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Statehouse Mosaics and the American Electorate: How State Legislatures Affect Political Participation

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Statehouse Mosaics and the American Electorate:
How State Legislatures Affect Political Participation

A Dissertation

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

Doctor of Philosophy
in
Political Science

by
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While in the process of writing this dissertation, I worked two jobs. I was a full-time researcher at a local non-profit organization, and an adjunct instructor teaching two classes at a local university in New Orleans. Early mornings, late nights, and sleep deprivation characterized the time-frame in which I was working hard to collect data, analyze the results and submit my work to my dissertation advisor, Dan Lewis. Without a doubt, I could not have gone through this process if it were not for a few key individuals in my life. My late father, Willis T. Kuhlmann, and mother, Virginia Kuhlmann brought me up with a work ethic that was the foundation of getting me through every moment of this process. My mother, especially, gave me unwavering support. My best friend, Anna Ball, who witnessed practically every moment of my time-constrained life, was a central figure who gave me the unconditional support I needed, and, did not know I needed. Anna, thank you. I also could not have finished this dissertation without the support of my dissertation committee chair, Dan Lewis. His hard work, guidance, patience, and understanding were the linchpins that held the dissertation process together. I would also like to thank the other dissertation committee members, Matthew Jacobsmeier and Edward Chervenak – as their knowledgeable guidance were central components to this dissertation process as well.

Table of Contents

List of Figures	vi
List of Tables	vii
Abstract	ix
Chapter 1: Introduction	1
Chapter 2: State Legislature Size, Capacity, Individual Efficacy, and Voter Turnout	11
State Legislature Size and Voter Turnout	14
State Legislative Capacity (Office Professionalism) and Voter Turnout	19
State-level Analysis: Data, Methods, and Results	26
Representative Constituent Contact: Data, Methods, and Results	34
Voting – Individual-level Analyses: Data, Methods, and Results	47
Political Efficacy and Political Interest: Data, Methods, and Results	52
Conclusions	58
Chapter 3: Demographic Composition of State Legislatures and Voter Turnout	62
Diversity in Composition of State Legislatures: Gender and Race	62
Descriptive Representation, Policy Outputs, and Political Efficacy	66
Descriptive Representation, Contact, and Voting	70
State-level Analysis: Data, Methods, and Results	74
Individual-level Analyses: Data, Methods, and Results	76
Political Efficacy: Data, Methods, and Results	86
Conclusions	92
Chapter 4: Third Parties in State Legislatures and State Ballot Access Laws	95
Third Party Existence in State Legislatures	95
Third Party Access to Legislatures in the United States: A Brief Overview	99
Ballot Access Laws, Third Party Placement, and Voter Turnout	97
Third Parties in State Legislatures and Political Efficacy	105
State Level Analysis: Data, Methods, and Results	107
Individual-level Analyses: Data, Methods, and Results	115
Political Efficacy: Data, Methods, and Results	118
Conclusions	121

Chapter 5: Summary of Findings and Directions for Future Research.....	123
American State Legislatures and Political Efficacy.....	125
The Future of State Legislatures and Citizen Political Engagement	127
References.....	130
Appendix.....	146
Vita.....	159

List of Figures

Figure 1	LCR per 100,000 (2010).....	13
Figure 2	Squire’s (2007) State Legislative Professionalism Index.....	21
Figure 3	Predicted Values – LCR and Voter Turnout (95% Confidence Intervals)....	33
Figure 4	Predicted Values – Legislative Professionalism and Voter Turnout (95% Confidence Intervals).....	34
Figure 5	Predicted Values – LCR and Constituent Contact (95% Confidence Intervals)	40
Figure 6	Predicted Values – Legislative Professionalism and Constituent Contact (95% Confidence Intervals).....	40
Figure 7	Boxplot of Interaction Term of LCR x Legislative Professionalism	42
Figure 8	Distribution of Interaction Term: LCR x Legislative Professionalism	43
Figure 9	Interaction Effects of Legislative Professionalism at varying levels of LCR on Constituent Contact.....	45
Figure 10	Percent Female State Legislators (CAWP 2012)	64
Figure 11	Percentage of African American State Legislators and Percent African American in States	65
Figure 12	Predicted Probabilities – White Voter Turnout and Percent African American State Legislators	79
Figure 13	Predicted Probabilities of Voter Turnout in the 2000 Election Interacted with Percent African American State Legislators	82
Figure 14	Predicted Probabilities of Voter Turnout in the 2004 Election Interacted with Percent African American State Legislators.....	82
Figure 15	Predicted Probabilities of Voter Turnout in the 2008 Election Interacted with Percent African American State Legislators.....	83
Figure 16	Predicted Probabilities of Voter Turnout in the 2000 Election for Females Interacted with Percent Female State Legislators	85
Figure 17	Predicted Probabilities of Voter Turnout in the 2000 Election for Females Interacted with Percent Female State Legislators	85
Figure 18	Political Efficacy: Predicted Values – Females and Descriptive Representation in State Legislatures (2004 GSS).....	89
Figure 19	Political Efficacy: Predicted Values – Females and Descriptive Representation in State Legislatures (2006 GSS).....	90
Figure 20	Political Efficacy: Predicted Values – African Americans and Descriptive Representation in State Legislatures (2004 GSS).....	91
Figure 21	Political Efficacy: Predicted Values – African Americans and Descriptive Representation in State Legislatures (2006 GSS).....	92
Figure 22	State Ballot Access Laws and Voter Turnout in State House Election – Predicted Values (95% Confidence Level)	111
Figure 23	Path Model State Ballot Access Laws, Percent Third Parties and Voter Turnout.....	114
Figure 24	Ballot Access and Voter Turnout (2008 GSS) – Individual Level.....	118
Figure A.1	Kernal Density Plot	148
Figure A.2	Interactive Effects of LCR at Varying Levels of Legislative Professionalism on Constituent Contact	152

List of Tables

Table 1	Voter Turnout in State House Elections	32
Table 2	Multilevel Regression Analyses – Constituent Contact	39
Table 3	Multilevel Regression Analysis – LCR x Legislative Professionalism and Constituent Contact	44
Table 4	Logistic Multilevel Regression – LCR, Legislative Professionalism and Individual-level Voting	50
Table 5	Voter Turnout Significant State Level Variables with Clustered Standard Errors.....	52
Table 6	Multilevel Regression – LCR, Legislative Professionalism and Political Efficacy	56
Table 7	Multilevel Regression – LCR, Legislative Professionalism, Political Efficacy and Political Interest.....	57
Table 8	Efficacy and Political Interest (2004 GSS) – Significant State-level Variables with Clustered Standard Errors.....	58
Table 9	Voter Turnout in State House Elections	75
Table 10	Logistic Multilevel Regression – State Legislature Diversity and Individual-level Voting	78
Table 11	Individual and State Cross-level Interaction – Descriptive Representation in State Legislatures (Multilevel Modeling).....	81
Table 12	Multilevel Regression – Descriptive Representation and Political Efficacy.....	87
Table 13	Multilevel Regression – Descriptive Representation and Political Efficacy.....	88
Table 14	Party Representation in State Legislatures – Lower Chamber (1990-2010).....	96
Table 15	2010 State Signature Requirements for Third Party Ballot Access – Descriptive Statistics	98
Table 16	Percentage of Multi-Member Districts in States for State Legislatures	100
Table 17	Total Signatures Required for Ballot Access (Signatures per 10,000 Voting Age Population).....	104
Table 18	Voter Turnout – State House Elections (2000-2010)	110
Table 19	Logistic Multilevel Regression – Percent Third Party, Ballot Access Signature Requirements and Individual-level Voter Turnout.....	117
Table 20	Multilevel Regression – Ballot Access, Percent Third Party and Political Efficacy	119
Table 21.	Multilevel Regression – Ballot Access, Percent Third Party and Political Efficacy.....	120
Table A.1	Legislature to Citizen Ratios (2010).....	146
Table A.2	State Legislative Professionalism (Squire 2007)	147
Table A.3	Descriptive Statistics.....	148
Table A.4	Voter Turnout in State House Elections – LCR and LnPopulaiton	149
Table A.5	Variance Inflation Factor Scores – LCR and LnPopulation	150

Table A.6	Variance Inflation Factor Scores – LCR and Legislative Professionalism	150
Table A.7	Multilevel Regression Analysis – Constituent Contact	151
Table A.8	Logistic Regression with Clustered Standard Errors (not weighted) – LCR, Legislative Professionalism and Individual-level Voting	153
Table A.9	Logistic Regression with Clustered Standard Errors (weighted) – LCR, Legislative Professionalism and Individual-level Voting	154
Table A.10	Regression with Clustered Standard Errors (weighted) – LCR, Legislative Professionalism, and Political Efficacy	155
Table A. 11	Regression with Clustered Standard Errors (unweighted) – LCR, Legislative Professionalism, and Political Efficacy.....	156
Table A.12	Regression with Clustered Standard Errors (weighted) – LCR, Legislative Professionalism, Political Efficacy and Political Interest	157
Table A.13	Regression with Clustered Standard Errors (unweighted) – LCR, Legislative Professionalism, Political Efficacy and Political Interest	158

Abstract

Comparatively few studies have explored how variations in state governing institutions influence voting behavior. Utilizing lower chamber state legislative election returns from the years 2000 through 2010, and the 2002 through 2010 GSS data series, this dissertation focuses on how US state legislatures influence voting behavior and political attitudes of the American electorate. Specifically, this research takes on a comparative approach and illustrates how institutional differences in the size, capacity, and composition of the US state legislatures affect the electorates' propensity to vote and how politically efficacious people feel.

Keywords: Voter turnout, political efficacy, state legislatures, legislative professionalism, legislature to citizen ratios, descriptive representation, third parties, ballot access laws.

CHAPTER 1

Introduction

“Voter turnout is the most common and important act citizens take in a democracy and, therefore is one of the most important behaviors for scholars of democratic politics to understand.”

- John Aldrich (1993, p. 246)

Assessing what drives voter turnout is an important area of inquiry for political science. Many scholars argue that the health of a democracy can be measured by how much citizens participate in politics through voting (Piven and Cloward 1988; 2000; Teixeira 1992; Hill and Leighley 1992; Lipjhart 1997; Franklin 2004, p. 4). The vote is a mechanism that allows citizens to voice their opinion, gives them some influence in shaping policy, and consequently, affects the scope and role of government in their lives. Some theorists, such as Carol Pateman (1970), argue that the power of the vote lies in its ability to safeguard the public from despotic governments and protect private interests (Bentham 2005 [1830]). If governments are institutionally arranged to create competitive electoral systems, it is a means for citizens to have the ability to drive policy, and as a result, the allocation of resources. Voting, then, is how citizens can get maximum output from their leaders with ‘minimum input’ (Bachrach and Botwinick 1992). In addition, the act of voting is argued to function as a source of sound civilizations (Aristotle 1998 [350 BC]; also see Putnam 1995; 2000).¹ Participation in politics was theorized by Aristotle to cultivate well-informed individuals who contribute to stable, ‘good’ and ‘just’ societies (1998 [350 BC]). John Stuart Mill (1978 [1869]) discussed the virtues of inclusion of individuals in civic life as well. Voting is an opportunity for the citizenry to candidly express opinions, creating a civic environment with a “market of ideas” that helps

¹ Aristotle (1998 [350 BC]) argued that men are inherently social and political beings. Accordingly, since full realization of human existence hinges on being socially and politically connected, communities that allow citizens to participate in politics enhance these intrinsic traits and would be considered sound or ideal civilizations.

broaden knowledge and leads to better decision-making (Mill 1978 [1869]). Modern theorist Benjamin Barber (1984) argues that citizen participation can transcend institutional flaws and increase a sense of political efficacy. Recent empirical work supports these perspectives. Communities that have higher levels of political participation have happier, healthier communities (see Putnam 1995; 2000).²

If voting is a marker of a healthy democratic community, then finding what may actuate or depress voter turnout is important. As such, political scientists have found many factors that are determinants of voter turnout. Individual-level factors such as socioeconomic status (SES) (Almond and Verba 1963; Verba and Nie 1972; Brady, Verba, and Schlozman 1995; Verba, Schlozman, and Brady 1995), race (Verba and Nie 1972; Bobo and Gilliam 1990; Wilcox and Gomez 1990; Kinder and Mendelberg 1995), occupation³ (Brady, Verba, and Schlozman 1995; Verba, Schlozman, and Brady 1995), trust in government (Almond and Verba 1963; Lyons 1970; Pierce and Carey 1971; Verba, Schlozman, and Brady 1995; Inglehart 1999), interpersonal trust, (Putnam 2000; Paxton 2002), strength of party identification (Campbell et. al 1960; Allsop and Weisburg 1998), and involvement in volunteer organizations (Verba and Nie 1972; Inglehart 1990; Verba, Schlozman, and Brady 1995; Paxton 2002; Putnam 2000) all affect rates of voter turnout. Such research has advanced our understanding of how individual traits and attitudes can mold variations in voter turnout at the individual and aggregate levels.

However, voting and political participation is not solely driven by behavioral determinants. Government institutions can also affect political participation. The fundamental

² Other scholars disagree, arguing that political participation by the masses as a hindrance to good policy-making because the public lacks expert knowledge as to how to solve complex problems (Lippman 1993 [1925]; Schumpeter 2008 [1942]; Berelson 1952).

³ The acquirement of, and the opportunity to, practice civic skills such as communication and the ability to write a letter are found to increase political participation. These skills are found to be practiced and honed through involvement in organizations and/or through the workplace (Brady, Verba, and Schlozman 1995, 275).

structure of government, such as a parliamentary or presidential system (Almond and Verba 1963; Jackman 1987; Blaise and Carty 1990; Jackman and Miller 1995; Blaise and Dobrzynska 1998), can influence voter turnout. Or partisan control of government – as in the case of the United States, unified or divided national government – can also affect voting (Franklin and Hirczy de Mino 1998). Further, there are various factors that are unique to some political jurisdictions that can increase or reduce the electoral activities of citizens. Yet, comparatively few studies have explored these institutional determinants. The purpose of this research is to examine the influence of governing institutions on voter turnout in the US states.

The US states, by design, are important political jurisdictions because they administer policies that are unique to the economic, geographical, and cultural characteristics of those states. Under the US federal system, states are where concerns such as crime, welfare, education, and other policies are addressed. Dahl (1989) notes that such types of localized government “make it possible for different groups of citizens to arrive at different solutions to problems” (p. 180). In turn, this also reduces strain on national government. Possibly more important when considering the virtues of citizen participation in politics, is that policies (at the aggregate level) are driven by public opinion, or more (in)directly, by those officials who were placed in the statehouse by the electorate. Erickson, Wright, and McIver’s (1993) work illustrates that the policies that emerge from state government correspond well with the opinions of citizens of that state. Still, there is variation in policy congruence with public opinion across states (Lax and Phillips 2009). Since there are distinct variations between states and the institutions that are within them, those political jurisdictions certainly provide a unique advantage to test how such differences may affect the public. Such aspects of the political environment, especially institutional variation in

states, give a much more complete picture of the political experiences of citizens in the United States.

Accordingly, the main purpose of this research is to expand the inquiry on the impact of state-level institutions on political participation and go beyond individual-level determinants of political behavior. This research seeks to take a comparative approach in examining the institutional differences between the US states and how these differences affect citizen participation in politics. As Justice Brandeis (1923) once noted, states are “laboratories of democracy.” All states have the same overarching governmental framework, but each varies in their specific institutional designs. I argue that these differences in institutional design, namely, variation in the characteristics of state legislatures, can affect the political activities of citizens.

State Institutions and Political Participation

The argument that variation in institutional design between states can create different outcomes in electoral activity is not new. It has led many scholars to examine what individual and/or environmental aspects can increase or decrease the ability of the public to engage in electoral activity. Research on comparative voting systems between countries has illustrated that institutional rules, particularly electoral institutions, affect the political behavior of the electorate. For instance, proportional representation (PR) systems create a greater sense of self-efficacy in voting (Karp and Banducci 2008). PR systems are theorized to increase political efficacy for citizens because they create a sense that voting matters (Karp and Banducci 2008). Unlike majority party systems, PR voting systems can draw more minority groups into the voting arena because citizens have more power in allocating votes to candidates of their choice – which is also

theorized to increase a sense of efficacy (see Bowler, Brockington, and Donovan 2001; also see Karp and Banducci 2008).

Research comparing US states also shows that differences in institutional design affect voting behavior. For example, states with cumulative voting districts are found to have rates of voter turnout (Bowler, Brockington, and Donovan 2001). Other institutional rules such as state registration laws can also increase or decrease aggregate rates of voter turnout. The farther out from election day one is allowed to register to vote, the lower the overall voter turnout in that state (see Highton 1997; 2004; also see Highton and Wolfinger 1998). Not only do states that have less stringent voter registration restrictions have higher voter turnout rates (Highton 1997; 2004; also see Highton and Wolfinger 1998), but states where citizens directly vote on policy through initiative systems also have higher levels of voter turnout (Tolbert, Grummel, and Smith 2001). The initiative system is also theorized to increase political efficacy and trust in government because citizens have the opportunity to play a direct role in determining policy (Tolbert, Grummel, and Smith 2001). A sense of political efficacy and trust in government are important. Both are found to increase electoral activity, and are also tied to feelings of system legitimacy (Bowler and Donovan 2002).⁴ While an increase in political efficacy can spur a sense of empowerment among citizens that leads to participation in politics, trust in government the perception that the democratic system is legitimate.

Since state electoral rules can affect both a sense of efficacy and a citizen's trust in government, governing institutions may also influence individual attitudes in similar ways.

⁴ Dyck and Lascher (2009) find evidence contrary to the link between state initiative systems and political efficacy. They argue that survey questions often used to determine the link between efficacy and state initiative systems fail to directly ask how respondents feel about state government. Studies have also not controlled for whether or not respondents voted for a winning candidate, which increases efficacy. Additionally, aggregate trends show that as ballot initiatives increase, political efficacy has decreased. They find that direct democracy increases a sense of political efficacy for those who are white and have more education and decrease efficacy among low income individuals.

Indeed, constraints on the electorate and/or more autonomy in participation, such as the ability to directly vote on policy or decide to register to vote on election day can affect the propensity to participate in politics, and have overall control of governmental output, or at least a sense of this control. However, few analyses have examined the relationship between such institutions and political participation.

It is clear that there is a variety of research conducted on state-level factors that affect voting behavior. My research differs from prior research that focuses on aspects of *electoral* institutional design in states such as voter registration laws, initiative systems, and cumulative voting. Studies mainly illustrate how variations in electoral systems, such as initiatives and registration laws can affect voter turnout or general participatory acts of the electorate. This line of research shows: 1) institutions matter in that they affect the political behaviors of citizens and; 2) political jurisdictions such as states provide unique environments in which to examine how variations in institutional context can affect voter turnout. What they do not illustrate is how *governing institutions*, such as aspects of state legislatures including the relative number of representatives, legislative composition, professionalization, and the political parties that make up the composition of state legislatures also affect the political behaviors of the electorate. I seek to illustrate that characteristics specific to governing institutions affect the voting public. This research focuses on examining the effects that the institutional arrangements of American statehouses have on the electorate. The analyses presented here demonstrate that institutional characteristics of state legislatures are important factors that affect political participation. The *size, capacity, and diversity* of state legislative institutions shape voter turnout rates in the American states. Further, through analysis that examines these effects at the aggregate and

individual-levels, I will show that these aspects of state legislative assemblies impact how politically efficacious people feel.

It is important to note that existing research has explored some facets of how governing institutions, in conjunction with the electoral environment, can encourage or deter political participation (e.g., Hanson, Palfrey, and Rosenthal 1987; Aldrich 1993; Squire 1993; Hirczy de Mino 1998; Schacar and Nalebuff 1999; Gay 2001; 2002). However, that work tends to focus on the national level. Franklin and Hirczy de Mino (1998), for example, find that divided national government decreases voter turnout by about two percentage points for each consecutive election that control of government remains divided. Along similar lines, other research finds that citizen-legislator contact increases as descriptive representation increases in the national legislature (Gay 2001; 2002). That is, citizens are more likely to contact their national representatives when those representatives share the same ethnicity or gender. At the state-level, Squire (1993) finds that indicators of legislative professionalism, such as the number of days in session and the amount of money paid to state legislatures, significantly affect the amount of contact legislators have with citizens. These findings highlight the importance of studying the effects of institutions on political participation. Because election activities and particular features of the legislative branch at the national and local levels can both stimulate changes in the political environment, and connect the electorate to government, it seems logical that particular aspects of legislatures in states influence citizen political participation.

Though it is clear that characteristics and composition of legislative institutions matter, not much research has been conducted on how the *size*, *capacity*, and *diversity* of state legislative branches affect the electorate. How does the relative number of representatives (or size of the

institution), institutional capacity (legislative professionalism), demographic composition and partisan diversity of state legislatures (or diversity) affect political participation?

State Legislatures as Political Mobilizers: Summary of Chapters

This dissertation begins by expanding upon prior examinations on the effects of institutions on voter turnout, and focuses on the size and capacity of state legislatures. In the following chapter, I utilize a measure of institutional size that centers on the relationship between legislators and citizens – Legislator-to-Citizen Ratios (LCRs). LCRs are constructed by dividing the number of state legislators (SL) by the voting eligible population (VEP) of the state (SL/VEP). This section expands upon prior work which finds that higher ratios of representatives to constituents increase voter turnout at the local and national levels (Hanson, Palfrey, and Rosenthal 1987; Hibbing and Alford 1993; Oppenheimer 1996). I argue that this relationship applies to the states. Higher LCRs should increase the probability of constituent contact by representatives, which engender positive feelings of efficacy, encourage participation in politics and, overall, eases the costs of participation. As a result, all else equal, states with higher LCRs have higher aggregate levels of voter turnout in statehouse elections. Further, states with higher LCRs should have state legislators that are more likely to contact citizens, and those citizens who are contacted should be more likely to turn out to vote. Additionally, while scholarship has already found that some characteristics of state legislatures, such as office professionalization, can increase the amount of contact legislators have with citizens (Squire 1993), this chapter examines the individual-level causal mechanism by testing whether the capacity of the legislative office (office professionalization) translates into political efficacy for citizens and voter turnout.

Chapter Three focuses on how the demographic diversity of legislative institutions affects the electorate. In particular, this chapter examines whether the presence of women and racial minorities in state legislatures affects female and minority voter turnout. Representation by members of the same demographic (descriptive representation) can create a symbolic connection to institutions (Pitkin 1963; Mansbridge 1999). Verba, Burns, and Schlozman (1997), for example, find that higher proportions of female state-wide candidates increases political efficacy for women living in those states.⁵ As such, descriptive representation can create an emotional connection to an institution and can connect citizens to the institution through direct contact with representatives and as well as through the vote. Gay (2001) also finds that descriptive representation for minorities increases the probability that they will contact their national representatives. In this chapter, I test whether descriptive representation of gender and racial minorities in state legislative branches increases citizens' sense of political efficacy and participation.

Chapter Four addresses variations in the diversity of electoral 'mobilizers,' both within and outside of state legislative branches – political parties. I illustrate how institutional variations between states in party ballot restriction laws can affect the composition of state legislatures, and in turn, voter turnout in states. This is quite different than prior research that has investigated the effects of third parties at the state-level. Often, research focuses on the survival and demise of third parties through the burden of state laws – and not how these restrictions affect voters. Equally important, however, is research that directs attention to how the availability of third parties in elections and within state legislatures influence the electorate (Alvarez and Nagler 1995; Donovan, Bowler, and Terrio 2000; Adams and Merrill 2003; Karp and Banducci 2008).

⁵ Verba, Burns and Schlozman (1997) chose elections for three state-wide offices that were meant to be the most "visible" which were for Senator, Governor and Lieutenant Governor.

However, work that centers on what leads citizens to vote for third party candidates or abstain from voting due to dissatisfaction (Rosenstone et.al 1996; Donovan, Bowler, and Terrio 2000; Adams and Merrill 2008) does not include how the party composition of legislative assemblies, or more specifically state legislatures, affects the electorate – which is the mode of inquiry I take in Chapter Four.

To begin, I examine ballot access laws in each state. Ballot access laws have had deleterious effects on the development and success of third parties (Lewis-Beck and Squire 1995; Burden 2003). Ballot restrictions, for example, reduce the number of candidates that run under third party platforms in states. Riker (1988) notes that the major dilemma for citizens of democracies is the lack of electoral choice on the ballot. States that have stringent ballot restrictions offer decreased choices to the electorate. This decreases the ratio of third parties and the diversity of candidates. Limited electoral choices may also reduce the number of individuals who are willing to vote. I argue that restrictions on third party access to the ballot will decrease voter turnout due to constriction in vote choice options, voter dissatisfaction, and decreased feelings of political efficacy. I argue that diversity of parties in state legislatures increases political participation. In sum, Chapter Four seeks to examine the impact of minor party constraints and their existence in state legislatures on political participation.

State legislatures constitute a type of ‘mosaic’ of US institutions. Large variations exist in their design and composition. Altogether, the following chapters takes a comparative approach to examining how the features of US state assemblies affect citizen political participation and efficacy. This fills a gap in prior research on state institutions, political behavior, and attitudes. In the following chapters, I illustrate that variation in size, capacity, and composition of state legislatures molds citizen’s relationship with government.

CHAPTER 2

State Legislature Size, Capacity, Individual Efficacy, and Voter Turnout

Prior to the ratification of the US Constitution, delegates debated over the proper size of the national legislature. At the time, state legislatures served as examples of successful institutions that, in part, informed the debate surrounding the creation of Congress. The primary debate over the size of the national legislature focused on relative representational power between the states. However, other more intricate philosophical arguments about the size of the institution were also articulated. Borrowing from the experience of the states and arguments of contemporary political philosophers such as Montesquieu and Hume, James Madison refined arguments concerning the size of the national legislatures through his well-known writings in the Federalist papers.⁶ A legislature with representatives constituting a diversity of interests was necessary in order to divert majority factions over minority interests (Madison, Federalist No. 10, 1987 [1788]).⁷ There is some empirical evidence that supports this claim (see Gamble 1997; Donovan and Bowler 1998).⁸

Historically, discourse about the size of national and state legislatures was dominated by political elites and focused upon how to best represent interests (Squire 2006). Thus, the size of legislatures has been shown to be an important factor in determining the ability of American governments to uphold the principles of representative democracy. However, there has been little empirical research on how the size of state legislatures affects other components of democracy, such as the voting behaviors of citizens. My primary interest is to illustrate another important aspect of how the size of representative institutions can affect the quality of a

⁶ Although Montesquieu argued for a much smaller geographic size for a republic than Madison, both viewed the multiplicity of interests as an essential feature of legislatures (see Ketcham 1957).

⁷ Anti-Federalists, however, argued for a higher numbers of representatives.

⁸ More recent work finds that jurisdiction size does not stop majority will from overriding (gay) minority rights when controlling for gay and protestant populations (see Haider-Markel, Querze, and Lindaman 2007) .

