated that individual will be. Therefore, there is every reason to presume that political sophistication will impact the structure of my model of gun control policy preferences. The question remains, of course, “in what ways?”

First, I hypothesize that increasing political sophistication will increase the influence of ideology on gun control policy preferences. As noted in Chapter One, the funnel of causality posited by Campbell, *et al.* (1960; see also Converse 1964; Hagner and Pierce 1982) placed ideology fairly far back in the causal chain. Furthermore, Jacoby’s (1995) results indicate that using ideology as a referent requires a high degree of political sophistication. This implies that ideology holds a more central “location” in the value structure of sophisticates and, by extension, it must exert more influence. Therefore, one would expect the politically sophisticated to have an increased impact of ideology on gun control policy preferences.

Second, I hypothesize that, since increasing sophistication will increase the “breadth and depth” of the respondent’s store of considerations, sophisticates will be able to consider a broader range of their values while expressing their gun control policy preferences, thereby increasing the strength of all the relationships in the model (Luskin 1987). Research conducted during the search for ideologues showed that sophisticates apply more considerations to a problem, while the unsophisticated tend to approach problems in a more simplistic manner (Althaus 1995; Bartels 1996). Chapter Three demonstrates that the elite debate on gun control policy has informed the public regarding which values are associated with the question of gun control. It stands to reason that sophisticated members of the population would be more skilled at simultaneously considering the full range of values implied by the elite debate. If this presumption is correct, OLS regression should produce results that show stronger relationships

between core values and gun control policy preferences among the sophisticated than among the unsophisticated.<sup>41</sup>

Finally, I hypothesize that increasing sophistication will reduce the incidence of random response, effectively increasing the overall predictive strength of the model. As was noted in Chapter Four, any effect that reduces the likelihood of respondents “guessing at answers” will increase the predictive strength of the model. It seems very likely that sophisticated respondents would be less likely to “guess” at their gun control policy preferences and other variables in the model.

The most recent research has shown that an increase in sophistication typically increases the homogeneity of the individual’s considerations, meaning the degree to which an individual’s ideas tend to be mutually reinforcing (Hamill and Lodge 1986). This should lead to tighter and more defined linkages between core values and policy preferences among the sophisticated. In contrast, the unsophisticated should have weaker linkages and should be more susceptible to giving shallow, casual or random responses. If a sufficient number of respondents give random responses, the net effect would appear as random error variance in the estimation of the model. Given this, increasing sophistication should increase the consistency of the model, effectively increasing its ability to explain individual preferences.

It is important to recognize that I do not expect a direct relationship between sophistication and gun control policy preferences. As argued in Chapter One, the elite message war on gun control policy is relatively balanced in terms of messages supporting and opposing increased restriction on firearms ownership. Since sophistication represents a continuum of thinking *styles* rather than a predisposition to particular thoughts, it stands to reason that

sophisticated and unsophisticated individuals should have gun control policy preferences that span the gamut of opposition and support.<sup>42</sup>

### Distribution of Sophistication

Luskin (1986) remains the standard by which to evaluate measures of sophistication. As he demonstrates, the concept of sophistication contains two dimensions, density and organization. The scale measuring density is operationalized as the ability to correctly answer a number of factual questions regarding political conditions, and it also functions as a composite density/organization scale. This implies that a variable measuring the amount of political information a respondent holds will serve as a measure of sophistication.

Based upon Luskin's (1986) findings, this research uses the number of correct identifications of the offices for a set of four political figures. In 2000, these figures were Trent Lott, William Rehnquist, Tony Blair, and Janet Reno. In order to be counted as a correct response, the respondent was required to identify the office exactly (e.g., identifying Tony Blair as the "leader" or "president" of Britain would be counted as incorrect). A correct answer for these variables is coded as 1 and an incorrect answer as 0. Summing the variables produces a scale ranging from 0 to 4, with a 4 indicating the highest degree of sophistication.

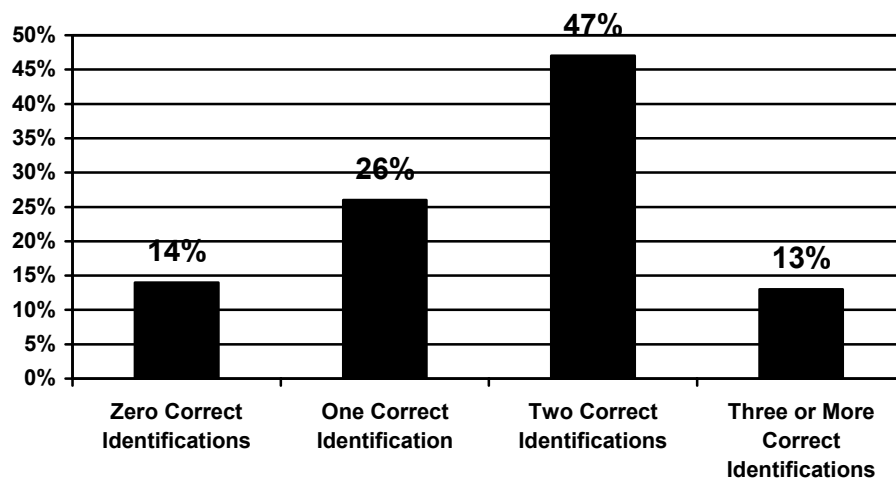
However, as part of an experiment imbedded in the 2000 ANES, a random half of the respondents received an additional probe when they offered an initial answer of "don't know" to these items. When a member of this random half responded "don't know" the interviewer prompted the respondent by saying, "well, what's your best guess?" Therefore, for the individuals who received the probe, a second response of "don't know" is clearly an incorrect response. Those respondents who did not receive the probe and answered "don't know" should

receive a score that reflects the uncertainty in their answers. As such, I code a final response of “don’t know” after probing as zero and a final response of “don’t know” without probing as .5.

As noted many times, the multiple imputation procedure used to account for missing data problems in the 2000 ANES transforms ordinal level variables into interval level variables. In order to stratify the sample, as outlined in Chapter Two, this interval level variable was converted back to an ordinal level variable by rounding to the nearest whole number. Furthermore, as noted in Chapter Two, in the interest of preserving enough sample size in each strata, the two highest categories of sophistication (three or four correct answers) were collapsed into a single category.

Respondents to the 2000 ANES demonstrate moderate levels of political sophistication (see Figure 5.1). Seventy percent of the respondents were able to correctly identify at least two of the political leaders from the list in the paragraph above. Lest this result seem high, the reader should recall that the only listed individual who might remotely be considered less than well known is William Rehnquist, Chief Justice of United States Supreme Court.

FIGURE 5.1: POLITICAL SOPHISITICATION



Note: n = 1763. Multiple Imputation transforms the variable to interval level measurement. Categories shown based upon rounding to nearest category.

This distribution does compare to the results of other researchers in the field of political sophistication. For instance, Zaller (1991, 343) reports that the average level of political awareness, as measured in the 1989 ANES pilot study and 1990 ANES both fall toward the middle of the scales. Delli Carpini and Keeter (1996, 74) report that, from 1940 through 1994, 75 percent or more of the population often correctly identified certain political figures such as presidents, vice presidents, presidential candidates, and particularly visible Senators or government officials.

## SOPHISTICATION AND GUN CONTROL POLICY PREFERENCES

Chapter Four outlined a general model of gun control policy preferences that intentionally seeks to account for the contextual impact of violent crime and childhood socialization on the relationships between core values and policy preferences. This section will answer the question posed in Chapter One, “How does the model change when we selectively consider the politically unsophisticated versus the politically sophisticated?”

Methodologically, the simplest way to illustrate the impact of sophistication on the model is to stratify the sample based on sophistication and to re-estimate each stratum using the same reverse-stepwise procedures as those used in Chapters Three and Four to remove the insignificant relationships. However, this methodology creates a problem when combined with multiple imputation because it effectively creates a series of interactions that went unspecified in the imputation process.<sup>43</sup>

As noted in Chapter Two, the computational requirements of multiple imputation increase exponentially with an increase in the number of variables in the dataset increase. Functionally, the creators of the Expectation Maximization with Importance Resampling (EMis) algorithm suggest limiting the dataset to be imputed to no more than 40 variables (Honaker,

Joseph, King, Scheve and Singh 2001). Since including the proposed interactions with sophistication would take me well over this limit, the only option available is to not include the proposed interactions and to accept the fact that the results of the stratified estimates will be less than fully efficient. For this reason, the requirements of the reverse-stepwise procedure in the following estimations are relaxed by allowing a variable to remain in the estimation if it achieves significance at the  $p < .1$  level.

#### Estimation of the Sophisticated Model of Gun Control Policy Preferences

This section provides some answers to the question posed in Chapter One, “How does the [contextually-sensitive] model [of gun control policy preferences] change when we selectively consider the politically unsophisticated versus the politically sophisticated?” Estimation of the contextual model of gun control policy preferences stratified by levels of political sophistication reveals that the differences in the “breadth and depth” of political thought measured by sophistication does impact the ways in which individuals think about gun control policy (See Table 5.1).

