

Testing Group-Level Differences in Political Decision-Making

A DISSERTATION  
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL  
OF THE UNIVERSITY OF MINNESOTA  
BY

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS  
FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY

John L. Sullivan

November 2009



## Acknowledgements

Thanks go first and foremost to my adviser John Sullivan. Under his tutelage, I've received a world-class education. Thank you, John, for never putting a ceiling on my aspirations. You've allowed me room to struggle and think and work independently: your calm, matter-of-fact perspective kept me on track throughout this endeavor, even from several thousand miles away. Over the years, many people have applauded John's talents. I join the list of grateful, admiring students who share a deep respect for John: not just for his qualities as a researcher, teacher, and mentor, but as a *person* I wish to be more like. Thank you for everything you do.

I would also like to express my appreciation for the examining committee members who gave feedback, advice, and suggestions throughout the project: Joanne Miller, Larry Jacobs, and Paul Goren have been an immense help. Thank you for the time and resources you've devoted to helping me along the way - I appreciate it from the bottom of my heart.

I also wish to thank several others who have been instrumental to the success of this project: thanks to Tom Bishop, who wrote and developed the METIS software. John Easton and Pernu Menheer in the Social and Behavioral Sciences Laboratory at the University of Minnesota provided their friendship, lab space, and research support. Thanks go to Gil Einstein at Furman University for his mentoring, guidance, and lab space. Rick Lau and Dave Redlawsk gave timely and useful suggestions as I developed and pursued this project in its early stages.

For advice and feedback along the way, thanks to Chris Federico, Tim Johnson, Jason Roberts, Kathryn Pearson, Shawn Treier, Dan Kelliher, David Samuels, Leonie Huddy, John Hibbing, Kevin Smith, Elizabeth Theiss-Morse, John Alford, and Richard Fenno. Participants in the CSPP Political Psychology Proseminar at the University of Minnesota provided helpful suggestions, as did members of John Sullivan's Dissertation Writing Group.

Thanks also to faculty and staff members at Furman University during my research sojourn in South Carolina: Brent Nelson, Paul Rasmussen, Liz Smith, Danielle Vinson, Glen Halva-Neubauer, Akan Malici, Catherine Borck, Lori Schoen, Paige Blankenship, and Drew Ferguson. Thanks also to my talented and diligent Political Science Fellows who provided supplemental research assistance: Grady Anthony, Jason Criss, Randi Moss, and Mary Catherine Smith. A word of thanks also goes to Laura Woliver and Paul Binkley in Columbia.

Without the support of my family and friends, I might very well have dropped out graduate school all those many times I threatened to. Thanks to my wonderful husband Zach – you bring out the best in me, both professionally and personally. From the start, you've helped me to remember what's really important at the end of the day. I love you more than words can say. For my mother and brother: thank you for your love, support, and encouragement. Also a special thanks to Henriët Hendriks, my saving grace and partner-in-crime in graduate school. Heartfelt appreciation – in many ways and for many reasons - is also owed to Eve and Simon Ringsmuth, Kjersten Nelson, Serena Laws, Geoff Sheagley, Angie Bos, Bas van Doorn, Monica Schneider, Chris Chapp, Aaron Rapport, Logan Dancey, Nicole Chiota, Jennifer and Michael Precht, Betsy Vance, Bob and Anne Rubocki, Alan and Lynsey Catchpool, Chris and Ken Murphy, MNRED, Rebecca Slisz, Steve Blank, and Martha James.

Generous research grants from the National Science Foundation and the Center for the Study of Political Psychology helped to make this project possible. This material is based upon work supported by the National Science Foundation under Grant # 0819591. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Science Foundation.

## **Dedication**

In honor and in memory of my father  
Raymond Buckley,  
Who would be incredibly proud of this accomplishment

And for the Gang,  
who will be going to Hawaii regardless.

## **Abstract**

A sizeable body of work in political science implies that elected officials differ from citizens in how they think, reason, and react to politics. Some suggest that indirect democracy provides an efficient and adequate representation of the public's interests, while others advocate a more deliberative democracy with direct public involvement in governance and decision-making. Amidst the clamor of this debate, these competing viewpoints have overlooked a simple but fundamental question: how different are elected officials from everyday citizens, really?

Via an information board experiment of ninety elected officials and one hundred seventy-nine everyday citizens in two states, I examined how individuals use information to make political choices. In the study, participants were asked to solve two hypothetical public policy problems. I equalized the amount and content of information available to them, and tracked how individuals used information before selecting one of three policy options to solve the policy problems.

I found that while elected officials differ from everyday citizens on several demographic factors (on average, elected officials tend to be significantly more educated, more knowledgeable about politics, more politically involved, and wealthier than everyday citizens), these groups do not differ significantly in how they use information to make political choices. By way of the volume of information sought, their tendency to compare alternatives, and decision-making speed, elected officials and everyday citizens in the study were far more similar than different. These findings held across both decision-making problems and under a variety of experimental contexts. The findings of this study suggest that the potential benefits and potential limitations of direct democracy are far less clear than previous research suggests.

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## **By the Numbers**

Number of people who helped me with this project in significant ways: 57

Data collection period: 347 days

Miles driven for research: ~10,000

Minutes per month on Blackberry plan: 900

E-mails sent for research study: ~5,500

Portable heart rate monitors: 3

Laptop computers: 2

NSF Grants: 1

Compensation offered to each participant: \$20

Final number of participants: 269

Iterations of METIS software: 4

Number of variables in METIS 4.0 (final software version): 700+

Frequency of heart rate monitor sample: 5 seconds

Average number of heart rate observations per participant: 4,500

No-show rate = 30% [~20% in MN, ~40% in SC]

Record number of no-shows in one day: 5

Record number of no-shows by the same elected official: 3

Courses taught during research period: 5

Conference presentations: 3

Tearful visits to advisor's office: 2

Number of dissertation-related nightmares: too many to count

Tenure-track jobs obtained: 1

## Chapter 1: How Different Are Elected Officials from Everyday Citizens?

Representative democracy is predicated on the idea that citizens delegate some of their decision-making authority to elected leaders, who make subsequent decisions on their behalf about how government will run and what it will provide. This arrangement – indirect democracy – is precisely what the Framers of the U.S. Constitution intended for American governance. Suspicious of the mass public’s decision-making abilities and capacity for reasoned judgment, the Framers placed a great deal of decision-making power in the hands of elected officials to guard against the “irrationality” of the masses. Indirect democracy would allow the best and brightest of citizens to win elected office, allowing key political decisions to be made by those with excellent judgment (Hamilton *Federalist 70*).

Though the Framers intended for a select group to lead American government, opportunities for citizens’ political participation have grown widely. Women, minorities, and people from all religious and social backgrounds are able to vote and seek elected office. Not only has ballot access expanded, citizens in many states are now able to put referenda on ballots and call for special elections. Citizens also have much easier access to news and media to gain information about politics and public affairs. More citizens are more educated than ever before. Presumably, increased information and education should develop citizens’ knowledge about politics and ability to think critically about political information.

However, while citizens’ education and media use has increased, the average level of political sophistication and coherence of political attitudes has not (Delli Carpini and Keeter 1996; Zaller 1992; Neuman 1986). These unflattering findings about the mass public invite serious consideration of an important question: to what extent should the mass public be involved in political decision-making?

Within political science, this debate rages on. On the one hand, some suggest that not every adult in society is necessarily *qualified* to govern (Dahl 1989). Moreover, some suggest that a sizeable swath of the population is not *competent* enough to make political decisions. Instead, political decisions ought to be made by a select group of individuals judged to be competent, rather than the citizenry as a whole (Schumpeter 1942). In contrast to both of these perspectives, others argue that because the notion of democracy rests upon the consent of the governed, adults who are subject to the laws of the state should be given the opportunity to play an integral role in deciding the nature of those laws (Dahl 1989). This has paved the way for more participatory views of democracy, which advocate more public involvement in governance and political decision-making (Chambers 1996; Barber 1984; Fishkin 1997; Gutmann and Thompson 1996; Mansbridge 1983; Putnam 2000; Cohen 1989).

Amidst the clamor of debate, these competing viewpoints have overlooked a fundamental question. Acknowledging the present arrangement of representative democracy, how do elected officials compare to everyday citizens when it comes to how they make political decisions? To what extent are they similar, and to what extent are they different? The answers to these questions would go a long way in informing the larger debate.

For quite some time, a sizeable body of work in political science has implicitly assumed elected officials are quite different from everyday citizens in how they think, reason, and react to politics. When it comes to decision-making, we assume that elected officials are advantaged by experience: practice with political decision-making could alter the cognitive process or strategies people use to make decisions. Elected officials' decision-making differs from everyday citizens' in the nature of the problems we ask them solve and the circumstances under which we ask them to do it (Lau 2003: 20). If we were to ask elected officials and everyday citizens to solve the same problems, gave them the same resources to help them do it, and placed them in

the same contexts, how different would they be in their decision-making? To date, we have virtually no empirical data to answer this question.

Political science has propagated the idea elite decision-making is more rational, less emotional, and more consistent than average citizens', a notion which persists in political practice as well (Lippmann 1922; Converse 1964; Schattschneider 1960). By contrast, a sizable body of research in psychology and decision-sciences indicates that human beings— whether elected or not – can (and do) experience systematic impediments to decision-making in a variety of contexts (Festinger 1957; Tversky and Kahneman 1974; Jervis 1976; Janis and Mann 1977; Janis 1982; Vertzberger 1990; Kunda 1990; Khong 1992; Levy 1994; Lodge and Taber 2000; Lau 2003; Hastie and Dawes 2003). Cognitive biases, contextual pressures, and other impediments impact individual's decision-making in reliable ways, and this tends to be true for most everyone.

Are there distinctions in human's capacities for political decision-making? Are different groups of people more or less efficient, or more or less sophisticated in decision-making than others? Given identical information, do elected officials and everyday citizens use information similarly or differently – and do they end up reaching similar or different policy choices? If there are differences, are they eliminated or amplified in certain decision-making contexts?

These questions are imperative for political science to answer. Over the last two hundred years, American government has evolved from a fledgling republic governed by a select group of political elites into a more populist democracy. Some people advocate a more deliberative democracy with direct public involvement in governance, while others believe indirect democracy provides an efficient and adequate representation of the public's interests. However, we know very little about the similarities and differences in individuals' political decision-making. Subsequently, we know little about what a more deliberative democracy

would look like in contrast to our present system indirect democracy, and the potential policy consequences that follow from it. This research attempts to fill this gap.

Part of the gap in knowledge stems from the dominant methods used to study elite decision-making. In general, most studies of elite decision-making are qualitative, not quantitative in nature. Elite interviews, case studies, and analysis of historical documents encourage researchers to draw post-hoc explanations about how elites reach political decisions (Khong 1992; Neustadt 1990; Janis and Mann 1977). Though there is scientific value added via these techniques, these methods do not measure, capture, or quantify the same kinds of variables we typically use to study citizens' decision-making, thereby leaving no outlet for direct comparison. Owing to this methodological disconnect, political science has not yet been able to directly compare how elected officials and everyday citizens reach political decisions.

To fully understand the intricacies of decision-making, we need to study decision-making *as it occurs*. An experimental method that does this, known as an information board experiment, enjoys a wide and popular following in economics, psychology, and market research (Payne, Bettman, and Johnson 1993; Carroll and Johnson 1990, Svenson 1979). Adapting this method to answer political questions, political scientists have begun to use information boards to test and quantify citizens' decision-making processes via these experiments (Lau and Redlawsk 2001, 2006; Huang 2000; Herstein 1981; Mintz, Geva, Redd, and Carnes 1997). The information board method is well established: however, most of these studies are administered to everyday citizens, not elected officials.

Several of these decision-making studies attempt to address "elite" political decision-making behavior, but the participants used in their samples are not elected officials. Most quantitative decision-making studies conceptualize "elite" by stratifying the sample of study participants as more or less knowledgeable about politics, more or less educated, more or less

attentive to news media, more or less politically sophisticated, more or less politically active, and so forth (Mintz, Geva, Redd, and Carnes 1997; Lau and Redlawsk 2001). I argue that this stratifying technique likely does not capture the decision-making tendencies of “real” elites. A direct comparison between everyday citizens and elected officials (the elites of democratic theory) is a more appropriate analysis. Comparing everyday citizens (not undergraduate students) to elected officials (not college students knowledgeable about politics) will provide adequate leverage to evaluate whether the widespread theoretical inferences drawn about elected officials and everyday citizens are accurate or not.

### **Historical Underpinnings of this Debate**

Distrust in the public’s political decision-making abilities is hardly a new trend. The idea of an irrational, emotional, and inconsistent mass public has roots that precede democracy, though with time, has softened some (emphasis on *some*). Yet, as will be illustrated in this chapter, the distrust of the public’s decision-making abilities is directly in tension with a widespread dedication to the norms of democracy – equal opportunity to participate in the democratic process. The American constitution, and the rules it provides for governance, represents this profound and troubling tension.

America’s independence from Britain was inspired by the (then radical) idea that the state’s legitimacy to rule rested on “the consent of the governed” (Locke *Second Treatise*, trans. Laslett 1988). In contrast to European states based on traditions of heredity, religion, or military strength to justify rule, citizens determine the form and structure of their government (Haskell 2001: 22). American democracy is founded upon a longstanding commitment to populism – the right and the power of the people to make decisions about the form and structure of their government, coupled with a historical reliance on constitutionalism – institutional features that

keep decisions from being made too quickly, and prevent majority abuse of the minority (Dahl 1956; Haskell 2001; Madison *Federalist 10*).

The constitutional safeguards from majority tyranny – separation of powers, checks and balances, and so forth – did not entirely satisfy populists who wanted institutions that would be more responsive to the will of the people. To this end, elections became the mechanism for citizens to contribute to government decision-making: elections check the power of representatives by allowing citizens to decide who gets to hold positions of authority in government (Haskell 2001: 17). In a representative democracy, citizens are sovereign because they control who is in office. If they are dissatisfied with the individual's performance, they can remove those people from office in the next election. The Framers considered citizens' power to elect and un-elect their representatives – and not the power of elected officials over government and policy – to be the ultimate source of power in a democratic nation.

This view has come under significant criticism, because it assumes that the citizens' political decision-making is largely a one-shot affair that is mostly exercised through voting (Schumpeter 1942). Though the Framers intended to maintain this citizen sovereignty through frequent elections, the reality is that national elections happen *no less* than every two years. The speed with which politics occurs in the modern era virtually guarantees that a great number of problems and issues will present themselves within a period of seven hundred seventy days.

Several trends have contributed to growing populist discontent in the last century. The rise of "career" politicians without rules that limit the number of terms of office they may hold, the power of interest groups and lobbies in Washington, and the role of moneyed interests in campaigns and elections have ignited populist distrust in elected officials' representation of public interests. Citizens have become increasingly distrustful of politicians, especially legislators (Hibbing and Theiss-Morse 1995; Mann and Ornstein 2007), in that the realities of the

modern political system give representatives little incentive to consult their constituents about policy. Rather than responding to aggregate public opinion, elected officials may feel they need only to respond to discrete and politically active subgroups: interest groups, those who control campaign contributions, primary nominations, or those who exert heavy control within the party (Aldrich 1995; Lowi 1979; McConnell 1966).

In the modern populist perspective, ordinary citizens are not defined and constituted by class, but “view their elite opponents as self-serving and undemocratic,” and try to mobilize against them (Kazin 1998:1). And indeed, while this populist sentiment has had firm roots in the American tradition since colonial times, the populist sentiment has grown significantly in the last few decades (Rosenberg 2007a; 2007b). Over the last century, the public has moved towards more direct democracy initiatives and reforms. Most of these reforms have occurred at the state and local levels, where separation of powers and checks and balances between government institutions is not as much of a barrier as in the federal government (Haskell 2001).

Constituents continue to contact their state, local, and federal representatives – via mail, phone calls, email, and other means, to let their representatives know their opinions on issues. There is compelling evidence to suggest that representatives are responsive to public pressures, at least on some issues (Jacobs and Page 2005; Miller and Stokes 1963). Elected officials do tend to listen more to other elites and issue experts in some policy areas, particularly foreign policy (Jacobs and Page 2005, Page and Shapiro 1983). In the modern era, the level of citizen involvement in political decision-making (beyond voting) is largely dependent upon both issue and context (Miller and Stokes 1963).

The rise of public opinion polling, coupled with representatives’ frequent use of this data, suggests that representatives are indeed interested in information about constituents’ perceptions and views about policy problems, though electoral or strategic concerns may be a

primary motivation for tapping public opinion (Jacobs and Shapiro 2000; Jacobs and Burns 2004; Morris 1998).

The extent to which shifts in public policy are congruent with what the public wants government to do is not wholly clear (Stimson, MacKuen, and Erikson 1995; Monroe 1998; Erikson, Mackuen, and Stimson 2002). Representing the myriad and often-conflicting interests of constituents is no small feat. And in an even more-challenging task, elected officials often have to go against the public's short-term demands for what the representative believes will better meet society's long-term interests.

The practice of representation is in fact a fairly recent development for democratic societies (Dahl 1989: 28-33). Only since medieval times have the mass public relied on elected representatives to formally express their interests in government (Mansfield 1968). The rise of representative democracy was largely necessitated by community expansion: as citizens became geographically more distant from the administrative centers of government, they relied on representatives to express their interests at distant meetings (Dahl 1989). By the time of the American Revolution, it was largely taken for granted that democracy should be representative (Dahl 1989: 29).

In the modern era, what have we come to expect from elected officials in a representative relationship? Who are elected officials – and what, if anything, makes them unique from the citizens they represent? What do we desire from each of these groups– and to what extent do our expectations for their roles in a democratic system differ?

### **Elected Officials**

The notion of an “elite” has much in common with how we think about elected officials, but there are important distinctions between these two terms. In most cases, we could

consider all elected officials to be elites, but not all elites to be elected officials (for example, one could consider lobbyists, appointed officials, members of the mass media, and others to be elites). Since political decision-making in a democracy hinges upon the relationship between elected officials (as representatives), and the mass public (as constituents), my study explores the potential differences in decision-making between these two groups. To uncover the origin of the idea that elected officials are cognitively and behaviorally different from the mass public, it is worth revisiting several key theories of elite governance and elite rule.

Most classical elite theories assume that elites operating within government institutions constitute a coherent group and they possess characteristics that readily distinguish them from non-elites (Parry 1969). Burkhardt once wrote that elites are “all that we are not”: a pithy assessment, but hardly instructive as to the specific criteria that makes elites “elite”. Conventional wisdom suggests elected officials and other elites are somehow “better” than the masses: they are “more noble, more efficient, or made out of better stuff” (Mills 1959: 13). Providential arguments that elites are somehow endowed with natural advantages have not gained much ground in the American political context (Haskell 2001).

Because America lacks a hereditary aristocracy who governs and had no feudal system, America developed an upper-class bourgeoisie with no higher level of society against whom to compete (Lipset and Marks 2000). Presumably, such an atmosphere of individualism and self-reliance for success would allow the cream of political decision-makers to rise to the top. However, these “nurture” arguments, highly prevalent in classical American political theory, tend to discount the advantages and disadvantages to success and power instilled by social forces and institutions (Hochschild 1996). Individuals born into “elite” families already have the advantages of access to education, connections to other “elites,” etc. Individuals born with a particular kind of “elite” character may be funneled into having life experiences and taking life

paths that will further shape them into elite "characters" of a specific type (Zuckerman 1977). Though some consider social background and personality to be driving forces of individual behavior (Barber 1992), others suggest that social background and personality characteristics are not determinate of behavior – *which would presumably include one's decision to run for elected office and the decisions they make once they are there* (Lasswell 1961; Edinger and Searing 1967).

Focusing on candidacy and elections as the epicenters of modern democratic political participation, the question, then, is who emerges to run for office. Voters can only pick from the "material," or the pool of candidates who choose to make themselves available (Schumpeter 1942). Rarely are candidates wholly chosen by others to run, and rarely do they decide to make themselves available for office due to overwhelming public clamor. Rather, most candidates self-select into running for office. Though federal, state, and local statutes spell out the requirements for holding various elective offices, most of the guidelines require only residency and a minimum age. These institutional arrangements present an equal opportunity to run for office among those who are eligible.

Even with the equal opportunity for self-selection, the landscape of elected officials (particularly at the state and federal levels) is generally not representative of the broader American public, at least in descriptive terms. While the makeup of elected bodies has grown to be more descriptive of racial, ethnic, and gender diversity in the United States, elected bodies are not wholly representative of the broader population in terms of their descriptive characteristics (Fox and Lawless 2005; Edinger and Searing 1967). Among those who run for office, and especially among those who win, there are distinct patterns in their demographic characteristics – including higher levels of income and higher levels of educational attainment than the national average.

If most elected officials do not mirror their constituents in descriptive terms, can they still represent constituents' substantive interests? The representation debate is wrought with a myriad of definitions and distinctions of what representation is and what it ought to look like (Pitkin 1972; Mansbridge 1999, 2003; Putnam 1976). In a basic representative relationship, we assume that the representative is responsive to constituents' preferences, and that they represent those preferences through policy making (Dahl 1960).

In a representative relationship, the person to whom I have delegated my political decision-making power (e.g.: designated as my representative) knows my political preferences, or anticipates what my political preferences would be (Stimson, MacKuen, and Erikson 1995). In representing my interests, the representative acts either as a delegate, a trustee, or a combination of the two. Acting as a delegate, I expect the representative will consult with constituents on a regular basis, asking for constituents' opinions and input before policy decisions are made. Acting as a trustee, I rely on the representative's good judgment to make informed political decisions on my behalf (especially on issues I may know little about). In so doing, I trust the representative to represent my interests accurately, even if I have not explicitly voiced my preferences on every political issue and scenario.

The difference between the delegate and trustee models of representation is the frequency and degree to which the representative considers my actively expressed political preferences. Absent telepathy, representatives cannot know citizens preferences unless those preferences are voiced or otherwise expressed (Verba 2003; Hill, Leighly, and Hinton-Andersson 1995; Verba and Nie 1972). Yet in the trustee model, citizens regularly rely on representatives to impute their preferences. In many ways and for many people, trustee models of representation explicitly assume representatives *know better* than constituents what kinds of outcomes the

public would want, or ought to want, as well as the best way to go about achieving those outcomes.

Does a system of democratic representation ensure that every view is heard, duly considered, and put to action? In considering the views and wants of different individuals and groups within the constituency, the representative evaluates and condenses these preferences into a coherent message: literally, *re-presenting* the preferences of constituents into a unified perspective that will be voiced to other political actors on their behalf.

In an ideal world, the wishes of the representative and their constituent(s) coincide (Pitkin 1972). In reality, however, we understand that representatives and citizens often hold different ideas about policy. In a large nation operating in a complex political world, it is impractical for representatives to ask for extensive citizen input on every issue. It is an efficient use of citizens' time to delegate these decision-making tasks to a smaller, specialized decision-making body (Olson 1965; Downs 1957).

### **Everyday Citizens**

Without doubt, politics represents a peripheral concern for most citizens (Downs 1957; Delli Carpini and Keeter 1996). In keeping with this minimalist paradigm, most citizens presumably pay minimal attention to politics, possess minimal knowledge about political issues, and thus are likely to have minimal stability in their political attitudes and policy preferences. Minimal attention to politics is thought to make the mass public more susceptible to whimsical changes in opinion based on temporary passions, emotions, and/ or manipulation by elites (Jacobs and Page 2005; Page and Shapiro 1992).

The realities of a large democracy make it efficient for citizens to delegate at least some of their decision-making power, but efficiency is not an entirely satisfactory explanation for near-

total delegation of decision-making power. Democracy – government by the people – does not necessarily produce policy that is most the efficient, the most reasoned, or the most just (Rawls 1993). However, the guiding principle of democracy – the equal right and ability of citizens to determine for themselves the direction of their own lives by influencing decisions made collectively – leaves more room for citizens than just legitimizing elite rule through voting (Verba 2003: 667; see also Schumpeter 1942). In an age of increased educational equality and access to political information, what factors render elected officials different from everyday citizens when it comes to their political decision-making?

### **What Renders Elected Officials Different from Everyday Citizens?**

To be sure, elected officials hold a distinct decision-making advantage over everyday citizens not due to any inherent, inborn difference in their cognitive abilities, but because of an advantage when it comes to the availability of information in making decisions (Tetlock 2005; DeNardo 1995; Lau 2003; Marvick 1966). This assumes that having more information makes for more “informed” decisions (Marcus, Neuman, and MacKuen 2000). One of the main factors that distinguish elected officials’ decision-making from everyday citizens’ is their access to information. Information is typically easier for elected officials to come by because information is inherently built in to the institutions to which they are part. While information may be available, *learning* from information is another matter: people can access information seven ways from Sunday, but seeking more information is no guarantee of learning from that information (Huddy, Feldman, and Cassese 2007).

Information advantage is not the only factor that differentiates elected officials’ decision-making from the mass publics’. Challenging the elite/ mass cognitive and behavioral assumption is an extensive tradition of research from neuroscience and cognitive psychology: research in

these fields suggests that human brains operate essentially the same way – that is, the neural processes underlying the experience of emotion, cognition, and decision-making should operate essentially the same for all normal neurological functioning individuals. To this end, the neural processing mechanisms of elected officials and other elites ought to be similar, if not identical, to the neural processing mechanisms of non-elites, both in terms of structure and function.

Might elected officials' brains differ – either subtly or strikingly – from the brains of everyday citizens'? Possibly, and this point is worth investigation: individuals who are politically sophisticated (e.g.: express high levels of political interest and political knowledge) use their neural structures differently than non-sophisticates when asked to make political evaluations (Schreiber and Iacoboni 2002). Research in other fields demonstrates that experts on a particular topic use their neural structures differently than non-experts (Amidzic, Riehle, Fehr, Wienbruch, and Elbert 2001; Gaser and Schlaug 2003). However, no research in the fields of cognitive psychology or neuroscience explicitly discusses the potential differentiation between elected officials and everyday citizens with regards to expertise or other factors. However, this gap in the research is not wholly surprising. Though there is substantial evidence to demonstrate that neural mechanisms and processes can be altered by certain events, experiences, activities, and life circumstances (Hammond 1996, 2000; Tetlock 2005), neuroscience generally does not emphasize the role of normal, repeated events, activities, and life circumstances that would augment brain function (Damasio 1994; LeDoux 1996).

What exogenous factors *should not* change the brain? Being elected, non-elected, appointed, or abstaining from political participation altogether should not alter the brain's basic neural structures (though for initial evidence to the contrary, see Schreiber and Iacoboni 2004). Individuals possessing a particular neural structure or characteristic may be more likely to exhibit particular personality traits, which then leads them to seek and obtain positions of

power. However, the possession of political power should not, in and of itself, alter brain structure or function. If being elected, or being in a position of power, or any other combination of social (rather than physiological variables) is how we operationalize “elite” status, it is then clear that how we define elites has nothing to do with fundamental differences in neural structure, but has everything to do with the social context in which individuals operate and interact.

Elected officials differ from everyday citizens in the kinds of decisions they are asked to make and the circumstances under which they are asked to make them (Lau 2003: 20). This said, the *context* of decision-making for elected officials and average citizens is often very different, but in general, their decision-making *abilities* should not differ. In my dissertation, I focus on two contextual factors that differentiate elected officials’ decision making and average citizens’ decision-making: 1) accountability for one’s decisions and 2) the stakes or potential consequences of one’s decisions.

Accountability and high stakes are contextual factors that should lead to better quality decisions, because these factors increase people’s motivations to perform well. Accountability and high stakes should encourage people to think harder about the choices they are about to make, either because they will have to justify their choices to others, or because the decision carries serious consequences. However, *thinking harder does not equate to thinking better* (Lerner and Tetlock 2003). Many studies have shown that separately, accountability and high stakes often lead to poor decision-making: biases in information search, a tendency to go with the most popular choice, failure to consider unfamiliar or less popular choices, tailoring one’s explanation of the decision to fit audience views, and so on (Janis and Mann 1977). In some circumstances accountability and high stakes motivate people to make quality decisions, but

people can be ensnared by a conflicting motivation: a desire to make good decisions with minimal effort (Lau 2003).

If we were to place average citizens and elected officials into decision-making contexts usually encountered by elected officials (accountability and high stakes), what information do they use and what decisions do they make? Is their decision-making similar or different? If we place average citizens and elected officials into decision-making contexts with no mention of accountability and no mention of stakes, what information do they use and what decisions do they make? Are their decision-process and decision choice the same, or are they different? If decision-making for elected officials and average citizens does differ, why? Are differences in decision-making explained primarily by individual experience with decision-making, or by other factors?