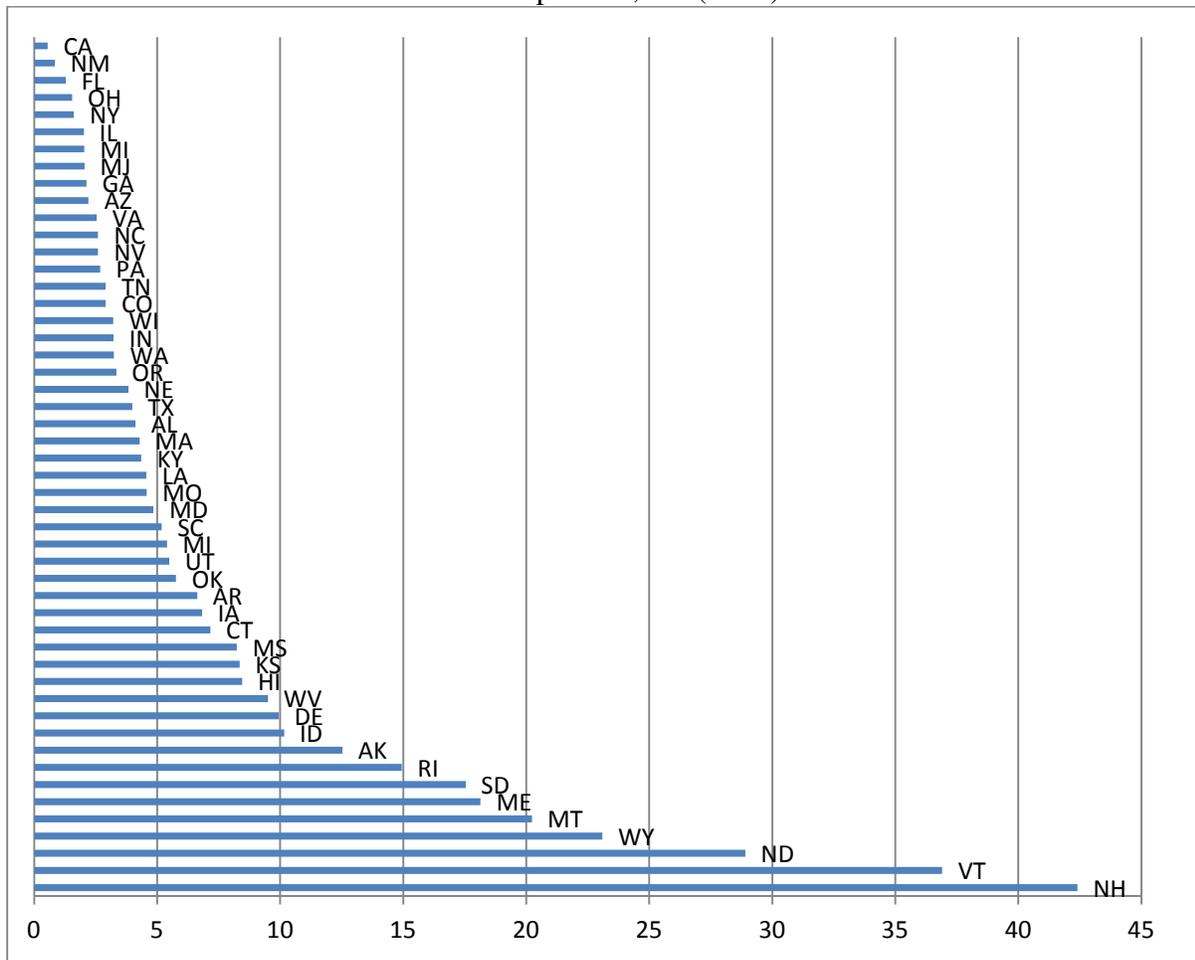
democratic system. I argue that citizen participation in politics is related to the size of state legislatures. As I discuss in detail below, larger state legislatures – relative to a states population – tend to have closer connection with their constituents and can encourage political participation and positive attitudes towards government.

After 1780, states started to increase the number of representatives in state legislatures in order to provide representation for townships and counties that were not previously included in states (Squire 2006). These increases were related to creating adequate representation based on the geography or population of the state (Squire 2006). States continued to increase the size of their state legislatures in order to adapt to increases in population and “make the chambers more representative of the electorate” (Squire and Hamm 2005, p. 21). However, some states were slower to adopt such increases and others completely halted increases in state representatives by the beginning of the 20th century. As a result, today there is wide variation in state legislature to citizen ratios (LCRs) between the states, and variation in the number of state legislators is weakly related to the size of the population in states.⁹ Figure 1 (also see Table A.1 in Appendix) below illustrates the significant amount of variation in the number of state representative seats regardless of population size. New Hampshire, for example, has 424 state legislators with a population size of about 1.3 million in 2010 – a ratio of 42.4 state legislators per 100,000 of the voter eligible population (VEP), while Florida has 160 state legislators with a population size of about 19 million – a ratio of 1.29 state legislators per 100,000 VEP (see Table A.1 in Appendix).¹⁰

⁹ There is a weak correlation between the raw number of state legislators and the population of states with a pearsons correlation coefficient of .152.

¹⁰ Voter eligible population (VEP) is an estimate of individuals who are legally eligible to vote. VEP is different than Voting Age Population (VAP) estimates. While VAP only counts individuals who are eligible to vote due to age, VEP includes all individuals over the age of 18 who are citizens, not in prison or jail (except for individuals in states that allow prisoners to vote), and takes into consideration the felony disenfranchisement policies for each state (see McDonald 2002).

Figure 1
LCR per 100,000 (2010)



Despite fluidity in the size of state populations over the past century, the size of state legislatures had not changed much since the beginning of the 20th century. In fact, there have been various movements to ‘dismantle’ the power of state legislatures since the 1990s through term limits and de-professionalization schemes (see Kousser 2005), and states have more recently witnessed movements to decrease the number of representatives that serve in state assemblies. One contention is that a reduction in the number of legislators would break gridlock in passing bills, enhancing “legislative effectiveness” (see Ehrenhalt 2001; Benefield 2006;

Jacobson 2011).¹¹ Another argument for reducing the size of the legislature is that it is costly to employ state representatives and this tax money could be spent elsewhere and/or reduce tax burdens for citizens.¹² However, counter arguments are that reducing the size of state legislatures would decrease face-to-face interactions with constituents, and possibly produce a party system where one political party can easily dominate, which would in turn, would reduce policy deliberation (National Conference of State Legislatures 2012).¹³ These reduction reforms are supported by citizen-led groups as well as some state representatives. Most notably, Republican representatives have fueled the debate through their ‘small government’ platforms. Despite the claims of these reformers, implementation of other changes to state legislatures such as term limits have had several negative effects, including reducing the ability of state legislatures to create complex policy (Kousser 2005; 2006), allocating more power to the governor’s office (Carey, Niemi, and Powell 1998), and increasing public spending (Erler 2007). Yet, it is still unknown how changing the size of state legislatures might influence politics and policy and, in particular, political participation. The purpose of this chapter is to examine these issues. Does size and professionalization affect voter turnout?

State Legislature Size and Voter Turnout

Research illustrates that that the ratio of representatives to citizens increases public participation in politics at the national and local levels (Hanson, Palfrey, and Rosenthal 1987;

¹¹ “Legislative effectiveness” refers to the procedural ease in which bills are written, passed through the committee system and on to the chambers floor for a vote. Pennsylvania state House Assembly Speaker Sam Smith (R) reiterated this argument in a memo to the Pennsylvania state assembly. Available at: <http://www.legis.state.pa.us/WU01/LI/CSM/2011/0/7378.pdf>

¹² In 2002 Rhode Island reduced the number of state assembly members from 100 to 75, and state Upper House members from 50 to 38 in 2002. This was off-set by a substantial pay increase for its members – from \$300 a year to \$10,000 a year (Fitzpatrick 2002).

¹³ Summarized arguments for and against reducing the size of state legislatures are available at: <http://www.ncsl.org/legislatures-elections/legislatures/sizes-of-legislatures.aspx>.

Hibbing and Alford 1993; Oppenheimer 1996). Yet it is unclear how these effects translate to state legislative assemblies. There has been no research conducted on how the size of *state* legislative assemblies affects the electorate. Theoretically, higher ratios of state legislators to citizens may increase voting because of an increase in legislator to citizen contact, and a subsequent sense of political efficacy for citizens.

Scholarship in voting behavior has attempted to reveal the mechanics behind how the size of governing institutions can induce voter turnout. In particular, formal models have been employed to demonstrate how the size of legislative institutions matter for voter turnout (Hanson, Palfrey, and Rosenthal 1987; Aldrich 1993; Schacar and Nalebuff 1999). These studies utilize the basic logic of rational choice laid out by Downs (1957) as a baseline, expanding upon this “calculus of voting.” Downs’ “calculus of voting” logic illustrates that an individual will vote (R) if the expected benefits or utility differential (B) outweigh the costs (C). The expected benefit is the probability that the individuals’ vote will have an effect in the outcome of an election. The utility differential is the benefit of having one party in government over another. The expected benefit and utility differential are contingent on the probability (P) that the voter is the deciding vote to determine an elections’ outcome (BP). Thus, no one is predicted to vote because the value of ‘P’ is exceptionally small and therefore reduces the expected benefits of voting greatly. The paradox, of course, is that large portions of the electorate do actually vote.

In order to solve this paradox, some scholars have placed more value on the probability side of the equation (Aldrich 1993; Shachar and Nalebuff 1999), while others have added a ‘D-term.’ The ‘D-term’ factors in the argument that people turn out to vote because of various intrinsic factors such as civic duty and sense of political efficacy (Riker and Ordeshook 1968). In their work, Riker and Ordeshook (1968) took the ‘P-term’ as an exogenous variable. The ‘P-

term' is quite important because it drastically reduces the size of the expected benefits.

Examining the benefits involved in voting is a way to evaluate one of the main arguments of this chapter – that the size of state legislatures affect voter turnout. How the size of state legislatures influence voter turnout is contingent on increasing benefits through altering the expectation of gaining benefits for the potential voter. While the 'P term' of the equation is argued to be what causes voters to decide whether or not to vote, it can heavily outweigh the costs (C) in the formula. The common argument against concentrating on the 'P term' is that voters are not well equipped to gauge the impact of their vote on an election. Shachar and Nalebuff (1999), for example, illustrate that the Electoral College helps voters perceive how much of an impact they will have in national elections. Nevertheless, Hanson, Palfrey, and Rosenthal (1987) argue that it is the net 'voting costs' distributed across the electorate that matters and the *size of institutions* can affect these aggregate costs. Their argument is that a voter's estimation of the costs of voting has "little to do with their sense of being pivotal." (Hanson, Palfrey, and Rosenthal 1987, p. 17). Voters turn out to vote in smaller districts not because citizens think they can change an election, but because the probability of gaining benefits offsets the costs of voting when citizens have the ability to access representatives and influence the legislative agenda. This is less likely in larger districts (Hanson, Palfrey, and Rosenthal 1987, p. 31). Even though more access to representatives may exist in smaller districts, the expected benefits are increased through voting in order to maintain the status quo or vote in another candidate based on the utility differential. Further, Aldrich (1993) illustrates that election activities' of politicians decrease as the size of the electorate increases. Therefore, the relative size of the electorate to representatives also matters. Hanson, Palfrey, and Rosenthal (1987), found support for this argument in their empirical study of Oregon school districts, and Hibbing and Alford (1993) and Oppenheimer

(1996) found that constituency size was an important factor in Senate elections. These findings imply that the costs of electioneering for representatives diminish as their constituency size decreases.

What is missing from the above works is an overarching framework to evaluate the generalizability of the results, how the results of the model empirically functions over variations in institutional design, and whether relative size of differing entities such as state legislatures contribute to the same phenomenon. Using state legislatures to test if higher LCR increases voter turnout can contribute to the generalizability of the work of Hanson, Palfrey, and Rosenthal (1987), Hibbing and Alford (1993) and Oppenheimer's (1996). The above works only focused on the national legislature and one local context. Testing the phenomenon using state legislatures would contribute to scholarship in this area because state legislatures vary in legislator to citizen ratios as well as other institutional characteristics. In addition, states also vary in electoral rules and demographics, which allow for examining the relationship between LCRs and voter turnout a good empirical test of work conducted at the local and national levels. Further, the assumption that the costs of information gathering are alleviated by citizen assessments of representatives may be misguided, as *representatives* need smaller costs to access the electorate. I argue that a larger constituency size may make it much more difficult for representatives to contact higher proportions of citizens within districts.

Following relevant work on representatives, I assume that state legislators are reelection seekers (Downs 1956; Mayhew 1974; Fenno 1978; Herrnson 2004).¹⁴ Fenno's (1978) seminal work on Congressional members shows that representatives are well aware of their constituents

¹⁴ However, there are different types of ambition, and we cannot always assume that state legislators are progressively or statically ambitious politicians (Maestas 2003; [also see Schlesinger (1966) for discussion of various levels of ambitions]). Progressively ambitious politicians seek to be elected to higher office, while statically ambitious politicians seek to maintain their seats.

concerns, and as a result, seek to maintain incumbency status by appealing to the interests of their district and the particular constituencies it encompassed. Smith (2003) illustrates that state legislators do the same. Even though name recognition for state legislators is not as high as national representatives, they still have mobilization strategies to get themselves reelected. As one state legislator in Smith's (2003) work put it, "I'm in competition with Tide and McDonalds and I usually lose." (p. 178). However, he still canvasses door-to-door for face-to-face interaction with constituents in order to garner votes. Research has illustrated that this type of personal canvassing has much more of an impact on voter turnout than telephone calls or direct mail in national elections (Gerber and Green 1999; 2000) as well as local elections (Green, Gerber, and Nickerson 2003). A smaller constituency may help to mitigate the burden of this kind of direct constituent contact – and such contact may facilitate a citizens sense of efficacy and, subsequently, voting in state legislative elections.

As a result, I assume that actions of representatives are geared towards maintaining their jobs and that smaller constituencies have lower electioneering costs. Axiomatically, relatively low cost elections create political environments that mobilize voters through promises of benefits and contact with elected officials. Aldrich (1993), for example, illustrates that campaign activities of representatives become attenuated when the size of the electorate increases (p. 257).¹⁵ Therefore, there should be more information generated from increased levels of campaign activities in states with higher levels of LCRs. In turn, this provides more political information and cues about party differentials to potential voters. Further, higher levels of LCR equate to more access points available to those seeking to benefit from government, including citizens. If contact with representatives increases for citizens, then this could foster a subsequent increase in

¹⁵ Aldrich (1993) also argues that if voting is a low cost and low benefit action, simple changes in the equation can make a significant difference (p. 264).

the sense of efficacy among the electorate. As the literature in voting behavior suggests, an increase in political efficacy should raise the probability that individuals will participate in politics (see Almond and Verba 1963; Brady, Verba, and Schlozman 1995; Putnam 2000; also see Gimpel, Lay, and Schuknecht 2003).

The assumption that citizen contact increases as the number of representatives increases is not supported solely by Aldrich's (1993) work. Hibbing and Alford (1990) also find support for this mechanism in their study of Congress. They find that a Senator's state population size affects the amount of constituent contact (Hibbing and Alford 1990). The higher ratio of national representatives-to-constituents in a state, the more representative-to-citizen contact there is. However, Hibbing and Alford (1990), Aldrich (1993), and Oppenheimer's (1996) work has neither been extended to studies on state legislature nor over multiple years.¹⁶ I argue that it is better tested at the state level because there is much more variation in state legislatures while the national legislature has only one institutional context.

State Legislative Capacity (Office Professionalism) and Voter Turnout

In this chapter I also examine how the capacity of state legislatures influences voter turnout. Like LCR, increased capacity should lower representatives' costs to contact citizens and have a positive effect on voter turnout. In general, the concept of capacity is the amount of resources an actor or entity has to perform their duties. For example, the capacity of a state to successfully go to war is contingent on the number troops, military technology, money, supplies to support troops, as well as other resources to support the military, such as oil and intelligence

¹⁶ Hibbing and Alford (1990) use the 1988 Senate Election Study, while Oppenheimer (1996) uses the 1988 and 1990 Senate Election Study.

systems. Similarly, legislatures require resources to create policy, represent citizens and provide oversight of the executive branch.

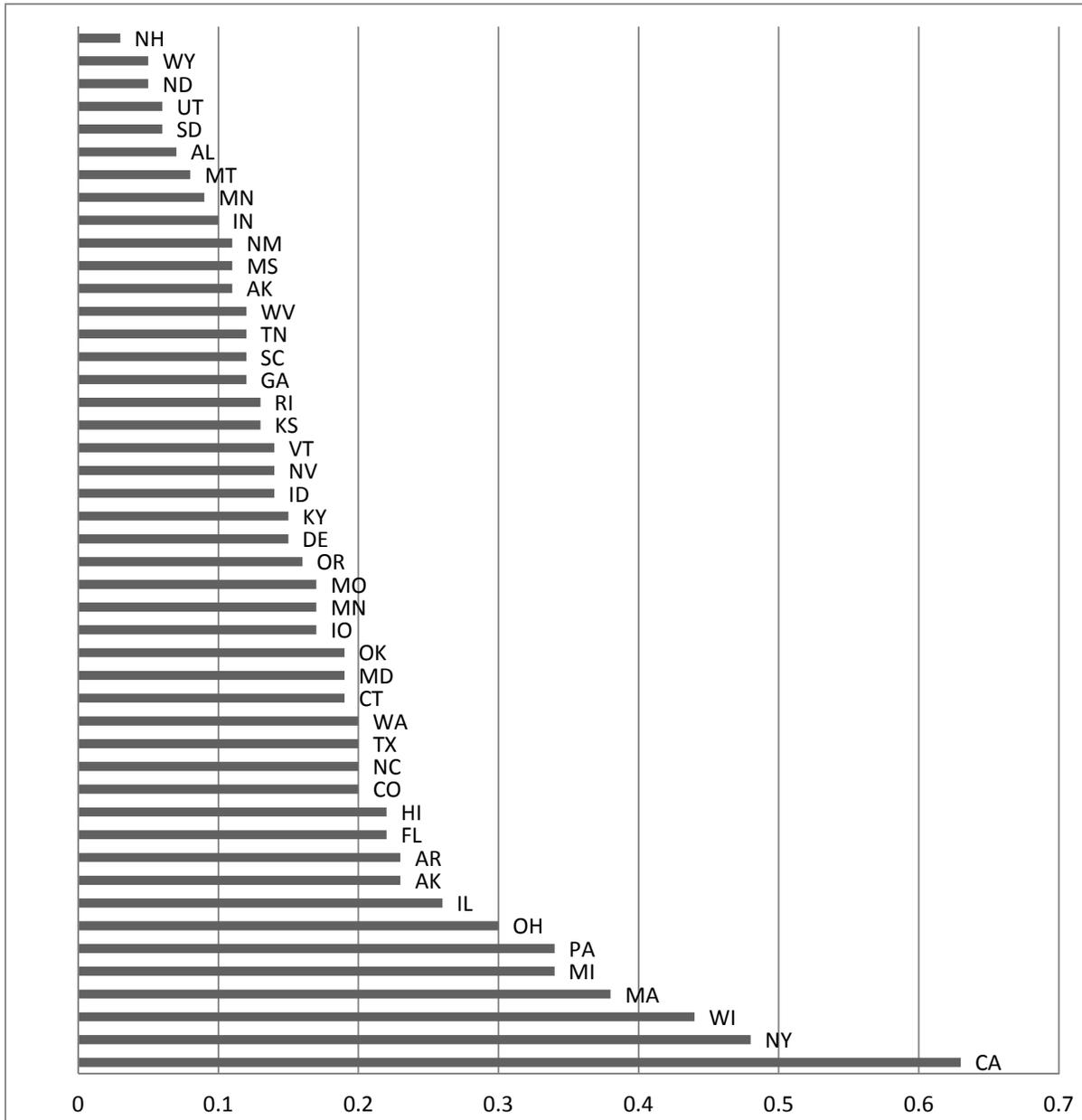
The measurement of the capacity of state assemblies has been developed through the concept of legislative professionalism (Squire 1992; 1993). Levels of legislative professionalism depend upon the amount of resources that representatives have access to. These resources make the job more efficient and careerist-oriented. Such resources include salary and other compensation, the number of days in session, and the number of staff members per legislator (Squire 1992; 1993; King 2000; Maestas 2000). If state representatives are paid more, it is likely they do not have to have a second job, which could possibly take time from their work in the legislature. Further, spending time at the state house allows for an increase in attention to legislating. Having more staff members could alleviate representatives from legislative duties as well as electioneering activities. As legislatures professionalize, legislators' service becomes full-time, and many of the administrative burdens of the job can be delegated to staff members (Squire 1992; 1993; 2000; King 2000).

There much variation in the office professionalism of state legislatures (King 2000).¹⁷ Below is an illustration of the variation in the capacity of state legislatures, as measured by Squire's (1992) index of legislative professionalization. Squire's (1992) index compares the office professionalism of state legislature to Congress as an "ideal type" (p. 71). The index was created in order "to show how closely a state legislature approximates the professional characteristics of the Congress" (Squire 1992, p. 71), and includes a standardized comparison of the number of days in session, salary and compensation, and number of staff members each

¹⁷ King (2000) also notes that there are some state legislatures that have not increased in professionalism for 30 years, such as Arkansas, New Hampshire, North Dakota, South Dakota, Utah, and Wyoming. However others have adapted according to population size and neighboring states' rise in professionalism.

legislator has. Figure 2 shows the wide variation in legislative professionalism across the states (also see Table A.2 in the Appendix).

Figure 2.
Squire's (2007) State Legislative Professionalism Index



Just as there have been recent movements to reduce the number of representatives in some state assemblies, there have also been attempts at reducing the capacity of state legislatures through reduction in salary, staff, and length of sessions. Arguments for de-professionalizing state legislatures hinge on cutting government spending, ultimately saving tax-payers' dollars. Paradoxically, these types of populist movements may inadvertently hinder citizens' voices in politics by reducing political participation.

Research illustrates that state office professionalism increases representatives' contact with citizens (Squire 1993). Professionalism may also affect citizens through the ability of legislators to spend more time assessing the wants and needs of their constituents. Maestas (2000) finds that higher professionalism of state legislatures heightens the ability of politicians to spend more time on policy, and thus, increase policy responsiveness. Further, she illustrates that professionalism attracts more ambitious politicians who survey public opinion more often than legislators serving in less professionalized legislatures (Maestas 2003). Since professionalism can enhance policy responsiveness, this characteristic can theoretically strengthen the relationship between citizens and representatives. It may also further legitimize the institution as a policy-making body. Further, ambitious politicians attracted to professionalized legislatures have higher levels of contact with their constituents (Squire 1993). As a result, legislative professionalism should increase political participation and voting.

At the same time, however, studies have also found that office professionalism deters competitive elections. The more professionalized the state legislature, the more it promotes incumbency safety (Berry, Berkman, and Schneiderman 2000; Carey, Niemi, and Powell 2000). Berry, Berkman and Schneiderman (2000) find strong evidence that legislative professionalism thwarts competitive elections and insulates members from external shocks during elections, such

as bad economic conditions. Members in more professionalized legislatures may be insulated because they have more resources for constituency services (Berry, Berkman and Schneiderman 2000). Professionalism is also significantly associated with party polarization and divided government – which can stall policy responsiveness (Fiorina 1994; 1999), reduce benefits of participation, make it difficult to assess the differences between the two major parties, and attribute blame. These effects have been found to decrease voter turnout at the national level (Franklin and Hirczy de Mino 1998).¹⁸

While professionalism may increase the incumbency advantage, which decreases electoral competition, Squire's (2000) work shows that professionalism also explains many of the uncontested seats in state legislatures. States with lower levels of office professionalization had more seats that were uncontested from 1992 through 1996. He argues that states with higher levels of professionalization have drawn in more challengers because of the careerist and monetary appeal of the office. In Squire's (1993) earlier work comparing seven states, he found that professionalism lessened the likelihood of citizen attention to state politics, but increased the amount of contact state legislators have with constituents. This illustrates that office professionalism enhances the ability for legislators to contact citizens, which can elicit voting behavior.

Together, these contrasting effects of professionalism have the potential to produce mixed results in terms of political participation. Do the effects of professionalism decrease turnout by increasing the incumbency advantage, or increase turnout by increasing constituent contact and responsiveness? I argue that the effects of professionalization increases political participation as legislators in more professionalized offices are more likely to contact

¹⁸ Divided government has not been found to significantly stall legislative outcomes at the national level (see Mayhew 1991) while others have found it to do so at the state level (Bowling and Ferguson 2001)

constituents. Further, an increase in salary gives incumbents a much larger advantage in their campaigns (Cox and Munger 1989; see Herrnson 2004). If it is the case that incumbents are electorally safer because they utilize the resources from the professionalization of the legislature, it may mean that they have more resources to pour into elections, which subsequently elevates information flows to citizens in the form of information and credit claiming. At the same time, professionalized seats are much more appealing due to monetary perquisites and could lure more challengers into elections. Resources of incumbents may translate into more funding for media and other campaign activities such as motor voter drives, of which once overcome, can decrease some of the costs involved in making the decision to vote (Downs 1957; Wolfinger and Rosenston 1980; Highton 1997; Gimpel et al. 2007). Accordingly, incumbent safety due to professionalism (Berry, Berkman, and Schneiderman 2000; Carey, Niemi, and Powell 2000) may not equate to a less stimulating campaign environment for citizens, and state legislative capacity may increase voter turnout because of policy responsiveness.

What is clear is that the legislators in more professionalized the state legislatures are more likely to contact constituents (Squire 1993) and survey public opinion (Maestas 2003). These legislators are arguably more connected to their constituents. This connection draws citizens into the political arena, which may spur higher levels of citizen political engagement. However, this mechanism by which professionalism affects political participation has not yet been empirically tested. Feelings of such connectedness are important because it is a way for citizens see themselves as actors in government. This connectedness gives citizens a sense of control over politics (Pateman 1970). Since representatives are fundamental in shaping policy and act as a conduit of public opinion, those that reach out to constituents provide a signal of governmental legitimacy (Mansbridge 1999; Gay 2001). The following analyses examine if

legislative characteristics, in particular, LCR and legislative professionalism, influences voter turnout and a sense of political efficacy.

Chapter Hypotheses

A review of the literature suggests that state legislative institutions should influence the voting behaviors of the electorate. The number of national legislators, relative to a states' population size has been found to increase voter turnout in national elections (Hibbing and Alford 1993; Oppenheimer 1996). To date, no research has been conducted that evaluates whether this relationship exists for state representatives in elections for state representatives. The first section of this analysis tests whether this relationship exists in state elections. I theorize that higher ratios of state legislators to citizens may increase voting because of an increase in legislator to citizen contact, and a subsequent increased sense of political efficacy. A smaller constituency may help to mitigate the burden of constituent contact on part of legislators. The following section first tests whether or not LCR is associated with voter turnout at the state-level. Subsequent sections of this analysis test the individual-level mechanism.

LCR of course is not the only state legislative characteristic theorized to influence voter turnout. The capacity, or professionalism, of state legislative assemblies (such as more staff per legislator, higher salary, and more days in session) attracts much more careerist oriented members (Maestas 2003). State legislators in more professionalized assemblies also contact citizens more often than their counterparts in less professionalized state legislatures (Squire 1993). As a result, office professionalism could increase voter turnout in states. This is because contact by representatives may spur citizen efficacy. The hypotheses for the first two sections of the analysis are below:

H(1a): States with higher LCRs will have higher levels of voter turnout in state house elections.

H(1b): States with higher levels of office professionalism will have higher levels of voter turnout in state house elections.

H(1c): States with higher LCRs will have state house representatives that have higher levels of contact with citizens.

H(1d): States with higher levels of legislative professionalism will have state house representatives that have higher levels of contact with citizens.

H(1e): Individuals who live in states with higher LCR will be more likely to report voting.

H(1f): Individuals who live in states with higher levels of legislative professionalism will be more likely to report voting.

State-Level Analysis: Data, Methods, and Results

Dependent Variable

The first section of this analysis is a state-level analysis. I utilize a fixed effects Ordinary Least Squares (OLS) regression model to evaluate whether legislative size and legislative professionalism affected voter turnout in state house elections from 2000-2010. The first evaluations are pooled cross-sectional state-level analyses with standard errors clustered by states. Standard errors are clustered around each state because regular OLS models assume that observations within states are independent, which could bias the size of the standard errors downward (Primo, Milyo, and Jacobsmeier 2007).

Voter turnout for the 2000 - 2010 is the proportion of votes cast according to a states VEP for state *lower chamber legislative* elections and is the dependent variable. These estimates were obtained through each state's Secretary of State website. Lower chamber elections are used because they tend to have all seats were up for election during the same year, whereas it is often

the case that upper chamber elections occur for half of the district seats.¹⁹ This provides for consistency in estimating total voter turnout rates. Voter turnout for state house elections was collected by compiling state house election returns for each state for each election year. Since election returns are distributed by state's Secretary of State via district, and this analysis evaluates state-level institutional effects on voter turnout, I aggregated these returns to the state-level. Prior to collecting these election returns, compiled data for the above years did not exist. The last large data-set for state-wide election returns are from 1967 through 2003 by Carsey, et al. (2007) and utilized the same data collection method.²⁰

The years 2000 – 2010 are the most current years to evaluate how characteristics of state legislatures influence voter turnout. Further, this ten year interval will help to evaluate state-wide elections. While approximately 53 percent of the voter eligible population turned out to vote in the 1996 Presidential election, 62 percent of their population turned out to vote in the 2008 Presidential election (United States Election Project [USPE] 2010).²¹ This illustrates that there is variation in presidential elections that should be accounted for in the OLS model. As for Congressional elections, which have had historically lower voter turnout rates, turnout has been steady at about 37 percent of the voting age population turning out to vote for all midterm elections (USPE 2010).²² Variation in voting throughout those years therefore requires a fixed effects approach for Presidential election years. (Descriptive statistics for state-house elections are in the Appendix [see Table A.3 in Appendix]). The average turnout rate for all states in state

¹⁹ States that are not included in this analysis because seats up for election are staggered between years are: Arkansas, Florida, Hawaii, Louisiana, North Dakota and Oklahoma. Nebraska also is not included in the analysis because it has a unicameral legislature.