In Table 5.1 the first column reproduces the results of the estimation of the full (non-stratified) contextual model from Table 4.2 for the purpose of comparison. The remaining four columns correspond to the four levels of political sophistication outlined above. Level 1 equates to no correct identifications or the lowest level of political sophistication; Level 2 equates to one correct identification, etc. The results in each column represent the parsimonious form of the estimation, removing insignificant terms to improve degrees of freedom and reduce multicollinearity.

TABLE 5.1: OLS MULTIPLE IMPUTATION ESTIMATES OF THE STRATIFIED, CONTEXTUAL MODEL OF GUN CONTROL POLICY PREFERENCES

	Sample Stratified by Political Sophistication				
	Full Sample	Level 1	Level 2	Level 3	Level 4
Ideology	.22 ***(.02)	.17 **(.07)	.25 *** (.05)	.20 ***(.04)	.22 **(.07)
Salience of Crime	--	--	--	--	--
Unexplained Fear of Assault	.04 **(.01)	--	--	--	--
Party Identification	.08 ***(.01)	--	.04 <sup>a</sup> (.03)	.09 ***(.02)	.12 **(.02)
Age	--	--	--	--	--
Education	.05 **(.01)	--	--	.09 ***(.02)	.13 **(.04)
Income	.02 **(.01)	.05 <sup>a</sup> (.03)	.05 *(.02)	--	--
African-American	-.45 **(.14)	--	--	-.57 **(.20)	--
Female	.46 ***(.05)	.46 ***(.14)	.53 ***(.11)	.40 ***(.09)	.36 *(.15)
Salience of Crime X Ideology	--	--	--	--	--
Unexplnd. Fear of Assault X Ideology	--	--	--	--	--
Violent Crime Rate	.04 *(.02)	--	.02 <sup>a</sup> (.01)	-.01 (.01)	--
Childhood Urbanization	.10 ***(.02)	--	.05 <sup>a</sup> (.03)	.06 ***(.01)	--
Vlnt. Crm. Rt. X Salience of Crime	--	--	--	--	--
Vlnt. Crm. Rt. X Un. Fear of Assault	--	--	--	--	--
Vlnt. Crm. Rt. X Ideology	--	--	--	--	--
Vlnt. Crm. Rt. X Chldh. Urbanization	-.01 **(.01)	--	--	--	--
Vlnt. Crm. Rt. X Party Identification	--	--	--	--	--
Vlnt. Crm. Rt. X Age	--	--	--	--	--
Vlnt. Crm. Rt. X Education	--	--	--	--	--
Vlnt. Crm. Rt. X Income	--	--	--	--	--
Vlnt. Crm. Rt. X African-American	.03 *(.02)	--	--	.04 <sup>a</sup> (.02)	--
Vlnt. Crm. Rt. X Female	--	--	--	--	--
Constant	2.07	3.06	2.22	2.28	1.95
N	1764	246	464	824	230
F	46.25 ***	9.09 ***	29.53 ***	25.97 ***	24.04 ***
Adj R <sup>2</sup>	.20	0.08	.21	.19	.24
RMSE	.9345	.9372	.9085	.9454	.9489
BIC'	-136.09	-3.45	-35.39	-55.61	-20.57

Note: n = 1764. a = p < .10, \* = p < .05, \*\* = p < .01, \*\*\* = p < .001. Cell entries are unstandardized regression coefficients with Standard Errors in parenthesis. All values are rounded to the nearest hundredth. Levels of political sophistication correspond to the number of correct identifications of political figures (e.g., Level 1 equals zero correct identifications, Level 2 equals one correct identification, etc.)

As in Chapters Three and Four, a reverse-stepwise procedure is used to remove the most insignificant coefficient from the model, to re-estimate the relationships, and to compare the results to the original estimations for coefficient stability. If the coefficients remain stable (i.e., their values do not fluctuate beyond their 95 percent confidence interval) the removal of the

insignificant term does not affect the model fit, and this process is repeated for the next most insignificant variable, continuing until all variables are significant or the removal produces instability in the main effect coefficients. The only addition to this methodology from previous chapters is the repetition of the process within each stratum. In each stratum, the basic methodology of applying a contextually sensitive, value pluralism model of gun control policy preferences produces a significant estimation ( $p < .001$ ). However, each stratum displays substantial variation in the coefficients that achieve significance and the magnitude of those coefficients.

Contrary to expectations, the impact of ideology on gun control policy preferences does not increase with political sophistication. The coefficients remain largely consistent both across all levels of political sophistication and between the various stratum and the full model. Establishing confidence intervals ( $\pm$  twice the standard error) for each stratum of political sophistication and the coefficient from the non-stratified model (Column 1) reveals that the strengths of the relationships are statistically identical. In addition, focusing solely on the point estimates of the relationships reveals that the impact of ideology on gun control policy preferences follows no discernable pattern. On the basis of these results, it is possible to establish the fact that my first hypothesis, that the impact of ideology will increase as sophistication increases, is largely false.

Strictly speaking, the results of the estimations also falsify the second hypothesis that the magnitude of all relationships in the model will increase as sophistication increases. However, a closer examination of the results reveals that this interpretation is not wholly correct. Generally, as sophistication increases, the actual number of predictor variables that achieve significance in the model increases, implying an increase in the complexity of the respondent's gun control



policy preferences. For instance, among the least sophisticated respondents only gender, ideology and income impact gun control policy preferences. Among more highly sophisticated respondents (Level 2), party identification, the violent crime rate and socialized familiarity with firearms are added to this list. The only deviation from this pattern occurs in the highest levels of sophistication.

There are really two ways of looking at the results highlighted in the preceding paragraph; both suggest that the assumptions implicit in the second hypothesis are correct. First, in a very literal sense, the relationships that do not achieve significance at the lower levels of sophistication, but do at higher levels, are increasing the magnitude of their coefficients. This is because insignificance in hypothesis testing equates to a coefficient magnitude of zero. Thus, the magnitude of the coefficient for party identification does increase as one moves from the lowest level of sophistication ( $b \approx 0, p > .1$ ) to the next highest level ( $b = .04, p < .1$ ). Second, the force of the argument in my second hypothesis is that the model will become increasingly complex as sophistication increases. As noted above, this pattern holds until one reaches the highest levels of political sophistication.

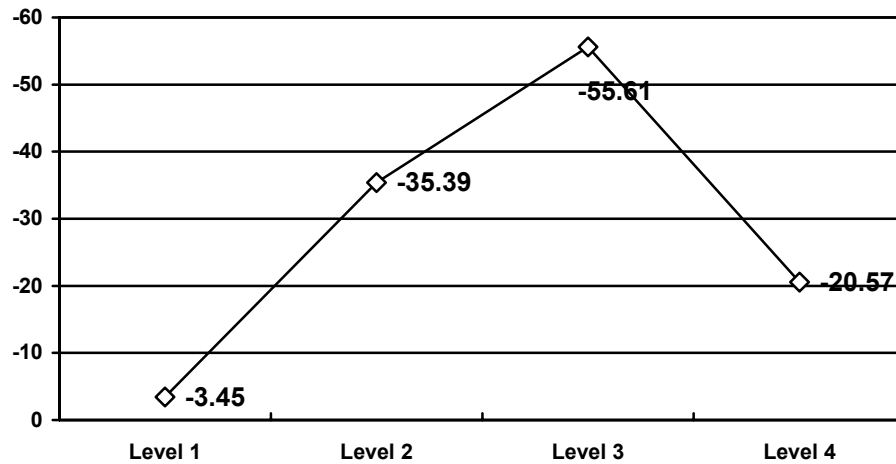
Furthermore, it is instructive to notice which predictor variables achieve significance and when. As one moves up the sophistication scale, more abstract variables such as party identification and childhood socialization enter the model. Moving even further up the sophistication scale, interactions between these concepts and contextual effects emerge. In short, moving from low to high sophistication changes the decision matrix of the respondent from a relatively simple combination of ideology, income, and un-specified gender issues to a more nuanced calculation that takes into account ideological, educational, and environmental effects.<sup>44</sup>

Evidence from the goodness-of-fit statistics provides only limited support for the third hypothesis, that increasing political sophistication will increase the overall predictive strength of the model. Although the Adjusted  $R^2$  for each stratum increases as compared to the next, comparing Adjusted  $R^2$ 's across non-nested models with different  $n$ 's is technically uninformative (Gujarati 1995, 209).<sup>45</sup>

The Bayesian Information Criterion (BIC) paints a clearer picture of the model's fit and its explanatory power across the strata (See Figure 5.2). The BIC is an alternate measure of model fit designed to overcome the limitations of the Adjusted  $R^2$ , and it is well suited for non-nested (i.e., varying  $n$ ) models (Raftery 1995). The BIC' form of the criterion can be applied to OLS regression:  $BIC'_m = n \cdot \log(1 - R^2_m) + k_m \cdot \log(n)$ .<sup>46</sup> As this equation shows, BIC' assesses the explanatory power of the model in light of both the number of predictors in the model and the sample size. If the model fits the data better than no model at all, BIC' will be a negative number, with larger negative numbers indicating "better" model fit. In other words, in this report, the greater the negative BIC' score, the better the model explains the data.