### **Measuring Decision-Making**

First, how are we to account for the difference in types of decisions and decision-making contexts between elected officials and everyday citizens, and then, how are we to measure their decision-making in a scientifically rigorous manner? The first task is to make the playing field between elected officials and everyday citizens even – which would mean placing them in the same kinds of decision-making contexts, asking them to solve the same kinds of problems, and controlling the amount and content of information available to help them do it. The second task is to find a way to measure how people use information in real-time. Understanding that decision-making contains two distinct components – process and outcome – I use a methodological approach that can measure both. This method is known as an information board experiment. An information board is a computerized program that controls the amount and content of information available to make a decision, and then measures how much

information individuals seek, in what order they seek the information, and how long they view each piece (Herstein 1981; Lau and Redlawsk 2001, 2006; Mintz, Geva, Redd, and Carnes 1997).

It is clear that the use of particular decision-making strategies or processes used to formulate a choice between alternatives can result in better or worse decisions (Lau and Redlawsk 2006: 15; Hammond 2000; Herek, Janis, and Huth 1987; Lippmann 1955; Yates, Veinott, and Palatano 2003; Cooksey 1996). Rather than tread the normative landmine of judging which choices are “good” or “bad,” I rely on several measures focused on the *process* of political decision-making as the point of comparison. Commonly used in other decision-making studies, these measures include how much information people access, their cognitive strategies for making sense of that information, the time they take to register a decision. Directly comparing elected officials with everyday citizens on these quantitative process measures will be the first step in better understanding whether they do indeed differ in their decision-making proclivities as so many have suggested.

## **Conclusion**

Representative democracy is grounded in citizens’ voluntary delegation of decision-making power to elected officials. In so doing, we consider elected officials as “trustees” who use their insight and information to make sound decisions on our behalf. We also see elected officials as “delegates” who represent constituents’ interests, voice concerns to government, and take action on citizens’ behalf. As part of the trustee/ delegate relationship, citizens implicitly trust elected officials to make decisions that are at least as good, if not better than what they themselves might make.

While not all citizens may be qualified to govern, many observers paint a grim portrait a public that is not *competent* enough to govern. Others suggest that no one individual can

represent citizens' interests better than citizens themselves; and therefore, more direct decision-making power should be placed in the hands of the people. Both perspectives in this debate have managed to overlook the central question: how different are elected officials and everyday citizens, really?

In this project, I address this question in several different respects. First, how different are elected officials and everyday citizens in regards to their demographic characteristics? Second, how do they compare in how they use information to make political choices? Third, do contextual pressures impact them similarly or differently? Fourth, do elected officials and everyday citizens differ in the attitudes they hold about politics?

Previewing some of the potential implications: what if elected officials' decision-making is radically different from citizens' – in their information use and learning, and/ or their preference for certain policy options over others? Is it then desirable and wise for citizens to delegate most of their political decision-making? Is there a well-supported rationale for a more deliberative democracy, or is indirect democracy adequate? The findings of this study offer an empirical contribution to this contentious debate.

## **Chapter 2: Study Design and Methodology**

In this chapter, I explain what research methods I used (an information board experiment) and why I chose this technique over other methods. In this chapter, I also describe each element of the study: which variables were measured and how, what political choices participants were asked to make, and step-by-step what participants were asked to do in the study. I also explain how I recruited everyday citizens and elected officials. At the end of the chapter, I describe the sample demographics, and show how the demographics of the study sample stack up against a nationally representative sample.

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To test whether elected officials make decisions differently than everyday citizens, I sought to design a study using methods that would allow me to level the playing field between these two groups. To do this, I needed to use a method that allows for a controlled, systematic comparison of the processes individuals use to make political choices.

One particular instrument appealed to these goals. Information boards, a dynamic process-tracing method, have been widely used in behavior and decision-making research (Svenson 1979; Carroll and Johnson 1990). Most information board studies are conducted in a controlled laboratory setting. With an information board study, participants in the study are given a hypothetical decision-making problem (which candidate to vote for, which public policy to enact, and so on). Essentially, an information board is a way of presenting information about different choice alternatives, while simultaneously allowing the researcher to track what information people select to guide their choices and which choice they ultimately select. An example will make this clearer.

Imagine you are a citizen voting in an upcoming election. Two candidates are running for office: Candidate A (Alex) and Candidate B (Bobby). You must decide which candidate will

receive your vote. Information about the candidates is contained in the information board. The information board is like a table: each option is listed in the columns, and different categories about the options are listed in the rows. To learn more information about an option for a particular category, you would click on the cell that corresponds to the option and the category. In this situation, the information board might look like this:

For example, if you wanted to know more about Bobby's stance on health care, you would click on this cell.

**Figure 2.1: Hypothetical Information Board**

	Candidate A – Alex	Candidate B – Bobby
Party identification		
Stance on Iraq War		
Stance on Health Care		
Previous experience		
Endorsements		

Clicking this cell takes you to a new page with information about Bobby's views on health care.

**Figure 2.2: Hypothetical Information Board Detail**

	Candidate A – Alex	Candidate B – Bobby
Party identification		
Stance on Iraq War		
Stance on Health Care		
Previous experience		
Endorsements		

Bobby favors a plan that would require all citizens to have health insurance.

When you are finished looking at this information, you can close it out by clicking the “x” button at the top of the page. This will take you back to the main information board page with the table. When you are ready, you can register your decision and indicate which candidate you have decided to vote for.

As illustrated in the figures above, information boards present participants with a variety of information that can be learned about the different choice alternatives. In matrix form, the alternatives under consideration are columns, and the attributes of the alternatives are contained in the rows. The cells of the matrix are hidden from participant’s view, so the participant must actively select a cell (row and column) to learn a particular piece of information. Usually, only one cell may be activated (i.e. “open”) at a time. Because the information board is computer-based, data is automatically recorded each time the participant accesses information. To this end, the researcher knows exactly which information was selected, in what order, and how long it was viewed.

The beauty of this method is that it offers an extraordinarily high degree of precision not afforded by many other methods. In this controlled environment, researchers can actually trace – step-by-step and second-by-second – how people use information and compare it to what choices they prefer and what decisions they make. Researchers can then compare this information-processing data across individuals or groups. (For example, do men and women differ in the kinds of information they use to evaluate political candidates? Do individuals who know a lot about politics use more or less information than people who know relatively little about politics? Do people who use less information come to different choices than those who use a lot?)

In the field of political science, information board experiments have been used to study how individuals use information to choose between political alternatives – especially when it comes to which candidate to vote for. Several studies have addressed how voters make sense of campaign information as they decide which candidate to support or oppose (Herstein 1981; Redlawsk 1992; Lau 1995; Lau and Redlawsk 1997; Lau and Redlawsk 2006; Riggle, Johnson, and Hickey 1996; Huang 2000). Other studies have used information boards to examine foreign policy decision-making, especially in attempts to better understand international conflict (Mintz, Geva, Redd, and Carnes 1997; Mintz and Geva 1997).

Though the information board method is becoming increasingly popular in political science, it is in fact a method borrowed from other disciplines. Information boards were first used by market researchers who wanted to test how consumers' ability and willingness to choose between different brands of household and grocery items (such as detergent, pudding, or pizza) was affected by the amount and content of information about those products (Jacoby, Kohn, and Speller 1974; Jacoby, Speller, and Berning 1974). Early information board experiments involved a physical board of cards that participants could choose to turn over (or

not), and the researcher would write down which cards were turned over, in what order, and how long they were viewed.

Via advances in computer technology, researchers are now able to design computerized information board experiments that automatically capture and record data. This means that information board experiments are now able to collect and store hundreds (and even thousands) of variables electronically. Moreover, computerized information boards allow the researcher to use multiple media sources: text, video, audio, and so on.

There are two types of computerized information board formats: static boards and dynamic boards.<sup>1</sup> In a static information board, a fixed amount of information content is available to the participant for a specified amount of time during the experiment. In dynamic information boards, the amount and content of information can vary during the course of the experiment. New information appears as older information cycles out, mimicking a more realistic information environment in which information content and availability is frequently updated. As information categories scroll across the screen, participants must make choices about what information to view at the expense of other information. Dynamic information boards can also randomize the order in which information appears or disappears, thus guarding against any potential order effects from information cycling.

Dynamic boards do more closely resemble the modern information environment because they allow the availability and content of information to change as time goes on (Lau and Redlawsk 2001, 2006). However, dynamic boards are vastly more difficult and more time-consuming to develop, and may not suit every decision-making situation. For some decision-

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<sup>1</sup> Participants tend to gather more information from dynamic information boards compared to static information boards, thus the information search is considered deeper in relation to the ideal world of the static board (Lau and Redlawsk 2006: 299-301). Because the dynamic information board is less controllable, it is slightly more difficult to make inferences from the data about particular decision-strategies used by participants, at least as compared to the clarity of decision-process revealed in static boards.

making scenarios, dynamic information boards are a natural choice – scenarios with a longer time horizon (such a campaign) are well simulated by dynamic information boards. The decision-making environment I was trying to simulate was a one-shot scenario with a short time horizon: advisors assemble information from experts and the media (akin to policy briefs), and the elected official is asked to make a decision quickly. For quick decisions (such as my hypothetical policy scenarios), a static board best suited the information environment I was trying to simulate.

There is no such thing as a “perfect” study – all research studies have flaws and limitations. Conducting social science research always involves tradeoffs: what to study, what to measure, and how to measure it. In this project, I sacrificed real-world observations for a more controlled environment that would allow for casual inferences, as well as the ability to make direct comparisons between individuals and across groups.

In this sense, I do not show what elected officials and everyday citizens do in real decision-making (real, live policy problems with real impacts). Instead, an information board experiment allows us to reduce the complexities and noise of the real world into a more controlled environment – which allows us to get “inside the heads” of individuals as they make decisions in real time. Pure observation (which by extension requires post-hoc inference) cannot do this. For this experiment (and as with most all experiments), I sacrificed wide-reaching external validity for very robust internal validity.

### **The Decision-Making Scenarios**

Before I could design the information board, I needed to determine what kinds of decisions I would ask participants to make. I would try to simulate an elected official’s decision-making when it comes to public policy: advisors or aides assemble policy briefs with the most

germane information; and based on that set of information, the elected official has a limited time frame to make a decision.

So what kinds of simulated policy problems would I use? Most information board studies use fictionalized decision-making problems. Fictional problems are preferable to actual problems for two reasons. First, when writing decision-making scenarios researchers do their best to avoid “hot-topic” problems (such as abortion, gay rights, and gun issues) because most people will gravitate towards choices that mirror their pre-existing attitudes about these issues. One, in a fictional problem, participants cannot have solidly held opinions about how best to solve it – precisely because they have never encountered that problem before. Second, when writing decision-making problems, most researchers try to avoid re-creating well-known historical scenarios (for example, the Cuban Missile Crisis). Historically familiar or salient problems may invite participants to make decisions in ways that they normally would not – precisely because they are trying either to mirror or to re-create history.

Recognizing the need to design decision problems that would be fictional but still at least somewhat plausible (i.e.: it would not be wholly out of the realm of reality to imagine that this situation could happen), I scoured public policy case study textbooks for potential examples. Eventually, I decided to create my own fictional decision-making scenarios.

Created in the summer of 2007, the first scenario I designed was about a hypothetical national economic crisis. In this scenario, the problem is described this way: the United States faces a severe economic downturn. Hundreds of thousands of Americans have put their homes into foreclosure, and many more have declared bankruptcy. Many people cannot keep up with the rising costs of basic goods and services (gasoline, groceries, utilities, and rent). The economic downturn has spread to all sectors of the financial market. Advisors fear this could

lead to public and political unrest, and worry that the problem may spread to the global economy.

I envisioned several alternatives that could be potential solutions to this problem:

- Option A – take no action, and wait for the market to correct itself
- Option B – encourage the Federal Reserve Bank to cut interest rates
- Option C – issue emergency loans to individuals/ families who are most in need

For the information board, I relied on basic knowledge about the economy to envision how a national economic crisis could conceivably impact several aspects of American life (for example, impact on the housing market, effect on the military, employment rates, and so on). I also imagined how each of the three alternatives might or might not impact those issue areas (the housing market, the military, employment, etc.). In total, I created separate snippets of information for each of the three alternatives across nine issue areas (effect on economy, foreign policy, response from interest groups, effect on housing market, military, business and industry, employment, public opinion, and history). The only factual information presented was in the history row, in which I described historical economic downturns. I also created a row of “other news” – a cell for each alternative that contained irrelevant stories on topics ranging from the fiftieth anniversary of the LEGO® to facts about giraffes.

Previously, I explained the importance of designing fictionalized decision problems for an information board experiment. As it turns out, the fictionalized economic crisis scenario I designed in the summer of 2007 eerily mirrored the *real* economic crisis Americans experienced in the fall of 2008 and into 2009. (I already started data collection several months before the national economic crisis occurred).

Scientifically speaking, this coincidence is serendipitous. One, the parallel of real-life events made what might have been a conceptual stretch for participants into an easy reach.

Absent information about bank collapses and corporate bailouts, the study scenario was *extremely* similar to the real economic crisis unfolding on a daily basis. Two, the data from this scenario becomes a tidy natural experiment: conceivably, participants who took the study before the real economic crisis unfolded could have used information differently and come to systematically different decisions than participants who took the study as the real economic crisis broke. Fortunately, I kept track of what date each participant took part in the study, which I account for in the data analysis presented in Chapter 3 and Chapter 4.

## **METIS©**

In the summer of 2007, when I started designing the research project, there was no pre-packaged information board software program for researchers to use – either for free or for cost. Creating an information board experiment required researchers (or their research assistants) to write programming syntax from scratch.<sup>2</sup> Acknowledging this potential barrier to the project’s progress, I also saw this as an opportunity to put together a new software program that could be specified to do *exactly* what I wanted it to do. Undaunted, I decided to design an original software program for my dissertation experiment.

The software program I designed to collect experimental data is called METIS© (Multistage Experiment Tracking Individual Strategies). METIS is a stand-alone software program which operates on C++ programming syntax. Working with a research assistant who wrote the program code and syntax<sup>3</sup>, I designed the structure and elements of the initial METIS software (version 1.0) to contain just one information board and a small set of survey questions. When participants enter data in METIS (responding to a questionnaire, selecting information to

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<sup>2</sup> In the near future, there should be a packaged, publicly available information board software program for social scientists to design and conduct their own studies. The program is designed by a team of researchers led by David Redlawsk and Rick Lau.

<sup>3</sup> Hearty thanks go to my research assistant Thomas Bishop, who wrote the computer programming code.

view, and so on), this data is automatically saved in specified variable columns in a separate Microsoft Excel file.

The initial METIS program (METIS 1.0) was piloted during February and March, 2008 at the University of Minnesota. Students recruited from undergraduate political sciences classes took part in the pilot study (N = 28). In METIS 1.0., I used only one decision-making scenario: the national economic crisis. My aims in the pilot study were two-fold: one, to obtain feedback about whether the METIS materials were clear, believable, and user-friendly, and two, to run manipulation checks on whether specific contextual pressures introduced during the decision-task actually impacted decision-making in the ways suggested by previous research.

Most studies that manipulate decision-making context have not explored how context affects the précis of decision-making. Instead, most studies focus on whether the manipulated context induces a particular mood or emotion, and how behavior or cognition is then affected by the presence or absence of that mood or emotion (Schwarz and Bless 1991: 57; Zajonc 1980; Damasio et. al 2000; Brader 2006; Schmidt and Trainor 2001; Valins 1966; Stern, Botto, and Herrick 1972).

In political science and psychology, two of the most commonly used affective inducements are autobiographical recall and affect-laden images. In autobiographical recall, participants are asked to think of a time in their personal life where they felt angry/ sad/ fearful/ enthusiastic (whichever affective state the researcher seeks to induce). With affect-laden images, researchers show participants a select set of pictures known to provoke a specific emotional response (pictures of spiders and snakes tend to incite fear, whereas pictures of feces incite disgust) (Smith et. al 2009).

While autobiographical recall and affect-laden images are relatively easy to use in an experimental setting, these inducements tend to produce strong bursts of mood or affect,

followed by longer periods where the desired affective response is either reduced or absent (Shackman et. al 2006: 44; Davidson, Jackson, and Kalin 2000). Subsequently, the fierce-but-fleeting nature of these manipulations may risk either overstating or understating the effect of emotion on the particular behavior or cognition under study.

In addition to the fierce-but-fleeting factor, autobiographical recall and affect-laden images may not capture the kinds of affective reactions induced by the real contextual stressors encountered by elected officials in their particular kinds of political decision-making. I sought realistic contextual manipulations that would mimic the kinds of contexts elected officials often encounter outside the lab: namely, accountability for their decisions, and high stakes or consequences associated with those decisions. The emotions generated by the contextual pressures of accountability or high stakes may or may not be limited to discrete emotions such as anxiety, enthusiasm, or anger.

Understanding that these contextual pressures probably correspond to a mixed emotional response rather than a discrete emotional response, I opted not to induce one particular emotion over another. Instead, I used very specific language to emphasize the particular pressure (accountability or stakes) when describing the decision-making task.

In the pilot study, there were three experimental conditions: a control group, an accountability condition, and a stakes condition. The control group received only standard decision-task instructions with no mention of accountability or high stakes. For the accountability condition, I used a task-internal manipulation by introducing specific wording to the standard decision-task instructions. This manipulation emphasized accountability with this language:

**After you register your decision, members of the media and voters in your district will ask you to tell them more about your decision.**

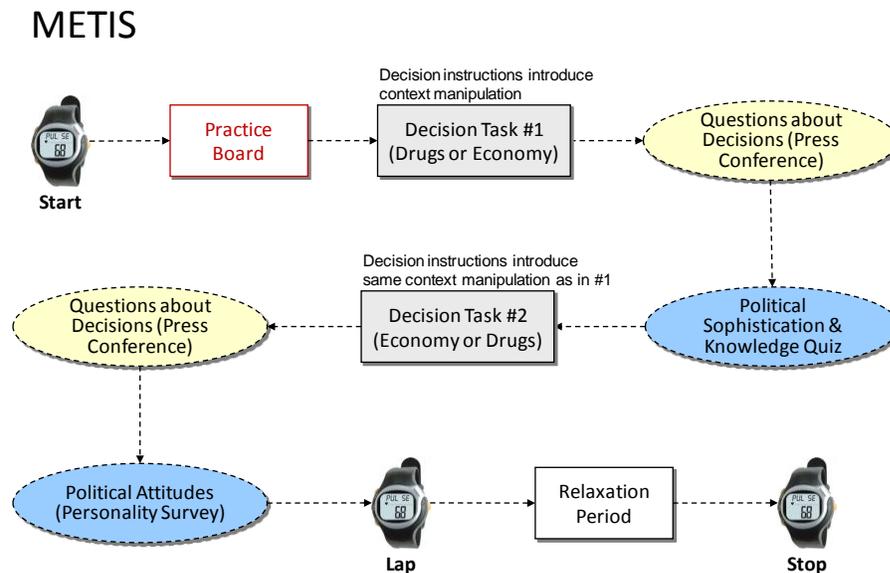
For the high stakes condition, I used another task internal manipulation by introducing another separate wording to the standard decision-task instructions. This manipulation emphasized high-stakes with this language:

**This decision is very serious: a poor decision will result in many lives being lost, while a better decision will result in fewer lives being lost.**

Reviewing the comments and suggestions received from participants in the pilot study (March 2008), the stakes manipulation was believable, but the accountability manipulation was not as believable. Given these results, I decided to use the same accountability language in the decision-task instructions, but ramped up the contextual pressure via a simulated video “press conference” where the participant is actually asked to justify their decision to a group of voters and reporters.

In addition to the changes to the accountability condition, I made several other changes to the software for METIS 2.0. Figure 2.3 is a conceptual map that illustrates the setup of METIS 2.0.

Figure 2.3: Conceptual Map of METIS 2.0©



METIS 2.0 retains the information board and survey questionnaire qualities from METIS 1.0, but expands to include two measured and quantified decision-task scenarios instead of just one. How people make decisions may largely depend on the nature of the task (Lau 2003). With data from two decision-making scenarios, there is more evidence to say whether their information use and decision-making varies depending on the nature of the problem. I created a second decision-making scenario in order to be able to compare *how the same individual makes decisions across multiple political problems*.

The second fictional-but-plausible scenario I designed was about a new pharmaceutical drug that could be used to treat Alzheimer's disease. In this scenario, a pharmaceutical company in Mexico recently developed a therapeutic drug to treat Alzheimer's – a disease which affects the lives of millions of people. This drug may significantly lessen the symptoms of Alzheimer's, and perhaps even stop the disease's progression entirely. The Mexican company

plans to start selling the drug next week. One American pharmaceutical company has developed a similar drug to treat Alzheimer's – Alzoperine – but the American drug has not received approval from the U.S. Food and Drug Administration (FDA). There are many uncertainties about the potential dangers of taking Alzoperine, as this drug may have serious and harmful side effects. Currently, the federal government does not allow pharmaceuticals from Mexico to be shipped into the U.S.

I imagined several alternatives as potential solutions to this hypothetical problem:

- Option A – take no action, wait to see whether Alzoperine is approved by the U.S. FDA.
- Option B – encourage the FDA to “rush” the approval of Alzoperine, foregoing extensive clinical trials and putting the drug directly on the market.
- Option C – pass a law allowing the Mexican drug to be imported, but Mexico will tax American buyers at fifty times the drug's Mexican retail price. American insurance companies will not cover this cost.

Similar to my design strategy for the economic crisis information board, I relied on common knowledge about the FDA. I also did background research to better understand the symptoms and effects of Alzheimer's disease. I imported eight of the nine issue areas from the economic crisis scenario into the drugs scenario. Instead of a “history” row, I created a new row titled “background,” which contained factual information about the signs and symptoms of Alzheimer's disease. In total, I created separate snippets of information for each of the three alternatives across nine issue areas (effect on economy, foreign policy, response from interest groups, effect on housing market, military, business and industry, employment, public opinion, and background). I also created a new row of “other news” – a cell for each alternative that contained irrelevant stories on topics ranging from the best books of the twentieth century to the mysterious death of a fictional celebrity.

In the next section, I describe step-by-step each component of the finalized METIS study. Because the structure of the study is extremely complex, I walk the reader through each element of the study from consent form to debriefing.

## **METIS 2.0: Structure and Protocol**

With each administration of the study, I followed a standard protocol to introduce the study. Participants were given an electronic version of the consent form to read on the computer. When they finished reading the consent form, I asked questions to confirm the participant met the study's eligibility criteria. I answered any questions they had about the study and the study procedures. I then showed participants how to assemble the non-invasive, sport-grade heart rate monitor and gave instructions on how to wear it.<sup>4, 5</sup> Participants could either wear the heart rate monitor directly against their skin (underneath their clothes), or they could wear it over a t-shirt provided by the researcher.

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<sup>4</sup> I used the heart rate monitors in the study for one reason well-known to emotion researchers: for a variety of reasons, people tend to underreport their own emotional experience (Turner, Sherwood, and Light 1992). Specific emotions, particularly anxiety, are marked by highly reliable biophysical responses, including increased heart rate. Hard data on heart rate (including in-study heart rate variance) helps me to more reliably analyze how the presence or absence of particular contextual pressures impact decision-making behavior (which self-reports of emotional experience may not do as reliably).

<sup>5</sup> In the study, I set the heart rate monitor to sample heart rate every five seconds, resulting in an average return of more than 4,500 observations *per participant*. Owing to the massive amount of data and the need for a more focused analysis in this manuscript, I leave analysis of the heart rate data aside for now.



**Picture 2.1: Heart Rate Monitor Worn Over T-Shirt**

When participants returned from the restroom after putting on the heart rate monitor, I asked a standard set of comprehension check questions to make sure participants had read the consent form and understood what would happen during the study. I then showed participants the device that would record their heart rate. The device that captured the heart rate data was a small wristwatch, which I placed on the back of the participant's chair, out of the participant's sight. Each participant was instructed not to reset the watch during the study. After I started the heart rate monitor, participants then followed prompts on the computer screen to start the study.

The first part of the study was a practice information board. This showed what an information board looked like and gave time for participants to become accustomed to using it. To reduce the likelihood of any priming effects to take place, I used a non-political scenario for the practice information board. For the practice board, participants decided which candidate to hire for a job at a fictional public relations firm.

Following the practice information board, participants in the study were randomly assigned to one of four experimental conditions. This assured that participants assigned to a particular condition would not differ from other participants in other conditions: elected status, gender, race, political knowledge, partisanship, and other individual difference variables are randomly distributed across conditions. To this end, the decision-making phenomena effects I observe in the study can confidently be attributed to differences in the experimental contexts, and not attributed to systematic differences in individual difference variables between participants in each condition.

Based on feedback from the pilot study, I created four experimental conditions for the full study: an accountability condition, a high stakes condition, a combination condition of both accountability and high stakes, and a control group against which to compare the treatments. The control group received only standard decision-task instructions with no mention of accountability or high stakes.

For the accountability condition, I used a task-internal manipulation by introducing specific wording to the standard decision-task instructions. This manipulation emphasized accountability:

**After you register your decision, members of the media and voters in your district will ask you to tell them more about your decision.**

For the high stakes condition, I used another task internal manipulation by introducing another separate wording to the standard decision-task instructions. This manipulation emphasized high-stakes:

**This decision is very serious: a poor decision will result in many lives being lost, while a better decision will result in fewer lives being lost.**

I also created a condition that manipulated both accountability and high stakes, which combined the specialized language from both the accountability and high stakes conditions into

the standard decision-task instructions (see Appendix A for detailed decision instruction scripts for each condition).

In addition to randomly assigning participants to experimental conditions, METIS also randomly assigned which decision-task they received first (the drugs scenario or the economic crisis scenario). Participants stayed in the same experimental condition for both tasks. After reading the decision-task instructions participants could use as little or as much information on the information board to help them make a decision within the five-minute time limit. After registering their decision, I asked several follow up questions about how much they preferred their selected option to the other options, why they made the decision they did, how long into the information board did they know what choice they preferred, and so forth.

What amplified the contextual manipulations was a mock press conference. In the press conference, all participants were asked to explain their decision-making to a (simulated) crowd of boisterous reporters after they registered their decision. Only the accountability condition and accountability x high stakes conditions were told ahead of time that they would be asked to justify their choices to voters and the media after making their decision. The press conference undoubtedly made the experimental environment seem more real. In the press conference, the screen view is a simulation such that it seems the participant is standing behind a podium of microphones while a crowd of noisy, demanding reporters clamor in the foreground for the participant's attention.

Participants answered four questions from the press conference by typing in an open-ended response into a text box below the video area. Each question was asked in a separate video clip. The questions were:

- “Representative, why did you make the decision you did?”
- “Representative, what factors impacted your decision the most?”

- “Representative, what would you say you learned about this policy?”
- “Representative, if you had to make this decision again, would you do anything differently?”

Following the press conference questions, participants were asked to self-report how anxious they felt during several discrete moments during the task: reading the decision-task instructions, using the information board, registering their decision, and explaining their decision to voters and media during the press conference.

In between the two political decision tasks, participants completed a political knowledge test as a cognitive distraction. For this measure, I used the standard seven-item ANES battery with a mixture of close-ended and open-ended civic knowledge questions (Delli Carpini and Keeter 1996).

Following the political knowledge test, participants started the second decision task (the drugs scenario or the economic crisis scenario, whichever they had not received first). Participants stayed in the same experimental condition they received in the first task. Again, participants could use as little or as much information in the new information board as they liked before the end of the five-minute limit. After registering their decision, participants answered identical questions about choice preference strength, how long into the decision-task they knew their preference, etc. The participant received another press conference with the open-ended questions asking them to explain their decision-making in more detail, as well as the follow-up questions about self-reported anxiety at four discrete moments in the second decision-task.

Next, I offered an extensive set of questions to measure the participant’s political and social attitudes, political involvement, media use, partisanship, ideology, and early experiences with politics. I also measured several potentially key psychological characteristics, including

need for cognition (Petty, Cacioppo, and Kao 1984), need to evaluate (Bizer et. al 2004), need for closure (Webster and Kruglanski 1994; Kruglanski and Webster 1996), right-wing authoritarianism (Adorno et. al 1950; Altemeyer 1996), and trait anxiety (Mogg et al. 1990).

Understanding that some drugs and substances could impact readings from the heart rate monitor, I asked participants a series of questions about whether they were currently taking any medications to manage high blood pressure, as well as anxiety and/ or depression. I also asked participants whether they had consumed caffeine within the last six hours or nicotine within the last twenty-four hours prior to taking the study, as both these substances can impact heart rate.