²⁰ Carsey, Thomas M., William D. Berry, Richard G. Niemi, Lynda W. Powell, and James M. Snyder. STATE LEGISLATIVE ELECTION RETURNS, 1967-2003 [Computer file]. ICPSR21480-v1. Chapel Hill, North Carolina: University of North Carolina [producer], 2007. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2008-04-22. doi:10.3886/ICPSR21480.

²¹ http://elections.gmu.edu/voter_turnout.htm

²² Available at: http://elections.gmu.edu/Turnout_2008G.html

lower chamber election through 2000-2010 is 46 percent. Virginia has the lowest average of 24 percent turnout, and Minnesota has the highest average of 56 percent.

Independent Variables

LCR is measured as the number of state house members divided by the voting eligible population (VEP) for each state for corresponding years and multiplying it by 100,000 – hence making a SL/VEP ratio per 100,000.²³ VEP was acquired from McDonald’s (2002) compiled data posted online (see Table A.1 in Appendix).²⁴ The number of state house members for each state for each year was found through the *National Conference of State Legislatures* website. State legislative capacity is operationalized by Squire’s (2007) index of state legislative professionalism, as mentioned in the previous section.²⁵ This scale is a standardized comparison of the number of days in session, salary and compensation, and number of staff members per legislator. Both LCR and legislative professionalism are expected to have a positive relationship with voter turnout.

The models also include several other state-level factors known to affect voter turnout, including: direct democracy institutions (Smith 2001; Tolbert, Grummel, and Smith 2001; Tolbert, McNeal and Smith 2004; Grummel 2008), and voter registration restrictions (see Highton 2004; also see Highton and Wolfinger 1998; Highton 1997). The variable “direct democracy” is a dummy variable coded 1 if the state has direct initiatives and/or popular referenda and ‘0’ if otherwise. Direct democracy states should have a positive relationship with

²³ Voter eligible population (VEP) is different than voting age population (VAP) in that VEP estimates those who are actually eligible to vote in the state by taking into consideration the number of individuals who are not citizens, those who are in prison or jail, and also estimates of those who are not eligible to vote due to state policies that disenfranchise individuals who are on probation or parole. These estimates were created by McDonald (2002).

²⁴ Available at: http://elections.gmu.edu/voter_turnout.htm

²⁵ Independent variables for off-year gubernatorial election were interpolated if missing.

voter turnout. Initiative systems have been found to draw voters to the polls because of salient issues on ballot measures (Smith 2001; Grummel 2008). Voter registration restriction is operationalized by the number of days before an election before which citizens are allowed to register to vote, taken from Project Vote Smart and is expected to decrease state-level voter turnout.²⁶ Some states also have multi-member districts (MMDs), in which citizens can vote for more than one candidate. The variable MMD is the proportion of districts that are multi-member in each state. Research suggests that voters vote less sincerely in US MMD districts and are more likely to abstain from voting (Cox 1994; Francia and Herrnson 2004).²⁷ Thus, I expect the same negative relationship with voter turnout. Additionally, since term limits can induce competition in states due to an increase in the number of open seat elections, the variable “term limit” is included in the models, indicating whether or not state representatives were term-limited out of their seat for that year.²⁸ This data was compiled from the National Conference of State Legislatures website.²⁹ Runoff elections, meanwhile, can reduce voter turnout since there are costs tied to turning out to vote for two separate elections (Wright 1989; Bullock, Gaddie, and Ferrington 2002). As a result, whether or not a state has a runoff election system is also included at a dummy variable and is expected to have a negative relationship with voter turnout in this analysis.³⁰

Other state-level factors, such as party competition, gubernatorial, and presidential elections years also need to be included in the model to control for variations in the electoral climate. The variable “Electoral Competition” is operationalized by the ‘folded Ranney index.’

²⁶ Data available at: <http://votesmart.org/elections/voter-registration>

²⁷ A voter votes ‘sincere’ when they do not take into consideration how others may vote in an election. Sincere voters purely vote their preference. This is opposed to ‘strategic voters’ who may not vote for their preferred candidate in order to keep the least preferred candidate from winning an election.

²⁸ Although Nalder (2007) finds that term limits decrease voter turnout in California state legislative elections.

²⁹ <http://www.ncsl.org/legislatures-elections/legisdata/legislative-term-limits-overview.aspx>

³⁰ Voter turnout rates for states with run-off elections were estimated by using election returns for the last election held for that seat.

The folded Ranney index is a measure of the proportion of seats held by the Democratic party in the upper and lower chambers of the state legislature, the Democratic proportion of the gubernatorial vote, and the proportion of terms of office Democrats held unified control of both chambers and the governor's office. This estimate is then subtracted by .5 and then 1, so that 1 represents perfect competition (see King 1989). The more competitive the electoral party system is, the more likely citizens turn out to vote (Caldiera and Patterson 1982). I expect electoral competition to have a positive relationship with voter turnout in these analyses. Since more individuals are likely to turn out to vote for high profile races, I expect positive coefficients in the OLS model for presidential and gubernatorial election years.

Finally, socio-economic status is one of the strongest predictors of political participation (Verba and Nie 1972; Brady, Verba, and Schlozman 1995; Verba, Schlozman, and Brady 1995). Racial patterns are also known to affect aggregate voter turnout rates in states (see Keys 1949; Hero 1998). In order to control for the factors that affect political participation, the variables poverty and percent African American are used in the model. The variable poverty is the percent of individuals below the poverty line in a state. The variable 'percent African American' is the percent of the resident population in each state that is African American.³¹ I expect that states with higher levels of poverty and percentages of African Americans will have lower levels of voter turnout.

Results

Results from the OLS model are shown in Table 1. Before discussing the regression results it is important to assess the appropriateness of the OLS model. Because OLS assumes

³¹ Both variables "poverty" and "percent African American" are taken from the Statistical Abstract of the United States 2000-2010.

normality in residuals, preliminary tests of the proposed model are necessary. New Hampshire is an obvious LCR outlier with approximately 42 state house legislators per 100,000 VEP in 2010. This may, of course, drive the variation in regression analysis.³² Preliminary analysis illustrates that New Hampshire does drive some of variation. However, holding all variables constant, the addition of New Hampshire into the model only increases the constant slightly, has a negative relationship with the dependent variable, and does not change the relationship of LCR with the dependent variable. Another concern with pooled data is the normality of the distribution of the residuals. The Shapiro-Wilk test does not reject the assumption that the residuals are normally distributed, with a p-value of less than 0.001.³³ Variance inflation factor (VIF) scores are well below the limit in which multicollinearity would be a problem with a mean VIF for the regression model including New Hampshire in the data at 2.15 and controlling for New Hampshire as a dummy variable at 2.22 (see Table A.4 in Appendix). The probability value of the Ramsey RESET test of model specification for the following regression has probability value of 0.09, which means that model meets OLS assumptions of linearity.³⁴ The Ramsey RESET test of the model controlling for New Hampshire has probability value of 0.63, which means that this model also properly specified.

The R-Square for the model is .584, which means that about 58 percent of the variation in voter turnout in state house elections is explained by the model (see Table 1 below). The

³² Another concern is whether LCR is a proxy for the population of the state, which may drive the results. However, LCR is negatively related to a states' population with a pearson correlation coefficient of -.481. Further, when the natural log of state populations is included into the regression model, it is not a significant predictor of voter turnout while LCR maintains its' statistically significant and positive relationship. See Tables A.4 in the Appendix for the regression model that includes Inpopulation and A.5 in the Appendix for variance inflation factor scores of that model.

³³ For Kernel Density Plots of both regression analyses, see Figure A.1 in Appendix.

³⁴ The null hypothesis for the Ramsey RESET test (Regression Specification Error Test) is that the model does not have incorrect functional forms and correlation between the dependent variable and the error term of the regression equation (see Ramsey 1969; Gujarati 2003, pages 521-523; Studenmund 2006, pages 198-201).

regression coefficient for LCR is in the positive direction and statistically significant. An increase of 2 state house representatives per 100,000 of VEP, on average increases voter turnout

Table 1
Voter Turnout in State House Elections

Variable	Coefficient (s.e)
LCR	0.004** (.001)
Legislative Professionalism	0.141* (.059)
MMD	-0.074*** (.013)
Runoff	0.012 (.025)
Term Limit	-0.014 (.014)
Electoral Competition	0.014 (.061)
Presidential Election Year	0.123*** (.010)
Gubernatorial Election Year	0.013 (.007)
Direct Democracy	0.030* (.018)
Registration Restriction	-0.001*** (.000)
Percent African American	-0.000 (.001)
Poverty	-0.003 (.002)
South	-0.05* (.025)
Constant	0.435*** (.064)
R ²	.584

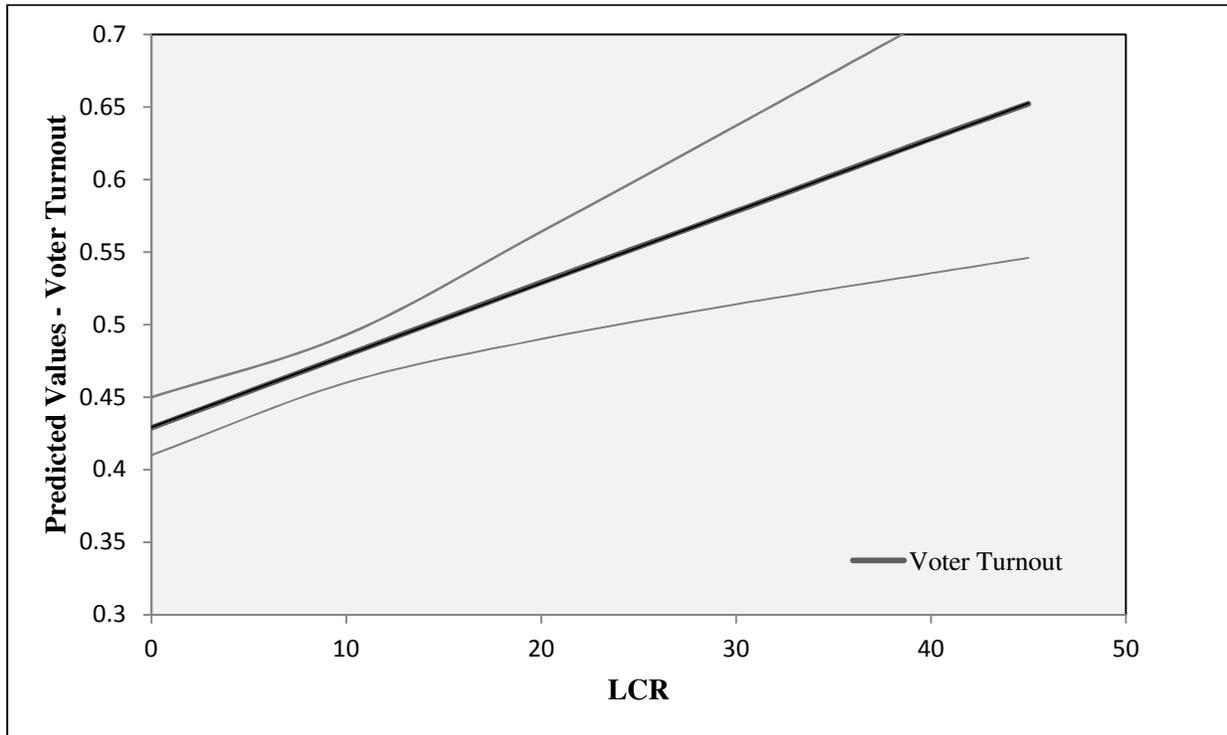
N= 243 (43 Clusters); *p <.05; **p < .01; ***p < .001 (s.e.)

*All coefficients are unstandardized beta coefficients, with robust standard errors.

by 0.8 percent. To further illustrate the substantive effects of LCR on voter turnout for state house elections, I utilized CLARIFY with a parameter algorithm at the 95 confidence level.³⁵ CLARIFY utilizes Monte Carlo simulations to convert the parameters of the model into predicted or expected values of the coefficients. This allows for easier substantive interpretations of results. All variables in the model were held constant at their mean while the predicted values were estimated utilizing CLARIFY by increasing LCR and values from the lowest to highest (see Figure 3 Below). From the lowest value of LCRs in state legislatures, to the highest value, voter turnout increases from an average of 43 percent to 64 percent.³⁶

Figure 3

Predicted Values – LCR and Voter Turnout (95 % Confidence Intervals)



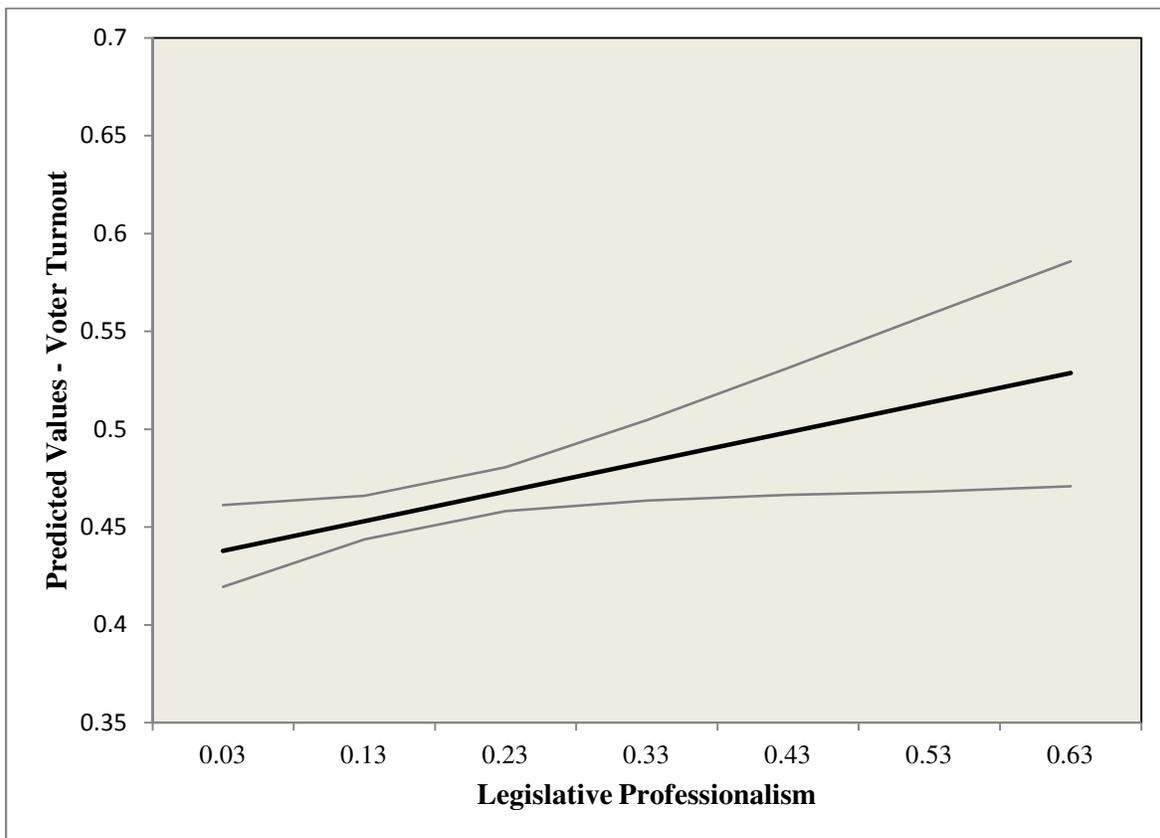
³⁵ (see King, Tomz, and Wittenberg, 2000; Tomz, Wittenberg, and King, 2001)

³⁶ These predicted probabilities were used with the ‘robust’ option for standard errors as CLARIFY does not have a ‘cluster’ option.

The impact of state legislature professionalism was also hypothesized to have a positive relationship with voter turnout and the relationship is significant and in the positive direction. Utilizing the same CLARIFY technique above, from the lowest to highest values of legislative professionalism, voter turnout increases from 44 percent to 53 percent, even while holding all variables in the model at its' mean (See Figure 4 below).

Figure 4

Predicted Values – Legislative Professionalism and Voter Turnout (95 % Confidence Intervals)



Representative Constituent Contact: Data, Methods, and Results

At the aggregate level, I find a significant relationship between turnout and LCR as well as legislative professionalism. Yet, it is not clear from these results what drives this relationship.

I now examine whether the relationship between LCR and increased aggregate turnout is driven by increased legislator contact with their constituents. This section extends work conducted by Aldrich (1993), Hibbing and Alford (1993) and Oppenheimer (1996). Aldrich (1993) illustrates that election activities of politicians decrease as the size of the electorate increases. Further, Hibbing and Alford (1993) and Oppenheimer (1996) found that constituency size was an important factor for voter turnout in Senatorial elections. Hanson, Palfrey, and Rosenthal (1987), also show this to be true while studying Oregon school districts. However, the general association between the ratios of state legislature LCR and voter turnout, as well as the causal mechanism had not been studied.

In order to find out if state legislators are more likely to contact citizens if they have a smaller constituency size, I merged the 2002 State Legislative Survey (2002 SLS) by Carey, Niemi, and Powell with the 2002 state level variables utilized in the last analysis.³⁷ The 2002 SLS consists of 2,982 surveys of state legislators and directly asks how much time legislators spend in contacting their constituents. The hypotheses for this section of the analysis are below:

H(1c): States with higher LCRs will have state house representatives that have higher levels of reported contact with constituents.

H(1d): States with higher levels of legislative professionalism will have state house representatives that have higher levels of reported contact with constituents.

Since I utilize state-level variables and the data used here incorporates individual-level responses, multilevel modeling will be utilized. While OLS regression models treat each observation as independent, multi-level modeling accounts for the correlation of the error terms at each level of analysis in hierarchically structured data. If this structure is not taken into account, OLS models will overestimate the statistical significance of the coefficients if the levels

³⁷ Study number 20960, available at: <http://dx.doi.org/10.3886/ICPSR20960>

of analyses are independent of each other (Moulton 1990; Gelman 2006; also see Cheah 2009). The following analysis will use data structured at two levels: the individual level (level 1) and the state level (level 2). Individuals in level 1 are state legislators nested within states (level 2). Another statistical method to cope with this type of data would be to cluster standard errors by states. However, recent work on state-level analysis has found that this type of clustering is too few in accounting for the error term for each level of hierarchically structured models and violates the assumptions of efficient estimators in OLS analyses (Gelman 2006).³⁸

Dependent and Independent Variables

As discussed above, this section evaluates whether legislators of states with high LCR have higher levels of citizen contact with representatives. The dependent variable “constituent contact” from the 2002 SLS is a response variable that asks “How much time do you actually spend on keeping in touch with constituents?” The responses are coded 1 through 5, 1 as a response of “hardly any” and 5 as a response of “a great deal.” Since members of both the lower and upper chambers of state legislatures were surveyed, “LCR” includes the total number of state legislature members divided by the voting eligible population (VEP) multiplied by 100,000. .

To ensure that “constituent contact” is not solely a function of the resources of a legislator’s office, Squire’s state legislature professionalism index will also be included as a control. Squire’s (1993) earlier work found that the more professionalized the legislative office, the more likely legislators contact citizens and I expect to find the same relationship in this analyses. Further, since prior work in Congress and on state legislators illustrates that members of Congress who are retiring spend more time on legislation and less time on constituent contact

³⁸ However Primo, Jacobsmeier, and Milyo (2007), argue that sometimes multi-level modeling is not necessary if clustered errors are appropriately utilized for some models over others.

(Herrick, Moore, and Hibbing 1994), whether or not the member is planning on retiring is also included in the model and should have a negative relationship with constituent contact. This variable, “Retire,” is a binary response variable that asks “After service in the present chamber, what are you likely to do – retire?” and is coded 1 for ‘yes’ and ‘0’ as ‘no.’

Some members of the state legislature may be much more ambitious than others. This personal factor must also be taken into consideration because ambitious politicians may be much more inclined to contact citizens in order to garner votes. Research finds that ambitious politicians, that is, state legislators that seek higher levels of office, are more likely to contact constituents Maestas (2003). I therefore include two variables to capture political ambition – “ambitious Congress” and “ambitious appointive office.” The 2002 SLS asks state legislators if they plan to run for higher office. Specifically, the legislators were asked “After service in the present chamber, what are you likely to do – run for US House or Senate?” The 2002 SLS also asks state legislators if they plan on pursuing an appointive office. Both of these variables are binary response variables coded ‘1’ as yes, and ‘0’ as ‘no’ and should have a positive relationship with constituent contact.

In order to account for politicians who may be ambitious, but, take on more legislative tasks, I include a variable that accounts for how much time the legislator spends developing new legislation. State legislators who spend more time developing legislation, may use less of their time contacting constituents and therefore have a negative relationship with constituent contact. I utilize the 2002 SLS question “how much time do you actually spend on developing new legislation?” to operationalize “ambitious – legislation development.” This variable is coded from 1 meaning “hardly any” to 5 “a great deal.”

Further, research on gender and state legislatures illustrate that females are much more likely to take on constituent casework (Richardson and Freeman 1995), less likely to run for higher office (Mueller 1984; Stanley and Blair 1991; Thomas 1994), less likely to expect benefits for running for higher office (Fulton et al, 2006), and spend more time on constituency service than males (Thomas 1992). Since female legislators are generally found to be less ambitious, but reach out to constituents through service more often, I expect a positive relationship with constituent contact. The variable “female” is a dummy variable coded “1” for female and “0” otherwise and is included in the following model.³⁹

Results

Time spent developing legislation may be correlated with constituent contact in a way that could reduce the effects of other variables in the model. Accordingly, I produced a model without the variable “legislation development.” The significance and relative effects of the coefficients of this model did not change much (see Table A.7 in Appendix). The Chi-Square for the likelihood ratio test for the full model presented below is 71.44 with a p-value of less than 0.001, which indicates that the multi-level model is a better model than OLS and that state level effects help to determine a state legislators’ time spent on constituent contact (see Table 2 below).⁴⁰ The LCR coefficient is statistically significant, but not in the expected direction (see Figure 5 below). As the relative number of state legislators increases, the less time they spend on constituent contact.⁴¹ Consistent with prior work legislative professionalism (Squire 1993), though, professionalism is statistically significant and in the expected direction (see Table 2

³⁹ Although female state legislators have increasingly become more likely to seek higher office there are still significant gender differences (see Carey, Niemi, and Powell 1998; Mueller 1984; Stanley and Blair 1991; Thomas 1994; and Fulton et al 2006)

⁴⁰ This model was run in STATA 11.0 using the xtmixed option.

⁴¹ Excluding New Hampshire from the analysis did not change the results.

below, also see Figure 6 below). This means that the more professionalized the state legislature, the more time the legislator will spend contacting constituents.⁴²

Table 2
Multilevel Regression Analyses – Constituent Contact

	Constituent Contact
Level 2 (State Level)	<i>B</i>(SE)
LCR	-0.019*** (.004)
Legislative Professionalism	0.648* (.311)
Level 1 (Individual Level)	
Retire	0.053 (.036)
Ambitious Congress	0.097* (.048)
Ambitious Appointive Office	0.108* (.049)
Ambitious – Legislation Development	0.073*** (.016)
Female	-0.145*** (.037)
Random Effects Variance	0.196 (.028)
Level 2 N (State Level)	50
Level 1 N (Individual Level) ⁴³	2,899
Minimum observations per cluster = 25; maximum observations per cluster = 188	
p < .05; **p < .01; ***p < .001	

⁴² Similar results were achieved by clustering standard errors around states. Multi-level modeling did produce much more efficient results, as the significance levels were inflated with clustering. The model that used clustered standard errors reduced the standard errors for all variables, which would overestimate the significance of the coefficients.

⁴³ Raudenbush and Bryk (2002) and well as Gelman and Hill (2007, p. 276) argue that two observations per cluster is enough to make inferences with multi-level models.

Figure 5
 Predicted Values – LCR and Constituent Contact (95% Confidence Intervals)

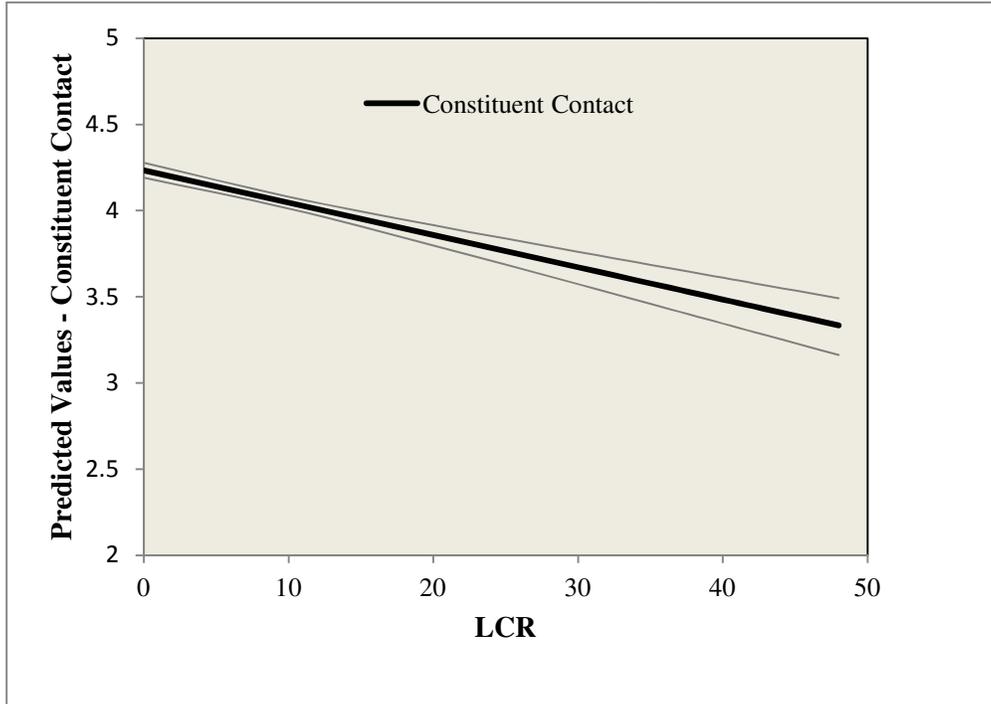
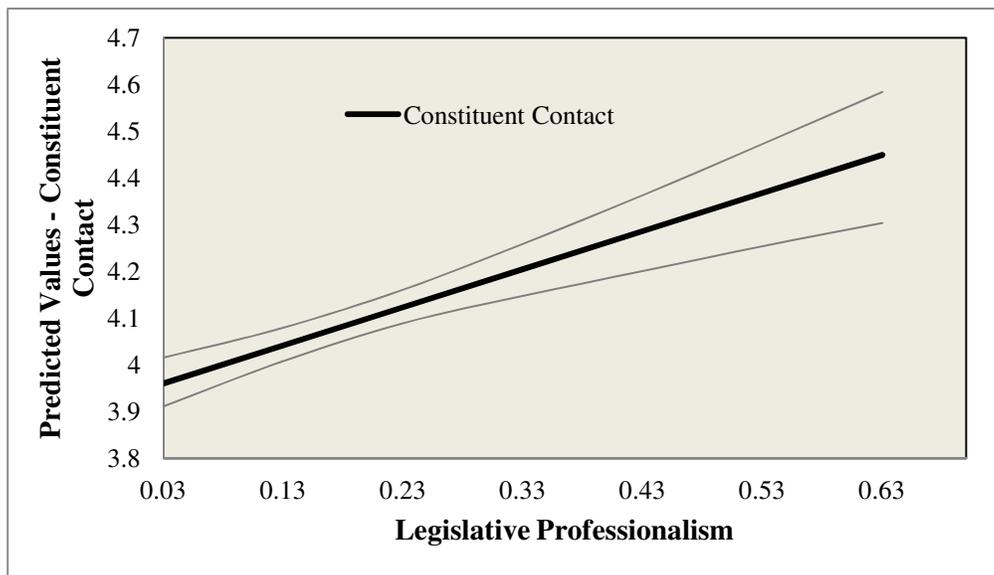


Figure 6
 Predicted Values – Legislative Professionalism and Constituent Contact (95% Confidence Intervals)



Office professionalism had a significant positive effect on a legislator's time contacting constituents, consistent with prior research (Squire 1993). However, despite prior research on contact and legislator to citizen ratios (Hibbing and Alford 1993; Oppenheimer 1996), LCR has a negative relationship in this analysis. This result may be because representatives with fewer constituents do not need to spend as much time contacting citizens. If legislators have fewer constituents, then it makes sense contacting efforts are less than if there are more constituents in a district. Additionally, this survey question may not be the best instrument to measure citizen contact. While citizen reports of contact may be positively related to LCR, reports of contact efforts may be negatively related. Similarly, legislators may respond differently to reports of contact who serve in more professionalized legislatures – because legislators who work within a more professionalized branch might have more resources to coordinate 'meet and greets' with citizens.