As I found when examining the model's complexity (in relation to the second hypothesis in this chapter), increasing sophistication is generally related to an increase in the model's predictive value. The lowest level of sophistication produces the worst fitting model with a score of  $-3.45$ . At Level 2, model fit increases, producing a score of  $-35.39$ . Level 3 produces the best fitting model with a score of  $-55.81$ . Model fit declines in Level 4, producing a score of  $-20.57$ . This suggests that increasing political sophistication does reduce the incidence of unexplained error in the model.

FIGURE 5.2: BAYESIAN INFORMATION CRITERION (PRIME) SCORE FROM MODEL ESTIMATES ACROSS LEVELS OF POLITICAL SOPHISTICATION



Note: The solid line represents the absolute value of the BIC' statistic. Levels of political sophistication correspond to the number of correct identifications of political figures (e.g., Level 1 equals zero correct identifications, Level 2 equals one correct identification, etc.)

However, two points argue against concluding that the third hypothesis is fully supported.

First, like the overall assessment of the complexity of the models across the various strata, the model's fit measured by BIC' falls sharply at the highest levels of political sophistication.

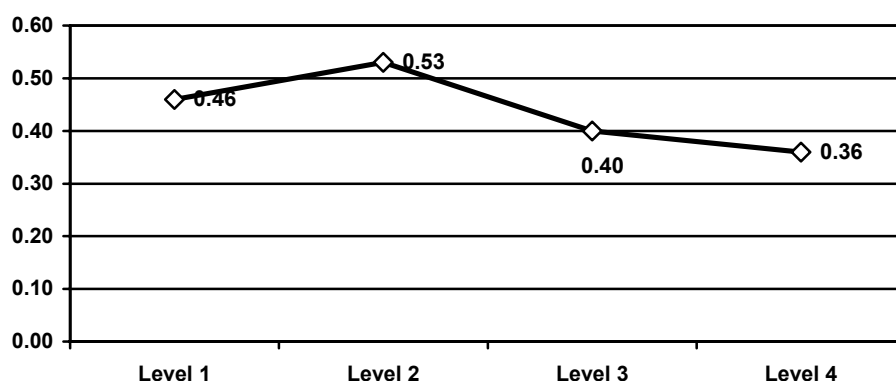
Second, unlike the clear drop noted in Root Mean Square Error (RMSE) when the sample was stratified based on the level of violent crime experienced by the respondent (see Chapter Three), the RMSE's of the sophistication-stratified model remain fairly constant across the strata, varying by only a few hundredths of a point (See Table 5.1). Furthermore, the variation that does occur follows no rational pattern. In the higher sophistication levels, error in the model is comparable to the lowest level of sophistication.

On balance, since it is irrational to suppose that the mental networks of highly sophisticated individuals are as disordered as those of least sophisticated in the public, an attempt must be made to explain these anomalous results for the highest levels of sophistication. A potential explanation lies in the dual impact of increasing sophistication on both the breadth and

depth of a respondent's considerations and the homogeneity of those considerations (Zaller 1992).

One clue lies in the behavior of the relationship between gender and gun control policy preference across the various strata bears consideration (See Figure 5.3). The reader should recall from Chapter One that gender represents a series of unidentified effects that differentiate the gun control policy preferences of men and women. Stratifying by political sophistication reveals that gender differences decrease as political sophistication increases. At the same time, the model increases in complexity with the introduction of other abstract concepts such as the impact of childhood socialization and attention to contextual effects such as the violent crime rate. Another way to describe this effect is to assert that gender differences translate into the underlying measurable core values as political sophistication increases. In relation to my hypotheses in this chapter, this result provides further evidence that increasing political sophistication expands the scope of considerations an individual brings to bear when forming gun control policy preferences.

FIGURE 5.3: MULTIPLE IMPUTATION POINT ESTIMATES OF GENDER COEFFICIENT MAGNITUDE ACROSS LEVELS OF POLITICAL SOPHISTICATION



Note: The solid line represents the magnitude of the relationship of the gender variable to gun control policy preferences. Levels of political sophistication correspond to the number of correct identifications of political figures (e.g., Level 1 equals zero correct identifications, Level 2 equals one correct identification, etc.)

## DISCUSSION OF THE STRATIFIED MODEL FINDINGS

The results of estimating a series of models on the sophistication-stratified sample reveal that differences in the respondents' level of political sophistication marginally impact the ways in which they think about gun control policy. At the same time, the stability that some of the independent variables display (most notably ideology) suggests a degree of attitude crystallization that begs the question, "Does the model really change that much?"

The evidence indicates that increasing sophistication does not substantially change the model. Eighty-six percent the sample (Levels 2 through 4) exhibit the same pattern of core value impact. For the vast majority of the American public, the core values of ideology and party identification, coupled with the unidentified values and tendencies subsumed by the variable gender, drive gun control policy preferences. While it is true that the magnitude of the coefficients of some variables change, the pattern that emerges is one of a basic or core set of attitude drivers (i.e., ideology, party identification, and gender) that remains consistent across all strata coupled with the addition of marginal impacts at higher levels of sophistication. Of course, even this stability has implications for gun control policy.

The consistency of the impact of ideology across sophistication strata has substantial ramifications for the policy processes surrounding the issue. In Chapter One, it was argued that the "legal" debate on gun control policy had "informed" the public of a connection between an individual's view on the proper role of government and that person's view on gun control. Zaller's (1992) construction of the interaction between political awareness (sophistication) and knowledge of policy issues suggests that the connection between the core value of ideology and gun control policy preferences should be much more tenuous at the lower levels of sophistication. The consistency of the impact of ideology across sophistication strata implies

that these messages have penetrated throughout the public. If this assertion is true, it means that the connection between ideology and gun control policy has crystallized and that there are few (if any) remaining members of public to be *swayed* in relation to this argument. In other words, there are very few individuals in the public who remain ignorant of (and therefore completely open to) persuasive messages that either seek to refute or promote the claim that the government should further restrict firearms ownership.

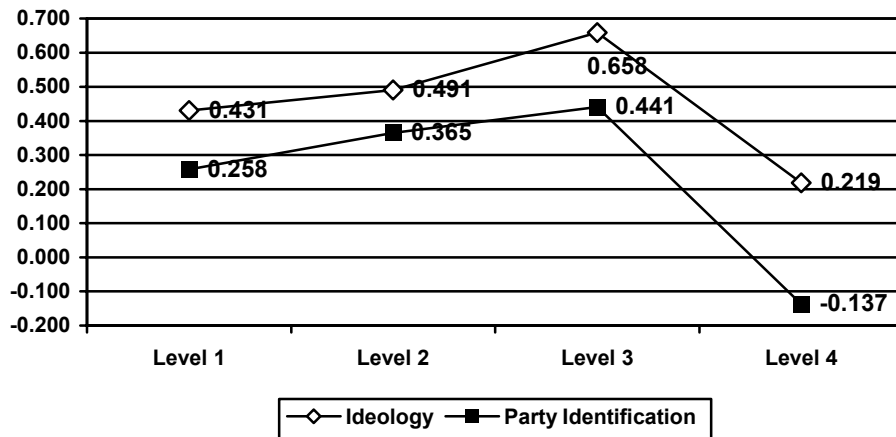
In essence, this finding buttresses the claim in Chapter Three that the vitriol in the public debate over gun control will likely continue. If the overwhelming majority of the public already has crystallized connections between ideological core values and gun control policy preferences, then elite messages relating to this aspect of the controversy will not create new connections. Rather, as Zaller (1992) argues, it is much more likely that these messages will only serve to reinforce the existing connections in the public's mind since respondents will be likely to reject countervailing messages.

The declining impact of gender across levels of sophistication also has implications for elites trying to affect the policy process. As noted above, the declining impact of gender may represent the crystallization of amorphous gender-based differences into measurable differences in the variables in my model. Bivariate analysis of the data largely bears out this assertion (See Figure 5.4). Generally, as sophistication increases, the differences between women and men grow. As other predictors take over the variance from the gender variable, the magnitude of the gender variable's coefficient would decrease.

For elites trying to influence the policy debate, the message is to focus on the core values that drive people's attitudes. Increasing political sophistication and political attentiveness and activity are positively associated (Neuman 1986, 128-131; Graber 1988, 140) Amorphous gender

“issues” give way to more crystallized gender-based differences in other predictor variables as sophistication increases. Therefore, those who are most likely to engage in the gun control policy process are also those who are most likely to have fully formed political opinions and to base their policy preferences on those opinions.

FIGURE 5.4: MULTIPLE IMPUTATION ESTIMATES OF THE DIFFERENCE IN MEAN RESPONDENT ATTITUDE BETWEEN FEMALES AND MALES BY SOPHISTICATION



Note: The lines represent the difference between female and male attitudes on the issues of ideology and party identification. Scores are computed by subtracting the mean score for males in a given sophistication stratum from the mean score for females in that stratum. A negative number indicates that the mean score for males was higher than for females. Levels of political sophistication correspond to the number of correct identifications of political figures (e.g., Level 1 equals zero correct identifications, Level 2 equals one correct identification, etc.)