In the last part of the study, I introduced a “relaxation period” in which I measured participant’s resting heart rate. The resting heart rate data allows me to compare the participant’s heart rate during the study tasks to a more serene environment (which becomes the “baseline” measure for comparison) (Valins 1966; Turner, Sherwood, and Light 1992). The relaxation period lasted approximately five minutes: participants could read magazines provided by the researcher, take a nap, or just sit quietly while soft music played in the background.

After the relaxation period, participants read a debriefing statement, removed the heart rate monitor, and returned the heart rate monitor to the researcher. Participants had the opportunity to ask any questions they had about the study before being offered compensation.

## **Recruitment**

There were only two eligibility criteria to participate in the study: individuals had to be at least eighteen years old, and could not have a pacemaker, defibrillator, or other implanted electronic device (owing to safety precautions with the heart rate monitor). On average, the study took between sixty and ninety minutes to complete.

Each participant was offered \$20 cash for taking part in the study, which served as a fairly decent incentive for everyday citizens to participate. Each everyday citizen in the study accepted the \$20 compensation, but elected official participants did not always accept it (approximately one in five refused payment).

Because the participants in the study come from potentially overlapping populations, I employed specific recruitment strategies to sample everyday citizen participants and elected officials. I recruited everyday citizen participants by placing advertisements in several media outlets throughout Minnesota and South Carolina. In particular, I posted announcements on Craigslist (a widely-used website offering free posting of classifieds and announcements). I posted the Craigslist announcements in the Twin Cities MN, Duluth MN, Moorhead MN, Greenville/ Upstate SC, Florence SC, Myrtle Beach SC, Charleston SC, and Columbia SC Craigslist sites. I also advertised via print and online advertisements in a large-circulation newspaper in Minnesota. In addition, I posted fliers about the study at community centers, public libraries, and local businesses. Most everyday citizen participants contacted me via e-mail to sign up to participate, though a smaller number called a phone number set up specifically for the research study in order to sign up.

I recruited potential elected official participants by using public records (in this case, the Internet) to enumerate a list of elected officials currently serving Minnesota or South Carolina at the state and local level. In Minnesota, this list included state representatives, state senators, mayors, and city council members. To create a robust list, I narrowed the search to include city officials in the top twenty-five most populous cities and towns in Minnesota (based on population enumerations from the 2000 Census), and other cities and towns of regional importance (in the event they were not one of the twenty-five most populous). I performed a similar list enumeration using the Internet for elected officials in South Carolina. The list

included state representatives, state senators, mayors, city council members, and county council members. In both states, I omitted city administrators, city managers, city clerks, and school board members from inclusion in the sample.

Not surprisingly, this list was enormous. For efficiency, I narrowed the large list into a smaller one by deciding to only contact elected officials who had a publicly available e-mail address.<sup>6</sup> My initial point of contact with elected officials was via e-mail, followed by a phone call within five days of the initial e-mail contact.<sup>7</sup>

The initial desired proportion between elected officials and everyday citizens was 50/50, with a total study N of 400. Due to recruitment issues (see Appendix C), the final proportions of elected officials and everyday citizens who participated in the study are not equal. The sample is also unequal by way of state-level participation (differences in political culture may account for much of this gap). In the data analysis, I account for these unequal proportions (between elected/ everyday, and between Minnesota/ South Carolina) as necessary.

**Table 2.1: Participation Count by Status and State**

	<b>Everyday</b>	<b>Elected</b>	<b>Total</b>
<b>Minnesota</b>	102	55	157
<b>South Carolina</b>	77	35	112
<b>Total</b>	179	90	<b>N = 269</b>

<sup>6</sup> Most all elected officials at the state level list their email address on their legislative websites. Most large cities have city websites where mayor/ council contact information is available, but not all mayors/ city council members/ county council members provide their e-mail addresses. Some elected officials use “form” email directed through a legislative aide or administrative assistant. Others only list their office mailing addresses. A few websites simply had the names of the elected officials and no contact information.

<sup>7</sup> Conceivably, elected officials who publicly list and use an e-mail address for constituent contact could differ in important ways from those who do not use e-mail, but I saw no discernable bias in these individual’s qualities. Older elected officials were just as likely as younger ones to have e-mail. Men and women were equally likely to list their e-mail address. One trend I did discern was that elected officials in especially rural, conservative areas were less likely to list publicly available e-mail addresses. This tended to be more true in South Carolina than in Minnesota.

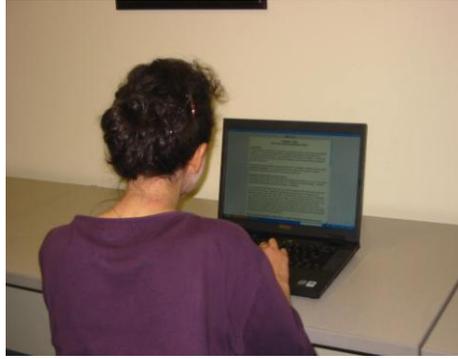
Data collection began in Minnesota on July 1, 2008. In Minnesota, most everyday citizen participants took the study at the Social and Behavioral Sciences Laboratory at the University of Minnesota (hereafter, SBSL). I conducted lab sessions in the morning, afternoon, and evening to accommodate participants' schedules as much as possible. Everyday citizens in the Twin Cities metro area came to the SBSL to participate, while everyday citizens outstate took the study on the mobile lab computers (typically administered at a local public library).<sup>8</sup> All Minnesota elected officials were given the option of either coming to the campus lab, or I brought the study to them (via a laptop computer) at a date and time convenient for their schedule. In Minnesota, approximately nine out of ten elected officials opted to have the study brought to them. Data collection in Minnesota took place in July and August 2008, October 2008, January 2009, February 2009, March 2009, and May-June 2009.

Data collection in South Carolina ran from October 2008 to May 2009. Most everyday citizens in South Carolina took the study at the Watson Cognition Laboratory at Furman University. I conducted lab sessions in the morning, afternoon, evenings, and weekends in order to maximize participation. Everyday citizens in the Greenville metro area came to Furman to participate, and everyday citizens from outstate took the study on mobile lab computers (usually set up at public libraries).<sup>9</sup> All South Carolina elected officials had the option of either coming to the lab at Furman or having me bring the study to them at a convenient date and time. Approximately eight out of ten elected officials in South Carolina opted to have the study brought to them.

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<sup>8</sup> In Minnesota, "outstate" refers to any area outside the Twin Cities metro.

<sup>9</sup> In South Carolina, "outstate" refers to any area outside the Greenville/ Spartanburg metro.



**Picture 2.2: Mobile Lab**

### **Sample Demographics**

Participants in the study came from two unique subject pools in two distinct states. The study never intended to have a nationally representative sample. To illustrate how the study sample compares to a nationally representative sample, I compare the study demographics to the demographic makeup of the 2004 American National Election Study (University of Michigan). The ANES uses a well-developed, nationally representative sample. These comparisons are reported in Table 2.2.

**Table 2.2: Comparison of Selected Sample Demographics to 2004 ANES**

	2004 ANES	METIS response options (if different from ANES)	METIS
<b><u>Age</u></b> <ul style="list-style-type: none"> <li>• ≤ 29</li> <li>• 30-45</li> <li>• 46-66</li> <li>• ≥ 67</li> </ul>	21% 30% 28% 0%  N = 1212		28% 24% 41% 7%  N = 269
<b><u>Education</u></b> <ul style="list-style-type: none"> <li>• Grade school</li> <li>• High school</li> <li>• Some college, no degree</li> <li>• College/ post-graduate degree</li> </ul>	5% 41% 29% 26%  N = 1212	No high school High school/ GED Associate’s degree Bachelor’s degree Graduate degree	0% 21% 10% 39% 30%  N = 267
<b><u>Race</u></b> <ul style="list-style-type: none"> <li>• White</li> <li>• Black</li> <li>• Asian</li> <li>• Native American</li> <li>• Hispanic</li> </ul>	70% 16% 3% 4% 8%  N = 1204	Caucasian (non-Hispanic) African-American Asian/ Pacific Islander Caucasian (Hispanic) Other	84% 7% 2% 5% 3%  N = 269
<b><u>Gender</u></b> <ul style="list-style-type: none"> <li>• Male</li> <li>• Female</li> </ul>	49% 51%  N=1212	Male Female Other	55% 44% 1%  N= 269
<b><u>Party identification</u></b> <ul style="list-style-type: none"> <li>• Democrat</li> <li>• Republican</li> <li>• Independent</li> </ul>	49% 41% 10%  N=1197	Democrat Republican Other None	53% 27% 10% 10%  N = 267
<b><u>Ideological identification</u></b> <ul style="list-style-type: none"> <li>• Extremely liberal</li> <li>• Liberal</li> <li>• Somewhat liberal</li> <li>• Moderate</li> <li>• Somewhat conservative</li> <li>• Conservative</li> <li>• Extremely conservative</li> <li>• Don’t know</li> </ul>	2% 9% 12% 26% 13% 16% 3% 20%  N = 1059	Very liberal Liberal Slightly liberal Moderate Slightly conservative Conservative Very conservative	11% 25% 17% 16% 10% 17% 4%  N = 269

## Demographic Differences Between Elected Officials and Everyday Citizens

In terms of demographics, how do elected officials and everyday citizens in the METIS study compare? This section offers a snapshot.

*Age:* Considering the sample as a whole, the average participant was forty-three years old (median age forty-four). Elected officials tended to be older, with a mean age of fifty-three (median age fifty-four). Everyday citizens were typically younger, with a mean age of thirty-eight (median age thirty-three).

*Gender:* By way of gender, the total sample of participants was 55% male and 44% female. 73% percent of elected officials in the study were male, and 27% percent were female. Among everyday citizens, 46% percent were male and 53% were female.

*Education:* The sample as a whole is likely more educated than a nationally representative sample would have been. Elected officials tended to be more educated than everyday citizens, with more than four in ten holding a master's degree or higher.

**Table 2.3: Education, by Status**

	<b>Elected</b>	<b>Everyday</b>	<b>Sample</b>
High school degree/ GED	8%	27%	21%
Associate's degree	10%	11%	10%
Bachelor's degree	37%	39%	39%
Master's degree +	44%	23%	30%

*Income:* Elected officials reported significantly higher household income than everyday did citizens. Forty-four percent of elected officials reported household earnings greater than \$120,000, as compared to 5% of everyday citizens. Nationally, less than fifteen out of one hundred households earn \$120,000 or more on an annual basis (U.S. Census Bureau 2005). Only 1% of elected officials reported household earnings of less than \$15,000, whereas nearly 20% of everyday citizens came from households in this income bracket. Nationally, about fifteen percent of households report annual income earnings of less than \$15,000 (U.S. Census Bureau).

**Table 2.4: Household Income, by Status**

	<b>Elected</b>	<b>Everyday</b>	<b>Sample</b>
Less than \$15,000	1%	19%	13%
\$15k-\$29,999	3%	15%	11%
\$30k-\$44,999	3%	17%	13%
\$45k-\$59,999	6%	13%	10%
\$60k-\$74,999	4%	9%	7%
\$75k-\$89,999	10%	6%	7%
\$90k-\$104,999	8%	7%	7%
\$105k-\$119,999	17%	2%	7%
\$120k +	44%	5%	18%

*Political sophistication:* Elected officials were much more likely to score highly on the seven-item political knowledge quiz (eight in ten scored six or better, compared to five in ten everyday citizens). Everyday citizens were twice as likely as elected officials to receive a low score on the political knowledge quiz.

**Table 2.5: Political Sophistication (categorical), by Status**

	<b>Elected</b>	<b>Everyday</b>	<b>Sample</b>
Low (0-2)	12%	17%	16%
Medium (3-5)	8%	33%	25%
High (6-7)	80%	50%	59%

*Political Ideology:* Elected officials and everyday citizens also differed in their response to the political ideology measure. Elected officials were more likely than everyday citizens to identify themselves as either politically moderate or politically conservative, whereas everyday citizens were more likely to identify themselves as politically liberal.

**Table 2.6: Self-Reported Political Ideology, by Status**

	<b>Elected</b>	<b>Everyday</b>	<b>Sample</b>
Very conservative	11%	1%	4%
Conservative	24%	14%	17%
Slightly conservative	11%	10%	10%
Moderate	21%	13%	16%
Slightly liberal	13%	18%	17%
Liberal	17%	28%	25%
Very liberal	2%	15%	11%

*Party Identification:* In the sample, elected officials were more likely to identify themselves as Republicans, while everyday citizens were more likely to identify themselves as Democrats. Across the sample as a whole, there is a nice distribution of identifiers from both major parties, those who identify with third parties, and those who do not identify with any party.

**Table 2.7: Self-Reported Partisanship, by Status**

	<b>Elected</b>	<b>Everyday</b>	<b>Sample</b>
<b>Democratic</b>	40%	58%	52%
<b>Republican</b>	42%	19%	27%
<b>Other</b>	8%	12%	11%
<b>None</b>	9%	10%	10%

In summary, elected officials differ from everyday citizens on several demographic factors, including education, income, political knowledge, and political ideology, and involvement in politics. The sample, however, is not as balanced as a nationally representative sample would have been. Citizens in the study sample are significantly more likely to identify themselves as politically liberal, and also more likely to identify as Democrats. The study sample of everyday citizens is Democratic and liberal, while the sample of elected officials is quite balanced. This may have important implications for later analysis.

The last table of this chapter is a correlation matrix describing the relationship between status and these demographic factors, as well as the relationship of these demographic variables to each other. These correlations show the direction and strength of relationships, but

correlation is different from causation. The following results should not be taken to mean that being an elected official causes an individual to be more educated, or that being more educated causes an individual to be an elected official. Instead, this matrix simply shows whether two variables are related, and describes the direction and strength of the relationship.

**Table 2.8: Correlation Matrix of Factors Significantly Related to Status**

		Status	Education	Income	Political Sophistication	Political Ideology	Political Involvement
<b>Status</b>	Pearson Correlation	1.000	.261**	.696**	.220**	.316**	.681**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	268	266	151	261	268	267
<b>Education</b>	Pearson Correlation	.261**	1.000	.342**	.195**	.048	.234**
	Sig. (2-tailed)	.000		.000	.002	.432	.000
	N	266	267	150	260	267	266
<b>Income</b>	Pearson Correlation	.696**	.342**	1.000	.268**	.407**	.579**
	Sig. (2-tailed)	.000	.000		.001	.000	.000
	N	151	150	151	149	151	151
<b>Political Sophistication</b>	Pearson Correlation	.220**	.195**	.268**	1.000	.148*	.323**
	Sig. (2-tailed)	.000	.002	.001		.017	.000
	N	261	260	149	262	262	261
<b>Political Ideology</b>	Pearson Correlation	.316**	.048	.407**	.148*	1.000	.086
	Sig. (2-tailed)	.000	.432	.000	.017		.159
	N	268	267	151	262	269	268
<b>Political Involvement</b>	Pearson Correlation	.681**	.234**	.579**	.323**	.086	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.159	
	N	267	266	151	261	268	268

\*\*Correlation is significant at the 0.01 level (2- tailed).

\*Correlation is significant at the 0.05 level (2 tailed).

Table 2.8 shows that elected official status is positively related to education, indicating that elected officials are significantly more likely than everyday citizens to hold higher levels of educational attainment. Status is positively related to income: elected officials are significantly more likely than everyday citizens to have higher household incomes. Also, elected officials are more likely than everyday citizens to score highly on the political knowledge quiz. Elected official status is also positively related to political ideology, indicating that elected officials in the sample were more likely to identify as moderate or conservative as compared to everyday citizens. Lastly, political involvement is significantly and positively related to status: elected officials are more likely than everyday citizens to be registered to vote, to have ever donated money to political causes, and to have volunteered for political candidates or parties.

Education in its own right is significantly and positively related to income (higher education associated with higher income), higher levels of political knowledge, and more involvement in politics. There is no significant relationship between education and political ideology. Income is significantly and positively related to political knowledge, more conservative ideology, and political involvement. Political knowledge is significantly and positively related to political ideology and political involvement.

Again, correlation does not imply causation. Elected officials tend to have higher levels of education and household income. They also tend to be more knowledgeable about politics, and tend to be more politically involved than everyday citizens. The important point to take away is that several of these demographic factors (education, political knowledge, political involvement) are known to affect how people use information. The fact that elected officials tend to be more educated, more politically knowledgeable, and more politically involved could explain the potential differences we observe in decision-making (if we observe any).

## **Conclusions**

In addition to describing the research methods used in the project, this chapter explained how the study was administered and how participants were recruited. While the study sample is not representative of a national sample, it does capture and reflect the special qualities of two distinct groups that I was interested in studying. Moreover, the methods used in this study (a highly controlled information board experiment coupled with a wide range of political, psychological, and biophysical measures) will allow for a direct comparison of elected officials and everyday citizens. To date, no other study has done this.

This chapter also illustrated (in very broad brush strokes) how elected officials in the sample differed from everyday citizens on several potentially important demographic factors. Elected officials in the sample tended to be more educated, more knowledgeable about politics, more involved in politics, and also tended to be much wealthier than everyday citizens. Elected officials and everyday citizens are different in these regards, but how different are they when it comes to how they make political decisions? Moreover, how large a role do demographic differences play in how people make political choices? Chapter 3 tackles these questions.

### **Chapter 3: Decision-Making: What Do Elected Officials and Everyday Citizens Do?**

When it comes to politics, the question of who is best equipped to make political decisions is a continuous and unresolved one. When citizens delegate their political decision-making power to elected officials, they do so with the expectation that the people they elect will make decisions that are at least as good – if not better – than what they themselves would make. At least, this is the hope.

But empirically speaking, what do we know about how elected officials and everyday citizens differ in their political decision-making? The answer is: not much.

America has a long and tumultuous relationship with populism, the belief that common people are wise enough to make their own decisions rather than delegating those decisions to elites (Haskell 2001; Dahl 1954). On the one hand, American political philosophy praises and promotes the notion of citizen sovereignty (de Tocqueville 1988; Kazin 1998). On the other hand, people tend to have little confidence in the rational thinking abilities of other citizens – especially people they do not know. The happy medium between these two views is to allow citizens to select an agent (i.e.: an elected official) to make political choices for them while retaining the right to “fire” them (i.e.: not re-elect them) if the agent fails to meet citizens’ expectations.

America’s lack of hereditary rule means that all elected officials have also been everyday citizens (Lipset and Marks 2000). There is no scientific evidence to suggest there would be any innate cognitive differences between these two groups. But the experience of making political decisions again and again could very well impact how elected officials think, reason, and react in political decision-making scenarios. Just as practice helps a football player develop his skills, it may well be that an elected official builds his or her cognitive skills by repeatedly making political decisions.

Aside from practice with political decision-making, one of the core differences between elected officials and everyday citizens is context: elected officials make different kinds of decisions under different kinds of contextual pressures (Lau 2003). Different contexts encourage people to rely on particular decision-making processes over others. The test then is this: when given the same amount and content of information, and when faced with the same contextual pressures, to what extent do elected officials and everyday citizens make decisions similarly or differently?

In this chapter, I examine whether elected officials and everyday citizens differ in the cognitive *processes* they use to make political decisions: how they use information, what kinds of information they use, how much information they view, and how long it takes them to make decisions.

Data from the METIS project makes a direct comparison between elected officials and everyday citizens possible. In this project, elected officials and everyday citizens participated in a large-scale experimental study contained on a specialized computer program called METIS. In the study, elected officials and everyday citizens were asked to solve a series of identical public policy problems (thus leveling the kinds of decisions they are asked to make).<sup>10</sup> I standardized the amount and content of information available for participants to use in evaluating the problem. Moreover, participants had a limited amount of time to make a decision. The computer program recorded what information participants accessed, in what order they accessed it, and what choice they finally selected. The computer program also measured how long they used information before registering their choice.

It may be the case that elected officials and everyday citizens use information differently when making political choices. This is likely not a product of any innate differences between the

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<sup>10</sup> In the analysis, I will look at each decision problem separately. As a safeguard against order effects, METIS randomized which decision problem participants received first.

two groups, but instead is due to a marked and consistent difference *in other characteristics* known to impact how people use information to make political choices. People who have higher levels of political knowledge and higher levels of educational attainment – which elected officials tend to have in spades – may very well use information differently than those who know little about politics or those who are less educated. In the first part of the analysis, I offer a basic look at how elected officials and everyday citizens (as groups) use information to make political choices. In the latter part of the chapter, I control for variables known to impact decision-making which are also significantly correlated to elected official status, especially political knowledge and education. With these controls, do differences between the two groups disappear or persist (if there are indeed any differences)?

In this analysis, I focus on people's decision-making *process*: what information do they use, how much information do they use, and how long do they take to reach a decision. To do this, I use three standard measures commonly used in other studies of decision-process: the depth of information search, the degree to which the individual compares the different alternatives, and the amount of time elapsed before the individual registers their decision. Taken as a whole, these measures indicate the degree to which the individual uses a compensatory or non-compensatory information search strategy. Compensatory strategies most closely follow the standards of the rational choice model, with an extensive use of information cues and thorough examination of choice alternatives.

According to the dominant theoretical paradigm, one would expect elected officials to use more compensatory strategies, and everyday citizens to rely on non-compensatory strategies. In the next section, I explain this rationale.

## How People Make Sense of Information: A Primer

Most of the decisions we make on a daily basis rely on some form of memory – memories about our prior experiences, and information we may have learned at a previous time (Redlawsk 2004). The foundation of memories is information (Hastie and Dawes 2001). We rely on the information stored in both short-term and long-term memory to help us make choices on a daily basis.

Building on Redlawsk's metaphor of papers stored inside file folders within a drawer (2004), information stored in our memories lies in wait ready to be used. But just how large is this filing drawer, and how often do we use all the information available inside it? While the brain is capable of encoding and storing a great deal of information, people have limited cognitive *processing* abilities. In other words, while the filing drawer may be quite deep, we can only "pull" so many files at a time and can only use so many pieces of information at once.

This view stands in direct contrast to rational choice theory. Rational choice assumes not only is the filing drawer deep, but that the secretary can pull many files and use multiple pieces of information at once, constantly revising and updating her information and evaluations until the task of judgment or decision-making is complete. Rational choice models assume individuals are rational, omniscient calculators: because individuals seek outcomes that will maximize their self-interest, they ought to seek and digest as much information about alternatives as possible in hopes of selecting the most optimal choice, at least to the point where the cost of obtaining more information outweighs the anticipated benefits (von Neumann and Morgenstern 1947; Arrow 1951; Downs 1957). According to the rational choice model, information processing is a blend of long-term and short-term memories about the positive and negative attributes of each alternative. Thus, the process for rational decision-making process would be one in which individuals consider the full range of relevant information about alternatives, and selects the

alternative that maximizes their subjective expected utility (based on their mental calculations of what will benefit them most).

Empirical studies repeatedly demonstrate that human beings do not often follow the rigorous information-seeking standards of rational choice models (Schneider and Shanteau 2003; Lau and Redlawsk 2006; Green and Shapiro 1994). Typically, the brain stores three to seven chunks of information in short-term memory at once (Miller 1956). Though there are millions of pieces of sensory information available to us at any moment, the brain actively directs our attention towards certain information and away from others in order to suit the task at hand – and all without our conscious effort to do it (Gray 1987; Pinker 1997). So what information do we attend to, and what information do we leave aside?

Though rational choice models assume individuals seek and absorb as much information as possible about each alternative before making a choice (again, taking into account that information is costly), a sizeable body of research in psychology and neuroscience demonstrates that the world of information is simply too much for anyone to address systematically or consistently for long (Fiske and Taylor 1981; Simon 1979; Kunda 1990). Rather than “rational, omniscient calculators,” humans are more accurately described as “boundedly rational information processors” (Simon 1957). Human beings rarely meet the standards of rational choice in their decision-making: rather, they depart from these expectations in systematic, well-documented ways, especially with regards to information use (Kahneman, Slovic, and Tversky 1982; Tversky and Kahneman 1974; Tversky and Kahneman 1981; Simon 1985; Nisbett and Ross 1982).

When asked to make a decision, individuals can utilize several different strategies to access and process new information (Lau 2003: 40; Lau and Redlawsk 2006). Particular features of the decision-making environment can impact which information-use strategies end up being

employed. For example, the volume and content of information, the difficulty of the task, the potential consequences of one's decision, and the number of available alternatives can all affect how deeply people use information, what kinds of information they attend to, and how quickly they reach a decision (Lau and Redlawsk 1997, 2001, 2006; Svenson 1979; Herstein 1981; Riggle, Johnson, and Hickey 1996; Jackson and Dutton 1988; Huang 2001; Payne, Bettman, and Johnson 1993).

However, most information use and cognitive processing occurs below the level of conscious awareness (Damasio 1994). In most instances, people are not concerned with the logical consistency of their decision-making process, or the amount of information they use and in what order they use it. Instead of focusing on their process of their decision-making, people tend to be more interested in the anticipated results of their decision-making, and hope that their decisions (however made) will lead to good outcomes (Yates, Veinott, and Palatano 2003). Most people *want* to make good decisions, but they also want to make decisions without having to exert the cognitive heavy-lifting. These goals – good decisions and minimal effort – often conflict (Lau and Redlawsk 2006: 29; Einhorn and Hogarth 1981; Lau 2003; Payne, Bettman, and Johnson 1993).

Decision-making scenarios rarely come with the luxuries of unlimited time, unlimited information, and a peaceful decision-making environment with no external demands. In the real world, stressors and limitations, whether internal or external, confront us in practically every choice. Recognizing these factors, the very real potential for value conflict in decision-making is palpable. The possibility of value conflict – preference for one alternative based on one factor, but preference for another alternative based on a different factor – plagues many decision situations (Jervis 1976; Hogarth 1987). As such, two different cognitive strategies help

people to manage (or avoid) value tradeoffs: these are known as compensatory and non-compensatory strategies.

*Compensatory strategies* are complex cognitive evaluations in which people typically use a great deal of information in evaluating different alternatives. In a compensatory strategy, individuals use the same kinds of information to compare different alternatives. In forming these comparisons, they sum up the positive and negative attributes of an alternative, and compare it to the sums of the attributes of other alternatives. By weighing more heavily in the individual's evaluative calculus, positive attributes can compensate for negative attributes, and potential value conflict is reduced (Lau 2003: 34; Redlawsk 1994). In a compensatory strategy, the perceived outcomes or values associated with each alternative must be considered commensurable (Lau 2003: 34). Compensatory strategies would indicate the use of a decision-making process most similar to the standards of the rational choice model – voluminous information use, online calculus comparing each alternative on the basis of the same kinds of information or evaluative criteria.

*Non-compensatory strategies* reduce value conflict by eliminating certain alternatives as soon as negative information is learned about them. Because positive attributes cannot compensate for negative information, alternatives are usually eliminated from the consideration set as soon as negative information is learned. This elimination strategy does leave room for incomplete information. Commensurability of values or outcomes is typically not relevant in this type of strategy (Lau 2003: 34). The hallmarks of a non-compensatory strategy are a shallower information search, and a pattern of *not using* the same kinds of information to evaluate each alternative.

In this chapter, I test whether and to what extent elected officials differ from everyday citizens in their use of compensatory or non-compensatory strategies when it comes to political

decision-making. Compensatory/ non-compensatory is not an either/ or designation: rather, it helps to think of information-use strategies as a continuum between more compensatory on one end and less compensatory on the other. A long normative tradition treats compensatory strategies as the gold standard (i.e.: using more information is better than using less; thoughtful consideration of alternatives is better than haphazardly selecting a choice) (Herek, Janis, and Huth 1987; Janis 1977; Janis and Mann 1972; Svenson 1979; Lau 2003; Lau and Redlawsk 2006; Mintz, Geva, Redd, and Carnes 1997; Lau and Redlawsk 1997; Payne, Bettman, and Johnson 1993).

The goal, then, is to create a composite measure that will capture the degree to which one's information use is compensatory or non-compensatory. The compensatory/ non-compensatory is a composite variable created from three separate measures of decision-process: depth of search, comparability of alternatives, and time elapsed before reaching a decision. Each of these measures has been used extensively in other studies of decision-making process (Lau and Redlawsk 2006; Mintz, Geva, Redd, and Carnes 1997; Payne, Bettman, and Johnson 1993). Before creating the composite dependent variable of compensatory/ non-compensatory strategy, I analyze each of the composite elements as separate dependent variables. In the next section, I explain how each variable is conceptualized and measured.