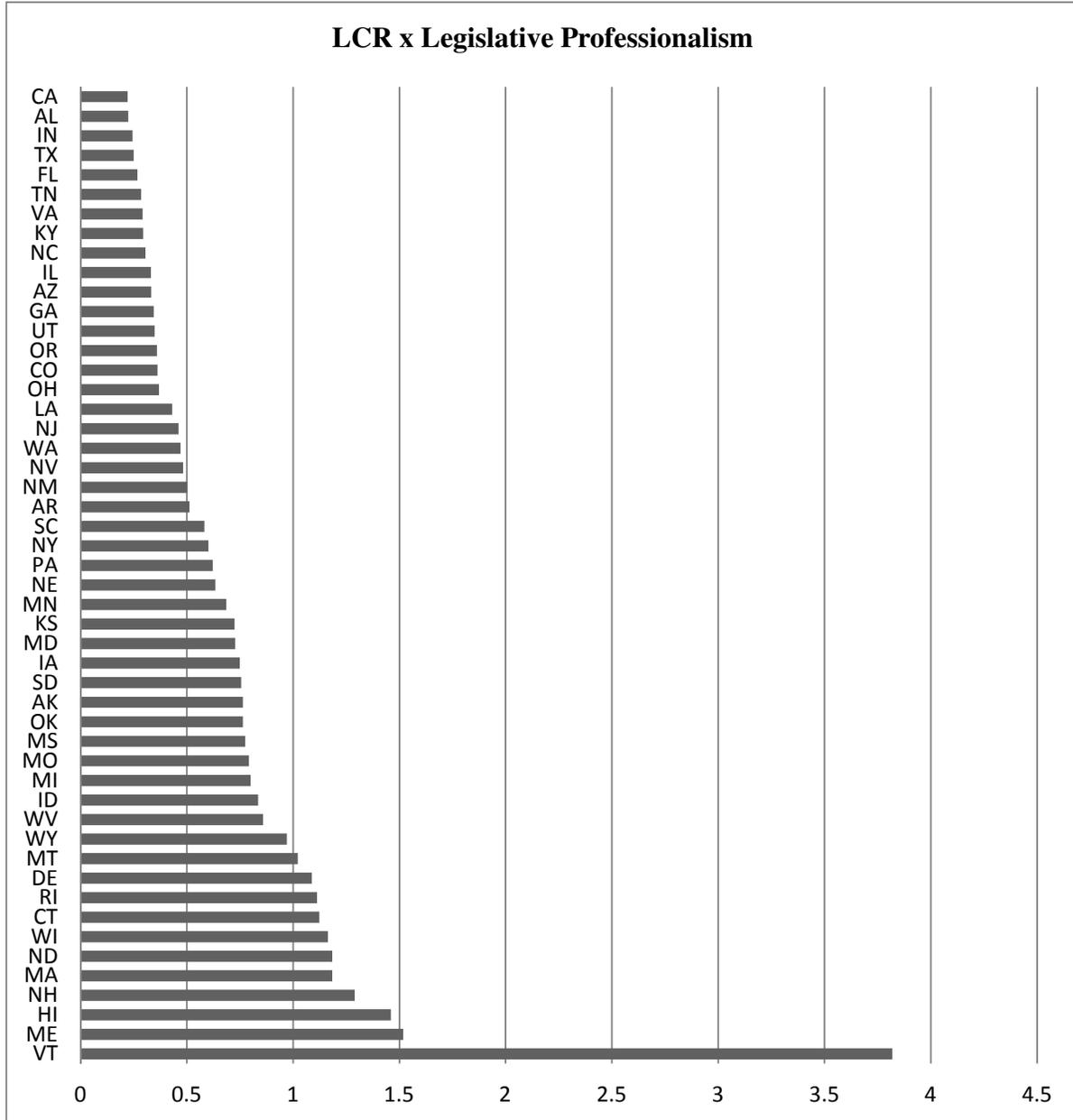
Since prior research has found that the ratio of legislators to citizens increases citizen – legislator contact at the national level (Hibbing and Alford 1993; Oppenheimer 1996), it may be that this relationship is contingent on legislators having the necessary office resources to contact citizens. Further, prior studies have conducted their analysis within one legislative context, the US Congress (Hibbing and Alford 1993; Oppenheimer 1996), which is highly professionalized. Thus, LCR may only positively affect turnout in highly professionalized legislatures. To test this, I re-estimated the model of constituent contact with an interaction between the two variables LCR and legislative professionalism. In order to evaluate the contingent effects of LCR across varying levels of legislative professionalism, I created an interaction term by taking the product of LCR and Legislative Professionalism (LCR x Legislative Professionalism). The distribution of

the combination of state legislative characteristics is illustrated below in the boxplot and bar chart (see Figure 7, also see Figure 8 below).

Figure 7
Boxplot of Interaction Term of LCR and Legislative Professionalism



Figure 8
 Distribution of Interaction Term: LCR x Professionalism⁴⁴



⁴⁴ Descriptive statistics of LCR x Legislative Professionalism are: Mean = 0.792; Median = 0.724; SD = 0.607; Minimum = 0.222; Maximum = 3.18

The state of Vermont is an obvious outlier with this interaction term and should be taken into account in the following analyses. In order to find if the LCR and legislative professionalism has an interactive effect on constituent contact, the same multi-level model presented above was utilized with the interaction term included (see Table 3 below). Including the interaction term in the model did not change the original coefficients of LCR and legislative professionalism much. The joint test of significance for all three variables, LCR, legislative professionalism, and the interaction term have a chi-square of 36.95 and a p-value of 0.000. This means that a model that excludes all three variables would not be correctly specified. These results show that when legislative professionalism is not taken into consideration, state

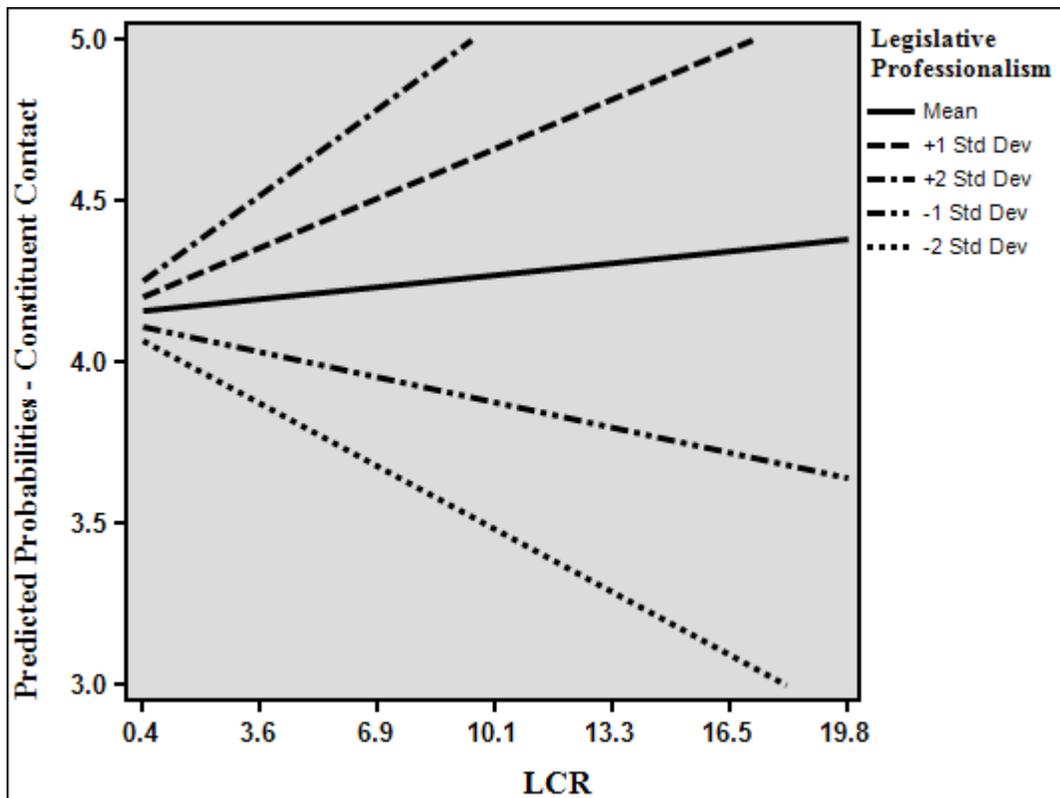
Table 3
Multilevel Regression – LCR × Legislative Professionalism and Constituent Contact

	Constituent Contact
Level 2 (State Level)	B(SE)
LCR × Legislative Professionalism	0.765* (.328)
LCR	-0.022*** (.006)
Legislative Professionalism	0.273* (.130)
Vermont	-0.863* (.399)
South	0.205* (.088)
Level 1 (Individual Level)	
Retire	0.053 (.036)
Ambitious Congress	0.095* (.048)
Ambitious Appointive Office	0.107* (.049)
Ambitious – Legislation Development	0.073*** (.016)
Female	-0.147*** (.037)
Random Effects Variance	0.191 (.028)
Level 2 N (State Level)	50
Level 1 N (Individual Level)	2,899
(minimum per cluster = 25, maximum per cluster = 188)	
p < .05; **p < .01; ***p < .001	

legislators with higher levels of LCR report less constituent contact. When LCR is not taken into consideration, state legislators in assemblies in more professionalized legislatures contact citizens more often than if they served in less professionalized legislatures. Below is a graphical depiction of the interactive effect LCR and legislative professionalism has on constituent contact (see Figure 9 below). This graph was estimated by utilizing predictions of contact, holding all

Figure 9

Interactive Effects of Legislative Professionalism at varying levels of LCR on Constituent Contact



other variables in the model at the mean while varying legislative professionalism at different ranges of LCR.⁴⁵ LCR enhances legislator-constituent contact for legislators in offices with higher levels of professionalism.⁴⁶ However, as legislative professionalism decreases one or two standard deviations below the mean, contact decreases as LCR increases.⁴⁷ In sum, legislators with fewer constituents tend to contact citizens more often as office professionalism increases.

Even though Squire (1993) found that the more professionalized the legislature, the more contact legislators had with constituents, the study did not incorporate the interaction between LCR and office professionalism. Further, prior research has found that the number of legislators-to-citizens increases citizen to legislator contact at the national level (Hibbing and Alford 1993; Oppenheimer 1996), and this analysis found that smaller constituency size, in conjunction with higher levels of office professionalization, enhances the relationship. This implies that the effects of LCR on the behaviors of state legislators are contingent on the resources of the legislative office. In more professionalized offices, members have larger staff sizes, which could help schedule meetings with constituents. Further, the more professionalized the legislature, the more time legislators spend in session. Spending more time in session means that legislators may be contacting constituents to garner support for bills. Or it just may mean that legislators who spend more time in session, are more likely to contact citizens because their political roles are extended for a longer period of time.

⁴⁵ This graph was estimated using the statistical package Interaction! 1.6.2 by Soper (2012) and excludes the states New Hampshire and Vermont.

⁴⁶ Intercepts for legislative professionalism at the mean has a slope of .011 (standard error [se] of slope is .001); +1sds above the mean, the slope = .047 (se of slope = .002); +2sds above the mean, the slope = .083 (se of slope is .003); -1sd below mean, slope = -.024 (se of slope = .000); -2sds below the mean, slope = -.060 (se of slope = .001).

⁴⁷ Interactive effects of LCR at varying levels of legislative professionalism are included in the Appendix (see Figure A.2 in the Appendix).

Voting – Individual-level Analyses: Data, Methods, and Results

The previous analysis illustrated that while LCR alone reduces the probability that state legislators will contact citizens, it can increase contact as levels of legislative professionalism increase. Prior analyses in this dissertation showed that, at the state-level, higher LCR contributed to higher levels of voter turnout in state house elections. This section focuses on whether or not we can attribute citizens' individual level political behavior, such as voting and attitudes toward government and politics, to LCR. The ensuing analysis seeks to determine whether individuals' decisions to vote are influenced by state institutional factors - LCR and legislative professionalism - using the same multi-level modeling technique utilized above. The hypotheses for this section are as follows:

H(1e): Individuals who live in states with higher LCR will be more likely to report voting.

H(1f): Individuals who live in states with higher levels of legislative professionalism will be more likely to report voting.

Data and Methods

All individual level variables in the following analysis are from the 2010, 2006, and 2002 General Social Surveys. The dependent variable is whether or not the respondent reported voting. Since the dependent variable is binary, a logistic multi-level regression is utilized. One caveat to this variable is that respondents reported voting in the last federal, not state legislative election. Thus, state institutional effects may be overwhelmed by national level factors. Using voter turnout responses for federal elections makes for a difficult case to show that LCR affects voter turnout – because respondents may or may not have had a state legislative election during the Presidential years that are evaluated in this analyses. However, it is nonetheless a good way to assess if LCR does affect individual political behavior. Further, individuals in survey research

tend to report higher levels of voting, which puts LCR and reported voting up to a much more stringent test than utilizing election returns.⁴⁸ Prior analyses in this study shows that states with high LCR have higher levels of voter turnout, even while controlling for Presidential election.

Other variables known to affect individuals' participation in politics, such as income and education, [Almond and Verba 1963; Verba and Nie 1972; Brady, Verba, and Schlozman 1995; Verba, Schlozman, and Brady 1995], race [Verba and Nie 1972; Bobo and Gilliam 1990; Wilcox and Gomez 1990; Kinder and Mendelberg 1995], gender, and strength of party identification [Campbell et al. 1960; Allsop and Weisburg 1998]), are also included in the equation. The variables "age," "income," and "education" are continuous variables and are in original form from the GSS. Age is the age of the respondent at the time of the interview, income, is a continuous variable with equal intervals of income categorized for every \$11,999 the respondent reported, and education is the total years of schooling of the respondent. Consistent with prior research on voting behavior, I expect all three variables to have a positive relationship with voter turnout. The variable "African American" is a recoded race variable from the GSS converted into a dummy variable, where "1" equals if the respondent is African American and "0" otherwise. Research shows that African Americans tend to turn out to vote despite socio-economic status and lower levels of political efficacy (see Verba and Nie 1972; also see Bobo and Gilliam 1990; Verba et al. 1993). As a result I expect this variable to have a positive relationship with voting. The variable "Female" is also a dummy variable, where "1" equals if the respondent is female, and "0" otherwise. Since the 1980s, females have turned out to vote more often than males (see Center on American Women and Politics [CAWP] 2008; also see

⁴⁸ In compared self-reported voting and official voting records in 1964, 1976, 1978, and 1980, the University of Michigan Survey Research Center (UMSRC) found that self-reported votes were significantly greater than official turnout figures.

Schlozman, Burns, and Verba 1994; Verba, Burns, and Schlozman 1997), and, therefore this variable should have a positive relationship with voter turnout.

The GSS variable “political views” is a measure of ideology where 1 = extremely liberal, 2 = liberal, 3 = slightly liberal, 4 = moderate, 5 = slightly conservative, 6 = conservative, and 7 = extremely conservative. Intensity of political ideology should increase reports of voter turnout (Campbell et al. 1960; Allsop and Weisburg 1998). To capture ideological intensity, the variable “political views” needs to be rank ordered from moderate to the extremely liberal and conservative. Otherwise the variable would be just be a measure of how liberal or conservative the respondent was. Therefore it was recoded from extremely liberal and extremely conservative = 1, liberal and conservative = 2, slightly liberal and slightly conservative = 3, and moderate = 4. All other state-level variables from the prior analyses are also included in the following model. As with the previous analysis, the following multi-level model consists of individual-level equation and a state-level equation.

Results

The 2000 dependent variable “vote 2000” is derived from the 2002 GSS, while the “vote 2004” and “vote 2008” are from the 2006 and 2010 GSS, respectively.⁴⁹ The variables “term limit” and “runoff” were taken out of the models because their inclusion provided a poorer fit for all years evaluated in this analysis.⁵⁰ Table 4 reveals the results (see Table 4 below). LCR and legislative professionalism are not statistically significant predictors of reported voting. The only state-level variable that reaches statistical significance is electoral competition in the 2004

⁴⁹ States missing in the “Vote 2000” model are: Arkansas, Hawaii, Idaho, Iowa, Maine, Nebraska, Nevada, New Hampshire, New Mexico, Rhode Island, Utah, West Virginia, and Wyoming. States missing the “Vote 2004” and “Vote 2008” models include: Alaska, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont.

⁵⁰ Bayesian information criterion scores increased from 1346.1 to 1354 for the “Vote 2000” model, from 2992 to 2999 in the “Vote 2004” model and 1824 to 1836 in the “Vote 2008” model when the variables “term limit” and “runoff” were included. The command for logistic multi-level mixed models in STATA is `xtmelogit`.

Table 4
 Logistic Multi-level Regression – LCR, Legislative Professionalism and Individual-level Voting⁵¹

	Vote 2000		Vote 2004		Vote 2008	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level (Level 2)						
LCR	-0.014 (.013)	.461	0.037 (.023)	.118	0.050 (.037)	.119
Legislative Professionalism	0.258 (.540)	.633	-0.512 (.470)	.277	0.554 (.575)	.336
MMD	0.304 (.281)	.279	-0.107 (.175)	.542	-0.038 (.353)	.914
Gubernatorial Election	-0.117 (.189)	.535	0.050 (.128)	.697	0.183 (.532)	.731
Direct Democracy	-0.021 (.178)	.904	0.196 (.136)	.149	-0.015 (.177)	.929
Electoral Competition	0.756 (1.23)	.554	1.52 (.767)	.047	0.389 (.715)	.586
Registration Restriction	0.001 (.007)	.802	-0.004 (.004)	.349	-0.009 (.003)	.086
Individual Level (Level 1)						
Education	0.262 (.027)	.000	0.293 (.019)	.000	0.219 (.022)	.000
Income	-0.111 (.004)	.006	0.144 (.021)	.000	-0.001(.003)	.705
Age	0.049 (.004)	.000	0.035 (.003)	.000	0.032 (.003)	.000
Female	-0.205 (.141)	.148	0.214 (.094)	.023	0.364 (.120)	.003
African American	0.432 (.202)	.032	0.434 (.137)	.002	0.377 (.167)	.025
Political Ideology	0.089 (.072)	.217	-0.077 (.057)	.180	0.222 (.061)	.000
Level 2 N (State-level)	37		39		39	
Level 1 N (Individual-level)	1,203		3,142		1,717	
	Minimum per cluster = 6; Maximum per cluster = 101		Minimum per cluster = 2; Maximum per cluster = 212		Minimum per cluster = 2 ; Maximum per cluster = 134	

⁵¹ All models have one-tailed tests of significance

election. The number of individual-level observations for the analysis in the “vote 2004” model are about twice as many as the other “vote 2000” and the vote “2008” election, which could inflate the statistical inference of effects of electoral competition on individual-level reports of voting.⁵² These results certainly cast some doubt on whether or not the effects of LCR and legislative professionalism on voter turnout can be inferred to the individual level. However, many of the state-level indicators that have been found in the past to influence voter turnout at the individual level, such as voter registration laws, are also not statistically significant. Perhaps some of these state-level variables do not have direct, but, indirect effect on voter turnout at the individual level. It is important to note that multi-level models place more stringent parameters on the standard errors and therefore, the confidence levels of the coefficients. Primo, Jacobsmeier and Milyo (2007), for example, found that multilevel models would not produce results when examining state registration laws on voter turnout. Further they found that state voter registration laws were no longer statistically significant predictors of voter turnout at the individual level when clustering standard errors around states, as opposed to utilizing unadjusted standard errors – as others have done in the past.⁵³ Similarly, this study did not have stable state-level predictors of individual-level voter turnout. However, results with weighted data, using clustered standard errors around states, and not multi-level modeling for the “vote 2000” model produced a significant negative coefficient for the state level variable LCR (see Table 5 below).⁵⁴ Conversely, LCR also had a statistically significant positive relationship with voter turnout in the “vote 2008” election with a coefficient of .065. The only other state-level variable

⁵² The 2006 GSS has almost twice as many observations as the 2002 and 2010 GSS. It should be noted that there was no oversampling of particular populations for all data-sets used in this analyses. Details of sampling are variable at the GSS NORC website: <http://www3.norc.org/GSS+Website/FAQs/>

⁵³ Specifically, Primo, Jacobsmeier, and Milyo (2007) tested Wolfinger, Highton, and Mullin’s (2005) study on voter registration laws.

⁵⁴ All models were weighted using the ‘pweight’ command in STATA. For comparison of results that were weighted and not weighted, see Tables A.8 and A.9 in Appendix.

significant in all models of the analyses with clustered standard errors around states was registration restriction in the “Vote 2008” model. These results, though, must be taken with caution, as the analyses presented here offer two different results.

Table 5
Voter Turnout – Significant State Level Variables with Clustered Standard Errors

Variable	Vote 2000		Vote 2008	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
LCR	-0.022 (.011)	.040	0.065 (.024)	.007
Registration Restriction			-0.019 (.004)	.003

Note: coefficients with $p > 0.05$ are not presented here. The full models are presented in the appendix (see Table A.8 in the Appendix).

Political Efficacy and Political Interest: Data, Methods, and Results

LCR and office professionalism did not have significant relationships with voter turnout in the multi-level models above. This section tests whether or not LCR and legislative professionalism influences attitudes found to lead individuals to participate in politics. Specifically, the following analyses test if these state legislative characteristics influence a citizen’s sense of political efficacy and political interest. I expect higher LCRs to elicit feelings of political efficacy for citizens. Further, individuals in states that have relatively more legislators may be more interested in politics because there are more politicians and therefore, many more election campaigns.

Data and Methods

In this section I utilize the 2004 and 2006 GSS data-sets. In all, there are 20 questions regarding political efficacy in the GSS data series that span the years 1972 through 2010. Questions about political efficacy, however, are not consistent across all years of the GSS. Further, while multiple questions about political efficacy may be in a survey for one particular year, these questions may only ask how respondents feel about federal, and not local, government. Political efficacy questions pertaining to federal government are not ideal measurements for the followings analyses, because this examination focuses on how state government influences political attitudes.⁵⁵ Unfortunately, the only GSS question related to political efficacy that directly asks about local government was in the GSS data series only from 1983-1987 – which is not an appropriate time frame for this study. As a result, I utilize general questions concerning political efficacy drawn from the 2004 and 2006 GSS in the following analyses.

The 2004 and 2006 GSS data sets are the only data sets that ask about political efficacy between the years 2000 through 2010 and are the only exceptions to inconsistencies in the uniformity of questions pertaining to political efficacy. There is one uniform political efficacy question in the 2004 and 2006 GSS data sets I will use in the following analyses.⁵⁶ In the following analyses I utilize two variables that measure a sense of political efficacy and one variable that assesses interest in politics.⁵⁷ The variable “political efficacy” is from the 2004 and 2006 GSS data sets and asks how much the respondent agrees or disagrees with the statement “People like me don’t have any say about what the government does.” The responses are coded

⁵⁵ For example, the 2006 GSS asks respondents levels of agreement to the statement “People we elect to Congress try to keep the promises they have made during the election.”

⁵⁶ The entire GSS codebook from 1972 through 2010 is available at:
http://publicdata.norc.org/GSS/DOCUMENTS/BOOK/GSS_Codebook.pdf

from 1 “strongly agree,” 2 “agree,” 3 “neither agree or disagree,” 4 “disagree,” and 5 “strongly disagree.” Thus, higher scores indicate higher levels of internal political efficacy. Internal efficacy is the perception that one has an impact on the political process. External efficacy is the perception that government is responsive (Gimpel, Lay, and Schuknecht 2003, p. 17) and is modeled separately. The variable “Government doesn’t Care” is a question from the 2004 GSS that asks the respondent if they agree or disagree with the statement “I don’t think the government cares much what people like me think,” and is coded the same way – higher scores indicate higher levels of external political efficacy. The variable “political interest” is the 2004 GSS variable “polint” and asks, “How interested would you say you personally are in politics?” The responses are coded 1 “very interested,” 2 “fairly interested,” 3 “somewhat interested,” 4 “not very interested,” and 5 “not at all interested.” Factors known to be related to a person’s sense of political efficacy and political interest, such as age, gender, race, income, education, and marital status are included in the baseline model (see Glen and Grimes 1968; Rogers 1974; Verba, Burns, and Schlozman 1997; Gimpel 2005; Anderson 2010). The variables ‘female,’ ‘African American,’ age, and education are coded in the same way as they were in the prior analysis. The variable “married” is a dummy variable coded as “1” if the individual was married and “0” otherwise. Females and African Americans are known to have lower levels of political efficacy and interest in politics (see Glen and Grimes 1968; Lyons 1970; Rogers 1974), and as a result should have a positive relationship with the variables “political efficacy” and “government does not care” and a negative relationship with political interest. Those who have higher levels of income and who are married should have more efficacy and interest in politics (see Almond and Verba 1963; Verba, Burns, and Schlozman 1997; Gimpel 2005). Because state-level variables other than LCR and legislative professionalism can affect political efficacy and

interest, direct democracy (Bowler and Donovan 2002), registration restriction, and electoral competition, are also included in the model.⁵⁸

Results

The Chi-square likelihood test for the model estimating political efficacy from the 2004 GSS has a value of 36.94 with a p-value of less than 0.001 and the 2006 GSS 69.16 with a p-value of less than 0.001.⁵⁹ Further, “Government doesn’t Care” has a chi-square likelihood test score of 35.23 with a p-value of less than 0.001, and the model estimating political interest has a LR test score of 34.03 with a p-value of 0.001. Therefore MLM is appropriate for these analyses. Further, the random effects of the model have minimal covariance between states at 0.002 and 0.004, evaluating political efficacy and political interest, respectively. This means that individuals clustered within states are not independent of each other – which is a factor standard OLS models cannot take into consideration. Below are the results of the effects of LCR and legislative professionalism on political efficacy and political interest (see Table 6 and 7 below).⁶⁰

⁵⁸ However, see Dyck and Lascher (2009) who do not find direct democracy to be tied to political efficacy.

⁵⁹ States missing in the analyses from the 2004 GSS are: Alaska, Delaware, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont. States missing from the analysis from the 2006 GSS are: Alaska, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont.

⁶⁰ All models were weighted using the ‘pweight’ command in STATA. For comparison of results that were not weighted, see Tables A.10, A.11, A.12, and A.13 in Appendix

Table 6
Multilevel Regression – LCR, Legislative Professionalism and Political Efficacy

	Political Efficacy (2004 GSS)		Political Efficacy (2006 GSS)	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level (Level 2)				
LCR	-0.022 (.017)	.184	-0.025 (.025)	.334
Legislative Professionalism	0.107 (.339)	.751	-0.490 (.473)	.300
Direct Democracy	0.059 (.098)	.547	0.070 (.107)	.513
Registration Restriction	0.001 (.003)	.641	-0.010 (.006)	.131
Electoral Competition	0.081 (.605)	.893	0.274 (.765)	.720
Individual Level (Level 1)				
Education	0.038 (.009)	.000	0.095 (.012)	.000
Age	-0.001 (.002)	.575	-0.002 (.002)	.193
Female	0.074 (.071)	.299	-0.101 (.072)	.164
Black	0.170 (.105)	.104	-0.020 (.104)	.847
Married	0.247 (.072)	.001	-0.005 (.074)	.942
Level 2 N	38		38	
Level 1 N	2,607		1,292	
	(Minimum per cluster = 7; Maximum per cluster = 191)		(Minimum per cluster = 2; Maximum per cluster = 93)	

*unstandardized coefficients – one tailed.

Table 7
Multilevel Regression – LCR, Legislative Professionalism, Political Efficacy and Political Interest

	Government does not Care		Political Interest	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level (Level 2)				
LCR	-0.021 (.014)	.178	-0.012 (.012)	.298
Legislative Professionalism	0.067 (.314)	.829	0.114 (.232)	.622
Direct Democracy	0.042 (.091)	.641	0.032 (.068)	.637
Registration Restriction	0.004 (.003)	.154	0.003 (.002)	.115
Electoral Competition	0.224 (.560)	.689	0.159 (.420)	.704
Individual Level (Level 1)				
Education	0.033 (.008)	.000	-0.019 (.006)	.005
Age	-0.002 (.001)	.272	-0.003 (.001)	.008
Female	0.028 (.065)	.663	0.074 (.050)	.140
Black	0.004 (.096)	.967	0.187 (.074)	.012
Married	0.237 (.066)	.000	0.077 (.051)	.133
Level 2 N	38		38	
Level 1 N	2,607		2,607	
(Minimum per cluster = 7; Maximum per cluster = 191)				

*unstandardized coefficients – one tailed.