Finally, perhaps the most surprising result in this chapter is the divergence of the results among the most sophisticated members of the public. First, the model complexity falls off in the highest levels of sophistication and actually collapses to a simple unconditioned form. Second, though the model produces the highest Adjusted  $R^2$  in the stratum containing the most sophisticated individuals, the BIC` measure of goodness-of-fit indicates that the model does not fit the data as well, given the relative strata  $n$ 's, as it does in the strata containing less sophisticated respondents. These items combine to reveal a picture of unexpected differences between the respondents in the highest levels of sophistication and the remainder of the sample.

The dual impact of sophistication on the breadth and depth of an individual's considerations and the homogeneity of those considerations helps explain some of these results. As my results show, increasing sophistication produces an increase in the complexity of a respondent's mental networks and associations. At the same time, Zaller (1992, 121) argues that increasing sophistication will also strengthen respondent resistance to the messages they receive, implying that the homogeneity of the considerations a respondent has will increase. Analysis of the correlation between party identification and ideology supports this assertion. Among those who correctly identified two or fewer individuals (Levels 1 through 3), the multiple imputation estimate of the correlation between party identification and ideology is .47 ( $p < .001$ ); among those with three or more correct identifications (Level 4), the multiple imputation estimate of the correlation between party identification and ideology jumps to .67 ( $p < .001$ ).<sup>47</sup>

This increase in breadth, depth and homogeneity of considerations are, in fact, contradictory to each other and could produce the curvilinear model complexity in the results. If one presumes that the homogeneity of a respondent's considerations is negatively associated with the number of predictors *necessary* to explain that respondent's policy preferences, then, at some point, the increase in the number of core values that *relate* to a particular policy preference will be overwhelmed by the decrease in the number of core values necessary to *explain* that core preference. Under such conditions, a relatively complex model would collapse into a fairly simplistic model.

The fall-off in the BIC` measure of the model's predictive power is more problematic because there is no suitable measure to judge its severity. Raftery (1995) suggests that a difference of 10 points between two models is "very strong" evidence of a significant difference in model fit. Since the Adjusted R<sup>2</sup> for each stratum does increase, the BIC` measure shows that



the model does not fit as well as it could, *given the small number of individuals in the strata*.

Whether this means that the fit of the model in Level 4 (three or four correct identifications) is poorer than one should expect remains in question.

In conclusion, this research began with the premise that the respondent's level of political sophistication would radically impact the way in which that respondent thought about gun control. The results of a series of estimations of the contextual model on the sample stratified by political sophistication reveals that this premise is largely untrue. Of course, the model does change across levels of political sophistication; however, these changes appear only in the marginal predictors. The core drivers of gun control policy opinions, ideology, party identification, and gender-based differences, remain consistent across almost every stratum.

For elites, the results of this chapter paint something of a grim picture. While elite messages might be able to sway some respondents to change their opinions, the ways in which respondents think about their gun control policy preferences are largely set. It will take a massive investment of energy or a major social catastrophe to jar the mental networks of respondents into seeing the gun control issue in a new light. Evidence of this assertion abounds. Even after attempted and successful presidential assassinations, gun-related massacres in schools and the rise of tension due to fear of terrorist incidents, the partisan divide on gun control remains about the same. Proponents and opponents of gun control have made statements that were intended to teach the public how to think about gun control, and the public has learned the lesson well.

## END NOTES

<sup>41</sup> Functionally, I expect that the decreased capability of the unsophisticated to simultaneously consider several core values when determining a gun control policy preference will lead to a situation where some individuals consider one or a set of related core values to the exclusion of another. This condition will tend to attenuate the estimate of the relationship between each core value and gun control policy preferences because, for those individuals not considering a particular core value, the true magnitude of the relationship is zero. Astute individuals will recognize

that I am essentially positing an uncontrolled conditional relationship between core values and policy preferences among unsophisticated individuals. I would further assert that this effect (i.e., selectively considering the various core values attached to the issue of gun control) is largely driven by factors occurring in close temporal proximity to (or contemporaneously with) the survey itself. If this were the case, these conditioning effects would be largely unmeasurable outside of a controlled, experimental survey atmosphere.

<sup>42</sup> Of course, correlation between political sophistication and certain predictors in the model could produce the appearance of a relationship between sophistication and gun control policy preferences. I would argue that such relationships are most likely spurious and would disappear in a multivariate environment.

<sup>43</sup> An interaction is statistical device that allows the magnitude of a coefficient to vary with change in the value of a second variable. When a researcher stratifies a sample on a particular variable and conducts separate estimates on every stratum, she is explicitly permitting each coefficient's magnitude to vary between strata. Therefore, stratifying a sample and conducting estimates on every stratum effectively creates an interaction between the stratifying variable and every variable in the model.

<sup>44</sup> The exception to this pattern is the highest levels of sophistication. At this level, the model again collapses to a very simple four-factor solution. As I will discuss later in this chapter, this result is not as counter-intuitive as it may seem. The dual-track impact of increasing sophistication (increasing "breadth and depth" of considerations and increasing *homogeneity* among those considerations) implies that one should expect non-monotonicity in model complexity (Delli Carpini and Keeter 1996, 237).

<sup>45</sup> In the case of Adj.  $R^2$ , the sample size figures into the calculation in both the numerator and denominator of the function.

<sup>46</sup> In this equation,  $m$  stands for the model under consideration and  $k$  stands for the number of independent variables in the model.

<sup>47</sup> The correlation between party identification and childhood socialization also behaves in this manner.

## CHAPTER 6: CONCLUDING THOUGHTS ABOUT GUN CONTROL

In September 2004, Title XI of the Federal Violent Crime Control Act of 1994 expired. Also known as the Assault Weapons Ban (AWB), Title XI has been the subject of a plethora of elite messages and counter claims. Public opinion surrounding it and its expiration serve as a microcosmic illustration of public opinion on gun control policy.

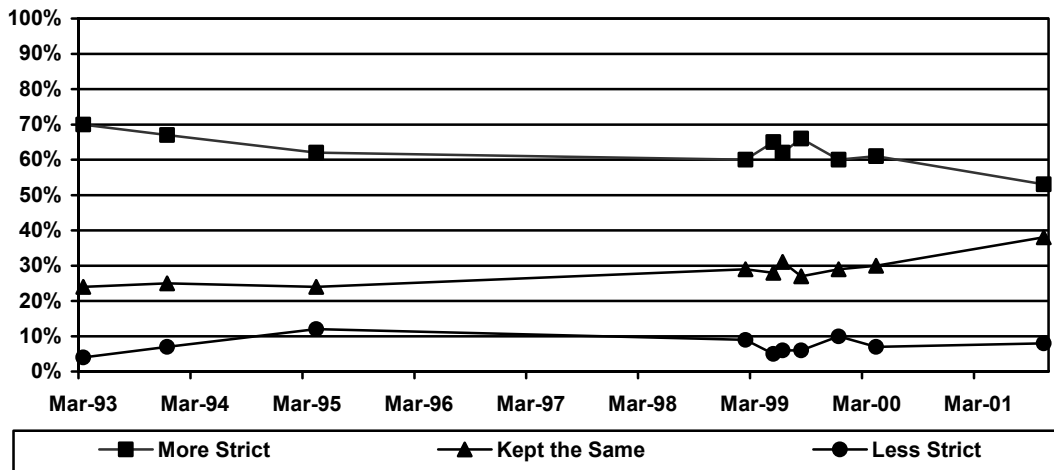
Elites on both sides of the gun control policy debate have made claims and counter claims regarding the assault weapons ban. Proponents of gun control have referred to the act as a “great victory” (Metzenbaum 2004). They cite statistics that purport to show the effectiveness of the ban, noting that the decline in gun trace requests for assault-type weapons used during the commission of a crime coincides with the passage of the act (\_\_\_\_\_ 2002). In contrast, opponents of gun control most often paint the act as an ill-convinced regulation that barely passed the U.S. Congress on the strength of deceptive language used by gun control proponents (VanOrden 2003). They cite research that purports to show that the ban had no long-term impact on the use of assault-type weapons during the commission of a violent crime (Wheeler 2004).

Predictably, the public’s opinion of the assault weapon ban has displayed inconsistencies in tune with the conflicting elite messages. In 1995 polls conducted by ABC, NBC, *The Washington Post* and the *Wall Street Journal* placed support for the ban at approximately 80 percent (VanOrden 2003). At the same time a poll conducted by Yankelovich Partners reported that only 50 percent of the public agreed with the idea that it should be “illegal for citizens to own semi-automatic assault guns” (VanOrden 2003). The inconsistency continued even after the expiration of the assault weapon ban. In October 2004, the Gallup Poll reported that only 50 percent of the American public would support a law that “would make it illegal to manufacture, sell, or possess semi-automatic guns known as assault rifles” (Silver 2004). In the same time

period, *Time Magazine* reported that 73 percent of the public supported reinstating the ban [on assault weapons] (Schulman 2004).

In contrast to the inconsistency in public opinion regarding the AWB, the Gallup Poll time series on opinion on general gun control policy, starting in the early 1990s, shows a marked degree of consistency (Figure 6.1). While support for restrictions on the sale of firearms has declined from 1993 to 2001, one does not see the extreme differences in opinion noted above in the discussion of the more specific assault weapons ban.