### **Depth of Search**

When faced with an abundance of information, potential value conflicts, and a limited amount of time to make a choice, how much information do people seek? According to the rational choice paradigm, individuals should access as much problem-relevant information as possible before time is up, or until the cost of seeking additional information outweighs the anticipated benefits (Downs 1957). I measure depth of search as the amount of relevant, non-repetitive information the individual accesses before making the decision or time runs out (Lau

1995, 2003; Redlawsk 2004). This is not the same as learning from information: someone can access a great deal of information and learn little, or view relatively little information and learn a great deal. Depth of search can, however, point to the use of compensatory or non-compensatory rules. Deeper searches are associated with compensatory decision rules (comparing a high volume of information across alternatives), while shallow searches (comparing few pieces of information across alternatives) suggest non-compensatory rules are in play (Payne, Bettman, and Johnson 1993).

Each information board contained thirty cells of unique information. The information boards were static boards, so the amount and content of information remained constant as the participant progressed through the task. There was no limit on how many times the participant could access the same piece of information, but participants had no more than five minutes to use the information board and register their decision. I designed the information board so that most of the cells in the information board were roughly the same length in terms of word count.

Three pieces of information in each board were wholly irrelevant to the scenario. This row, labeled "other news" contained short popular interest paragraphs, about topics ranging from the anniversary of the LEGO, the murder of a fictitious celebrity, facts about giraffes, and the best novels of the twentieth century. This filler information is not counted in the depth of search measure. The resulting depth of search variable is a numeric measure ranging from 0 (minimum) to 27 (maximum). If the participant accessed the same cell more than once (which many people did), information accessed more than once is not counted doubly.

**Figure 3.1: Screen Shot of Economy Scenario Information Board**

	<b>Option A – Do nothing</b>	<b>Option B – Cut interest rates</b>	<b>Option C – Issue emergency loans</b>
<b>Effect on Economy</b>			
<b>Foreign Policy</b>			
<b>Response from Interest Groups</b>			
<b>Effect on Housing Market</b>			
<b>Military</b>			
<b>Business and Industry</b>			
<b>Employment</b>			
<b>Public Opinion</b>			
<b>History</b>			
<b>Other news</b>	<b>Not included</b>	<b>Not included</b>	<b>Not included</b>

Time Remaining:  
4:16

Make Decision

When it comes to search depth, people who use a great deal of information in one scenario tend to engage in similarly deep searches in the other scenario (correlation coefficient = .379, significant at  $p$ -value  $<.000$ ,  $N=269$ ). This said, an individual’s tendency to use a little (or a lot) of information is fairly stable across these different political decision-making scenarios.

Did elected officials use more or less information than everyday citizens? As it turns out, elected officials and everyday citizens used approximately the same amount of information in each of the decision-making scenarios. Elected officials accessed an average of twelve items in the economic crisis scenario, whereas everyday citizens accessed an average of thirteen. In the drugs scenario, elected officials accessed an average of ten pieces of information, while everyday citizens averaged eleven pieces. This difference in means is not statistically significant.

**Table 3.1: Depth of Search, by Status**

Status		Depth of search, economy scenario	Depth of search, drugs scenario
<b>Everyday</b>	Mean	12.60	10.50
	N	178	178
	Std. Deviation	6.98	6.21
<b>Elected</b>	Mean	12.11	9.99
	N	90	90
	Std. Deviation	7.06	6.49
<b>Total</b>	Mean	12.44	10.33
	N	268	268
	Std. Deviation	7.00	6.30

If elected officials and everyday citizens do not differ in the amount of information they access to make a decision, might they differ in *the kinds* of information they choose to use? One school of thought suggests that given their expertise in (by way of daily proximity to) public policy, elected officials may be more adept at honing in on “relevant” information when it comes to political problems (Tetlock 2005, but see also Goren 2000).

Analyzing each scenario separately, elected officials and everyday citizens utilized mostly the same kinds of information. Elected officials were no more likely than everyday citizens to use certain pieces of information more than others in the economic crisis scenario. They did not gravitate towards information about public opinion, or the response from interest groups, or the effect on the economy. Elected officials were also just as likely as everyday citizens to access the “other news” pieces (containing entertaining, but wholly irrelevant snippets of information), and this was the case for both scenarios.

In the drugs scenario, everyday citizens were slightly more likely than elected officials to look at information about the economy (ANOVA  $F = 2.754$ ,  $p$ -value significant at  $>.098$ ,  $N = 269$ ). This is the only attribute of information where there was a difference between elected officials and everyday citizens on what kinds of information they used.

### **Comparability of Alternatives**

Comparability of alternatives is the second measure of decision-process. In examining whether alternatives are comparable, I am interested in the degree to which the individual accesses *the same kinds of information* about each alternative. High comparability between alternatives suggests that consideration of each alternative is roughly equal (Redlawsk 2004: 5). A search that is both deep and highly comparable points towards a compensatory strategy, whereas a search that is shallow and low in comparability suggests a non-compensatory strategy (Redlawsk 2004).

Each static information board contained thirty pieces of information of which twenty-seven were relevant to the decision-task (the row of “other news” items is again excluded). The information board (considering only relevant information) appears as a 9x3 matrix. To measure comparability of alternatives, I calculate the proportion of cells accessed per attribute. This is illustrated in Figure 2. For each attribute, the participant can access zero out of three (0/3), one out of three (1/3), two of three (2/3), or three of three (3/3).<sup>11</sup> I then sum these proportions across the nine attributes. The comparability of alternatives measure is now a score ranging from 0 (the participant compared no alternatives because they accessed no information) to 9 (the participant compared all alternatives across all attributes). By default, deeper searches are more likely to have high comparability of alternatives relative to shallow searches.

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<sup>11</sup> See Redlawsk (1994) and Lau and Redlawsk (2006) for other information board analyses using proportions to measure comparability of alternatives.

**Figure 2.2: Information Board Comparability of Alternatives Measure (Yellow Cells Indicate Items Accessed)**

	Option A – Do nothing	Option B – Cut interest rates	Option C – Issue emergency loans	Comparability Score
Effect on Economy				2/3
Foreign Policy				1/3
Response from Interest Groups				1/3
Effect on Housing Market				0/3
Military				0/3
Business and Industry				2/3
Employment				0/3
Public Opinion				3/3
History				0/3
Other news	Not included	Not included	Not included	
				= 3

Similar to the findings regarding depth of search, people who engage in high comparability searches in one scenario tend to engage in similarly comparable searches in the other scenario (correlation coefficient = .373, significant at  $p\text{-value} < .000$ ). People who use and compare a great deal of information in one situation tend to do the same in other situations. This said; individuals' proclivities to use and compare information were stable across these two different political decision-making tasks.

Analyzing each scenario separately, I find that elected officials and everyday citizens scored roughly equally on the comparability of alternatives measure. This means elected officials and everyday citizens were about equally as likely to access the same amount of information within each row they selected: elected officials did not access more information within any particular row than everyday citizens did. For example, elected officials did not disproportionately use *more* information about public opinion (or any other attribute) than

everyday citizens did. This finding holds across each of the ten attributes (i.e.: the rows) in both political decision-making scenarios.

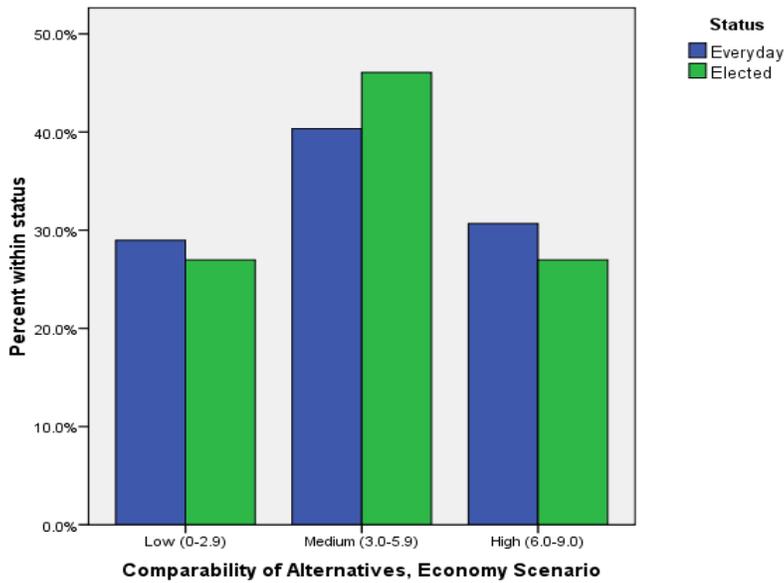
The maximum possible comparability of alternatives score was nine, and the lowest possible score was zero. As illustrated in Table 2, everyday citizens and elected officials scored roughly the same on comparability of alternatives within the scenarios. Both groups exhibited lower comparability of alternatives in the drugs scenario as compared to the economic crisis scenario. The standard deviations for each group are also quite similar.

**Table 3.2: Comparability of Alternative Scores, by Status**

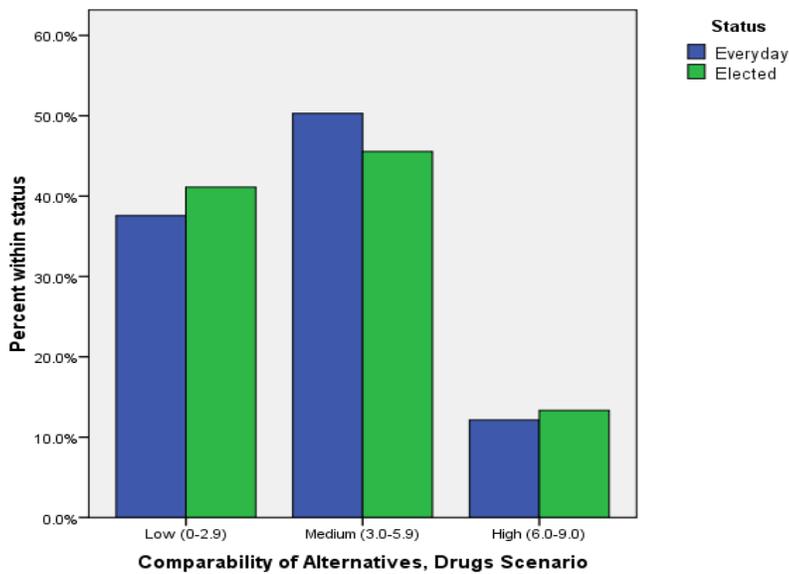
Status		Comparability of Alternatives Score, Economy Scenario	Comparability of Alternatives Score, Drugs Scenario
<b>Everyday</b>	Mean	4.49	3.50
	N	178	178
	Std. Deviation	2.47	2.07
<b>Elected</b>	Mean	4.36	3.33
	N	90	90
	Std. Deviation	2.54	2.16
<b>Total</b>	Mean	4.45	3.44
	N	268	268
	Std. Deviation	2.49	2.10

To better illustrate the relationship between comparability of alternatives and decision-making, I transformed the original comparability of alternatives measure (a numeric variable ranging from zero to nine) into an ordinal measure of low (0 -2.9), medium (3.0 – 5.9), and high comparability (6.0-9.0). Figure 3 and Figure 4 show how elected officials and everyday citizens ranked in high, medium, and low comparability scores across the two scenarios.

**Figure 3.3: Comparability of Alternatives by Status, Economy Scenario**



**Figure 3.4: Comparability of Alternatives by Status, Drugs Scenario**



As illustrated in Figure 3.3 and Figure 3.4, when we control for the relative proportion of everyday citizens and elected officials, their distributions into categories of low, medium, and high comparability is remarkably equal. In these scenarios, not all elected officials extensively compared alternatives, and not all everyday citizens compared little information. Figures 3.3 and 3.4 illustrate that there is a high degree of variation within the broader group of elected officials and everyday citizens when it comes to the extent to which an individual compares

choice alternatives. The comparability of alternatives measure indicates that elected officials did not disproportionately use *more* information about public opinion (or any other attribute) than everyday citizens did. This finding holds across all of the ten attributes in both political decision-making scenarios.

### **Elapsed Time**

The third key process measure is elapsed time to decision: the time it takes for a participant to use the information board and register a decision. What, if anything, is indicated by making a “slower” or “faster” decision? As in the fable of the tortoise and the hare, common wisdom suggests that “slow and sure” is better than “fast and careless.” For now, I leave this normative claim aside. Instead, as other studies have done, measuring the time it takes for an individual to make a decision can serve as a rough proxy for cognitive effort (Donders 1969; Dovidio et. al 1997; Bassili and Scott 1996; Schreiber and Iacoboni 2002; Huckfeldt, Sprague, and Levine 2000).<sup>12</sup>

In each decision-task, participants had a finite amount of time to use the information board and register their decision. Each decision-task had a five-minute time limit. METIS, the computer software program, was programmed to record what information participants viewed second-by-second, and at what second they exited the decision board to register their decision. If the participant had not exited the information board at the end of five minutes, the computer program automatically closed the information board for them and forced the participant to indicate their decision choice. The elapsed time variable, measured in seconds, ranges from 1 to 300. Participants who reached the five-minute limit without having registered a decision-choice are counted as 300.

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<sup>12</sup> Several other factors can account for elapsed time to decision, especially average reading speed. Reading speed likely varies with age and educational attainment. In this analysis, I assume reading speed follows a normal distribution.

In each decision-making task, the elapsed time variable follows a non-normal distribution, and is skewed towards slower times and longer times with fewer data points falling in the middle range. Based on the previous findings that people retain fairly consistent decision-making habits from one scenario to the other, it should come as no surprise that people who make decisions quickly in one scenario will likely make quick decisions in the other scenario. Individuals who spent a longer time in one scenario were likely to spend a longer time in the other (correlation coefficient = .459, significant at  $p\text{-value} < .000$ ,  $N = 269$ ).

**Table 3.3: Mean Time to Decision, by Status**

	<b>Elected Officials</b>	<b>Everyday Citizens</b>
<b>Economic Crisis Scenario</b>		
Mean Time to Decision (in seconds)	198	205
Standard Deviation (in seconds)	91	88
N	90	178
<b>Drugs Scenario</b>		
Mean Time to Decision (in seconds)	164	177
Standard Deviation (in seconds)	90	87
N	90	178

By way of rough averages, everyday citizens averaged three minutes, forty-one seconds (3:41) to register a decision in the economic crisis scenario, while elected officials averaged 3:18. In the drugs scenario, everyday citizens averaged 2:57, while elected officials averaged 2:22. In each situation, elected officials exited the information board to register their decision an average of thirty seconds faster than everyday citizens. While thirty seconds may seem to be a large spread, the difference in means is not a statistically significant difference – elected officials do not make decisions significantly faster than everyday citizens.

When individuals “register” their decision, this is not necessarily to say that they “knew” at that moment what choice they wanted to make. Individuals may have made up their mind which alternative they preferred, but may have continued using the information board for any number of reasons (curiosity, entertainment, etc.). Understanding this potential difference between “knowing” one’s decision and “executing” one’s decision (Krupnikov 2008), I asked participants to indicate at what point during the decision-task they “knew” which choice they wanted to select. As it turns out, participant’s actual decision speed is significantly correlated with when participants say they knew what choice they wanted to make (economy scenario correlation coefficient .392, significant at  $p\text{-value} < .000$ ,  $N = 269$ ; drugs scenario correlation coefficient .427, significant at  $p\text{-value} < .000$ ,  $N = 267$ ).

In the economic crisis scenario, everyday citizens were significantly more likely than elected officials to report that they knew what choice they wanted to make either very early or somewhat early in the task, while elected officials were more likely to say they knew which choice they wanted to select somewhat late or very late in the task (ANOVA  $F = 4.47$ , significant at  $p\text{-value} < .035$ ,  $n = 267$ ). In the drugs scenario, there was no significant difference between elected officials and everyday citizens in when they say they knew what choice they wanted to select (ANOVA  $F = 1.96$ , significant at  $p\text{-value} < .162$ ,  $N = 265$ ).

So what does this mean? On average, elected officials registered their decisions faster than everyday citizens in both scenarios, but the difference in decision-making speed is not statistically meaningful. Elected officials in the economy scenario said it took them longer to “know” which choice they wanted to select, and this difference with everyday citizens met statistical significance. In the drugs scenario, neither group reported knowing significantly sooner than the other which choice they wanted to make.

## Compensatory/ Non-compensatory Strategies

The last dependent variable of interest captures the degree to which an individual uses a compensatory or non-compensatory strategy in how they use information to make political choices. To refresh, compensatory and non-compensatory strategies are ways of using information. Both strategies are cognitive attempts to manage value conflict, albeit in different ways (compensatory strategies address value conflict head-on by gathering more information; non-compensatory strategies avoid value conflict by limiting information use). Compensatory and non-compensatory strategies are not either/ or: instead, I treat them as a continuum with more compensatory at one end and less compensatory on the other.

Previous studies have used the stand-alone measures of search depth, comparability of alternatives, and elapsed time to *separately* infer the use of compensatory or non-compensatory strategies (Lau and Redlawsk 2006). Based on correspondence with other researchers in this field, I explored how to create a composite measure that would account for each of these separate measures at once.<sup>13</sup> Blending the three variables together, I calculate the compensatory/ non-compensatory composite variable as follows:

$$\frac{\textit{Depth of search} + \textit{Comparability of alternatives}}{\textit{Elapsed time to decision}}$$

The rationale for this measurement is as follows. Individuals can access a large amount of information but compare few alternatives, especially if they only access information about one particular alternative (illustrated and accounted for in the numerator). And because participants could choose to spend as little or as much time using the information board as they liked before registering their decision (up to a five minute time limit), this individual choice is

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<sup>13</sup> Thanks to Rick Lau for several suggestions in this regard.

accounted for in the denominator.<sup>14</sup> Together, this gives a more accurate picture of what kind of information search strategy people use.

The resulting compensatory/ non-compensatory variable is a numeric variable ranging from zero to nine, with higher scores indicating the use of more compensatory strategies. Substantively, this means that individuals with a higher score are using more information, comparing more information across alternatives, and taking a longer time to register their decision.

Based both on common wisdom and an extensive tradition of political theory, one would expect elected officials to be more likely to use compensatory strategies than non-compensatory strategies when it comes to political decision-making. Moreover, one would expect that elected officials would be *at least as likely, if not more likely* than everyday citizens to use compensatory strategies. Does the data support or challenge this notion?

The initial results indicate that if an individual leans towards using a compensatory or a non-compensatory strategy in one decision-making situation, they are highly likely to use the same kind of strategy in the other situation (correlation coefficient .381, significant at p-value < .000, N =269).

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<sup>14</sup> Another way of calculating the compensatory score would be to construct a simple additive model:

$$\text{Depth of search} + \text{comparability of alternatives} + \text{elapsed time} = \text{compensatory score}$$

Using this specification, individuals who have a greater elapsed time would tend to score highly on the compensatory measure, even though they may have accessed little information and compared few alternatives.

The model I specify accounts for individual differences in decision speed by placing decision-speed in the denominator. In my model, individuals who take *less* time to make a decision will have a higher compensatory score than the individual who engages in the same depth of search and compares the same number of alternatives, but takes longer to register their decision.

In due diligence, I calculated the compensatory score using both specifications. I then ran separate analyses on the two different scores. Using the additive score required a modified interpretation of regression coefficients than in the division model, but both model specifications lead to the same substantive conclusions.

Analyzing each scenario separately, a summary of results of the differences between elected officials and everyday citizens is provided in Table 3.4.

**Table 3.4: Mean Compensatory Scores, by Status**

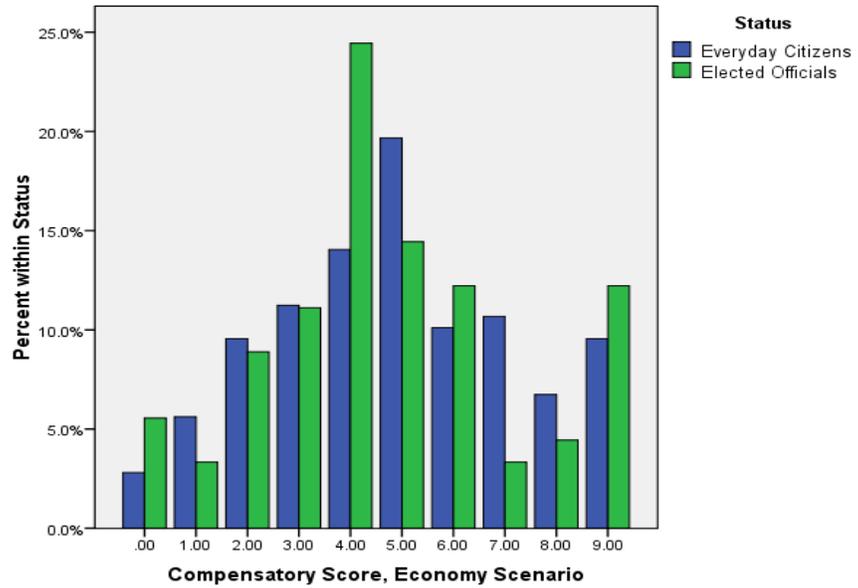
Status		Compensatory Score, Economy Scenario	Compensatory Score, Drugs Scenario
<b>Everyday</b>	Mean	4.88	4.15
	N	178	178
	Std. Deviation	2.39	2.14
<b>Elected</b>	Mean	4.67	3.91
	N	90	90
	Std. Deviation	2.44	2.29
<b>Total</b>	Mean	4.81	4.07
	N	268	268
	Std. Deviation	2.41	2.19

In the economic crisis scenario, the mean compensatory/ non-compensatory score across participants was 4.81, which leans towards the compensatory end of the strategies spectrum. Within the group of elected officials, the mean score was 4.67, while everyday citizens' mean score was 4.88. The difference of .19 is not statistically significant (ANOVA  $F = .477$ , significant at  $p\text{-value} < .490$ ,  $N=267$ ). This means that in the economic crisis scenario, elected officials and everyday citizens were equally likely to use compensatory or non-compensatory strategies, with most tending towards the more compensatory end of the spectrum.

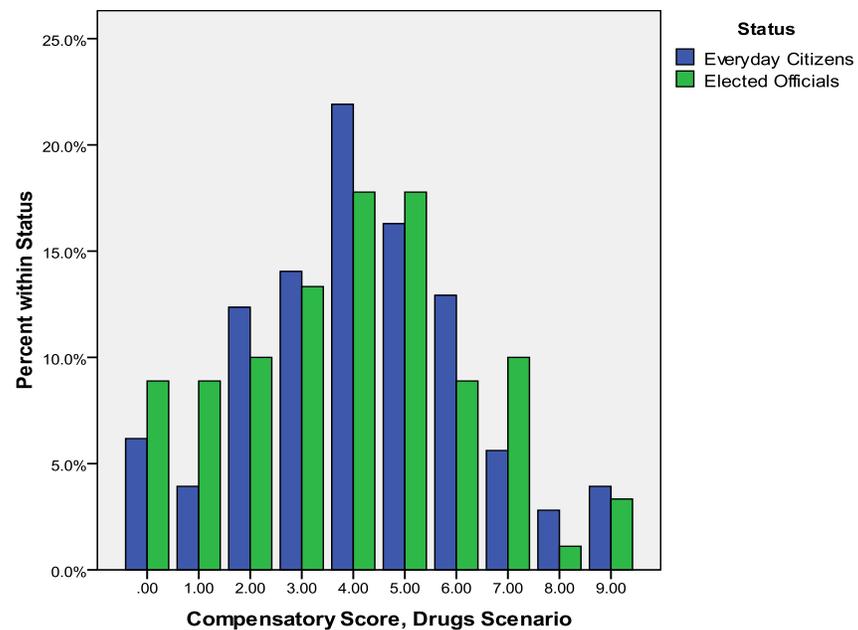
In the drugs scenario, the mean compensatory/ non-compensatory score across all participants was 4.07, slightly lower than the economic crisis scenario but still towards the more compensatory end of the strategies spectrum. Within the group of elected officials, the mean fell at a slightly lower 3.91, while everyday citizens as a group averaged 4.15. Again, this difference in means is not statistically significant (ANOVA  $F = .685$ , significant at  $p\text{-value} < .409$ ,  $N$

= 267). Once again, this indicates that elected officials were no more or less likely than everyday citizens to utilize compensatory strategies over non-compensatory strategies in this particular decision-making task. Figure 3.5 and Figure 3.6 show the spread of compensatory/ non-compensatory scores for elected officials and everyday citizens. In these figures, higher scores on the x-axis represent more compensatory information-use strategies. As illustrated in Figure 3.5 and Figure 3.6, both elected officials and everyday citizens exhibited quite a range of compensatory and non-compensatory strategies, with the greatest percentage in each group falling squarely in the middle of the spectrum. This pattern of distribution held in both decision-making scenarios.

**Figure 3.5: Distribution of Compensatory/ Non-compensatory scores in Economy Scenario, by percentage within status**



**Figure 3.6: Distribution of Compensatory/ Non-compensatory scores in Drugs Scenario, by percentage within status**



### **Why don't they differ?**

So far, the findings have challenged a long-running assumption in political science: that is, that elected officials make political decisions differently than everyday citizens. The preceding series of analyses showed how strikingly similar elected officials and everyday citizens are when it comes to the processes they use when making political choices. As a whole, elected officials do not make political decisions much differently than everyday citizens do: status alone is not a significant predictor of how much information is used, what kinds of information is attended to, how much information is compared, or how quickly the individual reaches a decision.

We do know, however, that elected officials differ from everyday citizens on several other demographic variables that could impact how people make political decisions. Individuals with higher levels of political knowledge may use information differently than those who know little about politics. Similarly, people with high levels of education may use information differently than those with less education. Understanding that elected officials tend to be (on average) more knowledgeable about politics than everyday citizens, and that elected officials also tend to be more educated (on average) than everyday citizens: do individuals with these qualities *across* elected officials and everyday citizens make decisions differently compared to their counterparts? Do high sophisticates make decisions differently than low sophisticates? Do the highly educated make decisions differently than the less educated? In the next section, I consider these questions separately using the same dependent variables (depth of search, comparability of alternatives, elapsed time, and compensatory/ non-compensatory strategies) used to compare elected officials and everyday citizens based on status alone.

## Political Sophistication

People with high levels of political sophistication may make political decisions differently from those who have lower levels of political sophistication. On the one hand, high sophisticates typically access more information than low sophisticates, especially in decision-making scenarios that are expressly political (Lau and Redlawsk 2006; Huang 2000). On the other hand, because high sophisticates possess the existing cognitive structures to help them make sense of new information, they tend to use the information they do have more efficiently than low sophisticates (Delli Carpini and Keeter 1996; Lieberman, Schreiber, and Ochsner 2003; Schreiber and Iacoboni 2002; Lau and Redlawsk 2001).<sup>15</sup> To this end, individuals with higher levels of political sophistication may search for less information because they have a greater prior understanding of what information may be most relevant in a political decision-making context.

Given these competing expectations, I leaned towards the notion that sophistications should be positively related to using less information, but more germane information. Based on this reasoning, I expected individuals with high levels of sophistication to engage in shallower but more targeted searches compared to those with lower levels of political sophistication. Contrary to this expectation, I found no significant differences in search depth between high sophisticates and low sophisticates in either of the decision-making scenarios (economy task ANOVA  $F = .382$ ,  $p\text{-value} < .537$ ,  $N = 261$ ; drugs task ANOVA  $F = .378$ ,  $p\text{-value} < .539$ ,  $N = 261$ ).

High sophisticates used approximately the same amount of information as low sophisticates; however, individuals from these groups did gravitate towards different *kinds* of information. In the economic crisis scenario, low sophisticates were markedly more likely to look at information about public opinion (ANOVA  $F = 3.17$ ,  $p\text{-value} = .076$ ,  $N = 261$ ). Individuals

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<sup>15</sup> Individuals who answer at least six of seven questions on the political knowledge quiz are considered highly politically sophisticated.

with lower levels of political sophistication were also more likely than high sophisticates to look at the “other news” items containing irrelevant information during the economic crisis task (ANOVA  $F = 2.59$ ,  $p\text{-value} = .108$ ,  $N = 261$ ). In the drugs scenario, low sophisticates and high sophisticates were likely to use the same kinds of information with the exception of the “other news” items: this time, high sophisticates were significantly more likely to gravitate towards these items than individuals with lower levels of political sophistication were (ANOVA  $F = 3.47$ ,  $p\text{-value} < .064$ ,  $N = 261$ ).