None of the state-level variables are statistically significant in the multilevel models. Considering that multi-level models significantly constrain the standard errors, it is worth examining what state level variables are significant using standard errors clustered around states with weighted data.⁶¹ The state level effect of LCR on individual-level feelings of political efficacy is marginally statistically significant, with a p-value of .075 and a coefficient of – 0.021 only in the 2004 GSS model (see Tables A.8 and A.9 in Appendix). Individuals in states with higher levels of LCR are more likely to agree with the statement that “people like me don’t have

⁶¹ Data was weighted utilizing the pweight command in STATA.

any say about what government does.” This means that, they are less likely to feel politically efficacious. For every increase of 4 state legislators per 100,000 of the VEP, there is a one unit decrease on the five-point Likert scale. These results are counter to the hypothesized relationship. This may be due to the fact that state legislators in high LCR states were found to spend less time contacting citizens. Further, even though previous analyses in this chapter found that the more professionalized the office, legislators would report more contact with citizens, legislative professionalism did not have any significant effect on efficacy and political interest. These results should be taken tentatively, as the multi-level model presented above and the 2006 GSS model with clustered standard errors did not produce significant results (see Table 8 above also see Tables A.7 and A.8 in the Appendix). However, it is a first step in understanding the impact of how institutions such as state legislatures influence the political attitudes of citizens.

Conclusions

The latter analyses showed that the size and capacity of state legislatures can influence the political activities of citizens as well as state assembly members – however the analyses presented above showed some mixed results. The primary focus of the dissertation is to illustrate that studying how variation in governing bodies, state legislatures more specifically is important, because it can influence democratic action such voting, and voter turnout is argued by many to be a keystone to a healthy democratic society (Piven and Cloward 1988; 2000; Teixeira 1992; Lipjhart 1997; Putnam 2000; Franklin 2004).

This chapter illustrated that LCR and legislative professionalism are important characteristics of state legislatures that influence the voting public. I found that LCR and office professionalism increased voter turnout at the state level. Antithetical to my hypothesis,

however, LCR did not increase, but decreased the probability that state legislators would contact citizens. Yet, the more professionalized the office, and the combined effects of LCR and office professionalization, increased state legislator contact with citizens.

The last section of the analyses in this chapter attests to the problems with making inferences about aggregate-level phenomena to individual-level behavior while utilizing self-reports of voting behavior as opposed to election returns. While I found that LCR increased voter turnout at the aggregate-level using pooled state legislative election returns, LCR had a significant negative relationship with individual level reports of voting in the 2000 federal election, and a significant positive relationship with self-reports of voting in the 2008 federal election. These conflicting results are not surprising given that individuals tend to over-report voting (see Bernstein, Chadha, and Montjoy 2000; Cassel 2003; also see Ansolabehere and Hersh 2012). For example, while 61.6 percent of the VEP turned out to vote in the 2008 Presidential election, 72.4 percent of GSS respondents reported turning out to vote for the same election.⁶² Consistently found in research evaluating individual reports of voting, is that those who misreport voting are demographically similar to those who actually vote. Similar to actual voters, misreporters are individuals who have high SES, are partisans, and attend church regularly (Bernstein, Chadha, and Montjoy 2000; Ansolabehere and Hersh 2012).⁶³ However, these over-reports may misestimate the real effects of how institutional factors such as LCR, influence voting behavior. Despite these problems with survey data over-reporting voting behavior, it is clear that LCR has a positive effect on aggregate rates of voter turnout when utilizing actual election returns.

⁶² All GSS surveys used in the analyses presented in this dissertation consistently had higher reports of voter turnout rates than VEP estimates of using actual election returns. While 68.4 percent of GSS respondents reported turning out to vote in the 2000 Presidential election, VEP rates were 54.2 percent. 69.8 percent of GSS respondents reported turning out to vote in 2004 Presidential election, while 60.4 percent of the VEP were estimated to turn out to vote.

Further, LCR was not a significant predictor of political efficacy and interest. Even in the analyses with clustered standard errors, LCR did not have an effect on feelings of individuals' sense of political efficacy. It would seem to make sense that since LCR is associated with voter turnout, then individuals in states with higher levels of LCR would be much more politically efficacious, especially since efficacy increases an individuals' propensity to vote (Almond and Verba 1963; Brady, Verba, and Schlozman 1995; Verba, Schlozman, and Brady 1995; Putnam 2000; Gimpel, Lay, and Schuknecht 2003). An alternative mechanism by which LCR may increase voter turnout is through campaign effects. When the size of the electorate attenuates, the campaign activities of representatives can increase (see Aldrich 1993). Increases in campaign activities by representatives mean more political information during elections. This heightened flow of the political activities by representatives can reduce the costs of information gathering for voters. More campaign efforts by state legislators may also increase citizen knowledge about state politics, thus increasing voting in state legislative elections. Further, if districts have smaller constituents per representative ratios, then citizens may have an easier time gauging the impact of their vote on the outcome of the election. Prior research, for example, illustrates that the Electoral College helps voters perceive the impact of casting a vote (Shachar and Nalebuff (1999), and this mechanism may apply to LCR.

Additionally, the analyses presented above also illustrate that making generalizations from aggregate level phenomenon to individual level phenomena can be problematic. The problem of making such ecological inferences is not a new discovery. Emile Durkheim's (1897) notorious work on suicide rates between Protestants and Catholics is a primary example of the problems with making individual level inferences based on aggregate level phenomena – known as the ecological fallacy. Durkheim, for example, found that suicide rates in countries were

higher with higher levels of Protestants than in countries with higher levels of Catholics. He attributed higher suicide rates to being Protestant – which is obviously problematic. Robinson (1950) was one of the first to point out the flaws of such inferences by showing that aggregating individual-level phenomenon can actually *reverse* relationships originally observed at the individual-level. Recent scholarship points to the same problem. Gelman et al. (2007), for example, shows that even though lower income individuals are more likely to vote Democrat, and higher income individuals are more likely to vote Republican, at the aggregate level, high income states tend to vote Democrat and low income states, Republican.⁶⁴

The research presented here found that LCR increases aggregate level voter turnout. In contrast, the individual level results were mixed. Multi-level modeling did produced significant results, while clustering the standard errors around states produced significant results for reported voting in the 2000 and 2008 elections. However, despite the problems with causal influence of aggregate level phenomenon to individual-level behavior, the results of this chapter are clear – the characteristics of state legislators influence voter turnout. This chapter begs the question as to what other aspects of state legislatures influence citizen political behavior. The following chapter explores whether diversity of individuals within state legislatures, or more specifically, the presence of descriptive representation, increases a sense of efficacy and political participation.

⁶⁴ Also reiterated in Gelman and Hills' illustration of this work in *Data Analysis Using Regression and Multilevel/Hierarchical Models* (2009, pages 310-314).

CHAPTER 3

Demographic Composition of State Legislatures and Voter Turnout

While Chapter Two illustrated that the size and capacity of state legislatures influence voter turnout, this chapter focuses on how diversity in the composition of state legislatures also matters. The following review of the literature shows how descriptive representation functions to motivate African Americans and women to participate in politics. The analysis then seeks to uncover if the racial and gender make-up of state legislatures influences voter turnout, particularly for African Americans and women. The analysis will also test if the presence of African Americans and women in state legislatures engenders political efficacy and political interest.

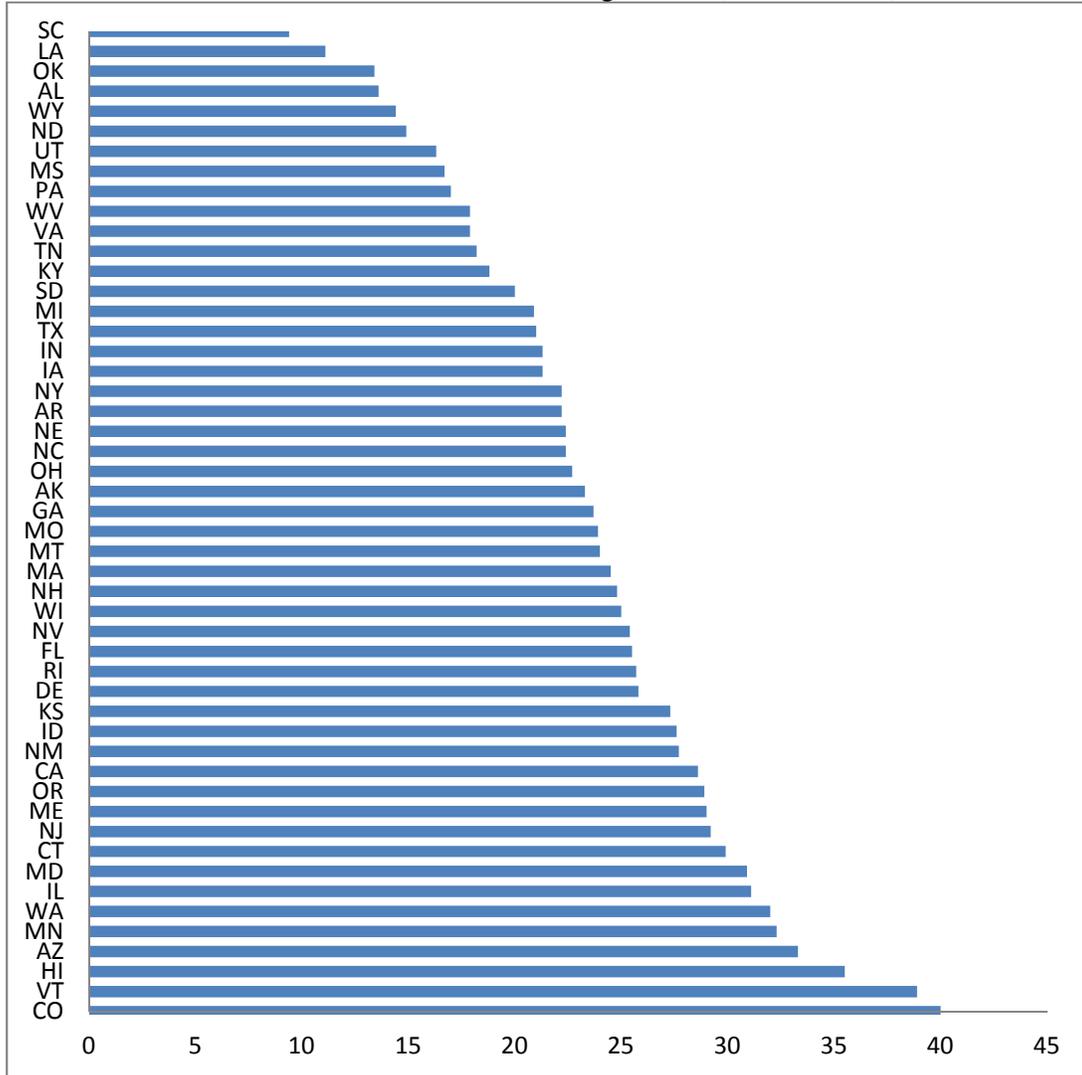
Diversity in Composition of Legislatures: Race, Gender and Representation

Jan Leighley (1995) argues that political participation is influenced by “contextual cues and political opportunities structured by the political environment” (p. 88). Her observation is fitting because citizens’ relationships with governmental institutions are influenced by the opportunities granted by government to participate in government. Historically, these “opportunities” had been contingent upon status related to race and gender. Both African Americans and women have had a tenuous relationship with government including a history of disenfranchisement, as well as comparable representation with their white male counterparts (Dahl 1967; Guinier 1994). Measures to alleviate such discrimination, such as the 15th amendment in 1868, the 20th amendment in 1920, and the 1965 Voting Rights Act, did not necessarily remedy the low representation of African Americans and women in Congress and

state legislatures during the 19th and much of the early 20th century.⁶⁵ Meanwhile, the proportion of females in state legislatures surpassed the proportion in the national legislature by the early 1900s and continued to grow at a rapid pace from the mid-1960s through the 1980s (Squire and Hamm 2005, p.136-137; also see Cox 1994). However, this rise has plateaued in the 2000s to a steady 22 to 24 percent of all state legislators. South Carolina has the lowest percentage of female legislators, at just 10 percent, and Colorado with 38 percent in 2010 (Center for American Women and Politics (CAWP 2012). However, numbers did increase slightly in 2012, with 40 percent of state legislators in Colorado being female (see Figure 10 below).

⁶⁵ In 1870, Reconstruction significantly increased the presence of African American in southern state legislatures until the end of reconstruction. By the beginning of the 1900s, with the rise of Jim Crow laws, African American were “shut out of service in southern state legislatures” (Squire and Hamm 2005, p. 138).

Figure 10
Percent Female State Legislators (CAWP 2012)

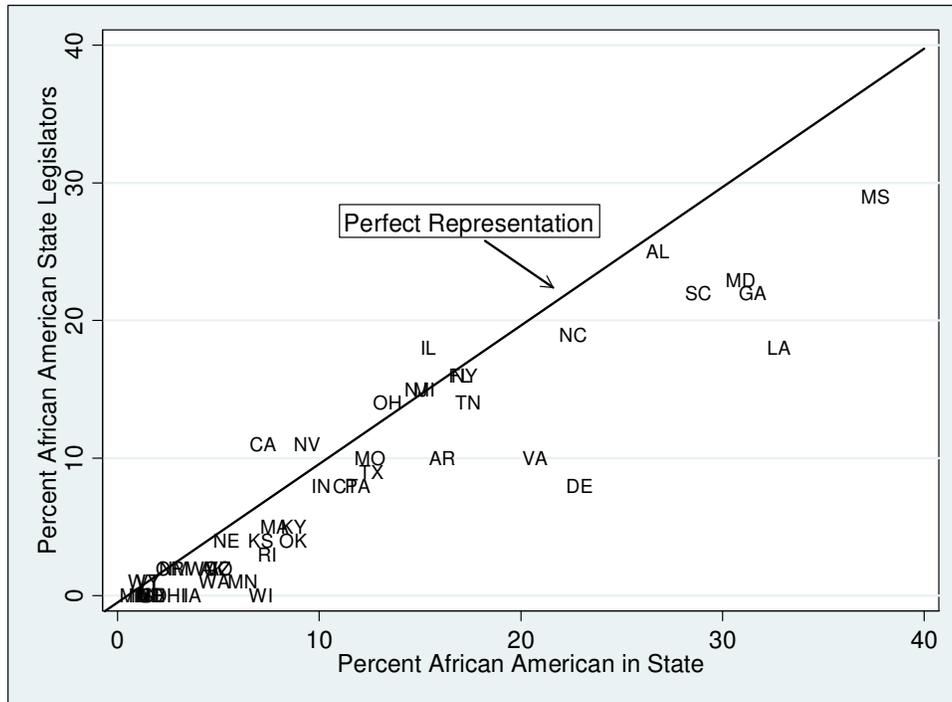


The presence of African American representatives, on the other hand, has not followed the same pattern. African American state legislators were quite rare in the U.S. throughout the 20th century. In the post-Reconstruction era, substantial growth in descriptive representation of African Americans did not occur until the 1980s (Squire and Hamm 2005). By 2009, African Americans made up about 9 percent of the total number of state legislators in all states (National Conference of State Legislatures 2009). While there is a roughly linear relationship between the

percent of African Americans in states and the percentage of African American state legislators
 African Americans are underrepresented in most state legislatures (see Figure 11 below).

Figure 11.

Percentage of African American State Legislators and Percent African American in States
 (2009)⁶⁶



States such as Alabama, Florida, Michigan, Nebraska, New Jersey, New York, Ohio, and Oregon have percentages that closely match state African American populations. Other states such as Delaware, Virginia, Arkansas, and Wisconsin have about twice the percentage of African Americans in the state as they do as representatives in the state legislature.

⁶⁶ Numbers of African American state legislators were acquired from the National Conference of State Legislators. Available at: <http://www.ncsl.org/legislatures-elections/legisdata/african-american-legislators-1992-to-2009.aspx> African American population estimates in state were acquired from the US Census. Available at: <http://www.census.gov/prod/cen2010/briefs/c2010br-06.pdf>

Though racial and gender representation in contemporary state legislatures is much improved, there is still wide variation in the levels of descriptive representation in state houses and most states are not fully representative of women and African Americans.⁶⁷ The primary focus of this chapter is to answer whether or not this variation affects political participation. I also examine whether descriptive representation increases feelings of political efficacy. Research suggests that citizens react positively to having representatives who are of the same ethnic and gender backgrounds. African Americans and women become politically mobilized as descriptive representation increases (Bobo and Gilliam 1990; Gay 2001, 2002; Tate 1993; Banduccie, Donovan, and Karp 2004; Rocha et al. 2011; Plutzer and Zipp 1996; Dolan 1998). This phenomenon is often described as forging ‘political empowerment’ (see Bobo and Gilliam 1990; Guinier 1994; Rocha et al. 2010).

Descriptive Representation, Policy Outputs, and Political Efficacy

Pitkin’s (1967) work is a useful guide to evaluating the concept of representation and what it may mean to the electorate and, more specifically, minority groups. She argues that when evaluating representation, there are two different dimensions that should be distinguished. One dimension is descriptive representation, where the representative physically resembles their constituents and does not ‘act for’ but ‘stands for’ the represented (p. 61). The other dimension is when representatives substantively act in the interest of the represented (Pitkin 1967). In cases of descriptive representation, the representative may or may not ‘act for’ the represented, but

⁶⁷ Latinos and other minority groups, similarly, do not have proportional levels of descriptive representation. It has been found that Latinos have higher levels of voter turnout when descriptive representation is present (see Rocha et al. 2010). However, even though Latinos make up higher percentages of the total US population than African Americans, Latino mobilization in voter turnout has not been uniform (see Diaz, 1996; Hritzuk and Park, 2000; Shaw et al, 2000; Wrinkle et al., 1996) and Latino populations differ in ethnic origins. Further, Latinos have not experienced similar de jure discrimination in voting that has historically affected women and African Americans. In this study I focus on African Americans and women because of the non-uniformity in the origins of Latino groups. However, this study could be expanded to other minority groups in future research.

their presence creates a symbolic connection of representation in legislative institutions (Pitkin 1967, p. 106). While Pitkin (1967) argues that descriptive representation alone is not sufficient to adequately represent the underrepresented (such as women and racial minorities), Mansbridge (2001) contends that it is necessary when institutions have historically denied groups from entering into dialogue concerning policy. By virtue of inclusion in legislative assemblies, descriptive representation creates trust in institutions as a whole as well as in those who represent them (Mansbridge 2001). However, institutional make-up also matters because it affects policy outputs, and, these outputs could strengthen the link between groups traditionally out-casted from politics.

Overall, descriptive representation should be beneficial to the voting public. Voters want someone in office who resembles them (see Menifield and Shaffer 2005). The electorate may feel as if they gain most when they have representatives who are descriptively like them. Even though Carol Swain (1993), for example, found that White representatives can substantively represent the interests of African Americans, women, and racial minorities, minority representatives are more likely than Whites to pursue policies that represent those interests. Women in public office are more likely to support issues concerning women (Thomas 1991; Thomas and Welch 1991; Swers and Larson 1995).⁶⁸ Similarly, African American office holders are more likely to support African American interests (Thomas 1991; Bratton and Haynie 1999; Owens 2005).

Research also shows that the proportion of women in state legislatures is associated with the introduction and passage of more bills that address issues of women and children (Thomas 1991; Day 1994; Bratton and Haynie 1999; Bratton 2002). Meanwhile, African American interests are realized through policy outcomes such as welfare, education, and health policy

⁶⁸ Poggione (2004) finds this to be true for female state legislators despite party affiliation.

(Button and Hedge 1996; Tschoepe 1997; Bratton and Haynie 1999; Owens 2005; also see Pruehs 2006).⁶⁹ Further, more women and minorities are attaining leadership positions in state legislatures (Rosenthal 2005; NCSL 2012; CAWP 2012). Based on research on women and minorities in Congress (Swers and Larson 2005), this may also translate into policy that better reflects the preferences of women and minorities – especially if they are making gains in controlling legislative agendas.

Although policy responsiveness is a viable reason for women and racial minorities to increase political activity, the presence of women and African Americans in government (as representatives) is also a symbolic good, and may explain heightened levels of the female vote (see Plutzer and Zipp 1996; Dolan 1998) and mobilization for racial minorities (Bobo and Gilliam 1990; Gay 2001; Tate 2001; Tate 2003; Griffin and Keane 2006; Rocha et al. 2010). Legislators with similar gender or racial demographic can represent the ability for the group to engage in shaping public debate within the political system. The presence of women in politics may break the connection between masculinity and politics (see Duerst-Lahti and Kelly 1995). Similarly, descriptive representation for African Americans generates “increases in the control of institutionalized power” (Bobo and Gilliam 1990, p. 377).

This type of representation could elicit more trust in the political system, as well as enhance political efficacy, which is often found to be lower for women as compared to men (Verba, Burns and Schlozman 1997) and Whites as compared to African Americans (Greenburg 1970; Lyons 1970; Rodgers 1974; Dawson and Cohen 1993; Parker, Onyekweluje, and Murty 1995; Quane and Rankin 2000). Research has found that efficacy along with social trust and trust in government are very strong predictors of political participation (Levi 1998; Inglehart 1999;

⁶⁹ Although Button and Hedge (1996) find that white state legislators find those types of policies important, they find that African American legislators rank those types of policies higher than whites.

Putnam 2000; Gimpel, Lay, and Schuknecht 2003). The mechanism of efficacy, social trust, and trust in government on political participation is based on the benefits an individual gains through their social and political experiences. These benefits vary and may include: making a person feel like an effective participant, gaining a sense of belonging or inclusion, feeling like they have an effect on political decision-making process, acquiring knowledge and resources through connections, feeling an overall sense of connectedness to government, and/or seeing their efforts realized.

Exactly why trust and efficacy induce higher levels of voting is often explained in terms of a rational choice perspective and can be applied to groups with minority status in government. Levi (1998) has illustrated the mechanism of trust through a simple triadic model. She argues that trust is a rational and personal investment that can facilitate coordination and cooperation with others. If an individual believes that trusting someone else will ensure some sort of benefit, then they should be willing to cooperate with that person. Further, trust also involves coordination of expected outcomes. If an individual assumes that it is in the other's best interest to act consistently with their own interest, then trust can facilitate coordination and cooperation between individuals (Levi 1998). However, the outcome of trust is uncertain, and "its maintenance requires confirmation of that trustworthiness, or else trust will be withdrawn" (Levi 1998, p. 79). Trust can be maintained through repeated opportunities to contact representatives and participate in politics, or at least the perception of the ability to do so. If minority representatives can claim credit for proposing legislation in line with minority group interests, this trust and a sense of efficacy can be maintained. Consistent with this mechanism of trust, Axelrod's (1984) tit-for-tat strategy experiments illustrate evidence of the phenomenon. Individuals that expect lower levels of benefits from cooperation were less willing to take action

or participate in their social or political environment. Further, if one feels more politically efficacious, then they will be more likely to turn out to vote.

Descriptive Representation, Contact and Voting

Research on descriptive representation and political engagement for African Americans illustrates that African Americans are more likely to contact legislators who are African American (Gay 2001; 2002). Further, African Americans are more likely to vote if an African American is on the ballot (Griffin and Keane 2006). Recent work demonstrates that there is a similar effect with incumbent state legislatures with racial minority status (Rocha et al. 2010). Rocha et al. (2010) found that African Americans and Latinos are more likely to turn out to vote if state legislatures have higher levels of descriptive representation. Even though political engagement increases for minorities who have minority representatives, this cannot be generalized to gender. Haynes (1997) concludes that women are no more likely than men to contact legislators of the same gender. However, to date, there has not been any research conducted on how descriptive representation in *state legislatures* affects voting for women and political efficacy for women and minorities. This is an important area to address. First, political efficacy affects voter turnout, which is a way for groups to significantly affect policy, and subsequently, the allocation of resources. This is a keystone of democracy. Second, it illustrates how variation in the make-up of government institutions influences citizen political behavior. Finally, the extant literature has yet to explore how representation of women in state legislative branches affects a sense of political efficacy for women and minorities.

Research finds that women are not significantly more likely to contact of representatives gender than men, and there is no research that illustrates that women are more likely to vote if

state legislatures have higher levels of descriptive representation. However, other work indicates that the existence of female representatives and women contending in elections increases political efficacy among women (Verba, Burns, and Schlozman 1997), voting for female House candidates (Dolan 1998; Smith and Fox 2001) and many other forms of political engagement, such as talking about politics and trying to convince others to support particular candidates (Atkenson 2003).⁷⁰ Atkenson (2003) found, for example, that the presence of female candidates in competitive national elections induced more political discussion, increased internal efficacy, and decreased ‘don’t know’ responses about political parties among women. For racial minorities, Banducci, Donovan, and Karp (2004) found similar results. They found that representation of racial minorities in the US national legislature increased political knowledge and efforts to contact minority representatives by minorities (Banducci, Donovan, and Karp 2004).

Additionally, women in politics are found to have a ‘role model’ effect on female adolescents (Campbell and Wolbrecht 2006). Campbell and Wolbrecht (2006) found that the more news coverage female candidates received, the more likely female teenagers were to discuss politics with their family, express an intention to vote in national elections, join a political party, and be a candidate for local or city office. The increase in the proportion of women in state legislatures and leadership positions may be partly responsible for the heightened media coverage of women in politics. These increases should translate into actual voting behavior among women. Studies have tested whether or not females increase political participation when female candidates are on the ticket (Plutzer and Zipp 1996; Verba, Burns, and Schlozman 1997; Dolan 1998; Smith and Fox 2001; Atkenson 2003), but have not tested

⁷⁰ Smith and Fox (2001) find that women prefer House candidates of the same sex, but not for Senate seats.

whether the presence of women in state legislatures in general affects women's sense of efficacy and political behavior.

The motivation to contact government officials or participate in politics by voting can be a byproduct of descriptive and substantive characteristics of the political system. This is based on the reliability of representatives to provide benefits (Jones and Hudson 2000), as well as egocentric (Fiorina 1978) and sociotropic voting models of political behavior (Kinder and Kiewit 1981; Markus 1988). There is strong evidence that individuals vote sociotropically (Kinder and Kiewit 1981), where they keep incumbents who facilitate goods for all, and not egocentrically – primarily voting for personal gain. However, sociotropic voting could apply to in-group benefits. Further, it can be argued that descriptive representation should increase political participation because it eases the costs of gathering information during elections. Therefore, higher proportions of these groups in state legislatures could increase voting behavior for women because of realized policy responses that are geared towards the wants and needs, and overall preferences of those groups, through those groups. Political efficacy and levels of voter turnout for African Americans and women should also increase as their descriptive representation in state legislatures increases.

Prior research has found that African Americans will be more likely to vote if an African American is on the ballot (Griffin and Keane 2006) and in the legislature (Rocha et al. 2010). Further, legislators exhibit policy congruence with their descriptive in-group identity. While the proportion of women, for example, in state legislatures is associated with the introduction and passage of bills that address issues of women and children (Thomas 1991; Day 1994; Bratton and Haynie 1999; Bratton 2002), African American interests are also realized through descriptive representation (Button and Hedge 1996; Tschoepe 1997; Bratton and Haynie 1999;

Owens 2005). And even though one study found that African Americans will turn out to vote if there are higher percentages of African Americans in the state legislature (Rocha et al. 2010), there has not been any research conducted on how descriptive representation in state legislatures influences voting for women, as well as a sense of political efficacy for women and African Americans. The following analyses examine this relationship

Chapter Hypotheses

The first analyses seek to determine whether the percentage of women and minorities in state legislatures affect total voter turnout rates in state house elections. The second section seeks to find if African Americans and women will turn out to vote as descriptive representation increases. In the following state-level analysis, I utilize the same variables from the pooled cross-sectional state-level data set as described in Chapter Two. All of the following individual-level analyses that utilize multilevel modeling techniques also use the same GSS variables described in Chapter Two. In order to test whether descriptive representation increases voter turnout and political efficacy for African Americans and women at the individual-level, the General Social Survey along with multilevel modeling will also be utilized. This chapter's hypotheses are listed below:

H(2a): Higher proportions of women in state legislatures increase total voter turnout in states.

H(2b): Higher proportions of African Americans in state legislatures increase total voter turnout in states.

H(2c): Higher proportions of women in state legislatures increase voter turnout among women.