FIGURE 6.1: TRENDS IN NATIONAL GUN CONTROL POLICY PREFERENCES



Note: Gallup (2001) provides the gun control policy preference data. Gaps in the gun control policy preference series are due to a lack of surveys on the topic during that year.

What factors drive public opinion on gun control policy? On the one hand, why can surveys about a specific gun control policy, taken during the same time period and using similar but not identical question wordings, produce such divergent results? On the other hand, why are the trends in public opinion recorded by the Gallup Poll on general gun control so consistent over time? The comprehensive model of gun control policy preferences developed here seeks to answer these questions.

## A (MODERATELY) CONTEXT-SENSITIVE MODEL OF GUN CONTROL POLICY PREFERENCES

This research project presumed that gun control policy preferences are not likely to be the kind of political attitude that individuals “carry” in their “mental file drawers.” It seems highly unlikely that the average individual would spend a great deal of time thinking about the issue and developing a reasoned, enduring attitude toward it. Rather, it seems much more likely that gun control policy preferences are the result of an internal debate that occurs “at the point of stimulus,” the point when individuals are asked about their opinions (Sudman, *et al.* 1996).

This presumption led to a series of questions throughout the course of the research reported here: 1) What core values constrain gun control policy preferences? 2) How do environmental conditions affect these preferences? 3) How do environmental conditions affect the relationships between core values and gun control policy preferences? 4) How does the model change when we selectively consider the politically unsophisticated versus the politically sophisticated?

The research results have provided answers to some of these questions. Taken together, they produce a model in which gun control policy preferences are associated with the largely crystallized and stable core values of ideology, partisan identification and gender issues. Furthermore, they show that contextual impacts such as violent crime rates do not play a large role in the model. Finally, they show that the ways in which people think about the issue of gun control do not substantially vary across levels of political sophistication. This implies that, barring a major “re-framing” of the debate so as to produce a change in the core values typically associated with gun control issues, the debate around the issue of gun control is likely to continue unabated.

In the next section I discuss the major findings of my research and their implications for the gun control debate. I will highlight how the relatively permanent associations between gun control policy preferences and stable core values in the mental networks of individuals produce apparently stable public preferences on gun control and the implications this has for the gun control debate. I will then conclude with recommendations for extending and replicating this inquiry and a discussion of the future of research on gun control policy preferences.

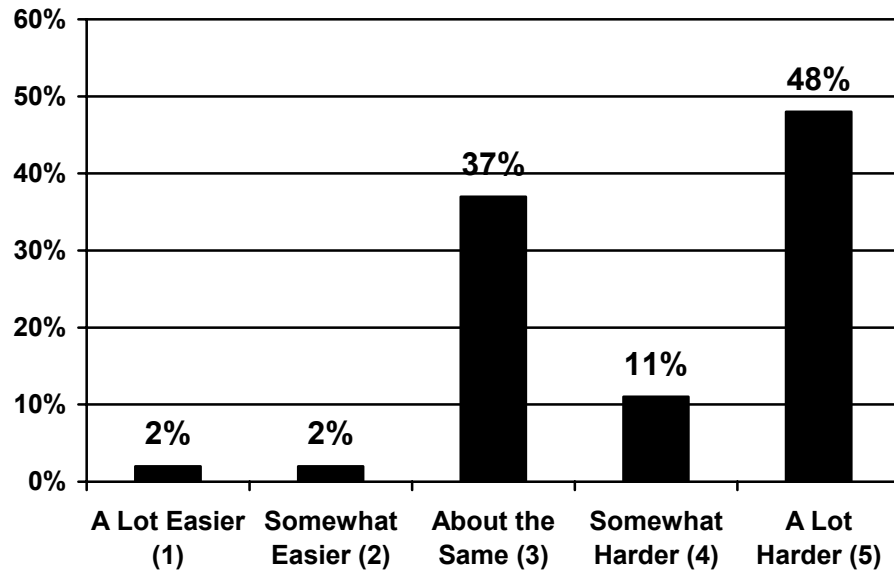
## RESEARCH FINDINGS

Spitzer (1998) concludes that the strength of the anti-gun control lobby ultimately explains the failure of the federal government to enact gun control reforms. Without devoting large segment of discussion to the dynamics of interest group and regulatory politics, one can argue that, while this may be a reasonable explanation, a necessary prerequisite of this result is the lack of a unified public opinion on the subject. Three major findings demonstrating this lack of unified public opinion stand out in this research: the bimodal distribution of gun control policy preferences, the centrality of ideology, party identification and gender in the model and across levels of sophistication, and the marginal impact of actual crime rates.

### The Bimodal Distribution of Gun Control Policy Preferences

In Chapter 3, the distribution of responses to the gun control policy preferences variable was clearly bimodal (See Figure 6.1). The plurality of the sample (48%) support making purchasing a gun “a lot harder.” At the same time, only 11 percent fewer (37%) support keeping the restrictions on firearms purchases “about the same.” The strong divide between supporters of the status quo and supporters of substantially increased restrictions suggests that the true “swing voters” in the gun control policy debate are the individuals *between* these poles.

FIGURE 6.2: SUPPORT FOR RESTRICTIONS ON GUN OWNERSHIP  
 “THE GOVERNMENT SHOULD MAKE BUYING A GUN...” (2000 ANES)



Note: n = 1764. Multiple Imputation transforms the variable to interval level measurement. Categories shown based upon rounding to nearest category.

Two points of evidence support the argument that individuals who fall in between the “status quo” and “substantially increased restrictions” poles are, by and large, the most ambivalent group. First, self-reported importance rankings from the 2000 ANES show that individuals who place themselves in the “somewhat harder” category rate the issue of gun control as less important to them than any other category of gun control policy preference. For instance, the median importance ranking given by respondents who selected the “somewhat harder” category is “somewhat important.” For all other respondents, the median importance ranking is “very important.” Second, presuming moderate supporters of gun control policy are actually ambivalent about the subject provides an elegant explanation for the stability in aggregate support for gun control policy.

The strong division between those individuals who intensely support expanding gun control laws and those who support the status quo shapes the entire gun control debate. Presume,

for a moment, that the gun control policy preferences fall into two basic camps: crystallized preferences generated by sampling core values and ambivalence. Furthermore, presume that those who have apparent crystallized preferences fall in the polar camps (i.e., support for substantially increased restrictions and support for the status quo), each constituting only a plurality of the sample population. The opinions of the remaining, ambivalent portion of the population are those most likely to vacillate into and out of polar camps when a specific policy is proposed. This vacillation would create the very apparent inconsistency across surveys on the assault weapons ban. However, because a large portion of the population does have stable, underlying “attitudes” toward gun control in general, the variation in the aggregate public opinion would be smoothed. This is exactly the behavior one can observe in long-term gun control policy preference trends identified by the Gallup Poll time series.

Practically, this finding implies that there is no true majority opinion on the issue of gun control. It seems apparent that the ambivalent middle category of opinion (captured in my measure by the “somewhat harder” category) does not represent solidified support for gun control; rather, it represents the retreat of those individuals who feel something should be done about the issue of guns but do not know how that “something” should look or even if it is a pressing issue. Furthermore, this finding implies that surveys that do report majority support for gun control based on “yes/no” type constructions are misrepresenting the level of support for gun control in the public.<sup>48</sup> Since these types of questions force respondents to choose between competing poles, the results they report represent a contrived consensus.

#### The Centrality of Ideology, Party Identification and Gender

In Chapters Three and Four, I note that the strength of the connection between ideological core values and gun control policy preferences is not surprising. The same



observation could be made of the connections between party identification, gender, and gun control policy preferences. The initial battles over gun registration during the 1930s pitted the government's desire to regulate society against questions of individual rights (Spitzer 1998). As was noted in Chapter One, many of the overtly non-ideological appeals made in the gun control debate still contain ideological and partisan overtones due to the propensity of each side to combine different themes into one appeal. Because of this propensity, one would expect these three areas to form the basis of an individual's gun control policy preferences.

What is interesting about the connections between ideological and partisan values (along with the other deep-rooted psychological tendencies being captured in the gender variable) and gun control policy preferences is the stability of these connections across various contexts and levels of political sophistication. For example, tests of conditional relationships between each of these predictors, gun control policy preferences and the level of violent crime in a county produced null results. Likewise, even though their values did fluctuate across levels of political sophistication, these three predictors remained central to the model in each level. In other words, regardless of local conditions or even personal attention to politics in general, an individual's gun control policy preferences can be explained by appeals to their feelings on big government, their party identification, and whether or not the individual in question is a woman.

Practically, the centrality of these three predictors in the model reveals the source of the stability in the Gallup Poll time series on gun control policy preferences. Since ideological and partisan core values are relatively stable constructs established before young adulthood (Dalton 1980), the robust influence of these core values on gun control policy preferences provides an enduring source of considerations (using Zaller's terminology). The result is that most

individuals can articulate a reasonably consistent gun control policy preference, when asked, even if they do not regularly consider the issue.