When it comes to comparability of alternatives, high sophisticates did not access any more of a particular kind of information than low sophisticates. Though low sophisticates were more likely than high sophisticates to look at information about public opinion in the economic crisis scenario, they did not access disproportionately *more* information about public opinion (or any other attribute, for that matter). This finding held true for the drugs scenario as well

**Table 3.5: Comparability of Alternatives Score, by Political Sophistication**

Political Sophistication		Comparability of Alternatives Score, Economy Scenario	Comparability of Alternatives Score, Drugs Scenario
Low Sophisticates (0-2)	Mean	4.37	3.36
	N	41	41
	Std. Deviation	2.56	2.33
Moderate Sophisticates (3-5)	Mean	4.74	3.33
	N	65	65
	Std. Deviation	2.48	2.11
High Sophisticates (6-7)	Mean	4.36	3.50
	N	156	156
	Std. Deviation	2.48	2.03
Total	Mean	4.46	3.44
	N	262	262
	Std. Deviation	2.47	2.09

Turning next to decision-making speed, the relationship between political sophistication and elapsed time to decision could plausibly go either way. On the one hand, low political sophisticates may take less time to make a decision than high sophisticates. Because they do not have the store of existing political knowledge to help them make sense of new political information, individuals with low levels of political sophistication may be tempted to satisfice (Simon 1985). Individuals with low levels of political sophistication may find these kinds of decision-making scenarios overwhelming – thus reducing their decision-speed because of the desire to move on quickly (Schwarz and Clore 1990). On the other hand, individuals with lower levels of political sophistication may take longer to make and register a decision. Because they do not have a readily accessible knowledge base in which to put new information about politics into context, they may take longer to make sense of that information, resulting in greater elapsed time.

**Table 3.6: Time to Decision, by Political Sophistication**

Political Sophistication		Time to Decision (in seconds), Economy Scenario	Time to Decision, (in seconds) Drugs Scenario
<b>Low Sophisticates (0-2)</b>	Mean	209	174
	N	41	41
	Std. Deviation	103	102
<b>Moderate Sophisticates (3-5)</b>	Mean	214	172
	N	65	65
	Std. Deviation	82	87
<b>High Sophisticates (6-7)</b>	Mean	198.	173
	N	156	156
	Std. Deviation	87	84
<b>Total</b>	Mean	204	173
	N	262	262
	Std. Deviation	88	88

There were no significant differences in decision-making speed between individuals with high levels of political knowledge and those with lower levels of political knowledge (economy scenario ANOVA  $F = 1.54$ , significant at  $p\text{-value} < .215$ ,  $N = 262$ ; drugs scenario ANOVA  $F = .002$ ,  $p\text{-value}$  significant at  $< .967$ ,  $N=262$ ). In addition, high sophisticates were no more likely than low sophisticates to say that they knew earlier or later in the decision task which choice they wanted to make (economy scenario ANOVA  $F = 1.58$ , significant at  $p\text{-value} < .210$ ,  $N = 262$ ; drugs scenario ANOVA  $F = 2.41$ , significant at  $p\text{-value} < .121$ ,  $N = 260$ ).

When it comes to the use of compensatory or non-compensatory strategies, individuals with higher levels of political knowledge were no more likely to use compensatory information-search strategies than individuals with lower levels of political knowledge (economy scenario ANOVA  $F = .755$ ,  $p\text{-value} < .386$ ,  $N = 262$ ; drugs scenario ANOVA  $F = .567$ ,  $p\text{-value} < .542$ ,  $N = 262$ ).

**Table 3.7: Compensatory/ Non-Compensatory Score, by Political Sophistication**

Political Sophistication		Compensatory/ Non-Compensatory Score Economy Scenario	Compensatory/ Non-Compensatory Score Drugs Scenario
<b>Low Sophisticates (0-2)</b>	Mean	4.68	3.92
	N	41	41
	Std. Deviation	2.55	2.43
<b>Moderate Sophisticates (3-5)</b>	Mean	5.09	4.01
	N	65	65
	Std. Deviation	2.32	2.18
<b>High Sophisticates (6-7)</b>	Mean	4.75	4.12
	N	156	156
	Std. Deviation	2.38	2.14
<b>Total</b>	Mean	4.82	4.06
	N	262	262
	Std. Deviation	2.39	2.19

From the preceding series of analyses, it seems that high sophisticates, moderate sophisticates, and low sophisticates do not differ much – at least in pronounced, significant ways – when it comes to the processes they use to make political decisions. High sophisticates used approximately the same amount of information as low sophisticates, and as a whole, were no more or less inclined to gravitate towards particular kinds of information over others. High sophisticates and low sophisticates also made decisions with approximately the same speed. Neither group was substantially more likely than the other to use compensatory or non-compensatory strategies in their decision-making: in fact, both tended (on average) towards slightly more compensatory strategies in the economic crisis scenario, and *slightly* more non-compensatory strategies in the drugs scenario.

### **Education**

Based on rationale similar to that of political knowledge, education imparts critical thinking skills that allow people to discern what information is relevant and what information is not – in a sense, helping them to filter and evaluate information in an efficient manner. In this way, individuals with higher levels of educational attainment should engage in shallower searches than those with less educational attainment. Again, these expectations outlined above may seem counter-intuitive. From a normative perspective, one would expect people with higher levels of education to use more information, not less. Rather, it could be that individuals with these attributes may use less information more efficiently.

With regards to depth of search, individuals with higher levels of education (a bachelor's degree or higher) did not access more information than those with less educational attainment (a high school degree or an associate's degree) in either of the decision-making scenarios. Individuals with a post-graduate degree accessed roughly the same amount of information as

those with only a high school degree (economy scenario ANOVA  $F = 1.95$ ,  $p$ -value  $< .121$ ,  $N = 267$ ; drugs scenario ANOVA  $F = 1.84$ ,  $p$ -value  $< .139$ ,  $N = 267$ ).

However, participants with different levels of education did rely on different *kinds* of information in the decision-making scenarios. In this respect, the highly educated and the less educated mirrored were more similar than those in the middle-ranges of educational attainment. The less educated and the most educated were more likely than those in the middle-ranges to look at the “military” and “employment” items during the economic crisis scenario (military items ANOVA  $F = 3.09$ , significant at  $p$ -value  $< .028$ ,  $N = 267$ ; employment items ANOVA  $F = 2.17$ ,  $p$ -value  $< .091$ ,  $N = 267$ ). Those with only a high school degree were also more likely than any of the others to look at “other news” items during the economic crisis scenario (economy scenario ANOVA  $F = 1.95$ ,  $p$ -value  $< .115$ ,  $N = 267$ ). During the drugs scenario, those with only a high school degree were significantly more likely than any of the other groups to access “military” items (ANOVA  $F = 2.52$ , significant at  $p$ -value  $< .058$ ,  $N = 267$ ). Interestingly, those with the highest levels of education (a masters degree or more) were more likely than any others to look at the “other news” items in the drugs scenario (ANOVA  $F = 2.52$ ,  $p$ -value  $< .058$ ,  $N = 267$ ).

With regards to comparability of alternatives (that is, the degree to which an individual uses the same kinds of information), people with lower levels of education and those with the highest levels of education were quite similar. In both the economy scenario and the drugs scenario, those with only a high school degree compared approximately the same number of alternatives as those with a masters’ degree or more. The greatest difference between the groups originated with those with a college degree. In both scenarios, those with a college degree compared fewer alternatives than those with both more and less education than they. This difference in means falls on the cusp of significance (economy scenario ANOVA  $F = 2.09$ ,

significant at  $p$ -value  $< .101$ ,  $N = 267$ ; drugs scenario ANOVA  $F = 1.84$ , significant at  $p$ -value  $< .139$ ,  $N = 267$ ).

What then is the relationship between education and decision-making speed? In the economic crisis scenario, those with higher educational attainment did not register their decisions any faster than those with less education (ANOVA  $F = .409$ ,  $p$ -value  $< .749$ ,  $N = 267$ ); in the drugs scenario, those with bachelor's degrees eclipsed all other groups in decision-making speed (making those decisions an average of twenty-six seconds faster than the other groups combined) – those with high school degrees, associate's degrees, and graduate degrees registered their decisions in roughly the same amount of time (ANOVA  $F = 2.11$ ,  $p$ -value  $< .099$ ,  $N = 267$ ).

Understanding the difference between “knowing” what decision one wants to make versus executing that decision, I analyzed the relationship between education and when during the decision-task the participant said they knew what decision they wanted to make. In the economic crisis scenario, there is a positive, linear, and significant relationship between education and how early the individual says they knew what choice they wanted to make. Individuals with lower levels of education say they knew much later in the decision-task which option they wanted to select, where “knowing” came earlier as education level increased (ANOVA  $F = 4.44$ ,  $p$ -value  $< .005$ ,  $N = 267$ ). This was not the case in the drugs scenario: individuals with less education did not say they knew what choice they wanted to make significantly later in the scenario than those with more education (ANOVA  $F = 1.66$ ,  $p$ -value  $< .175$ ,  $N = 265$ ).

Looking at information use as a whole, did individuals with higher levels of education use more compensatory strategies than those with lower levels of education? As it turns out, individuals with the lowest levels of education and those with the highest levels of education

mirrored each other most. Those with a high school degree and those with master's degrees or more were slightly (but not significantly) more likely than those in the middle-ranges of educational attainment to use compensatory strategies (economy scenario ANOVA  $F = 1.34$ ,  $p$ -value  $< .141$ ,  $N = 267$ ; drugs scenario ANOVA  $F = 1.85$ ,  $p$ -value  $< .137$ ,  $N = 267$ ). However, it should be noted that regardless of educational attainment, the average participant tended towards the more compensatory end of the decision-making strategies spectrum.

The sum findings on education and decision-process contradict the initial expectations in surprising ways. First, educational attainment seems to have had little overall impact on how much information people used, what kinds of information people used, and how long it took them to reach a decision. Those on the tail ends of the educational measure (those with only high school degrees versus those with a master's degree or more) were actually more similar in their decision-making processes than they were different. The average participant – regardless of their level of formal education – leaned towards compensatory strategies in both scenarios rather than non-compensatory ones.

### **Interaction Effects**

The preceding analysis examined information use patterns by level of political knowledge and by level of educational attainment. This analysis considered all participants together, and did not address whether political knowledge, education, and other factors have separate and distinct effects depending on the group. Do political knowledge and education interact with status? In other words, do elected officials who are highly sophisticated or highly educated use information differently from everyday citizens who are also highly sophisticated and highly educated?

To address these questions, I specified a series of OLS regression models that included separate interaction terms for status and political knowledge, and status and education.

Examining each decision-making scenario separately, I tested the relationship between the specified interaction models and the four dependent process variables of interest: volume of information sought, comparability of alternatives, elapsed time to decision, and the composite compensatory/ non-compensatory score. For each of the dependent process variables (volume of information sought, comparability of alternatives, elapsed time to decision, and the composite score), I found little evidence of interaction effects between status and political knowledge in both the economic crisis scenario and the drugs scenario. In other words, elected officials who are highly knowledgeable about politics used information in largely the same ways as everyday citizens who have high levels of political knowledge. These findings are offered in Table 3.8 and 3.9.

**Table 3.8: Interaction Effects between Status and Political Knowledge, Economy Scenario**

	Volume of Information Sought	Comparability of Alternatives	Time to Decision	Compensatory/ Non-Compensatory Score
Status	-.715 (2.45)	-.101 (.873)	40.26 (31.06)	-.317 (.844)
Education	.105 (.244)	.031 (.087)	1.07 (3.09)	.044 (.084)
Status x Political Knowledge	.038 (.422)	-.005 (.150)	-8.57 (5.34)	.016 (.145)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

**Table 3.9: Interaction Effects between Status and Political Knowledge, Drugs Scenario**

	Volume of Information Sought	Comparability of Alternatives	Time to Decision	Compensatory/ Non-Compensatory Score
Status	1.17 (2.21)	.393 (.739)	17.58 (30.97)	.401 (.772)
Education	.182 (.221)	.061 (.074)	2.22 (3.08)	.070 (.077)
Status x Political Knowledge	-.310 (.381)	-.103 (.127)	-5.79 (5.32)	-.117 (.133)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

I uncovered a similar pattern with regards to education and status. Examining each of the four decision-process dependent variables separately, I found no significant evidence of interaction effects between status and education. Moreover, elected officials who are highly educated tend to use information in much of the same ways as highly educated citizens. However, the findings on the interaction between status and education are somewhat limited because there was little variance in educational attainment among elected officials. Eighty-one percent of elected official participants held a bachelor’s degree or higher.

**Table 3.10: Interaction Effects between Status and Education, Economy Scenario**

	Volume of Information Sought	Comparability of Alternatives	Time to Decision	Compensatory/ Non-Compensatory Score
Status	-.501 (2.99)	-.076 (1.06)	44.2 (38.02)	-.305 (1.03)
Education	-.029 (.475)	-.033 (.169)	4.02 (6.02)	-.051 (.163)
Status x Education	-.016 (.940)	-.023 (.334)	-17.29 (11.92)	.030 (.323)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

**Table 3.11: Interaction Effects between Status and Education, Drugs Scenario**

	Volume of Information Sought	Comparability of Alternatives	Time to Decision	Compensatory/ Non-Compensatory Score
Status	-.343 (2.68)	-.114 (.896)	-3.12 (37.54)	-.214 (.935)
Education	-.120 (.426)	-.040 (.142)	3.01 (5.94)	-.042 (.148)
Status x Education	-.008 (.843)	-.003 (.281)	-3.28 (11.77)	.011 (.293)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

Although there is no *a priori* reason to expect systematic differences in information use according to level of political involvement, we do know that elected officials tend to be more politically involved than everyday citizens. I specified an OLS model to test for interaction effects between status and political involvement. Once again, I found little evidence of an interaction effect between status and involvement on each of the four dependent process

variables in both scenarios: highly involved elected officials used information in largely the same ways as highly involved everyday citizens.

**Table 3.12: Interaction Effects between Status and Involvement, Economy Scenario**

	Volume of Information Sought	Comparability of Alternatives	Time to Decision	Compensatory/ Non-Compensatory Score
Status	-4.62 (3.39)	-1.60 (1.20)	-14.95 (43.1)	-1.59 (1.16)
Education	.045 (.391)	.014 (.139)	6.33 (4.97)	.014 (.135)
Status x Involvement	.890 (.808)	.317 (.287)	-1.76 (10.2)	.298 (.278)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

**Table 3.13: Interaction Effects between Status and Involvement, Drugs Scenario**

	Volume of Information Sought	Comparability of Alternatives	Time to Decision	Compensatory/ Non-Compensatory Score
Status	-3.21 (3.03)	-1.07 (1.01)	17.7 (42.7)	-1.07 (1.05)
Education	.640 (.349)	.213 (.116)	5.28 (4.92)	.253 (.121)**
Status x Involvement	.258 (.722)	.086 (.241)	-9.66 (10.17)	.051 (.251)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

\*\* significant at p-value <.05

## Discussion

For a long time, people have assumed that elected officials are fundamentally different from everyday citizens when it comes to how they make political decisions. As much as society values the “*vox populi*” (the voice of the people) at least in a very abstract sense, there is also a widespread distrust in how everyday citizens come to political evaluations and make political choices (ourselves excluded, of course). The happy medium, then, is for citizens to collectively delegate their political decision-making power via elections. The idea is that those who are elected will make subsequent political decisions that are *at least as good, if not better* than what citizens themselves would make.

In the field of political science, many scholars have operated under the widespread belief that elected officials do indeed differ from everyday citizens in fundamental and important ways, especially with regards to their decision-making abilities. The findings of this chapter showed that elected officials do differ from everyday citizens in several ways: they tend to be significantly more educated, significantly more knowledgeable about politics, and also significantly wealthier than the average everyday citizen. Though elected officials and everyday citizens do differ by way of demographics, they do not differ when it comes to how they make political choices.

Elected officials and everyday citizens used roughly the same amount of information and the same kinds of information when making political decisions, and this held true across two very different political decision-making scenarios. Elected officials and everyday citizens made those decisions with roughly the same amount of speed, though elected officials were slightly more inclined to say that they “knew” sooner during the what choice they wanted to make. Generally speaking, elected officials and everyday citizens both used slightly more compensatory strategies in each of the decision-making scenarios.

Understanding that elected officials do differ from everyday citizens on key demographic factors, I tested whether people with these demographic factors (across elected officials and everyday citizens) made political decisions differently. I found that those who know a great deal about politics make decisions in essentially the same way as those who know little about politics. Those with the highest levels of educational attainment are quite similar with high school degrees when it comes to how they make political decisions. In sum, neither political sophistication nor educational attainment had much of an effect on what kinds of processes people employed. Moreover, there was no evidence of interaction effects between status and the demographic factors of political knowledge, education, and political involvement.

Elected officials differ from everyday citizens in the kinds of decisions they are asked to make and the situations under which they are asked to make them (Lau 2003: 20). In this study, I leveled the playing field in both regards. When given the exact same decision-problem and the same amount and content available to solve it, elected officials and everyday citizens did not differ substantially in the types of decision-making processes they used.

The next part of the puzzle is the role of context: do individuals make decisions differently depending on the kinds of contextual pressures they face? Given their experience with specific contextual pressures encountered in the political realm, do elected officials make decisions differently as compared to everyday citizens placed in those same contexts?

The analysis offered in Chapter 4 considers these questions.

#### Chapter 4: How Context Impacts Decision-Making

It may be the case that elected officials and everyday citizens use information differently when making political choices: not because of any innate differences between them, but because of a difference in their experience with specific contextual stressors. People might use information differently depending on the decision-making context they encounter. Many researchers suggest that elites are predisposed to make errors in information use and reasoning, just like everyone else (Janis 1972; Janis and Mann 1977; Hammond 1996, 2000; Tetlock 2005; DeNardo 1995). For elites, these missteps are particularly pronounced in stressful decision-making environments, while citizens' information use can be greatly impacted both in stressful *and* non-stressful situations. While we may not observe significant decision-making differences between elected officials and everyday citizens *across* contexts, we may witness differences between them *within* particular decision-making contexts.

As described in the methodology chapter, I wanted to simulate the same kinds of contextual pressures elected officials would encounter in their decision-making, and then place elected officials and everyday citizens in those same contexts. I chose to focus on two specific contextual pressures that distinguish elected officials' decision-making from everyday citizens': accountability for one's decisions, and high stakes or consequences associated with those decisions. In this chapter, I outline how the different decision-making contexts could impact the process variables at the heart of this analysis: depth of search, comparability of alternatives, and elapsed time to decision. I also describe what, if any, differences in decision-process may exist between elected officials and everyday citizens within and across these different contexts.

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Participants in the study were randomly assigned to one of four experimental conditions. Each experimental condition contained different language about the decision-task instructions.

One condition emphasized that the participant would be held accountable for their decision. Another condition emphasized the high stakes or consequences associated with the decision. Another condition combined both the accountability and high stakes language. The remaining condition, the control group, received the standard decision-task instructions with no mention of contextual pressures. Because METIS randomly assigned participants to one of the four conditions<sup>16</sup>, we should have a well-distributed number of elected officials and everyday citizens in each treatment group (accounting for their proportions in the final sample).

**Table 4.1: Participant Distribution across Conditions, by Status**

			Status		
			Everyday	Elected	Total
Context	Control group	Count	44	19	63
		% within Context	69.8%	30.2%	100.0%
	Accountability	Count	49	33	82
		% within Context	59.8%	40.2%	100.0%
	Stakes	Count	49	20	69
		% within Context	71.0%	29.0%	100.0%
	Accountability x Stakes	Count	36	18	54
		% within Context	66.7%	33.3%	100.0%
	Total	Count	178	90	268
		% within Context	66.4%	33.6%	100.0%

### Accountability

Accountability refers to an “explicit expectation that [the individual] will be called upon to justify [their] beliefs, feelings, or actions to others” (Lerner and Tetlock 2003: 434). As such, accountability is most likely a pressure that elected officials are more accustomed to than everyday citizens. Because elected officials routinely make decisions on constituents’ behalf, they are often asked to explain and justify those choices to those constituents. In this sense,

<sup>16</sup> Following random assignment to one of four conditions, participants remained in the same condition for both decision scenarios. Which scenario they received first (economic crisis or drugs) was also randomized to guard against any potential order effects. As in Chapter 3, I analyze the drugs and economy scenarios separately.

elected officials make decisions of consequence for others, they know ahead of time that they will be asked to justify those choices, and don't necessarily know how constituents will judge the choices they make.

This differs from the kinds of accountability everyday citizens' encounter. We may have to occasionally elaborate our opinions about politics and explain our stands on issues to friends and family, the politically attentive co-worker, and impolite dinner guests. But most citizens do not have to defend to others why they voted the way they did as vigorously or as frequently as elected officials do (we can just change the subject). Most citizens' careers do not hinge upon being able to successfully justify their political decisions in the way elites' careers likely do. Elected officials' experience with accountability probably breeds a certain level of familiarity, and perhaps skill, in successfully justifying one's actions and choices to others.

Under certain conditions, accountability alters individual decision-making in important ways. One school of thought suggests that accountability *increases* cognitive effort by building motivation to make a good decision, but simultaneously encourages the individual to gravitate towards choices that are easier to justify. The second school of thought suggests that the effect of accountability on cognitive effort is task-specific. On simple tasks, accountability encourages the individual to focus on relevant information. On difficult tasks, accountability encourages the individual to attend to all kinds of information – even the irrelevant stuff (Lerner and Tetlock 2003; 1999).

Only certain kinds of accountability heighten bias in decision-making (Lerner and Tetlock 2003). Among all different types of accountability manipulations used in experimental studies, one specific kind of accountability consistently leads participants to engage in more effortful cognition: pre-decisional notification about accountability to an audience with unknown views (Lerner and Tetlock 2003: 448).

Pre-decisional accountability to an audience with unknown views encourages exploratory, rather than confirmatory information seeking, as accountability motivates individuals to make optimal judgments (Lerner and Tetlock 1999; Simonson and Staw 1992). Pre-decisional accountability to an audience with unknown views can have one of two effects on the decision *process* depending on the kind of task involved: it can focus attention on easier information cues, *or* it can encourage attention to all cues, even the irrelevant ones. Pre-decisional accountability to an audience with unknown views increases participants' motivation to avoid embarrassing themselves and to avoid appearing foolish to others (Lerner and Tetlock 2003: 444). In a desire to avoid appearing foolish, participants tend to focus on choice options they believe are easiest to justify. As such, participants who are told ahead of time that they will have to justify their decision to others should use more information and take a longer time to reach a decision than those who receive no mention of accountability.

Based on previous research, the accountability manipulation in METIS could have one of two effects: one, it could result deeper searches with more alternative-based strategies (as participants look for easily justifiable choices), or two, it could result in deeper searches that use more irrelevant information. I hypothesize that accountability will result in deeper searches with attention to all cues – even irrelevant ones. In this sense, participants exposed to the accountability manipulation should access greater total information, and also score more highly on the comparability of alternatives measure than participants who are not told before they will be held accountable before the task begins.

### **High Stakes**

At its core, decision-making is about tradeoffs: choosing one alternative often means foregoing others. Different decisions at the personal, social, and political realms involve

different levels of perceived stakes and also potential differences in the kinds of value tradeoffs they elicit.

Presumably, people want to maximize gains and minimize losses, or, put another way, “to minimize their maximum regret” (Lau 2003: 24). Individuals’ decision-making behavior can be affected by their perception of the stakes involved in the decision. Per prospect theory, when individuals encounter problems that emphasize potential gains, their decision-making becomes more tolerant of risk and they tend to select alternatives they perceive as maximizing those gains. When the same decision-problem is framed to emphasize potential losses, individuals’ decision-making tends to become more risk-averse (Kahneman and Tversky 1979; 1982; 1984; Slovic, Fischhoff, and Lichtenstein 1977; Levy 1997; Tversky and Kahneman 1981, 1992). The voluminous literature on framing and prospect theory is not taken up by my study, but it is worth noting that these research paradigms have demonstrated a link between perceived stakes involved in a decision and individuals’ use of particular decision-making strategies.

In theory, high stakes or consequences should motivate people to use information more carefully, as to avoid making a poor decision. However, without expertise in dealing with these kinds of high stakes situations, people may not understand what information is relevant to solve the problem and what information is not. High stakes should encourage people to narrow their set of considered alternatives quickly, and to compare the narrowed alternatives based on the same kinds of information (i.e.: exhibiting highly comparable searches). Given that elected officials frequently make high-stakes choices on other’s behalf, elected officials in the stakes condition should use comparatively less information than everyday citizens in the stakes condition precisely because they have more experience managing the stresses induced by high

stakes. As a whole, participants in the stakes condition should tend towards more compensatory strategies – deep searches with heavy comparison of alternatives.

### **Accountability x Stakes**

In addition to the pure condition of accountability and the pure condition of high stakes, I also created a combination condition of both accountability and high stakes. There was no *a priori* reason to do this, but I wanted to better understand how these dual pressures (both of which elected officials often encounter at the same time) impact decision-making.

Keeping in mind that accountability typically encourages more information seeking but more focus on easily justifiable choices; whereas high stakes encourages more information seeking and more focused comparison between a select set of alternatives, I would expect that the accountability x stakes group will access the greatest amount of information and exhibit the most highly comparable searches out of all four conditions. However, any findings in this regard will be limited by the small treatment N (thirty-six everyday citizens, eighteen elected officials). Given that elected officials are more habituated to these contextual pressures than everyday citizens are, I would expect elected officials to use more non-compensatory strategies than compensatory ones.

### **Manipulation Checks**

The hypotheses outlined above are predicated on the assumption that individuals will respond to these contexts differently: that is, individuals exposed to one context will experience different affective reactions than individuals who are not exposed to that context. Namely, I expected the contexts of accountability, stakes, and accountability x stakes to increase feelings of anxiety, worry, and unease (as compared to the control group who received no contextual manipulation). Analyzing each decision-making scenario separately, I ran a series of

manipulation checks comparing the means and variances of participant's self-reported emotional responses, bifurcated by which contextual manipulation they received.

The first manipulation check concerns experienced anxiety: did participants in the treatment conditions report significantly higher levels of anxiety than participants in the control group? To gauge participant's self-reported anxiety, I asked participants to indicate how anxious they felt during four specific moments in the decision-task: reading the instructions, using the information board, registering their decision, and justifying their decision to voters and the media. I then combined these self-reports into a measure of state anxiety: how anxious the participant reported feeling during the task as a whole (additional detail on how the state anxiety measure was specified is provided in the measures appendix). In both the economic crisis scenario and the drugs scenario, the treatment groups did not indicate significantly higher levels of self-reported state anxiety than the control group.

Broadening the manipulation checks to include a range of other plausible negative emotions, I compared the means and variances of participants' self-reported sense of worry, fear, disgust, anger, frustration, and unease. Based on these analyses, there is some evidence that the manipulations did work. In the drugs scenario, the treatments of accountability, stakes, and accountability x stakes reported more worry than the control group (though pronounced, the differences in means did not reach statistical significance). In the drugs scenario, the treatment groups expressed significantly more fear than the control group (ANOVA  $F = 3.94$ , significant at  $p < .048$ ). In the drugs scenario, the treatments also reported a significantly higher level of unease than the control group (ANOVA  $F = 5.02$ , significant at  $p < .025$ ). In the economic crisis scenario, only the stakes group demonstrated markedly different emotional responses than the other treatments and the control group: participants in the stakes group

expressed significantly more anger ( $F = 4.45$ , significant at  $p\text{-value} > .036$ ), and more unease ( $F = 2.84$ , significant at  $p\text{-value} > .093$ ).

While the manipulation checks seem not to have worked consistently, it is possible that the self-report measures used in the manipulation checks do not fully capture participants' emotional experience. For a variety of reasons, participants tend to under-report their own emotional reactions. This said; self-reports of emotional response are not ideal measures. Acknowledging this potential limitation, I also collected biophysical markers of emotional response: namely, heart rate. In future analyses, I will be able to use heart rate changes as a more robust form of manipulation check.

### **Depth of Search**

Do different decision-making contexts encourage different levels of information use? Based on the expectations derived from previous research on accountability and high stakes, I hypothesized that participants in the experimental treatment groups would engage in deeper searches as compared to the control group. Participants in the accountability group should look for comparatively more information because they know ahead of time that they will be asked to defend their choice to others. Similarly, participants in the stakes condition should engage in deeper searches than the control, presuming that this contextual pressure motivates participants to make a good choice. Accordingly, the accountability x stakes group should also use more information than the control group, because not only do they presumably want to make a good choice (as in the stakes condition), they also know ahead of time that they will be asked to justify their choice to others.

As it turns out, participants in the control group accessed less (but not significantly less) information in the economic crisis scenario as compared to the treatment groups (11.6 to 12.7,

12.4, and 12.6, respectively). However, this difference in means is not statistically significant (one-way ANOVA  $F = .326$ , significant at  $p\text{-value} < .806$ ). In the drugs scenario, there were no discernable differences in depth of information search between the different contexts (one-way ANOVA  $F = .561$ , significant at  $p\text{-value} < .641$ ).