H(2d): Higher proportions of African Americans in state legislatures increase voter turnout among African Americans.

H(2e): Higher proportions of women in state legislatures will increase feelings of political efficacy among women.

H(2f): Higher proportions of African Americans in state legislatures will increase feelings of political efficacy among African Americans

State Level Analysis: Data, Methods, and Results

All baseline independent variables; LCR, legislative professionalism, MMDs, runoff, term limit, political competition, presidential and gubernatorial election years, direct democracy, registration restriction, poverty, and south are from the prior chapter and will be included in the following *state-level* regression model with the same dependent variable – voter turnout elections returns for state legislative lower house elections. The following OLS model also has standard errors clustered around states. In order to find if the proportion of women and African Americans in state legislatures affect total voter turnout the percent African American state legislators and female state legislators will be included in the following model. The variable “Women State Legislators” is the percent of women in state legislatures in that state and are percentages of female legislators. This variable was compiled from the Center for the American Women in Politics (CAWP) for the years 2000 through 2010.⁷¹ The variable “African American State Legislators” is the percent of African American state legislators compiled from the National Conference of State Legislatures for the years 2000 – 2010.

The state-level analysis did not produce any significant results for either the percent of women state legislators or African American state legislators (see Table 9 below). That is, there is no relationship between total voter turnout and the percent of state legislators who are female and African Americans state legislators at the state-level.⁷² These aggregate level results are not

⁷¹ This data is available at http://www.cawp.rutgers.edu/research/resources/archived_fact_sheets.php but does not yet include the year 2010.

⁷² Preliminary analysis of this model also made use of an alternate measure of descriptive representation for African Americans. The alternative variable was the proportion of the percent of African American state legislators to the percent of African Americans in states. These results were similar in that the coefficients were in the same direction

surprising especially since measurements of descriptive representation used in this analysis is expected to affect women and African Americans in particular, rather than the general electorate. It therefore makes sense to investigate the relationship at the individual level.

Table 9.
Voter Turnout in State House Elections

Variable	Coefficient (s.e)
Women State Legislators	-0.000 (.000)
African American State Legislators	-0.000 (.000)
LCR	0.003* (.001)
Legislative Professionalism	0.130* (.061)
MMD	-0.090*** (.023)
Runoff	0.014 (.037)
Term Limit	-0.008 (.023)
Political Competition	0.020 (.081)
Presidential Election Year	0.122*** (.008)
Gubernatorial Election Year	-0.014 (.007)
Direct Democracy	0.031 (.027)
Registration Restriction	-0.001** (.000)
Percent African American	-0.000 (.001)
Poverty	-0.004 (.003)
South	-0.074* (.037)
Constant	.511*** (.099)
R^2	.564

N= 243 (43 Clusters); *p <.05; **p < .01; ***p < .001 (s.e.)

*All coefficients are unstandardized beta coefficients, with robust standard errors.

and were not statistically significant. Inclusion of this variable in the model did not increase the model fit.

Individual-level Analyses: Data, Method, and Results

Descriptive Representation in State Legislatures and Voter Turnout

The effects of descriptive representation on voter turnout may be washed out at the aggregate level, because there may be a direct relationship between individual-level voter turnout and descriptive representation. This section focuses on individual-level reports of voting to test if individuals are more likely to turn out to vote in states with larger numbers of female and African American state legislators.⁷³ All individual level variables in the following analysis are from the 2010, 2006, and 2002 General Social Surveys. The dependent variable is whether or not the respondent reported voting, and it is binary. Since the following analyses also integrate state level variables and are hierarchically structured, the following models are logistic multi-level regressions. The 2000 dependent variable “vote 2000” is derived from the 2002 GSS, while “vote 2004” and “vote 2008” are from the 2006 and 2010 GSS, respectively. The following analyses use the same level one individual-level variables that examine individual reports of voting that were utilized in Chapter Two. Level 1 variables “age,” “income,” and “education” are continuous variables in original form from the GSS. The variable “African American” and “female” are dummy variables coded as “1” and is if the respondent was female or African American, and “0” otherwise. The GSS variable “ideology” is a measure of ideology and is ranked from extremely conservative and extremely liberal equaling 1 to moderate, equaling 5. The level 2 state-level factors included in the following model are; the percent of women state legislators, the percent of African American state legislators, the percent African American in

⁷³ The 2000 dependent variable “vote 2000” is derived from the 2002 GSS, while the “vote 2004” and “vote 2008” are from the 2006 and 2010 GSS, respectively. States missing in the “Vote 2000” model are: Arkansas, Hawaii, Idaho, Iowa, Maine, Nebraska, Nevada, New Hampshire, New Mexico, Rhode Island, Utah, West Virginia, and Wyoming. States missing the “Vote 2004” and “Vote 2008” models include: Alaska, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont.

each state, LCR, legislative professionalism, MMD, whether there was a gubernatorial election during the year the respondent reported voting, direct democracy, competition, and registration restriction.

Results

Likelihood ratio tests for all models suggested that the multilevel model is an improvement over a single level model.⁷⁴ Table 10 presents the results of the model. The results demonstrate that the percent of women and African Americans in state legislatures have no effect on the respondents' propensity to vote, except for a marginally significant coefficient in the "Vote 2008" model variable for the percent women state legislators and the "Vote 2000" model variable "African American State Legislators."⁷⁵ In those years, larger percentages of women and African Americans in state legislatures were associated with higher levels of reported voting. Additionally, Whites were more likely to report turning out to vote in states with higher percentages of African American in state legislatures in the 'Vote 2000' model while there was no relationship in the 'Vote 2004' and 'Vote 2008' models (See Figure x below).

⁷⁴ State level variables 'runoff' and 'term limit' were not used in this analyses because they did not provide a good fit for the models. Bayesian information criterion scores increased from 1361.8 to 1369 for the "Vote 2000" model, from 3013.6 to 3022.9 in the "Vote 2004" model and 1843.5 to 1854.4 in the "Vote 2008" model when the variables "term limit" and "runoff" were included.

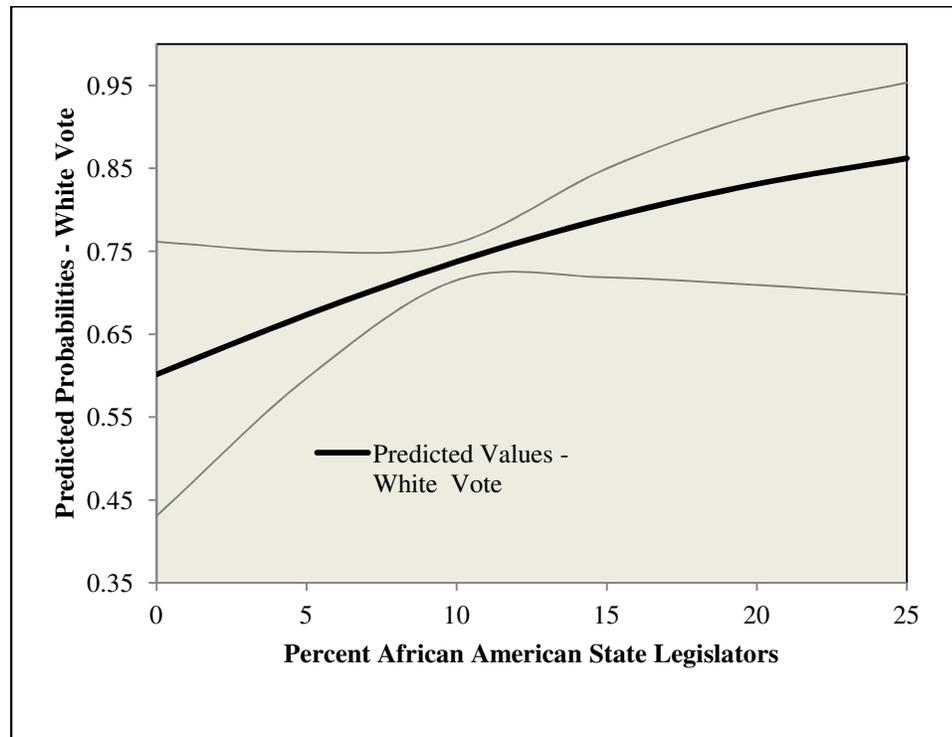
⁷⁵ I also ran these models using standard errors clustered around the states. State level variables that had a statistically significant relationship in the "Vote 2000" model were "women state legislators" and LCR. Both had a positive relationship with reported voting for the 2000 election. In "Vote 2004" model with standard errors clustered around the states, LCR, legislative professionalism, and competition had a statistically significant positive relationship with reports of voting. LCR was the only state level variable in the "Vote 2008" model that was statically significant with a positive coefficient using the latter modeling technique.

Table 10
Logistic Multi-level Regression – State Legislature Diversity and Individual-level Voting

	Vote 2000		Vote 2004		Vote 2008	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level (Level 2)						
Women State Legislators	-0.022 (.015)	.142	0.009 (.011)	.435	0.026 (.014)	.076
African American State Legislators	0.059 (.033)	.072	-0.003 (.021)	.860	0.013 (.026)	.617
Percent African American	-0.054 (.026)	.037	-0.007 (.019)	.710	-0.005 (.022)	.798
LCR	-0.023 (.019)	.232	0.027 (.025)	.291	0.082 (.042)	.052
Legislative Professionalism	0.163 (.565)	.773	-0.742 (.503)	.140	0.402 (.647)	.535
MMD	0.375 (.305)	.219	-0.196 (.184)	.287	-0.104 (.362)	.772
Gubernatorial Election	-0.123 (.202)	.542	0.020 (.129)	.876	0.126 (.540)	.815
Direct Democracy	0.063 (.218)	.771	0.091 (.153)	.551	-0.058 (.189)	.775
Competition	0.528 (1.30)	.685	1.40 (.832)	.091	0.513 (.725)	.479
Registration Restriction	-0.004 (.008)	.587	-0.001(.004)	.677	-0.007(.005)	.217
Individual Level (Level 1)						
Education	0.265 (.027)	.000	0.292 (.019)	.000	0.281 (.022)	.000
Income	- 0.011 (.004)	.005	0.143 (.020)	.000	-0.001(.003)	.707
Age	0.049 (.004)	.000	0.034 (.003)	.000	0.032 (.003)	.000
Female	-0.209 (.142)	.141	0.219 (.094)	.020	0.368 (.121)	.002
African American	0.460 (.206)	.026	0.473 (.140)	.001	0.372 (.172)	.031
Political Ideology	0.104 (.073)	.154	-0.077 (.057)	.178	0.217 (.062)	.000
Level 2 N (State-level)	37		39		39	
Level 1 N (Individual-level)	1,203		3,142		1,717	
	Minimum per cluster = 6; Maximum per cluster = 101		Minimum per cluster = 2; Maximum per cluster = 212		Minimum per cluster = 2 ; Maximum per cluster = 134	

Figure 12

White Voter Turnout – 2000 Election



As prior research demonstrates, representation should affect the voting behavior of those who are descriptively like them (see Plutzer and Zipp 1996; Verba, Burns, and Schlozman 1997; Dolan 1998; Smith and Fox 2001; Griffin and Keane 2006; Rocha et al. 2010). Thus a more direct test of my argument examines whether descriptive representation influences voter turnout for women and African Americans. In order to do this, I created two variables to capture cross-level interactions of descriptive representation for women and African American respondents using the GSS. These two variables are interaction variables where female respondents, were multiplied by the percent of females in the state legislature and African American respondents were multiplied by the percent of African Americans in the state legislature (Female \times % women

in state legislature and African American \times % African American in state legislature).⁷⁶ Table 11 reveals the results of those cross-level interactions.

Cross-level interaction terms in multi-level models are similar to OLS models in that they explain the variance of the slope when the intercept equals zero (see Gelman and Hill 2009), but, can be complex to interpret due to collinearity with other variables in the model. Therefore, it may be best to interpret these cross-level interactions visually. In Table 11, the multi-level model suggests that there is a positive relationship between reported voting for African Americans and higher percentages of African Americans in their state legislatures. The results show that this relationship is consistent for all three elections in these analyses. However, the joint effects of African American state legislators on reports of the African American vote are not significant across all years of this analysis.⁷⁷ Further analysis of the interaction illustrates that descriptive representation in state legislatures increases reported voting for African American males, while there is no relationship between the percent of African Americans in state legislatures and the female African American vote (see Figures 13, 14, and 15 below).⁷⁸ These results are not consistent with Rocha et al.'s (2010) study. Rocha et al. (2010) found that African Americans as a whole are more likely to vote if there are more African Americans in the state legislature. The results presented here illustrate that this relationship exists only for African American males.

⁷⁶ Both variables "female" and African American" are dummy variables coded "1" if female or African American, and "0" if otherwise.

⁷⁷ Joint effects were estimated using the command "lincom" in STATA 11.0. The joint coefficient for African Americans in the "Vote 2000" model is 0.003 ($p < 0.289$), the "Vote 2004" model, 0.024 ($p < 0.247$), and the "Vote 2008" model, 0.026 ($p < 0.299$). Joint effects with the STATA pweight option for African Americans in the "Vote 2000" model is 0.069 ($p < 0.139$), the "Vote 2004" model, 0.020 ($p < 0.451$), and the "Vote 2008" model, 0.006 ($p < 0.764$).

⁷⁸ Similar results were achieved using the pweight option in STATA with clustered standard errors. The predicted values using the weight option in CLARIFY also achieved similar results. Predicted values for the "Vote 2008" model are not estimations with clustered standard errors, but robust standard errors as the correlation matrix was not positive definite.

Table 11
Individual and State Cross-level Interaction – Descriptive Representation in State Legislatures (Multilevel Modeling)

Individual State Cross-level Interactions	Vote 2000		Vote 2004		Vote 2008	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
African American × Percent African American						
State Legislators	0.047 (.031)	.137	0.043 (.020)	.037	0.023 (.026)	.383
Female × Percent Female State Legislators	-0.004 (.022)	.828	-0.022 (.016)	.167	0.021 (.023)	.355
African American	-0.151 (.435)	.728	-0.114 (.304)	.708	0.041 (.409)	.919
Female	-0.112 (.502)	.824	0.705 (.370)	.057	-0.133 (.552)	.809
Percent African American State Legislators	-0.013 (.015)	.412	-0.019 (.010)	.051	0.002 (.012)	.850
Percent Female State Legislators	-0.012 (.019)	.521	0.021 (.014)	.128	0.016 (.018)	.353
State Context (Level 2)						
LCR	-0.089 (.019)	.329	0.020 (.025)	.423	0.080 (.042)	.057
Legislative Professionalism	0.483 (.557)	.386	-0.721 (.503)	.152	0.487 (.587)	.407
Registration Restriction	-0.000 (.008)	.927	0.000 (.004)	.898	-0.007 (.005)	.200
Direct Democracy	0.003 (.219)	.988	0.105 (.148)	.478	-0.047 (.189)	.802
Gubernatorial Election	-0.155 (.203)	.570	0.028 (.126)	.824	0.179 (.543)	.741
MMD	0.372 (.305)	.223	-0.211 (.184)	.251	-0.168 (.364)	.643
Competition	1.21 (1.27)	.343	1.43 (.808)	.075	0.505 (.727)	.489
Individual Level (Level 1)						
Education	0.265 (.027)	.000	0.292 (.019)	.000	0.218 (.022)	.000
Income	-0.010 (.004)	.007	0.144 (.021)	.000	-0.001 (.003)	.717
Age	0.049 (.004)	.000	0.034 (.003)	.000	0.032 (.003)	.000
Political Ideology	0.094 (.072)	.194	-0.086 (.057)	.137	0.212 (.062)	.001
Level 2 N (State Level)	37		39		39	
Level 1 N (Individual Level)	1,203		3,142		1,717	
	Minimum per cluster = 6; Maximum per cluster = 101		Minimum per cluster = 2 Maximum per cluster = 212		Minimum per cluster = 2 Maximum per cluster = 134	

Figure 13

Predicted Probabilities of Voter Turnout in the 2000 Election for African Americans interacted with Percent African American State Legislators

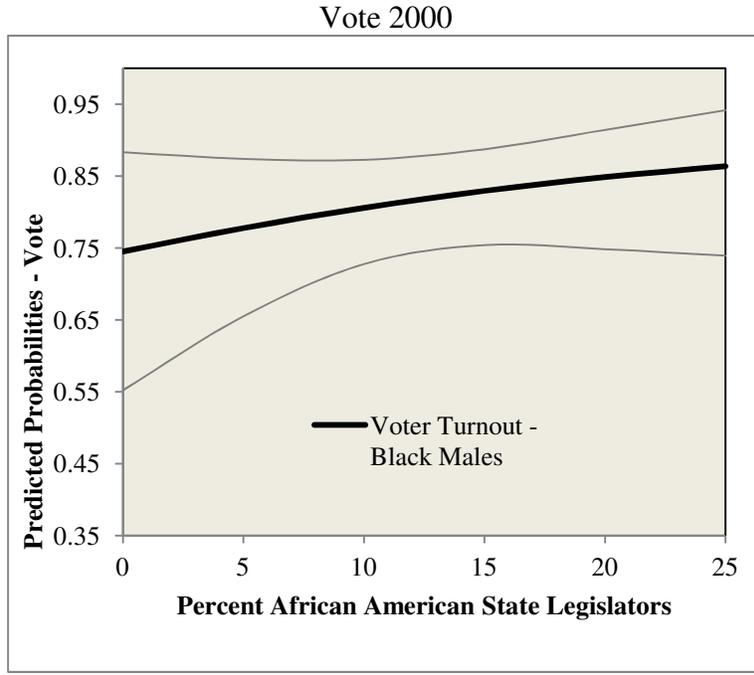


Figure 14

Predicted Probabilities of Voter Turnout in the 2004 Election for African Americans interacted with Percent African American State Legislators

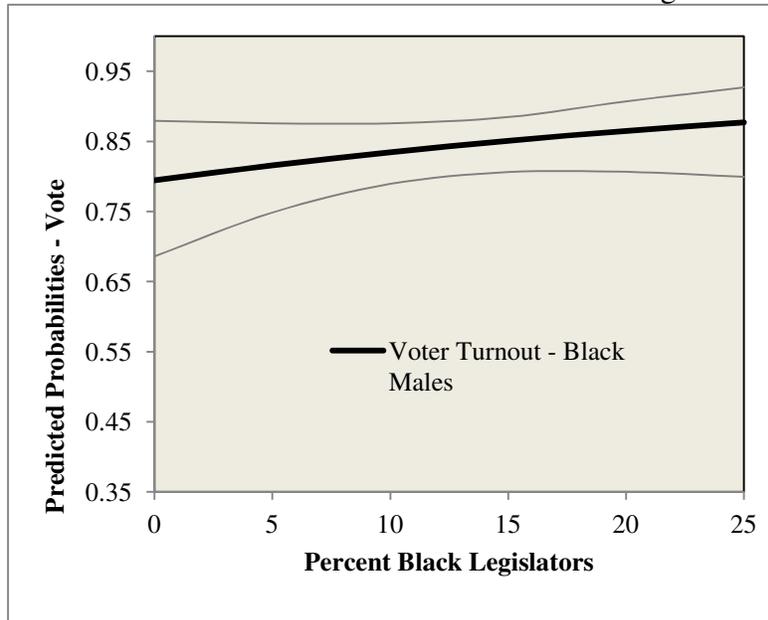
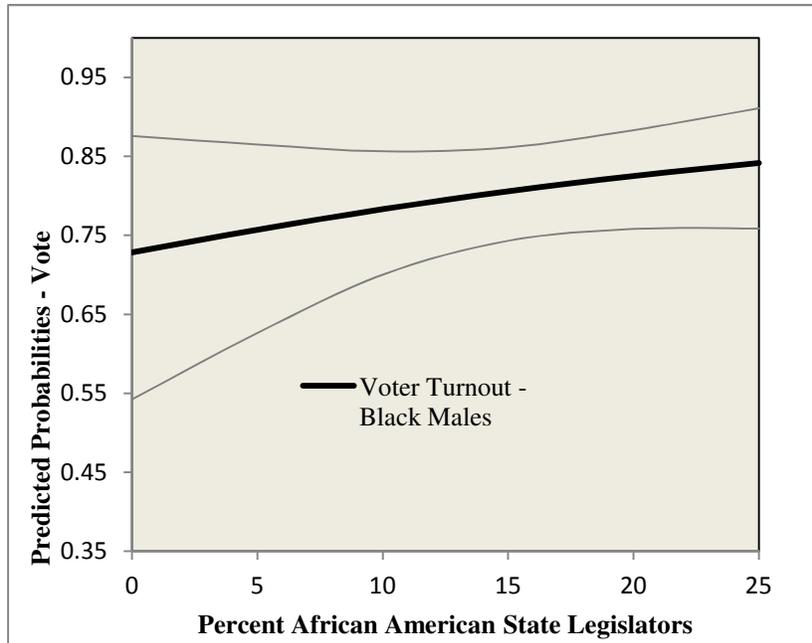


Figure 15

Predicted Probabilities of Voter Turnout in the 2008 Election for African Americans interacted with Percent African American State Legislators



The second interaction of interest in this analysis concerns whether or not females are more likely to turn out to vote if there are more women in state legislatures. This existence of this relationship has not been explored with descriptive representation in state legislatures. The results presented in Table 11 suggest that there is no relationship between descriptive representation in state legislatures and the female vote. The joint effect of the relationship between females and the percent of females in state legislatures is statistically significant for the 'Vote 2008' model with a coefficient of 0.038 with a probability value of .046. This means that females were more likely to report voting in the 2008 election if there were higher percentages of

females in state legislatures. Joint effects for the ‘Vote 2000’ and ‘Vote 2004’ models are not statistically significant.⁷⁹

As there may be differences between the effects of descriptive representation for white females and African American females, it is best to evaluate whether there are any within group differences. Utilizing CLARIFY, I estimated the predicted values for the effects of female state legislators and reported voting for both White and African American females. For African American females, I predicted the values of the multilevel logistic regression varying “female × percent female state legislator” from its lowest to highest values, holding the percent of African American state legislators at its’ mean, and the interaction term “African American × African American state legislator” at 0. The predicted values did not illustrate any relationship between the percent of females in state legislatures and the African American female vote. However, using the same CLARIFY method above illustrates that the percent of female state legislators had a negative effect on reported voting for White females in the ‘Vote 2000’ model and a positive effect on reported voting for White females in the ‘Vote 2008’ model (see Figures 16 and 17 below). As the percent of female state legislators increases, White females are less likely to report voting in the 2000 election, but more likely to report voting in the 2008 election. Since the existence of female representatives in national elections have also been found to increase a sense of political efficacy (Verba, Burns, Schlozman 1997), these results indicate that descriptive representation in state legislatures may also elicit feelings of efficacy, which can be related to voter turnout. The next logical step, then, is to analyze the effects of descriptive representation on these political attitudes.

⁷⁹ The joint coefficient for the ‘Vote 2000’ model is -0.0013 ($p < 0.444$), and the ‘Vote 2004’ model, 0.001 ($p < 0.952$). Joint effects with the CLARIFY weight option for women in the “Vote 2000” model is -0.016 ($p < 0.240$), the “Vote 2004” model, -0.021 ($p < 0.867$), and the “Vote 2008” model, -0.132 ($p < 0.786$).

Figure 16
Predicted Probabilities of Voter Turnout in the 2000 Election for Females interacted with Percent
Female State Legislators

Vote 2000

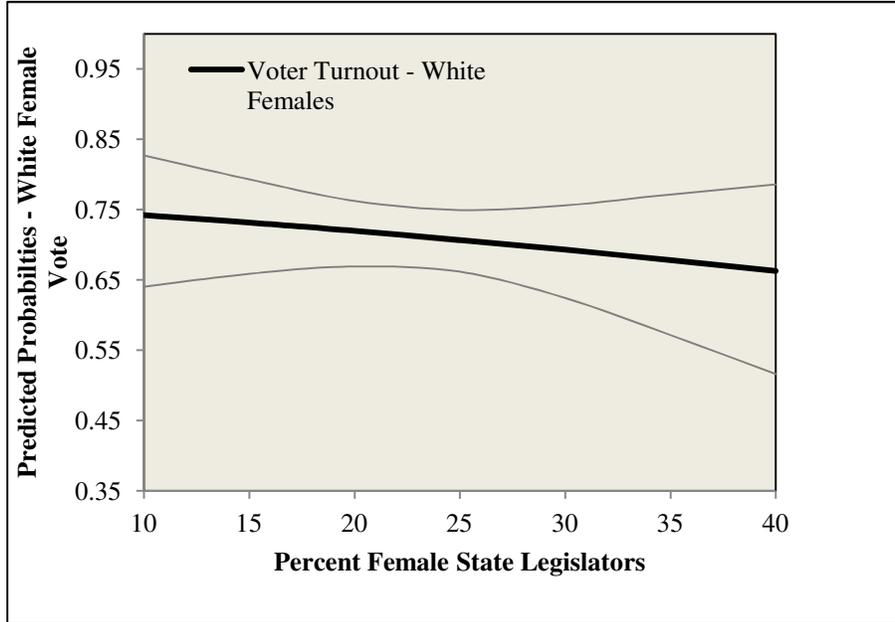
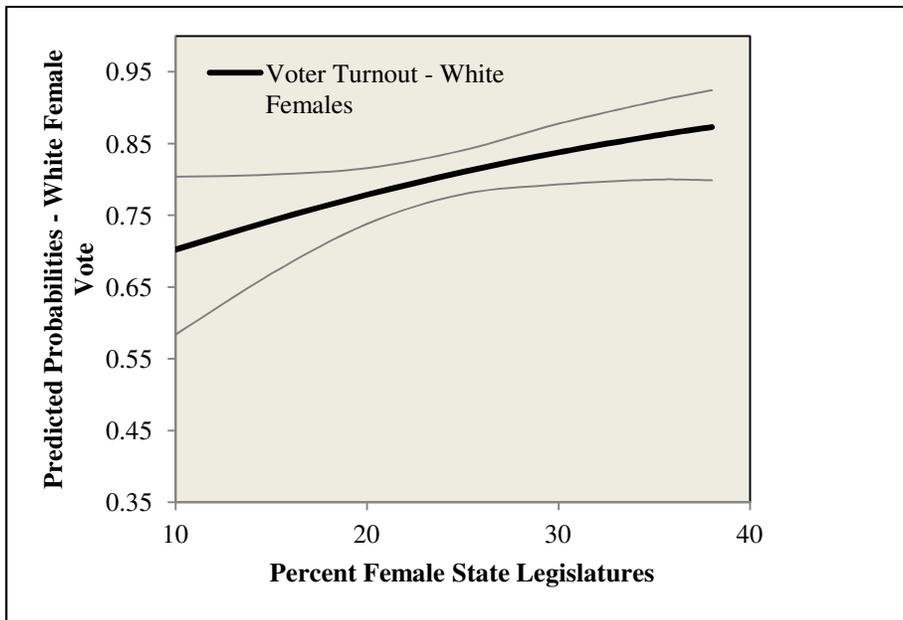


Figure 17
Predicted Probabilities of Voter Turnout in the 2008 Election for Females interacted with Percent
Female State Legislators



Political Efficacy: Data, Methods and Results

I argue that descriptive representation should increase a sense of political efficacy for women and African Americans, and prior research and theory supports this argument (Pitkin 1967; also see Mansbridge 2001 see Bobo and Gilliam 1990; Guinier 1994; Rocha et al 2010 Verba, Burns, and Schlozman 1997; Atkenson 2003). Political institutions, especially legislative bodies that are viewed as being ‘inclusive,’ can create perceptions of a legitimate government (Mansbridge 2001). Based on prior work, it is evident that political efficacy should increase as descriptive representation increases.

To find out if descriptive representation increases political efficacy for African Americans and women, I utilized the same multi-level modeling techniques and the same variables that were used in Chapter Two, “Political Efficacy” from the 2004 and 2006 GSS and the 2004 GSS variable “Government doesn’t Care.”⁸⁰ Also included in the model are both cross-level interaction terms of descriptive representation for African Americans and women that were used in last analyses. State level factors that were also theorized to influence efficacy such as direct democracy, registration restrictions, political competition, LCR, and legislative professionalism (also used in Chapter Two) are included in the model.⁸¹

The results of the models are in Table 12 and 13 below. The joint effects of descriptive representation for females and African Americans is not statistically significant for both 2004

⁸⁰ The variable “political efficacy” asks how much the respondent agrees or disagrees with the statement “People like me don’t have any say about what the government does.” The responses are coded from 1 “strongly agree,” 2 “agree,” 3 “neither agree or disagree,” 4 “disagree,” and 5 “strongly disagree.” The variable “Government Cares” is a question that asks the respondent if they agree or disagree with the statement “I don’t think the government cares much what people like me think,” and is coded the same way.