#### The Marginal Impact of Actual Crime Rates:

In Chapter Four, I conclude that the impact of crime on gun control policy preferences can best be described as marginal, that is, its impact affects the “margins” of the model. Copious sources confirm that the actual rate crime has little impact on perceptions of crime (Vandiver and Giacopassi 1997; Lewis and Salem 1998) and my research shows that perceptions of crime have less impact on gun control policy preferences than core values such as ideology. Second, contextual contrasts across levels of violent crime do not produce significant shifts in the model. In other words, the gun control policy preferences of most individuals are likely to remain stable regardless of changes in the crime rate in their locality or even (to a lesser degree) changes in the threat of crime those individuals perceive.

The main conclusion one draws from this finding can only be that the debate surrounding the issue of gun control will remain largely ideological rather than utilitarian. As noted in Chapter One, the presumption among gun control proponents that the mere presence of guns adds to the social devastation of violent crime (Spitzer 1998) leads to utilitarian-based messages that seek to link gun control to crime control. The results reported here suggest that, at best, these messages only impact those individuals who fall into the ambivalent center of the debate. The core values of ideology and partisan identification, and the proxy variable of gender, form building blocks that segregate the populace into staunch gun control opponents, staunch proponents, and ambivalent proponents. The level of violent crime causes the ambivalent proponents to slip into and out of supporting the status quo.

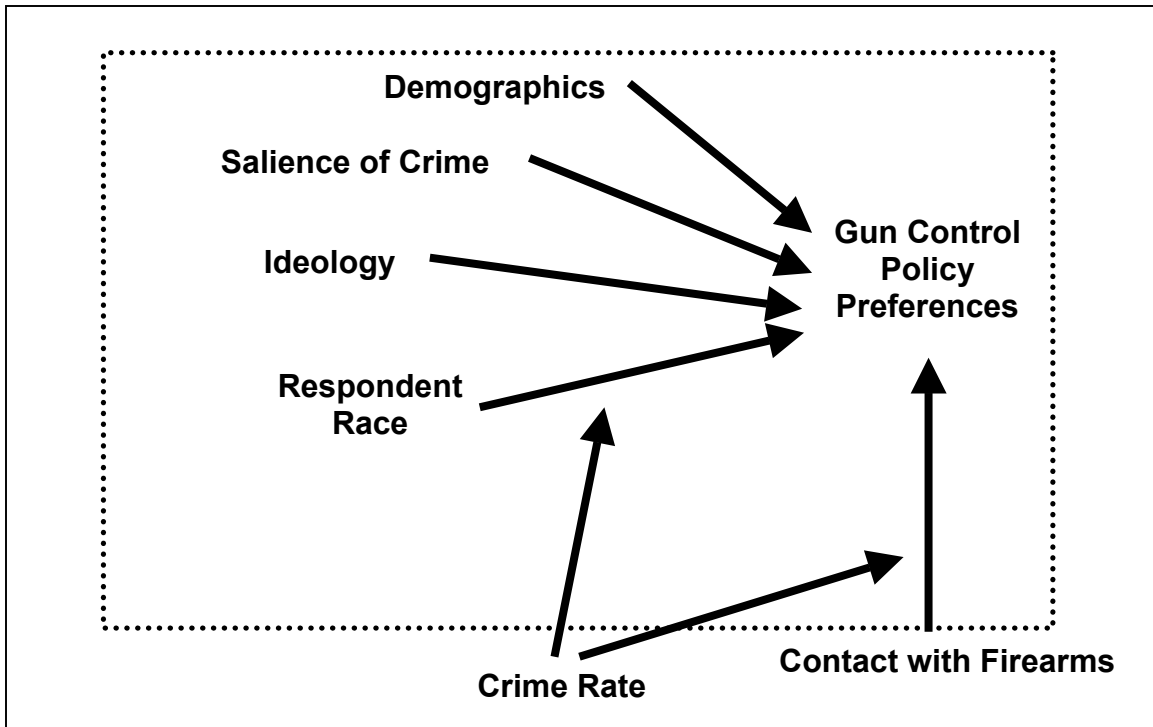
Practically, this finding suggests that the nature of the policy process itself will militate against radical change in gun control legislation that results from major criminal incidents. Since it is clear that the impact of violent crime on gun control policy preferences takes the form of a visceral, temporally-bound reaction, it is likely that the impact of any major criminal incident on public opinion will decay long before the legislation has a chance to wind its way through the Byzantine procedures of legislative committees and debates. This decay will allow interest groups to reassert their influence over the process.

### Conclusions

Figure 6.3 graphically illustrates the final results of my research. It began with the assumption that gun control policy preferences would be the result of a complex web of relationships and conditional effects. In contrast, it shows that the mental process creating these preferences is really rather straightforward. Gun control policy preferences are primarily associated with ideological and partisan values. Concerns about violent crime (both perceived and real) and the effects of childhood socialization do impact the model, but, the heart of the model lies with the core values.

For elites trying to influence public opinion on gun control policy, my research suggests that such efforts are likely to be self-defeating. Because elite messages already have established strong connections between ideological and partisan core values and gun control policy preferences, a large portion of the public are already “set in their ways” regarding gun control. The effect of the elite message war has been to teach the public that the issue of gun control is an ideological one, and the results of my estimations have shown that the public has learned that lesson.

FIGURE 6.3: A MODEL OF GUN CONTROL POLICY PREFERENCES (WITH MODERATE CONTEXTUAL IMPACTS)



Note: Demographics include measures of gender, education, income, and party identification. The heavy dotted line surrounds the psychological components of the model.

## FUTURE RESEARCH INITIATIVES

This research can hardly be considered the final word on the nature of the mental associations and thought processes that produce gun control policy preferences in individuals. Limitations in the original data alone warrant reevaluation of the model and results. However, this research does indicate some fruitful “next steps.”

First, the entire model should be re-assessed using a current dataset that contains fewer unobserved or missing cases. As noted in Chapter Two, multiple imputation estimation is still recognized as one of the best methods for dealing with missing data; however, this analysis pushed EMis algorithm to its logical boundaries. Several rounds of confirmatory replication, using the latest data available, are necessary before anyone can place substantial faith in the results.

Second, research should investigate the decay rate of impacts on individual policy preferences created by substantial, one-time contextual effects. As noted above, it is perfectly reasonable to presume that a particularly notable criminal event, such as an assassination or series of murders, might produce a measurable shift in public opinion towards gun control policy. But the question of how long these events can sustain their impact after they cease to be newsworthy remains open. Longitudinal or panel studies of gun control policy preferences seem to be the most reasonable approach to studying this aspect of the model.

Third, it seems likely that my estimates of the impact of violent crime on gun control policy preferences are understated because they do not account for long-term trends in violent crime. From Figure 4.3 one can see that the rate of violent crime and support for the status quo do track each other. Replication of this analysis, substituting measures of the trend in violent crime for measures of the actual rates of violent crime, might reveal a stronger impact of violent crime on the model.

Finally, an interesting next step in the research process would be to separate the non-black sample into those individuals who reside in majority-minority areas and those who do not. Comparing the results of this analysis to the results of Howell, *et al.* (2004) would add insight to their findings and help establish their assertion that non-blacks who are removed from their position of social dominance react more violently to contextual effects due to increased anxiety about their environment.

## END NOTES

<sup>48</sup> The same could be said for surveys that use response scales with more response options but report the results by collapsing the scales.

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## APPENDIX A

As I noted in Chapter Two, budget constraints led to a radical change in survey administration for the 2000 American National Election Study. For this project, research staff discarded the normal face-to-face administration of the survey for a dual-mode administration where approximately one-half the sample received face-to-face interviews and the other half of the sample were interviewed via CATI procedures (Burns, *et al.* 20001). This decision raises two distinct issues for my research.

First, research has shown that respondents do change their answers based on survey administration mode. As Holbrook, Green and Krosnick (2003) show, respondents completing the 2000 ANES were more likely than face-to-face respondents to offer “no response” answers (e.g., “don’t knows,” etc.) and were more likely to be affected by acquiescence bias. Second, the nature of telephone interviewing precludes many of the standard survey techniques used in face-to-face interviewing. As such, several questions employed different wordings for the two different administration modes.

Regarding the issues raised by Holbrook, Green and Krosnick (2003), results show that the differential in acquiescence bias between face-to-face and telephone respondents is fairly small. Across the entire sample, differences in survey mode produce a shift of less than .02 in the mean acquiescence measure created by the authors. Furthermore, and OLS estimates of the impact of mode and other control variables on acquiescence bias only explain five percent of the variance present in their measure.

In contrast, Holbrook, Green and Krosnick’s (2003) results show that nonresponse bias due to mode differences is a much more significant problem. Mode differences produce a shift of .07 in the mean nonresponse measure created by the authors. OLS estimates of the impact of mode and other control variables on nonresponse bias explain 17 percent of the variance present in their measure. Fortunately, the multiple imputation methodology I adopt to deal with the missing data issues in the dataset addresses this problem.

The reader should recall that multiple imputation uses the existing information in the dataset to produce a reasonable “guess” of the value of a particular missing data point. In addition, the reader should recall that, in most cases, I coded nonresponse type answers such as “don’t knows” as missing data. Therefore, even though telephone respondents were more likely than face-to-face respondents to give “no-response” answers, the multiple imputation methodology diminishes this propensity by replacing the missing data with the “best guess” of the value the respondent would have chosen had they chosen to answer.