**Table 4.2: Depth of Search, by Condition**

	Control Group	Accountability	Stakes	Accountability x Stakes
<b>Economic Crisis Scenario</b>				
Mean Depth of Search	11.6	12.7	12.4	12.6
Standard Deviation	7.7	6.8	6.3	7.1
N	63	82	70	54
<b>Drugs Scenario</b>				
Mean Depth of Search	10.3	9.6	10.9	10.5
Standard Deviation	6.8	5.5	6.2	6.6
N	63	82	70	54

If participants in these different contexts do not necessarily differ in the amount of information they access to make a decision, might contexts encourage participants to use certain kinds of information over others? Analyzing each scenario separately, participants across the different contexts generally opted to access the same kinds of information. In the economic crisis scenario, participants in one context were no more or less likely than individuals placed in other contexts to access certain kinds of information, with one exception. Participants in the accountability condition were significantly more likely than any of the other groups to access information about the response from interest groups (ANOVA  $F = 3.37$ ,  $p\text{-value}$  significant at  $<.019$ ). Participants in the accountability x stakes condition did not access more or less information about the response from interest groups than either the stakes or control groups. In the drugs scenario, participants accessed generally the same kinds of information regardless of what contextual pressures they faced: as a whole, participants in the treatment groups did not access different kinds of information than the control group did.

Did elected officials in these contexts use information differently than everyday citizens in the same contexts? The answer here is a bit mixed. In the economic crisis scenario, the only marked differences in volume of information sought between elected officials and everyday citizens occurred in the stakes group. Here, status interacts positively with the stakes manipulation, such that elected officials in the stakes condition accessed more information than everyday citizens in the same condition. However, this interaction does not reach statistical significance. In the remaining conditions of accountability, accountability x stakes, and the control group, elected officials did not access more information than everyday citizens.

Moving to the drugs scenario, there were limited interactions between status and context. Everyday citizens in the control group accessed more information than elected officials in the same group (test statistics)? There was also a significant, positive interaction between status and the accountability x stakes condition: elected officials in this group accessed significantly more information than everyday citizens in the same group.

**Table 4.3: Volume of Information Sought, Economy Scenario Interactions between Context and Status**

	Control	Accountability	Stakes	Accountability x Stakes
<b>Status</b>	-.735 (1.03)	-.808 (1.11)	.216 (1.04)	-.689 (1.01)
<b>Context</b>	-1.28 (1.22)	.269 (1.17)	.945 (1.17)	-.022 (1.31)
<b>Status x Context</b>	.941 (2.18)	.800 (1.93)	-2.95 (2.13)	.995 (2.27)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

**Table 4.4: Volume of Information Sought, Drugs Scenario Interactions between Context and Status**

	Control	Accountability	Stakes	Accountability x Stakes
<b>Status</b>	.204 (.925)	-.131 (1.00)	-.764 (.938)	-1.23 (.911)
<b>Context</b>	.966 (1.09)	-.634 (1.06)	.493 (1.06)	-.940 (1.17)
<b>Status x Context</b>	-3.22 (1.96)*	-.880 (1.74)	1.25 (1.92)	3.59 (1.76)*

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

\*Significant at p-value < .10

Examining the summary results, the interaction effects between status and context are mixed at best. In the economic crisis scenario, status only interacted with the stakes condition; in the drugs scenario, status interacted with the control and accountability x stakes conditions. The lack of a consistent pattern in interactions between status and context *across conditions* suggests that the presence or absence of significant interactive effects between status and context may be task-specific, at least when it comes to the volume of information individuals choose to seek.

### **Comparability of Alternatives**

Comparability of alternatives is the second measure of decision-process. In looking for whether alternatives are comparable, I am interested in the degree to which the individual accesses *the same kinds of information* about each alternative. High comparability between alternatives suggests that consideration of each alternative is roughly equal (Redlawsk 2004: 5). A search that is both deep and highly comparable points towards a compensatory strategy, whereas a search that is shallow and low in comparability suggests a non-compensatory strategy (Redlawsk 2004).

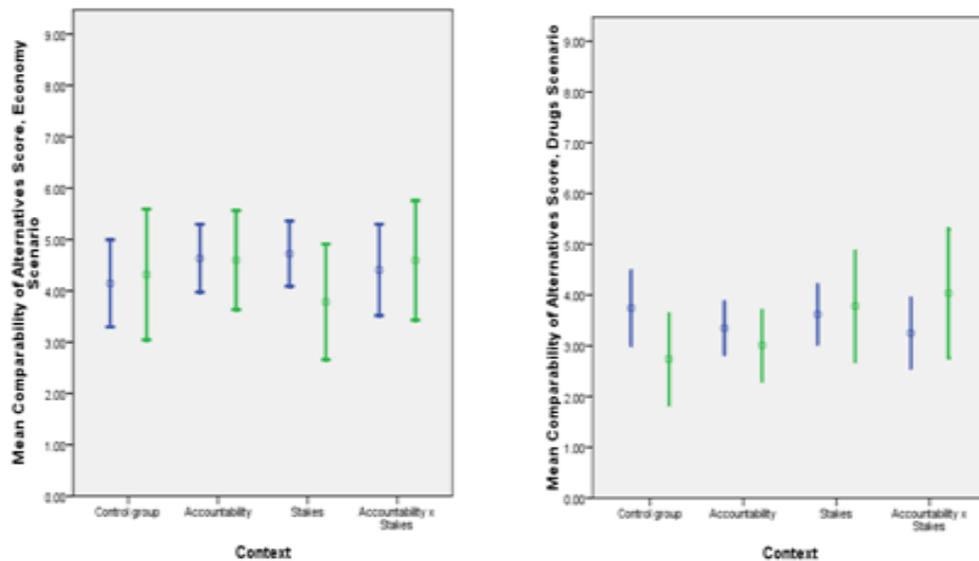
Based on previous research findings about how accountability and stakes impact information use, I hypothesized that the experimental treatments would compare alternatives more extensively than the control group. Because accountability often encourages people to look for easily justifiable choices, I expected the accountability group to use more information than the control group but to compare fewer alternatives. A priori, I had no firm expectation about which of the remaining treatments (stakes and accountability x stakes) would have the highest score on comparability of alternatives.

When it comes to comparability of alternatives (that is, how much of the same kinds of information an individual compares), there are no significant cross-context differences, and this holds true for each of the political decision-making scenarios. Participants in the treatment groups did not use any more information in any particular category than the control group, who was not given explicit contextual pressures.

**Table 4.5: Comparability of Alternatives Score, by Condition**

	Control Group	Accountability	Stakes	Accountability x Stakes
<b>Economic Crisis Scenario</b>				
Mean Comparability Score	4.1	4.6	4.4	4.4
Standard Deviation	2.7	2.4	2.2	2.5
N	63	82	70	54
<b>Drugs Scenario</b>				
Mean Comparability Score	3.4	3.2	3.6	3.5
Standard Deviation	2.2	1.8	2.0	2.2
N	63	82	70	54

**Figure 4.1: Comparability of Alternatives Score by Condition and Status**



Did elected officials exhibit greater comparability of alternatives within these different contexts than everyday citizens did? As reported in Chapter 3, elected officials and everyday citizens were equally as likely to access the same amount of information within each row they selected: elected officials did not access more information within any particular row than everyday citizens did. However, this finding applied to elected officials and everyday citizens *across* contexts: does a within-context analysis tell a different story?

Since accountability, high stakes, and their combination are factors that elected officials are presumably more familiar with in decision-making, it could be that their standard decision-making habits are less affected by these contextual pressures than are everyday citizens with little experience with contextual pressure. In the economic crisis scenario, there were no significant interactions between status and context in any of the contexts. This means that elected officials did not compare alternatives more extensively than everyday citizens placed in the same contexts.

**Table 4.6: Comparability of Alternatives, Economy Scenario Interactions between Context and Status**

	Control	Accountability	Stakes	Accountability x Stakes
<b>Status</b>	-.238 (.367)	-.220 (.397)	.116 (.370)	-.215 (.362)
<b>Context</b>	-.461 (.434)	.196 (.419)	.318 (.418)	-.104 (.467)
<b>Status x Context</b>	.410 (.777)	.184 (.689)	-1.05 (.758)	.401 (.808)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

In the drugs scenario, there is some evidence of interactive effects between status and context. In the control group, everyday citizens compared alternatives more extensively than elected officials (significant at  $p\text{-value} \leq .10$ ). In the accountability x stakes condition, elected officials compared alternatives more extensively than everyday citizens (significant at  $p\text{-value} < .10$ ). There was no evidence of an interaction effect between status and context in the accountability condition or the stakes condition.

**Table 4.7: Comparability of Alternatives, Drugs Scenario Interactions between Context and Status**

	Control	Accountability	Stakes	Accountability x Stakes
<b>Status</b>	.068 (.308)	-.044 (.335)	-.255 (.313)	-.411 (.304)
<b>Context</b>	.322 (.365)	.211 (.353)	.164 (.353)	-.313 (.392)
<b>Status x Context</b>	-1.07 (.654)*	-.293 (.580)	.419 (.640)	1.19 (.678)*

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

\*Significant at p-value < .10.

As was the case with volume of information sought, there is not a consistent pattern of interaction effects between status and context *across scenarios*. Status interacted with context in the control and accountability x stakes conditions. This result was confined to the drugs scenario. Again, the extent to which an individual compares choice alternatives may depend heavily on the nature of the task. Future research will hopefully be able to show whether this is the case.

### **Elapsed Time**

The third key process measure is elapsed time to decision: the time it takes for a participant to use the information board and register a decision. Based on expectations from the accountability and stakes literatures, I hypothesized that participants in each of the experimental conditions would take longer to register a decision than participants facing no contextual pressures in the control group. I had no firm expectation about which of the three treatments would take the longest to register a decision. Did participants facing contextual pressures take longer to register their decisions? In general, the answer is no.

By way of rough averages, the control group averaged 3:16 (minutes: seconds) to register a decision in the economic crisis scenario, while the accountability group averaged 3:30, stakes averaged 3:33, and the accountability x stakes combination group averaged 3:06. None of these time differences are statistically significant differences in mean times. In the drugs scenario, the

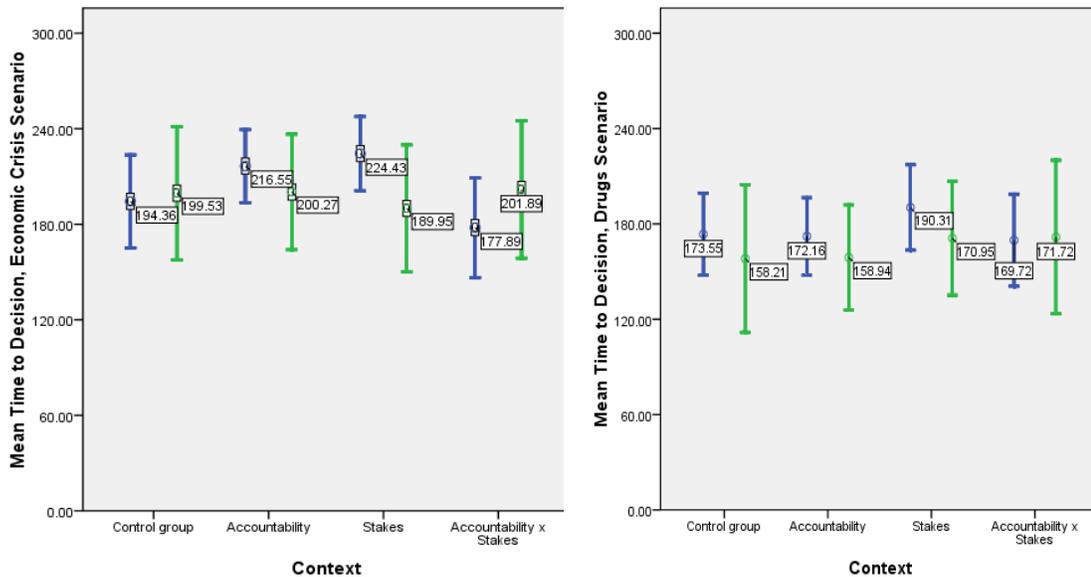
average time to decision is extremely similar between groups, with a spread of only eighteen seconds between the average slowest group (stakes) and the average fastest group (accountability). The difference in means is not a statistically significant difference – context alone seems to have little impact on decision-making speed.

**Table 4.8: Elapsed Time, by Condition**

	Control Group	Accountability	Stakes	Accountability x Stakes
<b>Economic Crisis Scenario</b>				
Mean Elapsed Time (in seconds)	196	210	213	186
Standard Deviation	93	89	83	91
N	63	82	70	54
<b>Drugs Scenario</b>				
Mean Elapsed Time (in seconds)	169	166	184	170
Standard Deviation	88	88	88	89
N	63	82	70	54

Within contexts, did elected officials make decisions more quickly than everyday citizens? Figure 4.2 offers a basic visual representation of the differences between elected officials and everyday citizens, further segmented by experimental context.

**Figure 4.2: Elapsed Time, by Condition and Status**



In both the economic crisis scenario and the drugs scenario, there were no significant interactions between status and context. This means that within each context, everyday citizens registered their decisions in roughly the same amount of time as elected officials in the same context did.

**Table 4.9: Time to Decision, Economy Scenario Interactions with Context and Status**

	<b>Control</b>	<b>Accountability</b>	<b>Stakes</b>	<b>Accountability x Stakes</b>
<b>Status</b>	-11.27 (13.1)	-4.27 (14.19)	2.29 (13.19)	-15.18 (12.83)
<b>Context</b>	-14.68 (15.51)	15.36 (14.97)	26.23 (14.91)	-34.50 (16.55)
<b>Status x Context</b>	16.43 (27.79)	-12.00 (24.60)	-36.77 (27.02)	39.18 (28.64)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

**Table 4.10: Time to Decision, Drugs Scenario Interactions with Context and Status**

	<b>Control</b>	<b>Accountability</b>	<b>Stakes</b>	<b>Accountability x Stakes</b>
<b>Status</b>	-12.57 (12.98)	-11.89 (14.06)	-9.92 (13.09)	-16.76 (12.79)
<b>Context</b>	-4.59 (15.37)	-6.68 (14.84)	18.35 (14.80)	-9.13 (16.49)
<b>Status x Context</b>	-2.75 (27.53)	-1.32 (24.38)	-9.43 (26.82)	18.76 (28.55)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

When an individual “registers” their decision, this is not to say that they “knew” at that moment what choice they wanted to make. An individual may have made up their mind which alternative they preferred, but may have continued using the information board for any number of reasons (curiosity, entertainment, etc.). As reported in Chapter 3, participant’s actual decision speed is significantly correlated with when participants say they knew what choice they wanted to make (economy scenario correlation coefficient .392, significant at  $p$ -value  $<.000$ ,  $N = 269$ ; drugs scenario coefficient .427, significant at  $p$ -value  $<.000$ ,  $N = 267$ ).

Examining each scenario and each condition separately, did any of the contexts interact with status? In the economic crisis scenario, everyday citizens were more likely to say they “knew” what choice they wanted to make sooner than elected officials, and this held true across conditions (OLS  $\beta = -.317$ , standard error .150, significant at  $p$ -value  $<.035$ ,  $N = 267$ ). Only the accountability x stakes condition exhibited a significant interaction effect: elected officials within this condition markedly more likely to say they knew which choice they wanted to select later in the decision-task than everyday citizens were.

**Table 4.11: When Knew, Economy Scenario Interactions with Context and Status**

	Control	Accountability	Stakes	Accountability x Stakes
<b>Status</b>	-.260 (.171)	-.276 (.185)	-.248 (.172)	-.474 (.167)*
<b>Context</b>	.174 (.202)	.088 (.195)	.032 (.195)	-.349 (.215)
<b>Status x Context</b>	-.241 (.362)	-.134 (.321)	-.303 (.353)	.779 (.372)*

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

\*Significant at p-value < .10

**Table 4.12: When Knew, Drugs Scenario Interactions with Context and Status**

	Control	Accountability	Stakes	Accountability x Stakes
<b>Status</b>	.164 (.167)	.138 (.181)	.190 (.170)	.323 (.165)*
<b>Context</b>	-.043 (.197)	-.120 (.190)	.021 (.190)	.172 (.211)
<b>Status x Context</b>	.200 (.359)	.218 (.315)	.076 (.346)	-.573 (.365)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

\*Significant at p-value < .10

In the drugs scenario, neither everyday citizens nor elected officials were more likely than the other to say they “knew” sooner which choice they wanted to select. Only in the accountability x stakes condition do we see modest evidence of an interaction effect (significant at p-value < .118). Under this condition and in this scenario, elected officials were more likely than everyday citizens to indicate they “knew” which decision they wanted to make earlier in the decision-task.

It seems that only the accountability x stakes condition exhibited significant interaction effects with status, but in different directions depending on the decision-making scenario. In the economic crisis scenario, everyday citizens say they knew sooner which choice they wanted to make, and this was especially pronounced among everyday citizens who faced contextual pressures of accountability and stakes. In the drugs scenario, everyday citizens and elected officials were no more likely than the other to report “knowing” sooner which choice they wanted to select. There was, however, an interaction between status and the accountability x stakes condition: elected officials were more likely to report knowing sooner than everyday citizens in this context.

### **Compensatory/ Non-Compensatory Strategies**

The final dependent variable of interest captures the degree to which an individual uses a compensatory or non-compensatory strategy in how they use information to make political choices. To refresh, compensatory and non-compensatory strategies are ways of using information. Both strategies are cognitive attempts to manage value conflict, albeit in different ways (compensatory strategies address value conflict head-on by gathering more information; non-compensatory strategies avoid value conflict by limiting information use). Compensatory and non-compensatory strategies are not either/ or: instead, I treat them as a continuum with more compensatory at one end and less compensatory on the other.

I calculate the compensatory/ non-compensatory composite variable as follows:

$$\frac{\textit{Depth of search} + \textit{Comparability of alternatives}}{\textit{Elapsed time}}$$

The compensatory/ non-compensatory variable is a numeric variable ranging from zero to nine, with higher scores indicating a more compensatory strategy.

What impact might context have on people's use of compensatory or non-compensatory strategies? Previous research on accountability and stakes is somewhat mixed in this regard. On the one hand, stressors such as accountability and high stakes could encourage more compensatory strategies (voluminous information search, high comparability of alternatives, greater elapsed time) because participants want to make a good decision and avoid appearing foolish to others. However, these same contextual pressures also seem to decrease information use and elapsed time because negative emotions are unpleasant for most people to experience. For these competing reasons, I had no expectation about which contexts would be more likely to encourage compensatory over non-compensatory strategies.

As described in Chapter 3, if an individual leans towards using a compensatory or a non-compensatory strategy in one decision-making situation, they are highly likely to use the same kind of strategy in the other situation (correlation coefficient .381, significant at  $p$ -value  $< .000$ ).

Looking at the decision-making scenarios separately, let's examine the economic crisis scenario first. Across participants, the mean compensatory/ non-compensatory score in the economic crisis scenario was 4.8, which leans towards the more compensatory end of the continuum. The control group held the lowest score on the compensatory/ non-compensatory measure in the economic crisis scenario, but this score is not significantly different from the mean scores of participants in the experimental treatments. In the drugs scenario, all contexts leaned towards more non-compensatory strategies, with the stakes group having the highest score of 4.27, and accountability having the lowest at 3.85. Again, the differences in compensatory/ non-compensatory scores between the contexts are not statistically significant (economy scenario OLS  $\beta = .101$ , s.e. .139, significant at  $p$ -value  $< .469$ ,  $N = 268$ ; drugs scenario OLS  $\beta = .066$ , s.e. .127, significant at  $p$ -value  $< .604$ ,  $N = 268$ ).

**Table 9.13: Compensatory/ Non-Compensatory Score, by Condition**

Context		Compensatory Score, Economy Scenario	Compensatory Score, Drugs Scenario
<b>Control group</b>	Mean	4.54	4.06
	N	63	63
	Std. Deviation	2.68	2.33
<b>Accountability</b>	Mean	4.94	3.85
	N	82	82
	Std. Deviation	2.35	2.01
<b>Stakes</b>	Mean	4.79	4.27
	N	70	70
	Std. Deviation	2.11	2.23
<b>Accountability x Stakes</b>	Mean	4.94	4.11
	N	54	54
	Std. Deviation	2.55	2.27
<b>Total</b>	Mean	4.81	4.06
	N	269	269
	Std. Deviation	2.40	2.19

When it comes to the use of compensatory or non-compensatory strategies, did elected officials respond to the contexts differently than everyday citizens? In the economic crisis scenario, status and context showed no significant interaction effects. This means that elected officials within a particular context were no more likely to use compensatory (or non-compensatory) strategies than everyday citizens placed in the same context. This finding also held true in the drugs scenario, which lacked any significant interaction effects between context and status. Once again, elected officials within any particular context did not rely on more compensatory (or non-compensatory strategies) than everyday citizens placed in the same contexts. The results of these interaction models, analyzed with OLS regressions, are offered in Tables 4.14 and 4.15.

**Table 4.14: Compensatory/ Non-Compensatory Score, Economy Scenario Interactions with Context and Status**

	<b>Control</b>	<b>Accountability</b>	<b>Stakes</b>	<b>Accountability x Stakes</b>
<b>Status</b>	-.331 (.354)	-.301 (.385)	.044 (.358)	-.290 (.350)
<b>Context</b>	-.507 (.419)	.135 (.406)	.304 (.404)	.043 (.451)
<b>Status x Context</b>	.463 (.751)	.200 (.667)	-1.09 (.733)	.373 (.781)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

**Table 4.15: Compensatory/ Non-Compensatory score, Drugs Scenario Interactions with Context and Status**

	<b>Control</b>	<b>Accountability</b>	<b>Stakes</b>	<b>Accountability x Stakes</b>
<b>Status</b>	.003 (.322)	-.081 (.350)	-.359 (.326)	-.461 (.317)
<b>Context</b>	.319 (.381)	-.145 (.369)	.108 (.369)	-.322 (.409)
<b>Status x Context</b>	-1.07 (.683)	-.384 (.606)	.585 (.668)	1.12 (.708)

OLS Regression, Unstandardized Regression Coefficients, Standard Errors in Parentheses.

## Conclusions

In this chapter, I explored whether the specific contextual factors of accountability, high stakes, as well as a combination of accountability and high stakes impact how people use information to make choices in two different political decision-making scenarios. More specifically, I tested whether elected officials and everyday citizens' decision-making was impacted differently under these contexts.

Based on the rationale that individuals who have experience with specific contextual pressures may respond to those pressures differently than those who have less experience, I hypothesized that elected officials' information use should be less impacted by contextual stressors than everyday citizens, and that this would be the case across the three experimental conditions (accountability, high stakes, and their combination). Analyzing each decision-making scenario separately, I found little evidence of systematic differences between elected officials and everyday citizens when placed under the same contextual pressures. There were only limited interaction effects between status and context, and this finding was task-specific. There

was no evidence of interaction effects between status and context in the economic crisis scenario for any of the information-use dependent variables. Only in the drugs scenario did I find evidence of a modest interaction effect between status and the accountability x stakes condition. In this context, elected officials accessed more total information and compared more alternatives than everyday citizens in the same context. However, this did not translate into a significant difference in their use of compensatory/ non-compensatory strategies.

These findings seem to suggest that status, as a lone variable of inquiry, does not consistently illustrate whose information-use patterns will be impacted under specific contextual pressures of accountability, stakes, and their combination. It could well be that individuals' information use is more explained by the nature of the problem, rather than by individual difference variables (such as status). These findings, of course, are circumscribed by a number of factors: the limited statistical power that results from small within-treatment Ns, as well as constrained evidence of consistent manipulation effects.

For now, we can tentatively suggest that status seems not to interact consistently with context. Everyday citizens, when placed under the same contextual pressures as elected officials, use information in remarkably similar ways to their elected counterparts. The implications of these nascent findings are discussed in more detail in Chapter 6.

If elected officials and everyday citizens do not differ much by way of information use, both across and within contexts, how else might they differ in important ways when it comes to their political decision-making? In Chapter 5, I explore whether and to what extent elected officials and everyday citizens differ when it comes to their political attitudes.

## Chapter 5: Differences in Political Attitudes

Representative government hinges upon the notion that citizens have attitudes about politics, and that citizens are able to match their attitudes with candidates or policies they believe best corresponds to their views. As part of the representative relationship, citizens expect elected officials to make logical connections between constituents' attitudes and which policies to support on their behalf (Pitkin 1972; Mansbridge 1999, 2003). But a decades-long debate questions whether individuals possess meaningful political attitudes that can be measured and interpreted (Campbell, Converse, Miller, and Stokes 1960; Converse 1964; Zaller and Feldman 1992; Achen 1975; Zaller 1992; Bartels 1996; Popkin 1991). Converse's "Nature of Belief Systems in Mass Publics" (1964) – a seminal work in the study of attitudes – concluded that the mass public's political attitudes were poorly formed and logically inconsistent, while political elites far outshone the masses in this regard.

Much of the research reacting to Converse's findings focuses on the political attitudes of the mass public (Nie and Andersen 1974; Sullivan, Piereson, and Marcus 1978; Judd and Milburn 1980; Judd, Krosnick, and Milburn 1981; Peffley and Hurwitz 1985, 1993; Hurwitz and Peffley 1987; Sturgis, Roberts, and Allum 2005). Converse's findings regarding political elites received nearly wholesale acceptance, and with a few exceptions, limited additional testing (Putnam, Leonardi, and Nanetti 1979; Converse and Pierce 1986; Jennings 1992). Nearly half a century later, and using a different sample of political elites, do Converse's these general findings still hold true?

Assuming that individuals do possess meaningful political attitudes rather than answering survey questions based on whatever information might be on their minds at the moment, it is crucial to representative democracy for citizens – and their decision-making delegates – to understand which views are compatible or incompatible with each other. This principle, known

as attitude constraint, suggests that individuals should know “what goes with what” (Converse 1964).

For example, if our hypothetical citizen John thinks government should have a strong role in helping the disadvantaged, it would then be logical for John to also support government spending on welfare programs. Ideologically speaking, we might assume that John is politically liberal. In this sense, one’s specific attitudes correspond to one’s general beliefs, and general beliefs tend to mirror a more global liberal or conservative ideological identification (Peffley and Hurwitz 1985; Peffley and Hurwitz 1993). Typically, researchers have examined attitude constraint at one of two conceptual levels. The first level is constraint at the abstract level – that is, the logical consistency between one’s ideological leanings and one’s specific political attitudes (Conover and Feldman 1981; Peffley and Hurwitz 1985). Second is constraint at the specific level – that is, the logical consistency of one’s views *between* specific policy areas or political topics (Converse 1964; Peffley and Hurwitz 1993).

At both the abstract-ideological level and the inter-attitude level, certain groups within the polity demonstrate more constrained attitudes. Education has a bifurcated relationship with constraint: individuals with the highest and those with the lowest levels of education express more attitude constraint than individuals in the middle strata of educational attainment (Bennett, Oldendick, Tuchfarber, and Bishop 1979; Bishop 1976; see also Bennett 1974; Nie and Anderson 1974). Political knowledge is positively related to constraint: individuals who have high levels of political knowledge tend to have more constrained attitudes than those who are less knowledgeable about politics, presumably because they are better able to reconcile new information with their existing beliefs, and identify the consistencies and inconsistencies between them (Delli Carpini and Keeter 1996: 265). Involvement in politics is also positively related to constraint: even within the politically active population, party elites tend to express

more constrained attitudes than even the smallest stratum of very active public citizens (Jennings 1992; Judd, Krosnick, and Milburn 1981). Lastly, individuals who identify strongly with an ideology exhibit more attitude constraint than those who identify weakly or not at all (Converse 1964; Peffley and Hurwitz 1985)

As identified in the previous chapters, elected officials differ systematically from the mass public on several of these factors associated with higher levels of attitude constraint. On average, elected officials tend to be more educated than the mass public, and also more knowledgeable about politics. Elected officials also tend to be more involved in politics: in addition to time spent in their position, elected officials are also more likely to be registered to vote, are more likely to have done volunteer work for other candidates or for political parties, and are more likely to have made financial contributions to other candidates or campaigns. Political elites are also more likely than the mass public to identify as strong ideologues (Page and Shapiro 1992; Rohde 1991; Poole and Rosenthal 1997; Hetherington 2001).

Do elected officials exhibit more inter-attitude constraint than everyday citizens, as Converse originally concluded? Are Converse's findings replicated or challenged using a different sample of elites? Controlling for established differences between the groups that are also associated with higher inter-attitude constraint (education, ideological strength, political involvement, and political knowledge), do any differences in levels of constraint disappear?