⁸¹ States missing in the 2004 GSS analyses are: Alaska, Delaware, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont. States missing in the 2006 GSS analysis are: Alaska, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont

Table 12
Multi-level Regression – Descriptive Representation and Political Efficacy

	Political Efficacy (2004 GSS)		Political Efficacy (2006 GSS)	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
Individual State Cross-level Interactions				
African American × Percent African American State Legislators				
American State Legislators	-0.009 (.016)	.537	-0.026 (.016)	.100
Female × Percent Female State Legislators	-0.031 (.012)	.001	0.007 (.012)	.549
African American	0.324 (.244)	.184	0.274 (.232)	.238
Female	0.822 (.303)	.007	-0.267 (.283)	.345
Percent African American State Legislators	0.005 (.007)	.439	0.024 (.008)	.004
Percent Female State Legislators	0.027 (.011)	.014	-0.001 (.011)	.867
State-level Factors (Level 2)				
LCR	-0.016 (.018)	.377	-0.010 (.025)	.688
Legislative Professionalism	-0.056 (.340)	.868	-0.452 (.405)	.264
Direct Democracy	0.094 (.113)	.404	0.132 (.111)	.237
Registration Restriction	0.002 (.003)	.496	-0.013 (.006)	.048
Competition	0.112 (.601)	.852	0.552 (.704)	.433
Individual Level (Level 1)				
Education	0.037 (.009)	.000	0.095 (.012)	.000
Age	-0.001 (.002)	.561	-0.002 (.002)	.192
Married	0.267 (.072)	.000	-0.002 (.074)	.974
Level 2 N	2,581		1,292	
Level 1 N	37		37	
	Minimum per cluster = 7; Maximum per cluster = 191		Minimum per cluster = 2; Maximum per cluster = 93	

*All coefficients are unstandardized coefficients

Table 13
Multi-level Regression – Descriptive Representation and Political Efficacy

	Government doesn't Care	
	<i>B</i> (<i>SE</i>)	<i>p</i> < <i>z</i>
Individual State Cross-level Interactions		
African American × Percent African		
American State Legislators	-0.025 (.014)	.085
Female × Percent Female State Legislators	-0.031 (.011)	.008
African American	0.373 (.224)	.097
Female	0.747 (.279)	.027
Percent African American State Legislators	0.004 (.007)	.501
Percent Female State Legislators	0.022 (.102)	.007
State-level Factors (Level 2)		
LCR	-0.015 (.017)	.357
Legislative Professionalism	-0.053 (.319)	.866
Direct Democracy	0.066 (.105)	.529
Registration Restriction	0.005 (.003)	.103
Competition	0.170 (.560)	.761
Individual Level (Level 1)		
Education	0.031 (.008)	.000
Age	-0.001 (.001)	.317
Married	0.254 (.067)	.000
Level 2 N	2,581	
Level 1 N	37	
Minimum per cluster = 7; Maximum per cluster = 191		

*All coefficients are unstandardized coefficients

and 2006 political efficacy models.⁸² Utilizing CLARIFY, I estimated the predicted values for the effects of female state legislators and political efficacy for both White and African American females.⁸³ For African American females, I predicted the values of the multilevel logistic regression varying “female × percent female state legislator” from its lowest to

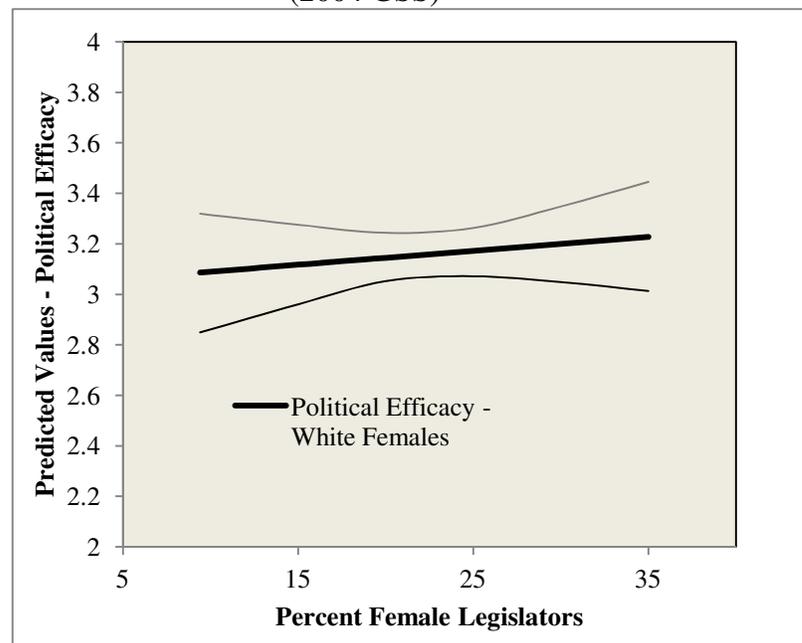
⁸² The joint coefficient for females of the 2004 Political efficacy model is -0.005 ($p < 0.547$), and the 2006 Political Efficacy model, is 0.008 ($p < 0.379$). The joint coefficient for African Americans of the 2004 Political Efficacy model is -0.004 ($p < 0.379$) and the 2006 Political Efficacy model is -0.004 ($p < 0.760$). Joint effects of the weighted 2004 Political Efficacy model for African Americans is -0.009 ($p < 0.352$), and Females, 0.010 ($p < 0.321$).

⁸³ Results were similar using weighted data.

highest values, holding the percent of African American state legislators at its' mean, and the interaction term “African American x African American state legislator” at 0. These predicted values did not illustrate any relationship between the percent of females in state legislatures and political efficacy for African American females. However, further analysis of the interaction illustrates that descriptive representation in state legislatures increases political efficacy for White women in both the 2004 and 2006 political efficacy models (see Figures 18 and 19). I found no relationship between the percent of women in state legislatures and White and African American women and the “Government doesn’t Care” model.⁸⁴

Figure 18

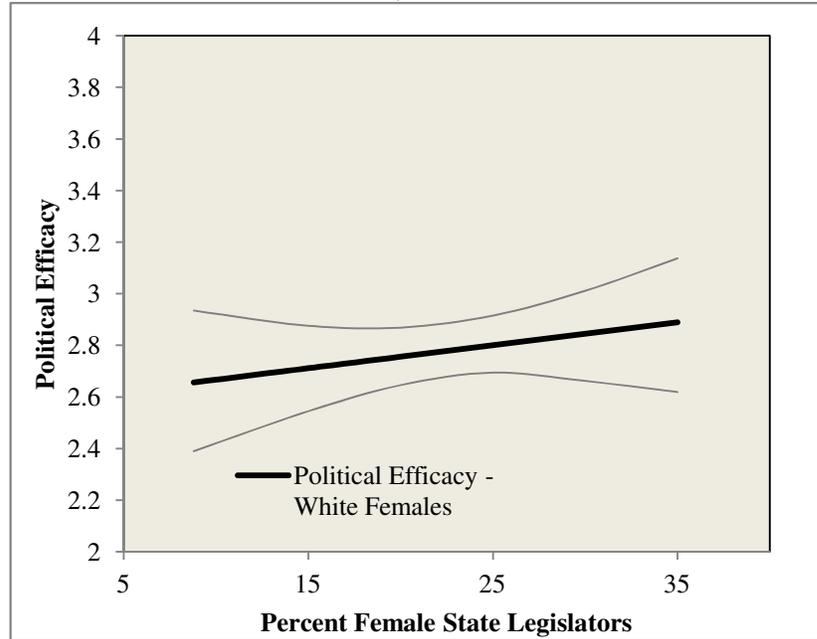
Political Efficacy:
 Predicted Values – White Females and Descriptive Representation in State Legislatures
 (2004 GSS)



⁸⁴ The joint coefficient for females for the “Government doesn’t care” model is -0.0002 ($p < 0.997$). Joint effects of the weighted “Government doesn’t care” model for females is 0.002 ($p < 0.796$), and African Americans, -0.015 ($p < 0.378$)

Figure 19

Political Efficacy:
Predicted Values White Females and Descriptive Representation in State Legislatures (2006 GSS)



Using the same CLARIFY technique above, I examined the effects of descriptive representation in state legislatures on political efficacy for African American males and African American females. I found no relationship between the percent of African Americans in state legislatures and political efficacy among African American females. However, descriptive representation decreased political efficacy among African American males (see Figures 20 and 21 below). As the percent of African Americans in state legislatures increase, African American males are less likely to disagree with the statement that they do not have any say in what government does. The joint coefficient for African Americans in the “Government doesn’t Care” model is -0.424 and is statistically significant with a probability value of 0.000. This means that as descriptive representation increases,

African Americans are less likely to think that government cares about what they think.

Figure 20
Political Efficacy:
Predicted Values – African Americans and Descriptive Representation in State Legislatures
(2004 GSS)

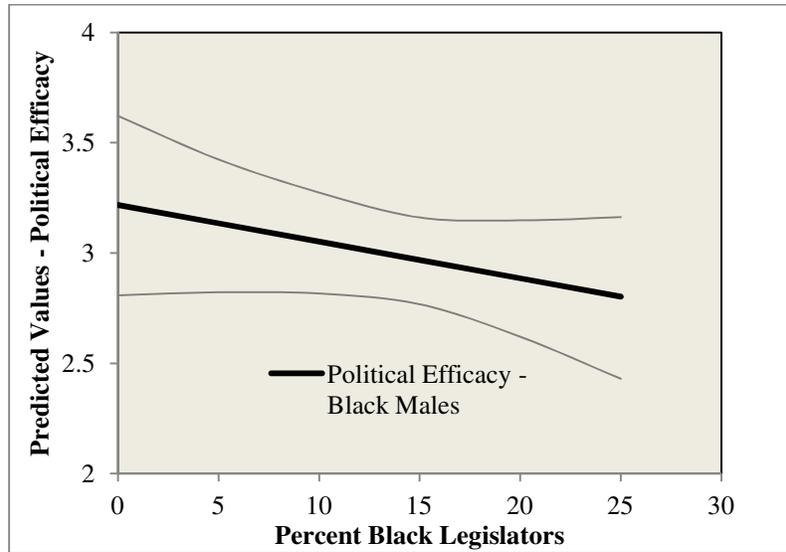
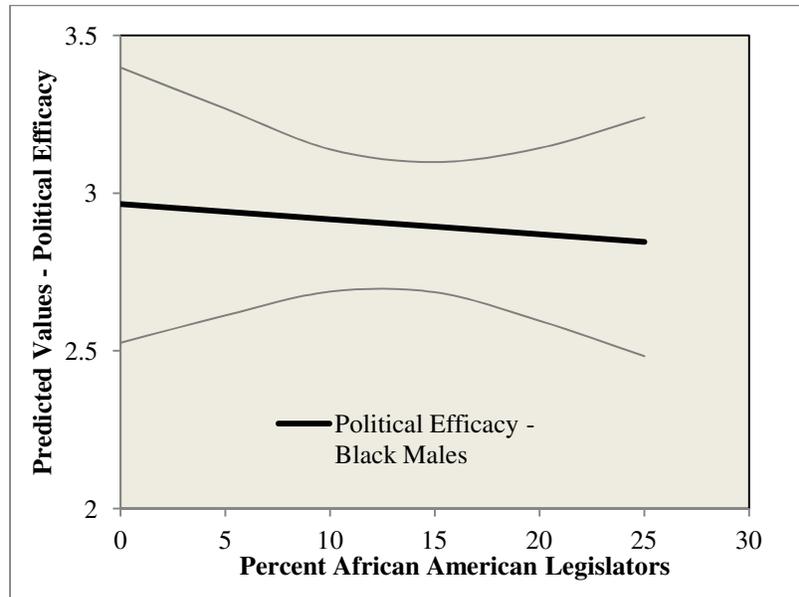


Figure 21
 Political Efficacy:
 Predicted Values – African Americans and Descriptive Representation in State Legislatures
 (2006 GSS)



Conclusions

In this chapter I sought to find if the diversity, or demographic composition, of state legislatures influenced voter turnout. I found that the percentages of women and African Americans did not increase total voter turnout rates for state house elections, but, as the percent of African American state legislators increased, Whites were more likely to report turning out to vote – at least in the 2000 election. Further, as descriptive representation increased for White women and African American males, they were more likely to report turning out to vote. However, descriptive representation did not have an effect on reported voting for African American females.⁸⁵

⁸⁵ Although Rocha et al. (2010) found similar results for African Americans, the effects of descriptive representation on the female vote in state legislatures have not been tested.

Descriptive representation was also found to increase a sense of *internal* political efficacy for White women, but, there was no relationship between the percent of females in state legislatures and internal political efficacy for African American women. Although prior research supports the argument that descriptive representation should be linked to feelings of efficacy because it is related to policy congruence (Thomas 1991; Day 1994; Button and Hedge 1996; Tschoepe 1997; Bratton and Haynie 1999; Bratton 2002; Owens 2005; also see Pruehs 2006), as well as a symbolic connection to government (Pitkin 1967; Mansbridge 2001), it has not been empirically tested except for women and in relation to national representatives (Verba, Burns, Schlozman 1997; Atkinson 2003).

Interestingly, descriptive representation decreased a sense of internal efficacy among African American males. Further, as the percentage of African American state legislators increased, both African American males and females had decreased external efficacy. Both groups were more likely to agree that government does not care about what they think. These results are counter to my argument that descriptive representation should increase political efficacy for African Americans. These results may be due to the question wording of the survey, where prior to the question concerning whether or not ‘government cares,’ respondents were asked if they believed government “respected” and “protected” the rights of minorities. Another disadvantage of the question is that it did not ask if representatives in *state legislatures* cared about what respondents thought. If the question was more direct, and asked respondents whether members of state legislatures cared, then, results may be different.

Additionally, the historic exclusion from government could possibly be another reason why African American males and females do not feel as if government cares about what they think – regardless of higher levels of descriptive representation. Bobo and Gilliam (1990)

argued that political efficacy should increase among African Americans are in more positions of power. The results presented above run counter to their claim and certainly question whether or not descriptive representation is a keystone to feelings of political efficacy. These results, though, are consistent with more recent work on political efficacy and African Americans. Avery (2006), for example, found that the stronger the group-consciousness, the more likely African Americans mistrust government because of perceptions of racial inequality. Mangum (2003) found that African Americans who have a lower sense of political efficacy, actually have higher levels of political participation. Wu's (2003) research on African Americans and political efficacy supports prior findings – despite controlling for age and SES, African Americans still do not have levels of efficacy similar to whites.⁸⁶ The findings presented in this chapter certainly warrant future research on efficacy and descriptive representation. Ultimately, however, what this chapter illustrated was that the diversity of state legislatures matter in that they affect political behavior and attitudes. The following chapter seeks to find if other aspects of the composition of state legislatures to the same.

⁸⁶ Further, these findings may be an artifact of the 2000 Presidential election, as Avery (2007) found that African Americans became less trusting towards government after the 2000 Bush v. Gore Supreme Court ruling.

CHAPTER 4

Third Parties in State Legislatures and State Ballot Access Laws

In this chapter, I analyze a different aspect of diversity in state legislatures, and examine how variegation of political parties in state legislatures affects voter turnout. Specifically, I argue that ballot access laws influence the percentage of seats held by third parties in state legislatures and that state legislatures with lower numbers of third parties reduce voter turnout in state house elections. I also explore whether the presence of third parties influences a sense of political efficacy and determine whether political efficacy tied to third party ratios is related to voter turnout.

Third Party Existence in State Legislatures

“Third parties,” also known as minor parties, are political parties that seek to elect candidates for office in opposition to the two major parties; in the United States this means seeking to elect candidates outside of the Democratic and Republican parties.⁸⁷ Historically, third parties in American state legislatures have experienced a significant decline in their share of seats since the late 1800s (Arsinger 1980; Elliot, Gryski, and Reed, 1990; Dubin 2007). While minor parties received about a 20 percent of the vote in more than half of the state legislatures in the late 1800s (Elliot, Gryski, and Reed, 1990; Dubin 2007), vote share in all state legislative elections significantly declined and stabilized to its current state of 3 percent by the 1920s (Argersinger 1980; Elliot, Gryski, and Reed, 1990; Dubin 2007).⁸⁸ This trend is exemplified by an analysis of third party presence in state legislatures from 1976 to 1984 (Elliot, Gryski, and Reed, 1990). Voting for minor parties in state legislatures “was essentially a rare phenomenon”

⁸⁷ By third parties I do not mean independent candidates.

⁸⁸ Except for southern states which is attributed to a political culture of one-party systems (see Key 1949; Elazar 1973; Elliot et al. 1990).

that accounted for less than one percent of all votes cast in state legislative elections (Elliot, Gryski, and Reed, 1990 p. 125). From 1990 to 2010, 99.7 to 100 percent of the seats in the lower chamber of state legislatures were held by the two major parties (see Table 14 below).⁸⁹

Table 14
Party Composition of State Legislatures - Lower Chamber (1990-2010)⁹⁰

	Democrat	%	Republican	%	Third Party	%
1990	3,242	59.4	2,202	40.3	9	.7
1992	3,186	58.6	2,223	40.9	20	.5
1994	2,817	51.7	2,603	47.8	17	.5
1996	2,886	53.0	2,539	46.6	17	.4
1998	2,903	52.9	2,580	47.0	0	.1
2000	2,818	51.9	2,600	47.9	15	.2
2002	2,694	49.9	2,687	49.7	21	.4
2004	2,704	50.1	2,683	49.7	15	.2
2006	2,702	50.1	2,675	49.6	15	.3
2008	2,985	55.2	2,403	44.5	17	.3
2010	3,028	56.0	2,356	43.6	21	.4

There are some states in which third parties have maintained nine percent or more of the total votes cast in state legislative elections from the mid-1970s to the early 1980s (Elliot, Gryski, and Reed, 1990) and have recently had a non-trivial number of seats in the lower chamber of the state legislature. From 2000 to 2010, for example, minor parties held two to seven percent of lower chamber seats in Georgia, Maine, Maryland, Minnesota, Mississippi, Vermont, and Virginia.⁹¹ So even though the total percentage of third parties in state legislatures are less than one percent, there are states in which third parties have a significant presence in the state legislature.

⁸⁹ This ratio is similar in the Upper Chamber (for reference, see the Statistical Abstract of the United States)

⁹⁰ From the Statistical Abstract of the United States (2011)

⁹¹ Ibid

Institutional factors in electoral rules may account for variation between states and minor party affiliation in American state legislatures. Overall, scholars have attributed the decline of third parties holding federal seats to the formation of the Australian ballot along with Anti-fusion laws adopted from the 1880s through World War II (Arsinger 1980; Elliot, Gryski, and Reed, 1990). The Australian ballot was created in order to allow for secrecy in voting. Prior to the Australian ballot, political parties had printed their own ballots and handed them out at the polls, allowing relatively open ballot access to all parties. The adoption of the Australian ballot ultimately placed the responsibility of the creation of ballots in the hands of the states, which were dominated by the two major parties (*Columbia Law Review* 1937; Arisinger 1980; Elliot, Gryski, and Reed, 1990; Winkler 2000; Burden 2003). The argument in this area of scholarship is that the Australian ballot disintegrated the ability for minor political parties to achieve placement on a states' ballot (Arsinger 1980; Elliot, Gryski, and Reed 1990).⁹² In states where fusion is legal, minor parties are able to create coalitions to place single candidates on the ballot under multiple party labels (see Arisinger 1980).⁹³ No longer able to create coalitions in these states, third party candidates are not able to attain enough votes to gain seats in elective office.

Along with the Australian ballot and anti-fusion laws, scholars also attribute the absence of third parties to first-past-the-post, single member districts (Duverger 1954; Downs 1957; Neto and Cox 1997), the cooptation of third party platforms (Downs 1957; Rosenstone, Behr, and Lazurus 1984; Hirano and Snyder 2007), direct primaries (Rosenstone, Behr, and Lazurus 1984), and the decrease in MMDs in states (Niemi, Hill, and Grofman 1985). From this viewpoint, it is

⁹² However, Hirano and Snyder (2007) argue that it is support for third parties declined due to major party cooption of third party platforms, which is discussed later in this section.

⁹³ States where fusion is legal include Arkansas, Connecticut, Delaware, Idaho, Mississippi, New York, Oregon, South Carolina, South Dakota, Utah and Vermont.

not that individuals are not voting for third parties, but it is the electoral framework and laws that have hindered the election of third party candidates to office.

Certainly state laws influence the number of third parties in state legislatures. Ballot access laws have also had deleterious effects on the opportunities third party candidates have in running for office and, as a result, holding seats in elective office. Since the early 1900s, states have adopted laws that restrict third parties from being placed on the ballot unless they gather enough signatures and pay a petition fee. While the signature requirements in some states are rather low, other states have requirements that require an enormous amount of canvassing. In 2010, the median number of signatures third parties needed to obtain to gain access to the ballot was 3,261. A few states only require 50 signatures to gain access to the ballot, but most required 10,000 or more. Signature requirements in some states are so high that it can make it next to impossible to obtain enough signatures to get onto a states' ballot. In 2010 California required 8.8 million signatures, while Arizona required over 200,000 signatures and Kansas over 16,000 signatures (see Table 15 below). Research on these rules finds that strict ballot access laws decrease the number of third party candidates in national (Lewis-Beck and Squire 1995) and gubernatorial elections (Burden 2003). However, how ballot access laws affect the placement of third party candidates in state legislatures and how this affects the voting public has not been studied.

Table 15
2010 State Signature Requirements for Third Party Ballot Access – Descriptive Statistics

Mean	Median	Mode	Minimum	Maximum
203,823	3,261	10,000	50	8,899,059

How ballot access laws affect the presence of third parties in the statehouse and the electorate is important. Strict ballot access laws can limit any discernible effect of minor parties on the voting public if these parties cannot even be on the ballot or run with incumbent status. Much of the research on the survival and demise of third parties in the United States has primarily centered on the burden of electoral systems on minor parties (Duverger 1954; Downs 1957; Epstein 1958; Rosenstone, Behr, and Lazurus 1984; Niemi, Hill, and Grofman 1985; Neto and Cox 1997) without addressing the effects of third parties on the electorate. Do restrictions placed on third party access, and ultimately placement in state legislatures, influence citizen political behavior?

The availability of third party candidates in states can affect a citizen's propensity to vote for third party candidates in national elections (see Rosenstone et al. 1996; Donovan, Bowler, and Terrio 2000) and to abstain from voting (Rosenstone et al. 1996; Donovan, Bowler, and Terrio 2000; Adams and Merrill 2008). The presence of minor parties in national elections also affects the electorates' sense of political efficacy (see Karp and Banducci 2008). Thus states where it is more difficult for third parties to gain access to the ballot and states with low third party representation in state legislatures are expected to have lower voter turnout.

Third Party Access to Legislatures in the United States: A Brief Overview

As voters are never presented with a full array of choices among parties that exactly reflects their preferences (see Riker 1988), it is important to understand how the political system can further reduce voting options and possibly voter turnout. Duverger's law shows that electoral systems invariably affect the type of party system that will arise (1958). First-past-the-post electoral systems, along with single member districts, create two party systems because this

system provides disincentives for individuals to vote for third parties.⁹⁴ Downs (1957) illustrates that in such systems it is not rational to vote for a third party because of the costs associated with voting for a certain loser. Therefore, voting for a minor party constitutes a ‘wasted vote’ and it is questionable whether citizens will incur the costs to vote if there are not any candidates aligned with their preferences. In fact, Aldrich (1993) argues that it is optimal strategy for interest groups and the two major parties to publically assert that a vote for a third-party candidate is a wasted vote (270). This was evident in the 2000 Presidential election as Democrats tried to deter votes for third party candidate Ralph Nader.⁹⁵

Although Duverger’s law may define the American *national* party system, there are differences within and between states in terms of their electoral design. Though most states only have single member districts, others have either a mixture of single member districts and multi-member districts or multi-member districts only. Table 16 shows the states that have multi-member districts along with the percent of districts that are multi-member.

Table 16
Percentage of Multi-Member Districts in States for State Legislatures⁹⁶

State	%MMDS
Arizona	100%
Idaho	100%
New Jersey	100%
North Dakota	100%
South Dakota	100%
Washington	100%
New Hampshire	88%
Maryland	67%
West Virginia	40%
Vermont	39%

⁹⁴ See Dahl’s (2003) *How Democratic is the American Constitution?* for a discussion of the impact of single member districts and first-past-the-post electoral rules have on American politics.

⁹⁵ Presidential candidate Al Gore continuously argued that a vote for third party candidate Ralph Nader was a wasted vote and would favor the party that is ideologically farther from the preferences of Nader’s supporters.

⁹⁶ Data acquired from Donovan, Mooney, and Smith (2011, pages 232-233).

Single member districts with first-past-the-post voting systems may lead one to think that Duverger's law is the predominant reason why the presence of third parties in elective office are in the decline. Adams and Merrill (2003) tested whether or not SMDs deteriorate third parties. They concluded that the electorate abstains from voting if candidates do not sufficiently address the issues that are attractive to them – which may mean that the relative absence of third parties in offices are driven by a lack of voter support. However, they also found that along with other predictors of voter turnout, such as race and socioeconomic status (SES), individuals abstain from voting due to feelings of alienation, which indicates that the absence of political alternatives reduces citizen participation in elections. Further support of this phenomenon comes from countries with proportional representation electoral systems (PR), where political parties receive seats in proportion to their vote share, and MMDs contribute much to the number of political parties that hold office (Powell 1986; Blais and Dobrzynska 1998; also see Karp and Banducci 2008). In these systems, voters do have some chance of their party winning seats in legislatures. Since voters will vote for third parties if presented with an option, SMDs do not sufficiently explain that the absence of third parties are due to a lack in *voter* support as Adams and Merrill's (2003) research may suggest. Voter support may be lacking in SMD systems because third parties have little, if any, presence to begin with.

Even though Adams and Merrill (2003) show that voters choices are affected by 'insufficient candidates,' which makes it irrational to vote (Downs 1957), people still participate in the electoral process. This may be due to the cooptation of salient third party platforms by the two major parties. Hirano and Snyder (2007) find ample evidence that voter support for third parties has significantly declined between the years 1870 and 2000 due to cooptation of third party issues by the major parties. They test Down's (1957) 'majority principle' of political

parties. Downs (1957) illustrates that the platform of the two major parties widens during election season and contracts when the race is over (also see Rosenstone et al. 1996). This ‘majority principle,’ illustrates that in order to avoid defeat, “government must support a majority on every issue,” thus taking away third party support or viable choices for a minority of the electorate (Downs 1957, p. 55). As a result, elections are restricted to platforms with issues that are identified as salient to the public majority. Hirano and Snyder (2007) also conclude that, contrary to claims that the Australian ballot (Arsinger 1980; Elliot, Gryski, and Reed, 1990; Winkler 2000) caused the demise of third parties, party cooption is the primary culprit.⁹⁷

Rosenstone et al.’s (1996) theory of third party voting illustrates that individuals will vote for third parties when: the major party has deteriorated, an attractive third party candidate runs for office, and when voters gain a sense of allegiance to third parties (p. 126-150). One might think that in the current political environment characterized by candidate-centered politics and a deterioration of party identification, third parties might have a much easier time gaining support. However, the electoral system and historical restrictions on third parties, such as access to the ballot, continue to create an environment in which third parties fall far behind. The relative presence of third parties may be linked to decreases in voter turnout by alienating potential voters or making the electorate indifferent to the two-major parties.

Ballot Access Laws, Third Party Ballot Placement, and Voter Turnout

Plurality rules, single member districts (Duverger 1954; Downs 1957; Neto and Cox 1997), and the cooptation of third party platforms (Downs 1957; Rosenstone, Behr, and Lazurus 1984; Hirano and Snyder 2007) all contribute to the systemic failure of third parties to garner a significant number of votes in elections. However, state ballot access laws are the very first

⁹⁷ The South is an exception to this argument.

obstacles third parties need to overcome in order to compete in elections (Burden 2003).⁹⁸ Ballot access laws vary across states. Ballot access depends on parties meeting two requirements; a quota on petition signatures and/or ballot access fees. In Presidential elections, for example, both Democratic and Republican party candidates have guaranteed access to the ballot if they receive their party's nomination. Access to the ballot for state legislative elections for the two major parties is the same. Minor party and independent candidates, meanwhile, have to fulfill a variety of state petition requirements and pay fees. The obstacles for minor party access to ballots vary widely for both national and state-wide elections. Therefore, minor party candidates may be on the ballot in some states, but not in others. Table 17 shows the number of signatures required for minor parties to be placed on the ballot for state legislative seats, by state, in 2010.⁹⁹

⁹⁸ See Argersinger (1980) on the historical development of ballot access laws in the United States.