The issue of the variation in question wording by survey mode is at the same time both more problematic and generally unsolvable. Even the most basic texts in survey research agree that question-wording effects are some of the most worrisome sources of bias in surveys (Schuman and Presser 1981) and it is impossible to guarantee that the meanings of the questions survived the transfer across survey modes (Schober 1998). The following section lists the question wording for each summary measure employed in this research plus the variables used in the imputation model. The reader must decide if the differences in wording invalidate my results.

## QUESTION WORDINGS

All questions wordings are drawn from Burns, *et al.* 2003.

### **ANES 2000 CASE ID**

ANES 2000 Case ID corresponds to the Pre-election ID.  
There are gaps in the numbering (0001-1812)

### **WEIGHT:** Sample weight for Post variables

This is a 6-digit variable with a coded decimal point and 4 actual decimal places. A poststratification adjustment using the 2000 CPS March Supplement estimates as the standard was done for the combined RDD and area samples. The cells were formed by crossing 6 age groups by 4 levels of education. The age groups were: 18-29, 30-39, 40-49, 50-59, 60-69, 70+. The education levels were: < high school graduation, high school graduate, some college, and 4 years of college or more.

### **VAR 000431 Through VAR 000434:** #1 most important problem through #4 most important problem

Face-to-Face and Telephone Wording: *What do you think are the most important problems facing this country?*  
[PROBE: ANY OTHER IMPORTANT PROBLEMS FACING THE COUNTRY? UNTIL R SAYS NONE]

A half sample of Rs were randomly selected for administration of the 'most important problem' questions  
See MOST IMPORTANT PROBLEM master code list ANES 2000 Presidential Election Survey Codebook Appendix.

### **VAR 000446:** Summary Self-placement on Liberal-Conservative Scale

Respondents were randomly selected to be administered the 7-point scale or branching format.

#### 7-point Scale Version:

Face-to-Face Wording: *Please look at page 3 of the booklet. We hear a lot of talk these days about liberals and conservatives. Here is a seven-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale, or haven't you thought much about this? (IF DON'T KNOW, NEITHER, MODERATE, OR HAVEN'T THOUGHT) If you had to choose, would you consider yourself a liberal or a conservative?*

Telephone Wording: *We hear a lot of talk these days about liberals and conservatives. When it comes to politics, do you usually think of yourself as extremely liberal, liberal, slightly liberal; moderate or middle of the road, slightly conservative, conservative, extremely conservative, or haven't you thought much about this? (IF DON'T KNOW, NEITHER, MODERATE, OR HAVEN'T THOUGHT) If you had to choose, would you consider yourself a liberal or a conservative?*

#### Branching Scale Version:

Face-to-Face and Telephone Wording: *We hear a lot of talk these days about liberals and conservatives. When it comes to politics, do you usually think of yourself as a liberal, a conservative, a moderate, or haven't you thought much about this? (IF DON'T KNOW, NEITHER, MODERATE, OR HAVEN'T THOUGHT) If you had to choose, would you consider yourself a liberal or a conservative? (If LIBERAL) Would you call yourself a strong liberal or*

a not very strong liberal? (IF CONSERVATIVE) *Would you call yourself a strong conservative or a not very strong conservative?*

Frequency Table:

	7 Point Scale Version		Branching Scale Version
	Face-To-Face	Telephone	Both Modes
Extremely Liberal	9	8	65
Liberal	29	48	81
Slightly Liberal	126	82	143
Moderate; Middle of the Road	30	21	58
Slightly Conservative	169	118	241
Conservative	68	72	110
Extremely Conservative	11	15	119
DK	3	5	10
RF; NA; INAP	21	31	113

**VAR 000523:** Party ID summary

Face-to-Face and Telephone Wording: *Generally speaking, do you think of yourself as a Republican, a Democrat, an Independent, or what? (IF DEMOCRAT) Would you call yourself a strong Democrat or a not very strong Democrat? (IF REPUBLICAN) Would you call yourself a strong Republican or a not very strong Republican? (IF INDEPENDENT, NO PREFERENCE, OTHER, DK) Do you think of yourself as closer to the Republican Party or to the Democratic Party?*

	Frequency
Strong Democrat	346
Weak Democrat	274
Independent-Democrat	269
Independent-Independent	206
Independent-Republican	230
Weak Republican	215
Strong Republican	236
Other/ Refuses to Say	9
Apolitical	17
NA	5

**VAR 000550:** Self placement-services/spending scale

Face-to-Face Wording: *Please look at page 5 of the booklet. Some people think the government should provide fewer services even in areas such as health and education in order to reduce spending. Suppose these people are at one end of a scale, at point 1. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2,3,4,5 or 6. Where would you place yourself on this scale?*

Telephone Wording: *Some people think the government should provide fewer services even in areas such as health and education in order to reduce spending. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Which is closer to the way you feel or haven't you thought much about this? (IF GOVERNMENT SHOULD REDUCE SERVICES AND SPENDING) Should the government reduce services and spending a great deal or (reduce services and spending) only some? (IF GOVERNMENT SHOULD INCREASE SERVICES AND SPENDING) Should the government increase services and spending a great deal or (increase services and spending) only some?*

	Face-to-Face	Telephone
SCALE: 1; Reduce spending and services a great deal	46	74
SCALE 2; Reduce spending and services only some	60	105
SCALE: 3,4,5; Stay same as now	537	93
SCALE: 6; Increase spending and services only some	115	233
SCALE: 7; Increase spending and services a great deal	98	141
DK	7	10
RF; NA; INAP	802	1010
Haven't thought much	142	141

**VAR 000620:** Self placement guaranteed jobs and standard of living scale

Face-to-Face Wording: *Please look at page 9 of the booklet. Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Suppose these people are at one end of a scale, at point 1. Others think the government should just let each person get ahead on their own. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2,3,4,5, or 6.*

Telephone Wording: *Please look at page 9 of the booklet. Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Suppose these people are at one end of a scale, at point 1. Others think the government should just let each person get ahead on their own. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2,3,4,5, or 6. Which is closer to the way you feel or haven't you thought much about this? (IF GOVERNMENT SHOULD SEE TO JOBS AND STANDARD OF LIVING) Do you feel strongly that the government should see to it that every person has a job and a good standard of living, or not so strongly? (IF GOVERNMENT SHOULD LET EACH GET AHEAD ON THEIR OWN) Do you feel strongly that the government should just let each person get ahead on their own, or not so strongly?*

	Face-to-Face	Telephone
SCALE: 1; Strongly - govt see to jobs & std living	74	152
SCALE 2; Not strongly - govt see to jobs & std living	48	40
SCALE: 3,4,5; Other/depends/neither	455	55
SCALE: 6; Not strongly - govt leave people on own	195	93
SCALE: 7; Strongly - govt leave people on own	137	346
DK	4	4
RF; NA; INAP	801	1009
Haven't thought much	93	108

**VAR 000731:** Summary gun control policy preference

Face-to-Face and Telephone Wording: *Do you think the federal government should make it more difficult for people to buy a gun than it is now, make it easier for people to buy a gun, or keep these rules about the same as they are now? (IF GOVT SHOULD MAKE IT MORE DIFFICULT TO BUY A GUN) A lot more difficult or somewhat more difficult? (IF GOVT SHOULD MAKE IT EASIER TO BUY A GUN) A lot easier or somewhat easier?*

	Frequency
A lot more difficult	861
Somewhat more difficult	199
Keep rules about the same	659
Somewhat easier	36
A lot easier	39
DK	8
RF	2
NA	3

**VAR 000732:** Importance of gun control policy preference

Face-to-Face and Telephone Wording: *How important is this issue to you personally? Not at all important, not too important, somewhat important, very important, or extremely important?*

	Frequency
Not at all important	37
Not too important	139
Somewhat important	461
Very important	716
Extremely important	448
DK	8
RF	--
NA	3

**VAR 000908:** Respondent age

Face-to-Face and Telephone Wording: *What is the month, day and year of your birth?*

Age was calculated by subtracting the year of birth from 2000. For cases where R refused to give year of birth or year of birth was NA in the survey variable, a check was made of Household listing information: if age of R was included in the Household listing, it was included here from the Household listing.