## **Method and Data**

### **Political Attitudes**

In operational terms, I measure inter-attitude constraint with a series of eight close-ended political attitudes questions. A full description of the question wording and response options is available in the Appendix B. Broadly, each of the questions relate to social issues. The questions concerned the following topics:

- whether affirmative action programs should/ should not be required for companies with a history of discriminating against minorities,
- whether homosexuals should /should not be allowed to serve in the U.S. military,
- whether people convicted of murder should/ should not receive the death penalty,
- whether abortion should/should not be permitted, and under what conditions,
- whether same-sex marriage should/should not be allowed,
- whether it is important/ not important to try to equalize conditions for different groups,
- whether it is important/ not important to treat other countries as equals,
- to what degree does the government wastes taxpayer money.

Each question included four possible response options. For each question, I re-coded participant's response to each question from one to four, where lower values represent more liberal views towards the issue, and higher values represent more conservative views on the issue.

I took participant's responses to the series of eight questions and conducted a principal component analysis. Only the first component displayed an eigenvalue greater than one, and accounted for 39% of the total variance. The results of a scree test further indicated that only the first component was meaningful. This suggests that the eight questions tap into a single dominant construct, most likely social attitudes.

### **Education**

I measured educational attainment by asking participants to self-report the highest educational degree they had received, with options ranging from no degree earned to professional degrees. A full listing of the response options to this question is provided in the Appendix B. I re-coded participants' responses into a numeric value which corresponded to

their highest level of completed education. Participants who had no degree earned received a value of zero. Participants whose highest degree was high school (or graduate equivalence) received a value of one. Participants who earned associate's degrees as their highest education received a value of two. Participants whose highest degree was a bachelor's degree received a value of three. Individuals whose highest degree was a masters' degree or greater (including J.D, M.B.A, M.D, or Ph.D degrees) received a value of four. On the resulting scale of zero to four, higher values represent higher educational attainment.

### **Political Knowledge**

In operational terms, I measured political knowledge with a seven-item factual knowledge test commonly used in political science studies (Delli Carpini and Keeter 1996; American National Election Studies Series, University of Michigan). The political knowledge test contained both closed-ended and open-ended questions asking participants to identify key players in U.S. politics and to explain which branches of the government are responsible for certain tasks (nominating judges to the federal courts, deciding whether a law is constitutional or not, and so forth). A listing of these questions is available in the APPENDIX B. For each question, if the participant answered the question correctly, they received a value of one. Incorrect answers received a value of zero. I assembled the political knowledge scale by summing the values received on each question. The resulting political knowledge scale ranges from zero (no questions correct) to seven (all questions correct).

### **Political Involvement**

Political involvement can include a number of activities, including voting, volunteering, donating money to candidates or campaigns, contacting one's elected officials, and so forth. To measure political involvement, I asked three separate questions to tap into some of these activities, including:

*Have you ever done volunteer work for your favorite candidate or political party?*

Participants answering “never” received a value of zero, participants responding “once” received a value of one, and participants responding “more than once” received a value of two.

*Have you ever contributed money to your favorite candidate or political party?*

Participants answering “never” received a value of zero, participants responding “once” received a value of one, and participants responding “more than once” received a value of two.

*Are you registered to vote?* Participants who indicated they were registered voters received a value of one, and participants who indicated they were not registered or didn’t know if they were registered received a value of zero.

I calculated a composite score for political involvement score by summing the participant’s values across the three questions. The subsequent political involvement score could range from zero to five, with higher scores indicating more political involvement.

### **Ideological Strength**

To measure political ideology, I asked participants to indicate which of seven descriptors best corresponded to their views about politics. Response options included very conservative, conservative, slightly conservative, moderate, slightly liberal, liberal, and very liberal. I recoded participants’ response to this question into a Likert scale ranging from one to seven. On this scale, higher values indicate more conservative political views, while lower values indicate more liberal views.

### **Analysis and Findings**

The distribution of participant responses for each of the eight attitudes questions as presented in Table 5.1. Each question corresponds to a row, with response options listed within the row. The second column indicates the response distribution across elected officials on each

attitude question, and the third column indicates the response distribution across everyday citizens.

**Table 5.1: Distribution of Attitudes, by Status**

	<b>Elected Officials</b>	<b>Everyday Citizens</b>
<b>Affirmative action programs:</b>		
○ Strongly favor	21%	23%
○ Somewhat favor	47%	48%
○ Somewhat oppose	21%	20%
○ Strongly oppose	10%	9%
<b>Homosexuals in military:</b>		
○ Strongly favor	39%	60%
○ Somewhat favor	30%	24%
○ Somewhat oppose	16%	12%
○ Strongly oppose	15%	4%
<b>Death penalty for murderers:</b>		
○ Strongly favor	33%	14%
○ Somewhat favor	31%	30%
○ Somewhat oppose	16%	30%
○ Strongly oppose	20%	36%
<b>Abortion:</b>		
○ Should never be permitted	11%	6%
○ Should only be permitted in cases of rape, incest, or danger to woman's life	28%	20%
○ Should be permitted for reasons other than rape, incest, or danger to woman's life, but only when need is clearly established	14%	11%
○ Should always be permitted as a matter of personal choice	47%	63%
<b>Same-sex marriage:</b>		
○ Should not be allowed	21%	14%
○ Should not be allowed, but civil unions should	46%	30%
○ Should be allowed	33%	56%
<b>Should do what we can to equalize conditions for different groups:</b>		
○ Strongly disagree	18%	38%
○ Somewhat disagree	38%	43%
○ Somewhat agree	29%	13%
○ Strongly agree	15%	6%
<b>Important that we treat other countries as equals:</b>		
○ Strongly disagree	29%	37%
○ Somewhat disagree	29%	33%
○ Somewhat agree	19%	20%
○ Strongly agree	23%	10%
<b>Does government waste taxpayer money:</b>		
○ Wastes a lot	44%	62%
○ Wastes some	47%	35%
○ Doesn't waste very much	9%	3%
<b>Total N = 268</b>	<b>N = 90</b>	<b>N = 178</b>

The distribution of attitudes between elected officials and everyday citizens' was similar on only one of eight questions: affirmative action. With the remaining questions, the distributions in response are somewhat unequal between the groups. On the remaining seven questions, a greater percentage of elected officials took conservative viewpoints on issues, whereas everyday citizens' distribution skewed towards more liberal responses. This pattern is most likely due to the nature of the subject sample: the everyday citizen sample had many more Democratic identifiers, whereas the sample of elected officials was fairly balanced between Democrats and Republicans.

Per Converse's findings (1964), I hypothesized that elected officials would exhibit more attitude constraint than everyday citizens: that is, elected officials would be better able to arrange those attitudes in ways that correspond logically to the other measured attitudes. To test this proposition, I used a correlation matrix (similar to Converse's original presentation), which indicates the degree to which attitudes take the same orientation. I conducted the analyses separately for elected officials and everyday citizens. The results of the correlation matrices are presented in Tables 5.2 and 5.3.

**Table 5.2: Inter-Attitude Correlations, Elected Officials**

	Affirmative Action	Death Penalty	Gays in Military	Same-Sex Marriage	Equalize Conditions	Other Countries as Equals	Government Wastes Taxpayer Money
Affirmative Action	-	.34**	.30**	.21*	.46**	.29**	.26*
Death Penalty		-	.48**	.43**	.45**	.41**	.41**
Gays in Military			-	.66**	.43**	.43**	.42**
Same-Sex Marriage				-	.30**	.43**	.33**
Equalize Conditions					-	.39**	.34**
Other countries as Equals						-	.47**
Government Wastes Taxpayer Money							-

\*Correlation significant at 0.05,  
 \*\* Correlation significant at 0.01,  
 2-tailed test

**Table 5.3: Inter-Attitude Correlations, Everyday Citizens**

	Affirmative Action	Death Penalty	Gays in Military	Same-Sex Marriage	Equalize Conditions	Other Countries as Equals	Government Wastes Taxpayer Money
Affirmative Action	-	.17*	.15*	.24**	.30**	.27**	.09
Death Penalty		-	.21**	.20**	.17*	.14	.12
Gays in Military			-	.62**	.22**	.18*	.12
Same-Sex Marriage				-	.26**	.28**	.09
Equalize Conditions					-	.35**	.13
Other Countries as Equals						-	.14
Government Wastes Taxpayer Money							-

\*Correlation significant at 0.05,  
 \*\* Correlation significant at 0.01,  
 2-tailed test

Comparing Table 5.2 with Table 5.3, everyday citizen exhibited a moderate amount of inter-attitude consistency with regards to social issues. Among everyday citizens, nearly all the attitudes were significantly correlated with the others, with the notable exception of attitudes about government spending, which in the mass sample fail to correlate to any of the other attitudes questions. Elected officials exhibited a stronger and more consistent pattern of inter-attitude consistency *across all of the questions*. What is striking in these tables is the comparative magnitude of inter-attitude constraint levels *between* elected officials and everyday citizens. While everyday citizens did make at least moderately consistent attitudinal connections between issues, elected officials made those connections more strongly and more consistently.

Taking the averages of the coefficient sets described in Tables 5.2 and 5.3, we see that the strongest levels of inter-attitude constraint are among elected officials, presented in Table 5.4. The mean correlation for elected officials exceeds the mean correlation for everyday citizens by .18.

**Table 5.4: Summary of Differences in Inter-Attitude Constraint (based on Tables 5.2 and 5.3)**

	Within Social Issues
Elected Officials	.39
Everyday Citizens	.21

Again, the nature of the sample requires we interpret these findings with caution. This analysis did not exclude participants on the basis of education, political knowledge, or political ideology: it includes all participants. The study sample of everyday citizens is more educated, more knowledgeable about politics, and more politically liberal than a nationally representative sample. In this sense, this analysis may actually run the risk of *overstating* the mass public's

level of inter-attitude constraint on social issues. Using a more representative sample of everyday citizens, the average correlation coefficients for this group may actually be *lower* (compared to elected officials) than what is reported here.

What other factors might explain the difference in inter-attitude constraint between elected officials and everyday citizens? What other factors are associated with attitude constraint and are also correlated with elected official status? The next step is to compare how different levels of education, political knowledge, political involvement, and ideological strength are related to inter-attitude constraint. This next series of analyses will consider elected officials and everyday citizens together, dividing the sample not on the basis of status, but according to different values of the respective variables of interest.

When it comes to the relationship between education and inter-attitude constraint, I expected that individuals with higher levels of education should have higher levels of inter-attitude constraint, because education imparts critical thinking skills needed to make logical connections between seemingly distinct issues (Bishop 1979). As expected, there was a positive relationship between educational attainment and inter-attitude constraint. Using the same correlation matrix format provided in Table 5.2 and Table 5.3, I segmented observations on the basis of educational attainment, and took the averages of the appropriate correlation coefficients. The results of these analyses are offered in Table 5.5.

**Table 5.5: Differences in Inter-Attitude Constraint, by Highest Educational Degree Obtained**

	Within Social Issues	N
High school diploma or less	.24	55
Associate's degree	.17	29
Bachelor's degree	.31	102
Master's degree or higher	.30	81

These results indicate a positive relationship between education and inter-attitude constraint: as education increases, so does inter-attitude constraint (though the effect plateaus at the level of a bachelor's degree). However, the nature of the sample requires additional consideration of these results. The net difference between the highest and lowest educational categories is .6, which does not appear to be a dramatic difference. It is much smaller than the average coefficient difference between elected officials and everyday citizens considered separately. This may be due in part to the smaller N of the less-educated tiers. Again, the sample (as a whole) was much more educated than a nationally representative sample. If anything, having a more representative sample would likely decrease the average coefficients for those with high school and associate's degrees, illustrating a larger spread between the highly educated and the less-educated.

Similar to the expectations for education and inter-attitude constraint, political knowledge should be positively related to inter-attitude constraint. As people learn and understand more about current affairs, they should be able to make logical linkages as to how particular political issues are related to one another (Delli Carpini and Keeter 1996). To test this hypothesis, I segmented the political knowledge scores into categories of low knowledge (scores of 0-5) and high knowledge (scores of 6 or 7). Using the same correlation matrix method used in Tables 5.2 and 5.3, I calculated the coefficients for each inter-attitude correlation among low-knowledge participants and high-knowledge participants. Then, I averaged the inter-attitude coefficients for each group, the results of which are described in Table 5.6.

**Table 5.6: Differences in Inter-Attitude Constraint, by Political Knowledge**

	Within Social Issues	N
Low Knowledge (0-2)	.15	29
Moderate Knowledge (3-5)	.27	55
High Knowledge (6-7)	.31	156

The results offered in Table 5.6 illustrate that those with higher knowledge about politics expressed a higher level of inter-attitude constraint than those with low political knowledge. Again, the nature of the study sample requires a few caveats. First and foremost, the study sample was much more knowledgeable about politics than a nationally representative sample would have been. Not only were elected officials much more knowledgeable about politics than the everyday citizen sample, the everyday citizen sample was also much more knowledgeable about politics than the mass public writ large. Re-conducting this analysis with a sample that better reflects a normal distribution of political knowledge scores would likely result in different findings. If anything, a more normal distribution of political knowledge scores would likely show larger differences in inter-attitude constraint between the various levels of political knowledge.

Turning next to political involvement, I would expect involvement to have a positive relationship with inter-attitude constraint. Involvement in politics exposes people to political issues. Whether giving time, money, or simply getting out to vote; over time, this exposure illustrates how political issues, activities, and public affairs are intimately connected (Verba, Schlozman, and Brady 1995). In this ways, political involvement should have a positive relationship to inter-attitude consistency (Judd, Krosnick, and Milburn 1981). To test this hypothesis, I segmented political involvement scores into a low-involvement group (scores of 0

or 1), a moderate-involvement group (scores of 2 or 3) and a high-involvement group (scores of 4 or 5). Using the same inter-attitude correlation method used in Tables 5.2 and 5.3, I calculated the inter-attitude correlations for each of the eight political attitude questions separately for each group on the basis of their political involvement score. I then averaged the correlation coefficients for a summary score for each group. The summary results are offered in Table 5.7.

**Table 5.7: Differences in Inter-Attitude Constraint, by Political Involvement**

	Within Social Issues	N
Low involvement (0-1)	.15	87
Moderate involvement (2-3)	.28	84
High involvement (4-5)	.38	97

Table 5.7 illustrates a sizeable difference in inter-attitude constraint between the highly-involved and the less-involved. With a spread of .23 between the most involved and the least involved, those who were most active in politics exhibited significantly stronger patterns of inter-attitude constraint as compared to the least active. However, even those who were moderately active had much higher levels of inter-attitude constraint than those who were minimally or not at all involved in politics. The most involved had a markedly higher inter-attitude correlation average than those who were moderately involved in politics.

Once again, the nature of the sample requires a reserved interpretation of these findings. For one, elected officials in the sample tended to be more involved in politics than everyday citizens in the study. Seventy-five percent of the high-involvement group is comprised of elected officials, with the remaining twenty-five percent being everyday citizens. By contrast, the low-involvement group was overwhelmingly comprised of everyday citizens – ninety-six percent of the low-involvement group was everyday citizens. Moreover, the Ns and correlation coefficient spread between high and low involvement is nearly identical to the Ns and correlation coefficient spreads between elected officials and everyday citizens (Table 5.4). Conceivably, the main feature that distinguishes elected officials from everyday citizens – and

the factor that likely best explains their differences in inter-attitude constraint – is political involvement.

The last relationship I consider is between ideological strength and inter-attitude constraint. Previous research indicates that individuals who identify strongly with a particular political ideology (either liberal or conservative) tend to express higher levels of inter-attitude constraint. Strong ideologues are able to connect their general political orientations with specific issues, and do so with remarkable consistency (Judd and Krosnick 1989; Luskin 1987; Nie and Andersen 1974; Peffley and Hurwitz 1993). To test this proposition, I relied on participant's self-reported ideological identification. In the study, I asked participants to indicate where their political views fell along a seven-point scale ranging from very liberal (1) to very conservative (7). Individuals who placed themselves at the end-points of the scale (either "very liberal" or "very conservative") were classified as strong ideologues. Participants who classified themselves as "liberal" or "conservative" were classified as mild ideologues, while participants who considered themselves "slightly liberal" or "slightly conservative" were classified as weak ideologues. Participants who placed themselves at the middle of the scale, "moderate," were classified as non-ideologues and combined into one group for contrast against the strong ideologues.

To test for differences in inter-attitude constraint, I used a correlation matrix method similar to that presented in Table 5.2 and Table 5.3, calculating the inter-attitude correlations separately for each group. For each group, I then averaged each groups' correlation coefficients to give a summary description of the correlation differences. These results are provided in Table 5.8.

**Table 5.8: Differences in Inter-Attitude Constraint, by Ideological Strength**

	Within Social Issues	N
Non-ideologues	.03	42
Weak ideologues	.23	73
Mild ideologues	.30	113
Strong ideologues	.51	41

From Table 5.8, we see that as ideological strength increases, inter-attitude constraint also increases. This effect has a strong, linear pattern. Those with a “very liberal” or “very conservative” political ideology were significantly more likely to connect their social attitudes in logically consistent ways, and this trend tempers as ideological identification cools.

Once again, the nature of the sample requires additional interpretation of these findings. Bear in mind that this analysis includes both elected officials and everyday citizens. Controlling for the relative proportion of elected officials to everyday citizens in the sample as a whole, elected officials were much more likely to identify themselves as non-ideologues (moderates). Amongst the remaining elected officials, they were equally likely as everyday citizens to identify as weak, mild, or strong ideologues. This likely does not reflect any broader trends, and is probably attributable to the kinds of political offices held in this study. Elected officials in the study came from state and local government: many offices at these levels are elected on non-partisan tickets (Schaffner, Streb, and Wright 2001), and state and local politics may have a lower degree of elite polarization than at other levels (Squire 1992; Williams and Adrian 1959; Elazar 1984).

## Discussion

In the preceding analysis, I showed that elected officials in the study demonstrated higher levels of inter-attitude constraint with regards to social issues than did everyday citizens. These findings compliment Converse's original findings (Converse 1964), but are somewhat tempered by the nature of the study sample. If we were to use a nationally representative sample, the differences in inter-attitude constraint would likely be magnified rather than diminished. Understanding that elected officials differ from everyday citizens on core demographic factors that are also associated with higher levels of inter-attitude constraint, I tested how education, political knowledge, and political involvement were related to inter-attitude constraint *across* participants. In line with previous research, I found that education, political knowledge, and political involvement each had a significant, positive relationship with inter-attitude constraint. Given that elected officials tend to possess these demographic qualities in spades, it is not surprising that they exhibit a higher level of inter-attitudinal constraint than the mass public.

But the extent to which these differences manifest in policy-making and governance remains to be seen. Some express concern that if the public does not have consistent, logically linked preferences, then it would be difficult, if not impossible, for elected representatives to discern a meaningful public will (Page and Shapiro 1992; Friedman 2006). From elected officials' perspective, re-presenting conflicting and inconsistent attitudes becomes an increasingly difficult task. And if representatives are increasingly seen as trustees of the public interest rather than delegates of it, exactly what this means for our concept of representation is open for debate.

## Chapter 6: Conclusions

For quite some time, a sizeable body of work in political science has implied that elected officials are quite different from everyday citizens in how they think, reason, and react to politics. Decades of research in political science have demonstrated that citizens' actual behaviors rarely meet our classical democratic ideals. Portraits of a largely uninformed, inattentive, and inactive public are commonly presented.

Certainly, many citizens in society are not *qualified* to govern (Dahl 1989). But the darker subtext in this claim, which many philosophers and practitioners have seized upon, is to suggest that a sizeable swath of the population is not *competent* enough to make political decisions. Instead, if we desire good decision-making and policy-making, most important political decisions ought to be made by a group of individuals judged to be the most competent, rather than the citizenry as a whole (Schumpeter 1942). In contrast to both of these perspectives, some scholars have argued that because the notion of democracy rests upon the consent of the governed, adults who are subject to the laws of the state should be given the opportunity to play an integral role in deciding the nature of those laws (Dahl 1989). This has paved the way for more participatory views of democracy, which advocate more public involvement in governance and political decision-making (Chambers 1996; Barber 1984/2004; Fishkin and Laslett 2003; Gutmann and Thompson 1996; Mansbridge 1983; Putnam 2000; Cohen 1989).

Amidst the clamor of debate, these competing viewpoints have overlooked a simple but fundamental question. Acknowledging the present arrangement of representative democracy, how do elected officials compare to everyday citizens when it comes to the process by which they make political decisions and the subsequent quality of their decisions? To what extent are they similar, and to what extent are they actually different? How might a more direct model of

political decision-making compare to our present system of representative democracy? Until this project, we had little empirical data to answer these questions.

The preliminary findings of the study suggest that though these groups differ demographically and attitudinally, they do not differ significantly in how they use information to arrive at political choices. Rather, there is substantial variation *within* these groups when it comes to information use. At the individual level, people remain quite consistent in the decision-making processes they use, and tend to use these same information use strategies across scenarios. Those who use a great deal of information in one scenario typically use a great deal of information in another. Those who speed through one problem can typically be counted on to move speedily through the next. Yet depending on the nature of the problem itself, individuals tweak their information use in small ways, especially when it comes to the types of information they choose to view.

The initial results suggest that *across elected officials and everyday citizens*, the demographic factors of education, political knowledge, and political involvement seem to have little impact on what information use strategies people employ. Those with high levels of political knowledge did not use radically different decisions-making strategies than those with lower levels of political knowledge. The same could be said for educational attainment: those with fewer years of formal schooling did not make decisions much differently from those with many years of formal schooling. Moreover, the specific demographic factors of knowledge, education, and involvement do not have differential effects on elected officials and everyday citizens. In short, there is little evidence of any interactive relationships between status and the demographic factors of interest.

## **Study Limitations**

All research - regardless of which methods or measures are used – has flaws and limitations. As with any study, the conclusions of this research are circumscribed under a specific set of potential limitations. I address a few of the potential criticisms in turn.

In the study, I found minimal differences between everyday citizens and elected officials in the processes they use to make political decisions. Some may question whether the findings are simply an artifact of the study design. In the real world, elected officials' decision-making are heavily shaped by the institutions in which they operate. Rarely (if ever) are elected officials asked to make policy decisions alone, and rarely (if ever) do those decisions have zero ramifications. By removing the institutional dynamic from decision-making, might have I eliminated the opportunity to witness differences?

The experimental task was designed to equalize the kinds of decisions elected officials and everyday citizens are asked to make. In the study, all participants were asked to role-play the part of an elected official, and asked to solve two public policy problems. I randomized the order of the public policy problems. In each policy scenario, I equalized the amount and content of information available to participants, thereby leveling the information advantage that tends to characterize elected official's decision-making. However, using a static information board rather than a dynamic information board could have impacted the findings as well. In a static board, information was fixed: participants could have assumed all information on the board was relevant simply because it was included. Had I used a dynamic board, I may have witnessed more differences between elected officials and everyday citizens, especially when it comes to their ability to differentiate between relevant and irrelevant information.

Clearly, institutions matter. But to fully understand behavior in the group context, we must also understand how individuals behave alone. I make no claims that this study precisely

reflects what elected officials or everyday citizens do (or don't do) when it comes to real-life, real-time political decision-making. Instead, it helps us to understand how, at base, elected officials and everyday citizens possess the same general capacities and tendencies when it comes to how they go about making political decisions. It also shows that there is a great deal of variation *within* these groups: not all elected officials make decisions the same way, and neither do everyday citizens. As such, not all elected officials may be influenced by institutional constraints in the same ways. Because of this study, future research will be better equipped to examine how institutional dynamics influence individual's decision-making processes, and whether institutional dynamics influence some groups of people more so than others.

A related challenge to the validity of the study results stem from the nature of the sample. Some may question whether I found little differences between elected officials and everyday citizens because the sample of elected officials may not have been "the right kind" of elected officials to study. Perhaps I would have uncovered more differences comparing everyday citizens to national-level officials (members of the U.S. Congress, the Courts, or the Executive).

But for the purposes of this study, a sample of state and local elected officials was the appropriate level of analysis for several reasons. First, political decisions made at the state and local levels tend to have the most direct impact on citizens' everyday lives. As Tip O'Neill put it: "all politics is local." Studying elected officials the state and local level gives us immense insight into the kinds of decision-makers that stand to impact citizens' lives the most. Second, most national-level officials have at one point held state or local-level office: state and local offices are the primary recruitment pools for national-level elected offices. The single best predictor of winning elected office is having held an elected office before (Jacobson and Kernell 1983; Krasno

and Green 1988; Krasno 1994). It is unlikely that a step-change transformation in individuals' underlying political cognitions occurs by taking a different oath of office.

However, the cumulative effects of *experience* may encourage the use of different decision-making strategies over others. Within the group of elected officials, do elected officials with more years of experience make decisions differently than elected officials with relatively few years of experience? Future research will be able to guide us in this regard, as I did ask a question in the study about whether the individual had ever held certain levels of offices, as well as how many cumulative years they had held elected office. In the study, I asked elected officials to indicate the total number of years they had held elected office (time in their current position, plus any previously held position).<sup>17</sup> The mean experience level was slightly under seven years, with the mode being four years of experience in elected office. Among elected officials in the study, the distribution of office-holding experience ranged from under one year to more than twenty-five years, with the mean falling slightly under seven years and the mode being four. In future analysis, this data will allow me to better understand the potential relationship between experience and the kinds of decision-making strategies elected officials use.

It is also possible that limited findings between elected officials and everyday citizens are in part due to the nature of the sample of everyday citizens. As described in Chapter 2, the everyday citizens in the study sample tended to be much more educated and more liberal than a nationally representative sample would have been. I might have uncovered more differences between elected officials and everyday citizens by using a more representative segment of everyday citizens.

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<sup>17</sup> Data on this question is available for two-thirds of the sample of elected officials, as this question was only introduced starting in the fall of 2008.

Another potential limitation to the study again comes from the nature of the sample: what selective recruitment effects might have been at play? Did participants who took part in the study differ in important ways from the broader population who did not participate? This is always a possibility, but it's hard to tell to what extent selective recruitment occurred without additional information about the characteristics of those who did not participate (and it's a tautology: we do not have that information because they didn't participate).

Conceivably, there could have been a response bias in who took part in the study: those who were particularly interested in politics, those who held a particular affinity for the University of Minnesota or Furman University, those who might have had a friend or family member go through graduate school, or those who were particularly in need of the \$20 human subjects compensation may have been more likely than others to take part in the study.

Another potential criticism is that the study findings again may be an artifact of the sample, this time by way of where the study was conducted. I conducted the study in two very different states (Minnesota and South Carolina) in two very different regions of the country (the Upper Midwest and the Deep South). Minnesota and South Carolina are very different by way of political culture and the norms of participation. Minnesota tends to be a more liberal, populist state, whereas South Carolina tends to be more politically conservative, and also more socially stratified when it comes to political involvement (Elazar, Gray, and Spano 1999; Black and Black 1987; Key 1949).

Might I have uncovered different findings if I had conducted the study in different states? It is certainly a possibility, and future research of this nature will hopefully be able to use a sample of everyday citizens and elected officials from several states in different regions of the country. Yet even for all the differences in political and cultural norms between these two states, I found little differences in how elected officials and everyday citizens from these wildly

different areas made political choices. According to popular wisdom, elected officials and everyday citizens in these states should have been very different – *the surprising finding is that they weren't.*

## Implications and Future Directions

Recall that “representation” is a relatively new practice in democratic societies. The practical realities of a large, geographically dispersed nation make it efficient to delegate the division of political labor – at least to some degree. But historically speaking, most models of representation have not been overly concerned with freeing up citizens’ time and ensuring maximum governing efficiency, but instead, to guard against the perceived dangers of too much public involvement in decision-making. In the Jeffersonian-Republican perspective, people were to be more feared than trusted (Dahl 1989).

Most could agree that not all citizens are necessarily *qualified* to govern. The darker subtext that emerges from this claim is that a sizeable segment of the polity is not *competent* enough to govern. To meet classic democratic ideals, politically competent citizens should meet three key criteria, but extensive empirical research shows that citizens often fall short of these aims. First, we expect competent citizens to *have* meaningful attitudes and beliefs about political matters, which a sizeable literature indicates many people may not (Zaller and Feldman 1992; Zaller 1992; Achen 1975). Second, we expect competent citizens to be able to accurately express their attitudes and beliefs, which many seem not to be able to do (Converse 1964; Zaller and Feldman 1992). Third, we expect competent decision-makers to select appropriate courses of action that will correctly reflect their attitudes and beliefs, yet a sizeable swath of the population often fails in this regard (Lau and Redlawsk 1997; Bartels 1996). While it is unsavory from the perspective of classical democratic theory that a majority of citizens do not meet these criteria, so long as the smaller body of citizens who govern do, isn’t all safe and well for democracy?

In this study, I found that that the individuals who govern differ from everyday citizens in several important ways: those who govern tend to be more educated, more knowledgeable about politics, more consistent in their political attitudes, and also more involved in public

affairs. However, elected officials do not differ systematically from everyday citizens in how they make political choices. Elected officials also do not differ from everyday citizens in the frequency with which they select particular policy choices over others.

When we equalize the amount and content of information available to make a decision, elected officials and everyday citizens do not gravitate towards systematically different methods of information use. The key distinguishing factor that we eliminated was a dynamic information environment, which would have forced individuals to make more choices about what information to view and what information to ignore. Given more opportunities to make choices about what information is used, we may have witnessed more differences between elected officials and everyday citizens. It may be the case that certain individuals are more adept at 'chunking' relevant information in a dynamic environment (Delli Carpini and Keeter 1996; Lau and Redlawsk 2001; Tetlock 2005).

For now, we do know that when elected officials and everyday citizens face identical contextual demands on their decision-making, they tend to make decisions in much the same way. Comporting with previous research findings, contextual pressures impacted elected officials' and everyday citizens' decision-making in largely the same ways (Janis 1972; Janis and Mann 1977; Jackson and Dutton 1988; Khong 1992). While there may be few systematic differences in decision-making *across* elected officials and everyday citizens as groups there remains a great deal of variance *within* these groups when it comes to decision-making style.

In *Democracy and Its Critics* (1989), Robert Dahl posits political decisions depend on two types of judgments: moral judgment (being able to identify one's own interests and the ability to act in ways that realize them), and two, instrumental judgment (empirical knowledge of the world, and understanding how to go about realizing one's interests). Quality political decisions presumably require both: instrumental expertise alone is not enough (Tetlock 2005). How do

we cultivate the development of both moral and technical competence? According to Dahl, people discover their interests and learn how to realize them by paying attention to and being involved in politics. And in this regard, we ought not expect perfection from imperfect human beings (Dahl 1989: 78-79). When decisions are extremely technical in nature, or the stakes are extremely high, it makes sense to leave decision-making to experts (Hastie and Dawes 2003; Tetlock 2005). Few would support populist involvement in every political decision, especially those regarding strategy or military operations.

If elected officials and everyday citizens are more similar than they are different when it comes to how they make political decisions, why not continue this efficient (and seemingly effective) outsourcing of labor? Many treat public participation in politics and governance as valuable for its own sake (Rawls 1993; Verba 2003). Experiences shape views, opinions, and actions. Though in many cases it would be easier to outsource a task (mowing the lawn, buying a packaged dessert at the grocery store over making one for the dinner party, writing a term paper on your own versus buying one over the Internet), the sense of accomplishment that comes from taking ownership of a project is immense. Why not allow citizens more ownership – that is, more opportunities for sweat equity – when it comes to political decision-making (especially among those who want it)? At the very least, it would encourage more dialogue and debate within communities. With increased political involvement comes a greater sense of political efficacy: the notion that one's actions make a positive difference. And in most communities, the impact of high political involvement and high political efficacy has waterfall effects. Communities with high levels of social and political involvement tend to have lower levels of crime and violence, increased business investment, faster economic growth, higher levels of educational achievement, and greater trust in government institutions. Residents of these communities tend to be healthier, and they also tend to be happier (Putnam 2000).

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What lessons can we take away from this study? For a long time, many scholars within the discipline of political science have assumed (and some hoped) that elected officials were different from citizens when it comes to how they think, reason, and react to politics. The nascent findings of this study challenge this assumption. While elected officials differ from everyday citizens on several demographic factors (education, political knowledge, political involvement, and income), these groups do not differ much in how they use information to make political choices.

As with any research in a relatively unexplored area, the degree to which these findings and conclusions are generalizable to a larger population remains to be seen. The next step is to replicate and extend the study framework to other samples of everyday citizens and elected officials, and to see whether the findings presented here are either supported or challenged by those results.

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## Appendix A: Decision Scripts for Experimental Conditions

## CONTROL GROUP INSTRUCTIONS – ECONOMY SCENARIO

The nation has experienced a severe economic downturn. Hundreds of thousands of Americans have put their homes into foreclosure, many more have declared bankruptcy. Many people cannot keep up with the rising costs of basic goods and services (gasoline, groceries, utilities, and rent). The economic downturn has spread to all sectors of the financial market. Advisors fear this could lead to public and political unrest, and worry that the problem may spread to the global economy.

Several alternatives have been identified as potential solutions to this problem.

Option A – you can take no action, and wait for the market to correct itself

Option B – you can encourage the Federal Reserve Bank to cut interest rates

Option C – you can issue emergency loans to individuals/ families who are most in need

As an elected official, you must decide what to do. The decision you make will affect the lives of the people you represent. Since you are running for re-election soon, you must be very careful as to how you approach the situation. This decision will have a crucial effect on your re-election.

Information about the alternatives has been assembled for you by trusted policy experts and political advisors. You will also receive reports about the proposed alternatives from several news media organizations. This information is presented in an information board format.

As in the practice session, the information board is presented as a table. The choice alternatives are organized in the columns, and the attributes of the alternatives are organized in the rows. You can use the board to see what information has been provided about the different alternatives and then determine your choice. You can view as much or as little information as you feel is necessary before making a decision.

When you've decided on a choice alternative, click the "MAKE DECISION" icon at the bottom of the screen. The computer will guide you to another screen where you will register your decision.

As with all choices, there is a tradeoff between the amount of information you can consider and the time you have available to make a decision based on that information. You can access any piece of information as many times as you like, but remember that you will have a limited amount of time to make a final decision.

When you are ready, press "ENTER" to start the decision task.

## CONTROL GROUP INSTRUCTIONS – DRUGS SCENARIO

A pharmaceutical company in Mexico recently developed a therapeutic drug to treat Alzheimer's – a disease which affects the lives of millions of people. This drug may significantly lessen the symptoms of Alzheimer's, and perhaps even stop the disease's progression entirely. The Mexican company plans to start selling the drug next week. One American pharmaceutical company has developed similar drug to treat Alzheimer's – Alzoperine – but the American drug has not received approval from the U.S. Food and Drug Administration (FDA). There are many uncertainties about the potential dangers of taking Alzoperine, as this drug may have serious and harmful side effects. Currently, the federal government does not allow pharmaceuticals from Mexico to be shipped into the U.S.

Several alternatives have been identified as potential solutions to this problem.

Option A – you can take no action, and wait to see whether Alzoperine gets approved by the U.S. FDA.

Option B – You can encourage the FDA to “rush” the approval of Alzoperine, foregoing extensive clinical trials and putting the drug directly on the market.

Option C – you can pass a law allowing the Mexican drug to be imported, but Mexico will tax American buyers at fifty times the drug's Mexican retail price. American insurance companies will not cover this cost.

As an elected official, you must decide what to do. The decision you make will affect the lives of the people you represent. Since you are running for re-election soon, you must be very careful as to how you approach the situation. This decision will have a crucial effect on your re-election.

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When you are ready, press “ENTER” to start the decision task.

## ACCOUNTABILITY CONDITION INSTRUCTIONS – ECONOMY SCENARIO

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**After you register your decision, members of the media and voters in your district will ask you to tell them more about your decision.**

When you are ready, press "ENTER" to start the decision task.

## ACCOUNTABILITY CONDITION INSTRUCTIONS – DRUGS SCENARIO

A pharmaceutical company in Mexico recently developed a therapeutic drug to treat Alzheimer's – a disease which affects the lives of millions of people. This drug may significantly lessen the symptoms of Alzheimer's, and perhaps even stop the disease's progression entirely. The Mexican company plans to start selling the drug next week. One American pharmaceutical company has developed similar drug to treat Alzheimer's – Alzoperine – but the American drug has not received approval from the U.S. Food and Drug Administration (FDA). There are many uncertainties about the potential dangers of taking Alzoperine, as this drug may have serious and harmful side effects. Currently, the federal government does not allow pharmaceuticals from Mexico to be shipped into the U.S.

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Option C – you can pass a law allowing the Mexican drug to be imported, but Mexico will tax American buyers at fifty times the drug's Mexican retail price. American insurance companies will not cover this cost.

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**After you register your decision, members of the media and voters in your district will ask you to tell them more about your decision.**

When you are ready, press “ENTER” to start the decision task.

#### STAKES CONDITION INSTRUCTIONS – ECONOMY SCENARIO

The nation has experienced a severe economic downturn. Hundreds of thousands of Americans have put their homes into foreclosure, many more have declared bankruptcy. Many people cannot keep up with the rising costs of basic goods and services (gasoline, groceries, utilities, and rent). The economic downturn has spread to all sectors of the financial market. Advisors fear this could lead to public and political unrest, and worry that the problem may spread to the global economy.

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Option B – you can encourage the Federal Reserve Bank to cut interest rates

Option C – you can issue emergency loans to individuals/ families who are most in need

As an elected official, you must decide what to do. The decision you make will affect the lives of the people you represent. **The economic downturn is so severe that a poor decision will result in many lives being lost, while a better decision will result in fewer lives being lost.** Since you are running for re-election soon, you must be very careful as to how you approach the situation. This decision will have a crucial effect on your re-election.

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## ACCOUNTABILITY x STAKES CONDITION INSTRUCTIONS – ECONOMY SCENARIO

The nation has experienced a severe economic downturn. Hundreds of thousands of Americans have put their homes into foreclosure, many more have declared bankruptcy. Many people cannot keep up with the rising costs of basic goods and services (gasoline, groceries, utilities, and rent). The economic downturn has spread to all sectors of the financial market. Advisors fear this could lead to public and political unrest, and worry that the problem may spread to the global economy.

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## Appendix B: Measurements and Variable Coding

\*Unless otherwise noted, missing responses are treated as system missing.

### Political Knowledge

#### **Political Knowledge Items:**

- 1) What job or political office does Dick Cheney / Joe Biden hold? (write-in)
- 2) What job or political office does John Roberts hold? (write-in)
- 3) What job or political office does Nancy Pelosi hold? (write-in)
- 4) Whose responsibility is it to determine whether a law is constitutional or not?
- 5) Whose responsibility is it to nominate judges to the federal courts?
- 6) Which political party currently has the most members in the U.S. House of Representatives?
- 7) Which political party currently has the most members in the U.S. Senate?

**Political Knowledge Scale:** for each question, “1” if correct, “0” if incorrect, sum for score.  
Score range: 0-7

### Political Attitudes

#### **Political Attitudes Items:**

If a company has a history of discriminating against minorities, would you favor or oppose requiring the company to have an affirmative action program that gives minorities preference in hiring?

- Strongly favor
- Somewhat favor
- Somewhat oppose
- Strongly oppose

Do you favor or oppose the death penalty for people convicted of murder?

- Strongly favor
- Somewhat favor
- Somewhat oppose
- Strongly oppose

Do you favor or oppose allowing homosexuals to serve in the military?

- Strongly favor
- Somewhat favor
- Somewhat oppose
- Strongly oppose

Which of the following best reflects your views about same-sex marriage?

- Marriage between same sex couples should be allowed.
- Marriage should not be allowed, but civil unions should.
- Marriage and civil unions should not be allowed.

In your view, has the War on Terror (including the wars in Afghanistan and Iraq) made America more or less safe from the threat of terrorism?

- Much more safe

- Slightly more safe
- No change
- Slightly less safe
- Much less safe

Which of the following best corresponds to your view on abortion?

- By law, abortion should never be permitted.
- The law should permit abortion only in cases of rape, incest, or when the woman’s life is in danger.
- The law should permit abortion for reasons other than rape, incest, or danger to the woman’s life, but only after the need for the abortion has been clearly established.
- By law, a woman should always be able to obtain an abortion as a matter of personal choice.

**Inter-attitude Constraint Scale:** for each political attitude question, coded “4” thru “1,” where higher values represent more traditionally conservative positions.

### Demographic Measures

#### **Income**

Which of the following options best reflects the level of income *your household* earned last year?

- Less than \$15,000
- \$15,000-\$29,999
- \$30,000-\$44,999
- \$45,000-\$59,999
- \$60,000-\$74,999
- \$75,000-\$89,999
- \$90,000-\$104,999
- \$105,000-\$119,999
- \$120,000 or more
- Decline to answer

Income recoded according to response from 1 (“Less than \$15,000”) to 9 (“\$120,000 or more”). “Decline to answer” was coded as system-missing.

#### **Education**

What is the highest educational degree you have earned?

- No degree earned
- High school degree or equivalent (GED)
- Associate’s degree (AA)
- Bachelor’s degree
- Master’s degree
- PhD, LIT, SCD, DFA, DLIT, DPH, DPHIL, JSC, SJD
- LLB, JD
- MD, DDS, DVM, MVSA, DSC, DO
- JDC, STD, THD

Education recoded according to response: 0 = "No degree earned", 1 = "High school degree or equivalent (GED)," 2 = "Associate's degree," 3 = "Bachelor's degree," 4 = "Master's degree," "PhD, LIT, SCD, DFA, DLIT, DPH, DPHIL, JSC, SJD," "LLB, JD, "MD, DDS, DVM, MVSA, DSC, DO," JDC, STD, THD"

### **Political Involvement**

Have you ever done volunteer work for your favorite candidate or political party?

- Yes, once
- Yes, more than once
- No

Volunteer work recoded 0 = "No," 1 = "Yes, once," 2 = "Yes, more than once"

Have you ever made a financial contribution to your favorite candidate or political party?

- Yes, once
- Yes, more than once
- No

Financial contribution recoded 0 = "No," 1 = "Yes, once," 2 = "Yes, more than once"

Are you registered to vote?

- Yes
- No
- Not sure

Registered to vote recoded 0 = "No," 1 = "Yes," 0 = "Not sure"

### **Political Involvement Scale**

Sum values on each of involvement measure to get political involvement score.

### **Measures of Emotion**

#### **State Anxiety**

Following each decision-making scenario, participants were asked to self-report how anxious they felt at discrete moments during the decision-making task.

How anxious did you feel when reading the decision-task instructions?

- Not very anxious
- A little anxious
- Somewhat anxious
- Very anxious

How anxious did you feel when using the information board?

- Not very anxious
- A little anxious
- Somewhat anxious
- Very anxious

How anxious did you feel when registering your decision?

- Not very anxious

- A little anxious
- Somewhat anxious
- Very anxious

How anxious did you feel when you had to explain your decision to voters and the media?

- Not very anxious
- A little anxious
- Somewhat anxious
- Very anxious

Recoded answers to each discrete anxiety question: “not very anxious” = 0, “a little anxious” = 1, “somewhat anxious” =2, “very anxious” = 3

**Economy Task State Anxiety:** calculated by summing the scores to each discrete anxiety question in regards to the economic crisis scenario. Potential score could range from 0 to 12.

**Drugs Scenario State Anxiety:** calculated by summing the scores to each discrete anxiety question in regards to the importing pharmaceutical drugs scenario. Potential score could range from 0 to 12.

**Task-General Emotional Reactions**

Following each decision-making scenario, participants were asked to indicate the degree to which they may have felt particular emotional reactions (both positive and negative) during the decision-making task. Below is a list of the negative emotional responses I analyzed, including how the variables were re-coded.

Worried – “not at all” =0; “a little” = 1; “somewhat” =2; “very” = 4

Afraid - “not at all” =0; “a little” = 1; “somewhat” =2; “very” = 4

Disgusted - “not at all” =0; “a little” = 1; “somewhat” =2; “very” = 4

Angry - “not at all” =0; “a little” = 1; “somewhat” =2; “very” = 4

Frustrated - “not at all” =0; “a little” = 1; “somewhat” =2; “very” = 4

Anxious - “not at all” =0; “a little” = 1; “somewhat” =2; “very” = 4

Uneasy - “not at all” =0; “a little” = 1; “somewhat” =2; “very” = 4

## Appendix C: Reflections

One of my favorite texts I read in graduate school was Richard Fenno's *Homestyle* (1976). Fenno studied how members of Congress interact with the people they represent. According to Fenno, a congressman's behavior in Washington could best be explained *not* by analyzing their Washington behavior, but by examining the relationships they held with constituents back home.

While some kinds of congressional data would have been readily available for Fenno to use in the early 1970s, he recognized existing data does not suit every question. What was so revolutionary about Fenno's methodology is that *he brought his study to elite decision-makers*: he interviewed them on plane rides home, he attended business luncheons, and he played golf with them. Not only did *Homestyle* provide legislative scholars a fresh rubric by which to interpret Congressional behavior, Fenno's method of studying elected officials gave political scientists an alternative framework by which to study elites. The approach was qualitative, not quantitative in nature. Most of the studies that followed Fenno's lead had similarly small Ns, and built their conclusions from interviews and observations.

Over time, the fashionable methods for studying elite behavior and elite cognition changed. Behaviorist approaches gave way to rational choice, psychological analysis gave way to roll call analysis, soaking-and-poking gave way to formal modeling. As such, a substantive dichotomy emerged in the field of political science. On the one hand, there were scholars who studied behavior, and on the other hand, there were scholars who studied institutions. Throughout my graduate education, I had healthy exposure to both behavioral and institutional perspectives. At times, I felt frustrated that I might have to choose sides. I knew that institutions mattered. But I also knew that the individuals operating within those institutions – with their human imperfections and idiosyncrasies – also mattered a great deal.

A few years after reading *Homestyle*, I had the pleasure of meeting Richard Fenno in person. He came to Minnesota as part of a symposium, and I was able to meet with him one-on-one. I told him about this half-baked idea I had about taking a computerized study to elected officials and getting quantitative data from them. Would something like this even be feasible? Would elected officials do it? I asked Fenno for his take.

“Swing for the fences,” he said.

I could do that. Swinging for the fences was great idea. And using a really good bat would increase my odds of hitting a home run. It took me a full year to design and develop the project – I wanted the study to be as good as it could possibly be, and this took several iterations of proposals, pilot testing, and software modification. Development definitely did not happen overnight. In fact, when I originally proposed this project, I encountered a significant amount of nay-saying about it:

“It’s a nice idea, but you’ll never be able to do it.” - a senior faculty member

“You’ll never get real elected officials to take part in this study. Why don’t you use student government members instead?” - a senior faculty member

These select quotes cut to the heart of it. In hindsight, the nay-saying (as a whole) seemed to center around three main criticisms:

1) You’ll never be able to get elected officials to take part in an experimental study, not only for reasons of trust, but especially for reasons of time,

2) If you do get elected officials to take part in an experimental study, they probably won’t answer your survey questions honestly,

3) If you do get elected officials to take part in an experimental study, there is absolutely no way they will consent to wear a heart rate monitor.

As Thomas Edison is credited with saying, within every challenge lays an opportunity. For the first challenge – time and trust – I had to make it easy for elected officials to participate. The first way of doing this was to make data anonymous. Participants – especially elected officials – would be more inclined to answer sensitive questions honestly if they understood the data were anonymous. Second, I think it helped that I am politically inactive. I've never donated to a political campaign, I've never done volunteer work for a candidate, and I'm not a member of any political party. My research is not funded by parties or other political organizations. I think these factors helped participants to understand that this really was a scientific research study – not some politically-motivated endeavor masquerading as one.

Third, elected officials would be more likely to participate if I brought the study to them (rather than having them come to the lab). So, similar to Fenno, I took the study to elected officials. Really, though, this should not be interpreted as anything fancier than it was: I didn't get to ride in any jets, attend Rotary pancake breakfasts, or improve my short-game on the golf course. In order to bring my study to elected officials, I literally packed my laptop computers and portable heart rate monitors into an old Samsonite suitcase and rolled my mobile lab across the states of Minnesota and South Carolina.

Taking my study to elected officials in Minnesota and South Carolina, I saw an array of surprising and unexpected places. I saw the world's only museum dedicated to SPAM (the potted meat), a business that specialized in both barbecue and auto towing, and marble-floored corporate compounds with waterfalls in the lobby. I visited the beaches of South Carolina and the cornfields of southern Minnesota. I saw ancient glacial lakes and spooky, foggy swamps. I saw small town city council chambers, multi-million dollar government centers, and what seemed like hundreds of public library study rooms.

It should come as no surprise that this project required I spend a great deal of time in my car. Fortunately, I had some funds for long-distance travel. However, the grant money allocated to travel expenses dried up in a matter of days (gasoline in the summer of 2008 was \$4.00 a gallon). In travelling to elected officials and outstate participants, I put more than 10,000 miles on my car, most of which came as an out-of-pocket expense. I listened to hours of books on tape, National Public Radio, Top 40 radio stations, and voicemail messages.

It was a year of being on the road: of relying on friends and family members to let me crash on their couches. It was a year of spending afternoons going from local business to local business, cold-approaching them to ask if I could post recruitment flyers on their bulletin boards. It was a year of figuring out which would be the best non-perishable snacks to pack in my car if I forgot to eat lunch (Wheat Thins – yes, Diet Coke – yes, string cheese – no). It was a year of savagely hunting for the cheapest gasoline. It was a year in which I learned the words to every song on Stevie Wonder's *Greatest Hits* album. Most importantly, it was the year I learned how to talk about my profession and my research in plain, commonsense language. Being in the car gave me important time alone with my own thoughts. I needed uninterrupted time to just *think* – to think through challenges with recruitment, with time management, chapter structure, and the dissertation as a whole. Thinking time is automatically built into four-hour road trips.

The experience of creating and running this project shaped my professional growth, but it also impacted me on a personal level. Without a doubt, I got used to being told “no” on a near-daily basis! I quickly learned not to take refusal personally. Even so, some days I would come home and weep about rude participants or this-and-that frustration (no-shows were always vexing). Other days I would return home elated: people thought my project was so interesting! I had the coolest job on the entire planet!

All in all, this study was a very positive experience. If anything, my research experience taught me that the sour encounters I had to chalk up to people being people. At the same time, I could never take for granted that people were taking time from their lives to help me with my research. Their generosity amazed me, and I am grateful for it.

### **Recruitment Issues**

It is a truth universally recognized that academics conjure a number of stereotypes. I won't mince words, because I encountered these stereotypes on an almost-daily basis. I would imagine that the most common stereotypes that come to mind for most are:

- 1) academic types are very smart, but so smart as to be out of touch with the real world,
- 2) because they spend so much time thinking and working alone, they tend towards social awkwardness,
- 3) colleges and universities are crucibles of liberalism; therefore, academics must be liberal.

As such, I ran into different problems with academic stereotypes in Minnesota and South Carolina. I do not doubt that these stereotypes impacted recruitment.

In Minnesota, I found that most elected officials were happily willing to help a student with her research. In South Carolina, I encountered much more resistance. The premise that I was a graduate student or Ph.D. candidate doing scientific research was not cause for suspicion in Minnesota. If there was any question, it was about my age ("Why, you don't look old enough to be a professor/ a Ph.D. candidate/ a graduate student!" "Is this really your research project? But you're so young!").<sup>18</sup> Though my age was a surprise to some participants, I felt no resistance to being taken seriously, especially once people started the study. Several participants – mostly male – were surprised I was female (many said they were expecting to meet Mr. Dana Adams).

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<sup>18</sup> Disclaimer: I'm no Doogie Hauser. I was twenty-seven when I started data collection.

Some participants did ask to know more about my educational and training background before consenting to participate. In case people wanted verification that I was indeed a student doing dissertation research on a legitimate project, several members of my dissertation committee (well-known in the community) served as references. A handful of potential participants did ask for this information.

My goal in recruitment – both for elected and everyday citizens – was to introduce myself and explain the study in the most basic language possible. But as I found out, the language that was effective in with Minnesota participants was not the effective language for South Carolinians. Born and raised in the South, I figured that my accent (slightly faded from five years in the Midwest, but still discernable) would help. Moreover, my affiliation with well-respected schools would be a definite asset. I imported the exact same language and exact same approach as I had used only weeks before in Minnesota to South Carolina, but it did not yield the same results. Only through a very slow (and very frustrating) initial recruitment in South Carolina did I realize that I had to re-think this approach to recruitment, and re-tune it into a package that would be more effective for South Carolina’s political culture.

As it turns out, some people I eventually contacted by phone said they didn’t reply to my e-mails because they didn’t know what I was talking about “when [I] launched into all that business about the heart rate monitor and stuff.” I also had to slow down when leaving voice messages – in graduate school, I was teased for talking *soooooo* slowly, which I seemed to have lost now that I was back in the South and talking “twenty miles a minute.” Minnesotans wanted to cut to the chase. In South Carolina, recruitment required relating: more of the “how are ya today, sir?,” a more concerted effort to find commonalities as a means of gaining trust. Without a doubt, my failure to account for this difference in political culture greatly impacted the success of initial recruitment in South Carolina.

South Carolinians wanted to know who I was, with a particularly keen interest in knowing where I'd grown up and why on earth I was in South Carolina from as far away as Minnesota (and perhaps more pointedly, why on earth I would ever leave the lush, verdant Carolinas for arctic tundra). My education and training credentials seemed far less important in South Carolina than in Minnesota. In most cases, telling people I grew up in the South established trust and credibility more than my academic pedigree.

Hands down, the greatest difficulty I encountered during this research project was the no-show rate. The no-show rate for this study as a whole ended up around 30%. The no-show rate was far greater in South Carolina than in Minnesota (40% versus 20%, respectively). At first blush, a thirty percent no-show rate might seem small, but it's not. With this kind of no-show rate, in a study where nearly three hundred people actually participate in the study, another ninety signed up to participate and didn't show up.

Most people who know me well would consider me an optimist – a “don't give up in the face of challenges” type of person. Tenacity has always been one of my strengths. But the no-shows truly wore me down. I found myself increasingly frustrated at how much time and effort it took to even get one participant (especially elected officials) – and then they wouldn't show up for a scheduled meeting. Essentially, each no-show was a waste of my time. This was particularly infuriating if I'd driven several hundred miles to meet them.

Be it known that the no-show phenomenon was not at all confined to everyday citizens – I was stood up by elected officials as well. And not just once or twice – there were *dozens* of times I was left waiting in a library, or an office building, or a coffee shop. I made a conscious effort to wait for at least thirty minutes in hopes that the participant would arrive. Sometimes waiting proved effective (the participant was caught up in traffic, they got lost, they needed to pick up their sick child at school). With elected officials, I would call or email to see if they

would like to reschedule. But even a follow up was no guarantee. One elected official stood me up *three different times*.

But I had to keep going. With time, the pattern emerged that for every ten scheduled sessions, three of them would be no-shows. I wish I could say I reached a point of Zen-like acceptance about this, but I didn't. I was a one-woman band for this entire project, and dealing with a forty-percent no-show rate became a real threat to morale.

So what does one do to deal with the frustration induced by these experiences? You take yourself out to lunch. You choose the \$6 glass of wine over the \$5.50 glass of wine. You enjoy seventy degree weather in February. You marvel at the beauty of the new places you never would have seen if not for this research project. You allow yourself the luxury of watching an additional episode of *Grey's Anatomy* on DVD. Order pizza, go for a run, and focus on what you've accomplished rather than what you haven't.

### **Final Thoughts**

Political science is like a moderate-sized city, with research areas like neighborhoods. For me, graduate school has been akin to going out into this new city with a map and exploring the land. In graduate school, you're trying to decide which neighborhoods you like – do you prefer ones with mature trees, ones with grand old homes, or something set way back on a teensy lane at the edge of town? You learn which areas are the gated communities (they think their neighborhood is *the only* respectable one in town: if you don't live on their street, they'll ignore you at town get-togethers). You learn which neighborhoods are well-established but overcrowded. In graduate school, you're trying to figure out where to put down roots.

For my house, I chose newer construction in the heart of town, on a lovely parcel of undeveloped land. It's at the intersection of several cross streets – Psychology, Economics, and Biometrics. If developing the dissertation meant laying a foundation for my house, conducting

the dissertation research meant building it. (Thankfully construction financing came through). And after more than a year of building, I'm standing in front of this nearly-completed house. It's majestic and grand and there's nothing like it on the whole block. At the end of graduate school, I cannot imagine a more rewarding feeling than the pride of ownership I possess now.

From time to time, I've heard colleagues reminisce that by the time they finished their dissertation, they wanted nothing more to do with it – the written document, the topic, the whole she-bang. At the end of my experience, I can truthfully say I love my dissertation. While I certainly disliked some aspects of the research experience, I enjoyed doing my research far more. The experience of doing this project from start to finish affirmed for me that I am meant to be a scientist. I hope those who read and follow this research find this topic as interesting and exciting as I do.