**VAR 000913:** Education summary

Face-to-Face and Telephone Wording: *What is the highest grade of school or year of college you have completed? Did you get a high school diploma or pass a high school equivalency test? What is the highest degree that you have earned?*

	Frequency
8 grades or less and no diploma or equivalency	64
9-11 grades, no further schooling	116
High school diploma or equivalency test	519
More than 12 years of schooling, no higher degree	377
Junior or community college level degrees (AA degrees)	168
BA level degrees; 17+ years, no advanced degree	373
Advanced degree, including LLB	183
DK	--
NA	7

**VAR 000997:** Household Income

Face-to-Face Wording: R ONLY HH MEMBER AGE 14 OR OLDER: *Now we are interested in the income that you yourself received in 1999, not including any of the income received by (your spouse and the rest of your family). Please look at this page and tell me the income you yourself had in 1999 before taxes. This figure should include salaries, wages, pensions, dividends, interest, and all other income.*

Telephone Wording: R ONLY HH MEMBER AGE 14 OR OLDER: *Now we are interested in the income that you yourself received in 1999, not including any of the income received by (your spouse and) the rest of your family. Please tell me which category best describes the income you yourself had in 1999 before taxes. This figure should include salaries wages, pensions, dividends, interest, and all other income. Please stop me when I get to your income category. A. NONE OR LESS THAN \$4,999 B. \$5,000-\$9,999 C. \$10,000-\$14,999 D. \$15,000-\$24,999 E. \$25,000-\$34,999 F. \$35,000-\$49,999 G. \$50,000-\$64,999 H. \$65,000-\$74,999 J. \$75,000-\$84,999 K. \$85,000-\$94,999 M. \$95,000-\$104,999 N. \$105,000-\$114,999 P. \$115,000-\$124,999 Q. \$125,000-\$134,999 R. \$135,000-*

\$144,999 S. \$145,000-\$154,999 T. \$155,000-\$164,999 U. \$165,000-\$174,999 V. \$175,000-\$184,999 W. \$185,000-\$194,999 X. \$195,000-\$199,999 Y. \$200,000 and over

**VAR 001006a:** Racial group #1 self-description

Face-to-Face and Telephone Wording: *What racial or ethnic group or groups best describes you?*

**VAR 001019:** Urbanicity where grew up

Face-to-Face Wording: *Looking at page 20 of the booklet. Looking at this list, please tell me where you were mostly brought up?*

Telephone Wording: *I am going to read you a list of categories. Please tell me which category best describes where you were mostly brought up? On a Farm, In the Country not on a Farm, In a City, In a Suburb of a City. Were you mostly brought up (IF BROUGHT UP IN A CITY) in A Small City or Town Under 50,000 People, In a Medium Sized City 50,000-100,000, in A Large City (100,000-500,000), or in a Very Large City, over 500,000. (IF BROUGHT UP IN A SUBURB OF A CITY) in a suburb of a large city 100,000 TO 500,000, or in a suburb of a very large city, over 500,000.*

	Face-to-Face	Telephone
On a farm	123	119
In the country, not on a farm	114	136
In a small city or town (under 50,000 people)	282	104
In a medium city (50,000 – 100,000)	134	62
In a large city (100,000 – 500,000)	147	73
In a suburb of a large city	98	172
In a very large city (over 500,000)	71	57
In a suburb of a very large city	33	62
DK	1	10
RF, NA, INAP mode	804	1012

**VAR 001025:** Children under 18 living with respondent

Face-to-Face and Telephone Wording: *These are the last few questions. Often we find that people who have children or commute great distances have less time to participate in politics. How about you? Do you have any children How many children do you have under 18? How many of them live with you at least half of the time?*

**VAR 001029:** Observed respondent gender

**VAR 001418:** Fear of assault in next year

Face-to-Face and Telephone Wording: *How afraid are you that a member of your family, or a close friend, or you yourself might be the victim of an assault during the coming year? Would you say you are very afraid, somewhat afraid, a little bit afraid, or not afraid?*

	Frequency
Very afraid	41
Somewhat afraid	142
A little bit afraid	244
Note Afraid	338
DK	--
RF	--
NA, INAP Logic error	1042

**VAR 001420:** Less government, or more things government should do

Face-to-Face and Telephone Wording: *Next, I am going to ask you to choose which of two statements I read comes closer to your own opinion. You might agree to some extent with both, but we want to know which one is closer to your own views. ONE, the less government, the better; OR TWO, there are more things that government should be doing? [IF NECESSARY, PROBE “WHICH IS CLOSER”]*



	Frequency
The less government the better	639
There are more things government should be doing	888
DK	25
RF	3
NA, INAP	252

**VAR 001421:** Strong government to handle complex problems or free market

Face-to-Face and Telephone Wording: *Next, I am going to ask you to choose which of two statements I read comes closer to your own opinion. You might agree to some extent with both, but we want to know which one is closer to your own views. ONE, we need a strong government to handle today's complex economic problems; OR TWO, the free market can handle these problems without government being involved. [IF NECESSARY, PROBE "WHICH IS CLOSER"]*

	Frequency
Need a strong government to handle complex economic problems	928
Free market can handle without government involvement	575
DK	50
RF	2
NA, INAP	282

**VAR 001422:** Reason government is bigger- meddlesome or big problems

Face-to-Face and Telephone Wording: *Next, I am going to ask you to choose which of two statements I read comes closer to your own opinion. You might agree to some extent with both, but we want to know which one is closer to your own views. ONE, the main reason government has become bigger over the years is because it has gotten involved in things that people should do for themselves; OR TWO, government has become bigger because the problems we face have become bigger. [IF NECESSARY, PROBE "WHICH IS CLOSER"]*

	Frequency
Government bigger because it's involved in things people should handle themselves	671
Government bigger because problems are bigger	854
DK	28
RF	2
NA, INAP	282

**VAR 001447 Through VAR 001456:** Identify public individuals

Respondents were randomly selected to be administered the identity battery without "Don't Know" probes or the identity battery with "Don't Know" probes.

Face-to-Face and Telephone Wording: *Now we have a set of questions concerning various public figures. We want to see how much information about them gets out to the public from television, newspapers and the like. (IF SELECTED FOR STANDARD VERSION OF OFFICE RECOGNITION ITEMS) The first name is TRENT LOTT. What job or political office does he NOW hold? WILLIAM REHNQUIST [PRON: Renn-kvist] (What job or political office does he NOW hold?) TONY BLAIR (What job or political office does he NOW hold?) JANET RENO (What job or political office does she NOW hold?) (IF SELECTED FOR EXPERIMENTAL VERSION OF OFFICE RECOGNITION ITEMS) [PROBE DON'T KNOWS WITH, "Well, What's your best guess?"]*

**VAR 001486a:** Summary placement on ways to reduce crime

Face-to-Face Wording: *Please look at page 5 of the booklet. Some people say that the best way to reduce crime is to address the social problems that cause crime, like bad schools, poverty and joblessness. (Suppose these people are at one end of a scale, at point 1.) Other people say the best way to reduce crime is to make sure that criminals are caught, convicted and punished. (Suppose these people are at the other end, at point 7.) And, of course, some other people have opinions somewhere in between at points 2,3,4,5 or 6. Where would you place yourself on this scale or haven't you thought much about this?*

Telephone Wording: *Some people say that the best way to reduce crime is to address the social problems that cause crime, like bad schools, poverty and joblessness. Still others say the best way to reduce crime is to make sure that criminals are caught, convicted and punished. How about you? Do you think that the best way to reduce crime is to address social problems or to make sure criminals are caught, convicted, and punished, or that we should do something in between, or haven't you thought much about this? (IF OPINION IS TO ADDRESS SOCIAL PROBLEMS) Do you think that addressing the social problems that cause crime, rather than making sure criminals are caught, convicted, and punished is a much better way or somewhat better way to reduce crime? (IF TO MAKE SURE CRIMINALS ARE CAUGHT AND PUNISHED) Do you think that making sure criminals are caught, convicted, and punished, rather than addressing the social problems that cause crime is a much better way or a somewhat better way to reduce crime? (IF 'SOMETHING IN BETWEEN'/DK/HAVEN'T THOUGHT MUCH) If you had to choose, which way would you say is better at reducing crime -- addressing the social problems that cause or crime or making sure criminals are caught, convicted, and punished?*

	Face-to-Face	Telephone
SCALE: 1/ Much better to address social problems	76	214
SCALE: 2/ Somewhat better to address social problems	70	128
SCALE: 3/ Neither but slightly favor addressing social problems	80	156
SCALE: 4/ In-between	146	34
SCALE: 5/ Neither but slightly favor punishing criminals	80	107
SCALE: 6/ Somewhat better to punish criminals	64	105
SCALE: 7/ Much better to punish criminals	134	106
DK	1	1
RF; NA; INAP, no Post IW	1114	947
Haven't thought much	39	9

**VAR 001736:** Neighborhood satisfaction

Face-to-Face and Telephone Wording: *On the whole, how satisfied are you with your neighborhood? Would you say you are very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied?*

	Frequency
Very Satisfied	844
Somewhat satisfied	528
Somewhat dissatisfied	120
Very dissatisfied	55
DK	3
RF	1
NA, INAP no Post IW	256

**VAR 001741:** Racial diversity of neighborhood

Face-to-Face and Telephone Wording: *Thinking about the diversity of your neighborhood, are the people who live where you live all White, mostly white, about half and half, mostly Black, or all Black?*

	Frequency
All white	403
Mostly white	700
About half and half	238
Mostly black	70
All black	30
Other (volunteered)	104
DK	5
RF	1
NA, INAP no Post IW	256

## VITA

Matthew A. Vile was born in New Orleans, Louisiana on November 27, 1968. He received his Bachelor of Art in Mass Communications/Journalism from the Moody Bible Institute of Chicago in May 1991. He received his Master of Art in Political Science from the University of New Orleans in December 1999. He received his Doctorate of Philosophy in Political Science from the University of New Orleans in December 2005. He is currently employed as Senior Data Analyst for Goodwill Industries International in Rockville, Md.