⁹⁹ Data were acquired through each Secretary of State website. Some signature requirements had a set number of signatures to gain ballot access, such as 50 signatures total. Others were estimated via the criteria of the state. While some states required three percent of the votes cast in the last gubernatorial election, other states may have required signatures that equaled one percent of the votes cast in the last election for the seat they are competing for. This data only includes signature requirements for third party candidates, and does not include requirements for independent candidates.

Table 17
Total Signatures Required for Ballot Access (Signatures per 10,000 Voting Age Population)

State	Total Signatures	Per 10,000 Voting Age Population	State	Total Signatures	Per 10,000 Voting Age Population
California	8,899,059	3,161	Idaho	1,000	8.7
Oklahoma	51,738	182	Alaska	3,261	6.2
Maryland	44,499	100	Rhode Is	500	6.02
Tennessee	45,253	92.8	North Dakota	300	5.6
Delaware	6,244	89.1	Georgia	1,617	2.2
Kansas	16,994	79.4	South Dakota	100	1.6
Oregon	20,113	67.4	Illinois	1,456	1.5
Indiana	32,742	66.8	New Hampshire	150	1.45
Hawaii	6,844	64.3	Florida	2,103	1.4
Nevada	12,083	59.1	Wyoming	56	1.3
Michigan	37,219	49.3	Minnesota	500	1.2
Arizona	232,085	48.3	Colorado	400	1
Arkansas	10,000	45.1	New York	1,500	1
Ohio	32,290	36.6	Vermont	50	1
New Mexico	5,138	33	Wisconsin	400	0.91
South Carolina	10,000	28	West Virginia	108	0.73
Connecticut	7,500	27.1	Montana	56	0.72
Texas	43,990	23.7	Pennsylvania	663	0.7
Missouri	10,000	21.8	Maine	50	0.48
Washington	10,000	19.2	Massachusetts	150	0.3
Virginia	10,000	16.1	Mississippi	50	0.23
Kentucky	5,000	15	Iowa	50	0.21
North Carolina	8,439	11.5	New Jersey	50	0.07
Alabama	38,164	10.4	Louisiana	N/A[1]	
Utah	2,000	10.4	Nebraska	N/A[2]	

[1] As per Act No. 889 in 2004, Louisiana stipulates that for third parties to be placed on the ballot, they need 1,000 voters registered under that party name.
[2] Nebraska has a non-partisan state legislature.

I argue that more difficult ballot access procedures decrease voter turnout due to the decreased political efficacy of citizens faced with fewer electoral choices, which is connected to the lack of third party representatives in state legislatures. These restrictions can affect the electorate psychologically due to resultant dissatisfaction with the overall political system

(Almond and Verba 1963; Bowler, Lanoue, and Soivoie 1994), and have been found to decrease citizens' sense of political efficacy (see Powell 1986; Blais and Dobrzynska 1998; Karp and Banducci 2008).

Voters who may want to vote for minor party candidates will not be able to if they are not on the ballot. Clearly, ballot access laws make it much more difficult for third party candidates to get on a states' ballot. This makes it likely that fewer third party candidates will be seen on ballots with restrictive laws. Lewis-Beck and Squire (1995) find that ballot access laws inhibit third parties from being placed on the ballot in Presidential elections. Controlling for state political culture, they find that higher signature requirements in states adversely affect the number of parties on the ballot. At the state-level, Burden (2003) also finds strong evidence that an increase in the number of petition signatures required decreases the number of third party candidates on the ballot for both Senate and Gubernatorial elections.¹⁰⁰

Third Parties in State Legislatures and Political Efficacy

The main question is whether or not state ballot requirements have a significant effect on the composition of states legislatures and, ultimately, influence voter turnout. Extant research conducted on third party ballot restrictions have been focused at the national or gubernatorial levels, and not on elections for the state legislature or voter turnout. Does the diversity of political parties in state legislatures influence voter turnout? Donovan, Bowler, and Terrio (2000) contend that a lack of third parties may have an effect on perceptions of the symbolic legitimacy of the political system (p. 51). Some of the electorate may be quite discontent with the political system because of a lack of choice among candidates (Donovan et al. 2000). Alternatively, discontent with the two major parties may also lead to voting for a third party

¹⁰⁰ Filing deadlines were not found to affect ballot access laws (Burden 2003).

candidate, but having third party candidates to vote for makes this a contingent argument (Rosenstone et al. 1996). Through the California Field Poll, Donovan et al. (2000) find that Californians who are dissatisfied with major party candidates and/or see no difference between the two major parties vote for minor party candidates.

However, Donovan et al.'s (2000) study is limited because it does not allow for abstention if an individual is adverse to the two major parties and there are not any viable alternatives. If ballot access reduces the number of minor party candidates in state legislatures, those voters most likely to vote for a third party due to majority party discontent may not have the option to do so. Southwell and Everest (1998), for example, argue that alienated voters will vote for third party candidates, but only if they are presented with alternatives.¹⁰¹

Scholarship has also shown that the lack of minor parties in elections decreases citizens' sense of political efficacy (Karp and Banducci 2008). In a cross-national study, Karp and Banducci (2008) illustrate that the availability of minor parties affects political efficacy, and thus the decision to vote. They model the indirect effects of PR and plurality single member district electoral systems on political efficacy by evaluating the number of parties in government, minor party preference, and strength of party preference. They show that PR systems are more likely to have higher voter turnout due to higher rates of political efficacy which are in turn due partly to the availability of minor parties. This research points to the possibility that restrictions on the availability of third parties in American state legislatures might affect the voting public.

The latter works point to two aspects of ballot restriction laws that may affect political participation in states: the diversity of choices the electorate is given, and incumbent status of the party in the state legislature. This juncture leads to the conclusion that those aspects affect voter

¹⁰¹ Even though Southwell and Everest utilize the 1992 Presidential election to test their argument and Alvarez and Nagler (1995) had earlier found no evidence of 'angry voting' in the same election, this argument is a logically viable explanation of voting behavior and vote choice (see Aldrich 1993).

turnout at the state level. Since prior research illustrates that individuals will vote for third parties if they are placed on the ballot rather than abstain, (Southwell and Everest 1998; Donovan et al. 2000), I expect levels of voter turnout to be higher in states that have more minor political parties on the ballot and in the state house. Therefore, in the following sections, I test how ballot access influences the percentage of individuals under political parties in the statehouse, and subsequent voter turnout. I also test if individuals feel more politically efficacious and turn out to vote when third parties are in the state house. The specific hypotheses for this chapter are listed below:

H(3a): The more restrictive a state's ballot access law, the lower the voter turnout in that state.

H(3b): The higher the percentage of seats held by third parties in a state legislature, the higher the voter turnout will be in that state.

H(3c): The higher the percentage of seats held by third parties in a state legislature, the higher the likelihood of an individual in that state to vote in a state legislative election will be.

H(3d): Higher percentages of third parties in state legislatures creates higher levels of political efficacy for individuals who live in that state.

H(3e): The more restrictive a state's ballot access law, the lower the levels of political efficacy for individuals who live in that state.

State Level Analysis: Data, Methods, and Results

In order to test if whether states with higher percentages of seats held by third parties and less stringent ballot access restrictions increase voter turnout, I utilize the same pooled state-level data-set described in Chapter Two. The dependent variable is voter turnout for the 2000-2010 state lower chamber legislative elections and includes the following state level variables: runoff, MMDs, political competition, term limits, registration restriction, and direct democracy. The model also includes Presidential and Gubernatorial election years as fixed effects. The variable

“Signature Index” is an index that ranges from 1 through 10 and is the percentile rank of the states’ number of signatures required for third parties to gain access to the ballot and is a measure of how difficult it is for third parties to gain access to the ballot. A rating of “1” means that the state fell on or below the tenth percentile of the distribution, while a rating of “10” means that the state fell on or higher than the 90th percentile. These signature requirements were acquired through each Secretary of State’s website and utilize the criteria each state set for third party ballot access. Some signature requirements had set criteria to ballot access, such as 50 signatures total, while some states required that third parties gather signatures that equaled three percent of the votes cast in the last gubernatorial election, or one percent of the votes cast in the last election for the seat for which they are competing (see Table 17 above). Utilizing the signature index instead of the raw totals or the total number of signatures divided by population is a good way to operationalize this variable. It should make no difference in the amount of effort a candidate gathering 200,000 or 8.8 million signatures in highly populated state and 50 to 1,000 signatures in a low population state. The variable “percent third party” is simply the percent of third parties that are in the lower chamber of the state legislature for each year and each state in the analysis.

Since it is well known that the political cultures of some states support one party systems (see Key 1949) and some particular cultures have ideas as to whom should participate in politics (Elazar 1979), state political culture will be accounted for in this model. Elazar argues that every state has a dominant political culture: Individualistic; Moralistic; and Traditionalistic. The Individualistic political culture sees politics as a market-place. Behavior largely relies on self-interest and if individuals want to improve themselves socially and economically, they will participate in politics. The Moralistic political culture emphasizes political participation in order

to advance public concerns and interests. Traditionalistic culture focuses on maintaining traditional social hierarchies and the status quo. Emphasizing elitism in politics, those who are not seen as having a role in politics are not expected to participate – or even vote (Elazar 1972, p. 99). Both moralistic and traditionalistic political cultures are included in the following model and are dummy variables.

Results

The following regression model is estimated with standard errors clustered around states (see Table 18) and includes New Hampshire as a control due to the inclusion of LCR in the model. The mean variance inflation factor (VIF) score is 2.27 which means that multicollinearity is not a problem with this analysis. Further, the probability value of the Ramsey RESET test of model specification for the following regression has probability value of 0.685, which means that model meets OLS assumptions of linearity. The R-square of the model is 0.626 and explains much of the variation in voter turnout for state house elections.

The results support Hypothesis 3a. The variable “signature scale” is significant and in the hypothesized direction. Voter turnout decreases as states require more signatures for third parties to get on the ballot. I utilized CLARIFY to calculate the predicted values voter turnout as the signature scale increases, holding all other variables in the model at their mean. From the lowest (a state that ranked ‘1’) to the highest value (states that ranked ‘10’) on the signature scale, voter turnout decreases, on average, about four percent. States that ranked ‘1’ on the signature scale, have an average voter turnout rate of 49 percent, while states that ranked ‘10’ have an average voter turnout rate of 44 percent (see Figure 22).

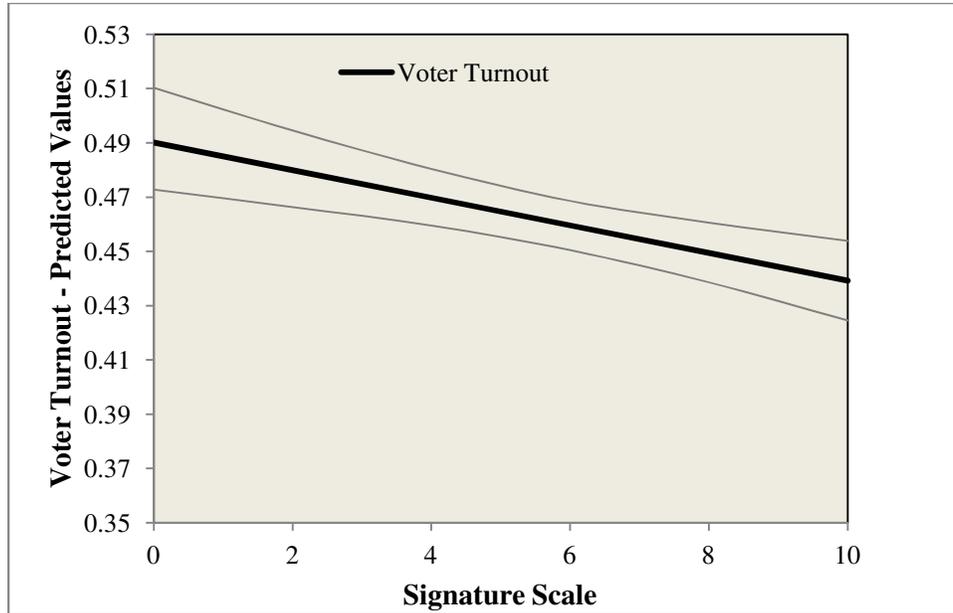
Interestingly, the percent of third parties in state legislatures does not have any effect on voter turnout, but is in the hypothesized direction. State legislative factors that were tested in the prior chapter, LCR and legislative professionalism remain significant predictors of voter turnout.

Table 18
Voter Turnout – State House Elections (2000-2010)

Variable	Coefficient
Signature Scale	-0.004* (.002)
Percent Third Party	0.836 (.779)
LCR	0.004** (.001)
Legislative Professionalism	0.120* (.060)
MMD	-0.081*** (.014)
Runoff	-0.028 (.019)
Term Limit	-0.000 (.015)
Political Competition	-0.038 (.077)
Presidential Election Year	0.123*** (.008)
Gubernatorial Election Year	-0.011 (.008)
Registration Restriction	-0.001 (.000)
Percent African American	-0.001 (.001)
Traditionalistic	-0.038 (.021)
Moralistic	0.047* (.019)
New Hampshire	-0.129** (.048)
Constant	0.440*** (.089)
R^2	.626

N= 243 (43 Clusters); *p <.05; **p < .01; ***p < .001 (s.e.)
*All coefficients are unstandardized beta coefficients

Figure 22
 State Ballot Access Laws and Voter Turnout in State House Elections – Predicted Values
 (95% Confidence Level)



The fact that percentages of seats held by third parties in state legislatures do not influence voter turnout may be due to the direct effects ballot access laws have on the composition of political parties in state legislatures. One way to test this argument is to utilize path modeling to see if ballot access laws actually deter third parties from gaining seats in state legislatures and if that indirectly influences voter turnout.¹⁰² Path modeling decomposes coefficients through regressing variables theorized to be exogenous on variables theorized to be endogenous. This allows researchers to trace the causal path of the projected relationship between mediator variables. In the path model below, I traced the causal path of ballot access laws on party composition and sought to find whether there is an indirect effect of ballot access laws on state legislative party composition, and subsequently, voter turnout.

¹⁰² The following path model was constructed using the command “pathreg” in STATA.

The path model also accounts for other factors that are found to affect party composition and voter turnout. Since MMD systems are found to influence the number of third parties in legislatures (Powell 1986; Blais and Dobrzynska 1998; also see Karp and Banducci 2008) the variable MMD is included in the model. The strength of majority state party systems should also reduce the number of third parties in state legislatures. The stronger the majority party organization, the more likely they are successful in implementing strategies to force out competitors or maintain a strong majority party duopoly (Key 1949; Mayhew 1986). The variable “state party organization” is taken from Mayhew’s (1986) rankings of the strength of local party organizations in states. This variable is ranked from 1 to 5, where 5 constitutes a strong local party system. Mayhew (1986) created this measure of party organizational strength based on historical patterns of local party activities, such as duration of a party’s control, autonomy from the national party system, and a hierarchical structure. I also theorize that state legislative professionalism should reduce the number of third parties in state legislatures. This is because legislative professionalism creates incumbent safety (Berry, Berkman, and Schneiderman 2000; Carey, Niemi, and Powell 2000) and competitive seats when seats are open (Squire 2000), the type of electoral competitiveness would deter access for minor party candidates. A dummy variable for southern states and Pachecos’ (2010) measure of state ideology are also included in the path analysis.

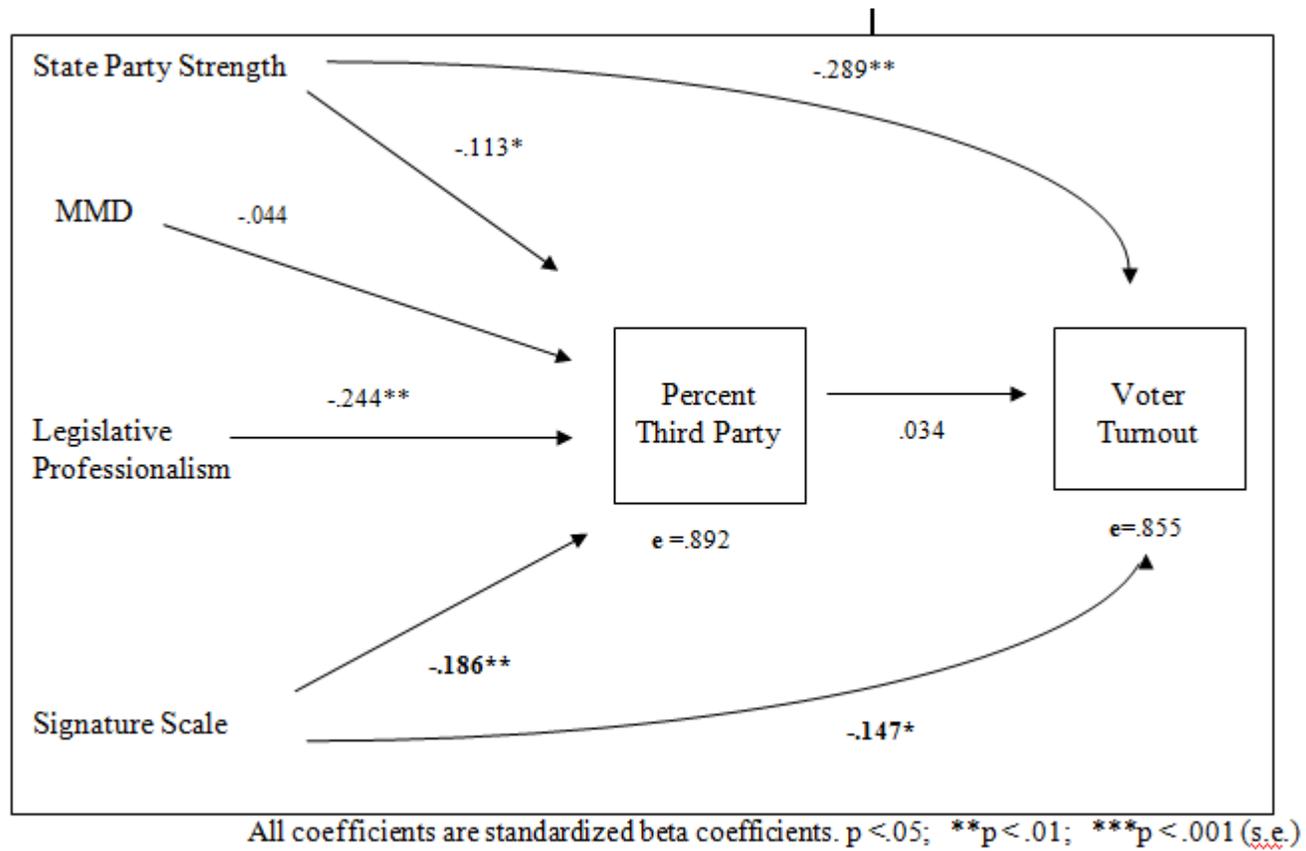
The results of the path analysis are shown in Figure 23.¹⁰³ The analysis shows that when more signatures are required for minor parties to access the ballot in state legislative elections there is a significant reduction in the number of third parties in state legislatures with a

¹⁰³ For the purpose of clarity in viewing the illustration of this path model, political ideology and the variable “south” are not included. The coefficient for the variable “state ideology” on “percent third party” is .111 with a standard error of .016, on voter turnout is -.020 with a standard error of .004. The coefficient for the variable “south” on “percent third party” is .003 with a standard error of .001, and on voter turnout, -.107 with a standard error of .021.

standardized beta coefficient of -0.186. In this analysis, ballot access laws as defined by “Signature Scale” have a significant negative relationship with voter turnout, as well as third party composition in state legislatures. However, the signature scale does not indirectly affect voter turnout through its’ direct effect on party composition in state legislatures.

In sum, the number of third parties present in state legislatures do not affect voter turnout. However, as theorized, the strength of local party organizations have a direct negative effect on the percent of third parties in state legislatures. Further, the stronger the local party system, voter turnout reduces. This analysis demonstrates that contextual effects of party systems and ballot access laws in states also influence voter turnout. Even though third party ratios to not have effect on aggregate levels of voter turnout in states, it leads to questions if there are effects at the individual-level.

Figure 23
Path Model: State Ballot Access Laws, Percent Third Parties and Voter Turnout



Individual-level Analyses: Data, Methods, and Results

Although ballot access laws were found to affect state-level voter turnout in the prior analyses of this chapter and there was no direct effect of third party composition, those results may not hold at the individual level. As in the case with making ecological inferences, the relationship between these third party ratios, state ballot access laws, and voter turnout may change when evaluating the relationships at the individual level. This next section employs multi-level modeling to determine if the ratio of seats held by third parties in state legislatures and ballot access laws affect individual-level voter turnout. I utilized the same method as the multilevel analyses in prior chapters and merged the GSS with the state-level ‘percent third party’ variable and ‘signature scale’ variables.

Another relationship I seek to evaluate in the following analyses is that between ballot access laws and the percent of third parties in state legislatures and an individual’s sense of political efficacy. Scholarship on third parties has pointed to the deleterious effects of the lack of third party candidates in elections and subsequent negative perceptions towards government (Donovan, Bowler and Terrio 2000). The lack of a presence of third parties has been found to decrease citizens’ sense of political efficacy (Karp and Banducci 2008). However, there has not been any work conducted on the impact of third party diversity in state legislatures or ballot access laws, in general, on political efficacy. The following analyses first evaluate the influence of state legislative party diversity and state ballot access laws on individual-level responses. I then examine whether the percent of third parties in state legislatures and ballot access laws influence feelings of political efficacy.

Results

The 2000 dependent variable “vote 2000” is derived from the 2002 GSS, while the “vote 2004” and “vote 2008” are from the 2006 and 2010 GSS, respectively.¹⁰⁴ The variables “term limit” and “runoff” were taken out of the models because their inclusion provided a poorer fit for all years evaluated in this analysis.¹⁰⁵ Table 19 presents the results.

The multilevel analysis shows that the more restrictive the states’ ballot access laws, the less likely individuals would report turning out to vote – at least in the 2008 general election (see Figure 18). In states with more stringent signature laws, individuals are less likely to turn out to vote. Similar to the state-level and path analyses conducted in the previous section, the percent of third parties in state legislatures did not have a significant impact on voter turnout at the individual level. Indeed, few state level variables achieved statistical significance in these analyses.

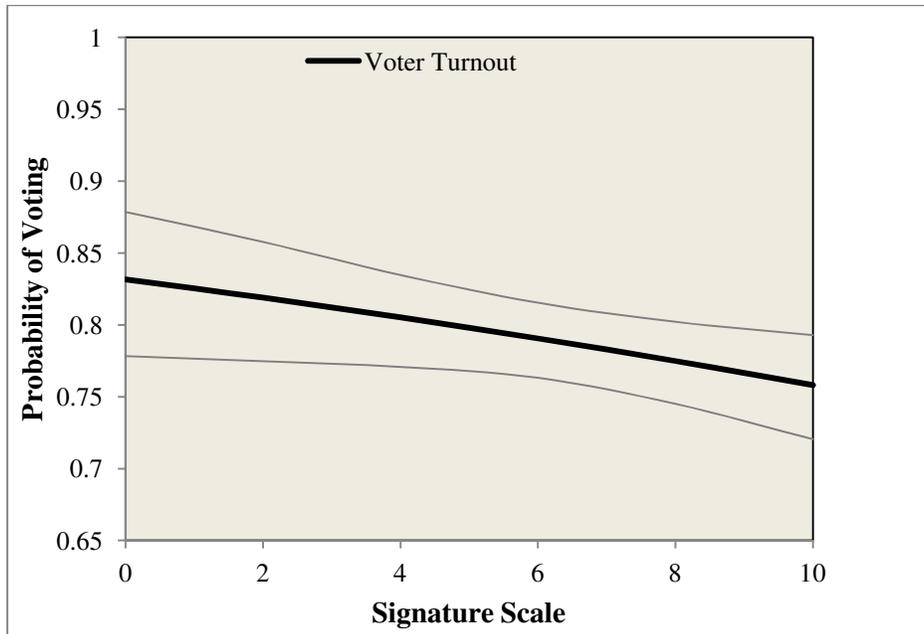
¹⁰⁴ States missing in the “Vote 2000” model are: Arkansas, Hawaii, Idaho, Iowa, Maine, Nebraska, Nevada, New Hampshire, New Mexico, Rhode Island, Utah, West Virginia, and Wyoming. States missing the “Vote 2004” and “Vote 2008” models include: Alaska, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont.

¹⁰⁵ Bayesian information criterion scores increased from 1332.1 to 1339.4 for the “Vote 2000” model, from 2941.6 to 2949.2 in the “Vote 2004” model and 1810.7 to 1821.4 in the “Vote 2008” model when the variables “term limit” and “runoff” were included

Table 19
 Logistic Multi-level Regression – Percent Third Party, Ballot Access Signature Requirements and Individual-level Voter Turnout

	Vote 2000		Vote 2004		Vote 2008	
	B(SE)	p< z	B(SE)	p< z	B(SE)	p< z
State-level (Level 2)						
Signature Scale	-0.032 (.024)	.193	-0.013 (.017)	.430	-0.049 (.024)	.004
Percent Third Party	16.8 (12.2)	.168	-3.7 (12.7)	.770	10.4 (13.4)	.440
LCR	-0.036 (.022)	.108	0.031 (.025)	.220	0.014 (.041)	.720
Legislative Professionalism	0.248 (.541)	.646	-0.574 (.471)	.224	0.076 (.615)	.901
MMD	0.275 (.290)	.343	-0.167 (.191)	.383	-0.153 (.328)	.639
Gubernatorial Election	-0.109 (.199)	.582	0.038 (.141)	.785	-0.261 (.566)	.645
Direct Democracy	0.048 (.185)	.795	0.242 (.148)	.102	0.270 (.154)	.081
Competition	0.749 (1.27)	.557	1.44 (.779)	.064	0.713 (.746)	.339
Registration Restriction	-0.001 (.007)	.809	-0.003 (.004)	.440	-0.008 (.005)	.135
Individual Level (Level 1)						
Education	0.261 (.027)	.000	0.293 (.020)	.000	0.217 (.022)	.000
Income	-0.011 (.003)	.004	0.152 (.021)	.000	-0.001 (.003)	.727
Age	0.049 (.004)	.000	0.034 (.003)	.000	0.031 (.003)	.000
Female	-0.214 (.143)	.135	0.220 (.095)	.021	0.384(.122)	.002
African American	0.361 (.205)	.079	0.411(.139)	.003	0.386 (.172)	.025
Political Ideology	0.075 (.073)	.304	-0.076 (.058)	.190	0.219 (.062)	.000
Level 2 N (State Level)	36		38		38	
Level 1 N (Individual Level)	1,182		3,080		1,691	
	Minimum per cluster = 6; Maximum per cluster = 101		Minimum per cluster = 2 ; Maximum per cluster = 212		Minimum per cluster = 2 ; Maximum per cluster = 134	

Figure 24
Ballot Access and Voter Turnout (2008 GSS) – Individual Level



Political Efficacy: Data, Methods, and Results

The second part of this analyses tests if state ballot access laws influence a sense of political efficacy. The following utilizes the GSS and the state level variables “signature scale” and “percent third parties” (see Tables 20 and 21 below).¹⁰⁶ The dependent variables “political efficacy” are from the 2004 and 2006 GSS and “Government does not Care” is from the 2004 GSS and are the same variables used in prior analyses of this dissertation.

¹⁰⁶ States missing in these analyses are: Alaska, Delaware, Mississippi, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Rhode Island, South Dakota, Utah, and Vermont.

Table 20
Multi-level Regression – Ballot Access, Third Party and Political Efficacy

	Political Efficacy (2004 GSS)		Political Efficacy (2006 GSS)	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level (Level 2)				
Ballot Access	-0.002 (.013)	.856	0.010 (.014)	.897
Percent Third Parties	-014.9 (10.1)	.140	-1.03 (8.00)	.467
LCR	-0.019 (.019)	.326	-0.019 (.024)	.421
Legislative Professionalism	0.035(.360)	.922	-0.177 (.431)	.680
Direct Democracy	0.035 (.105)	.737	-0.114 (.099)	.252
Registration Restriction	0.001 (.003)	.637	-0.012 (.006)	.056
Competition	0.184 (.625)	.768	-0.116 (.686)	.865
Individual Level (Level 1)				
Education	-0.039 (.009)	.000	-0.074 (.010)	.000
Age	-0.001 (.002)	.517	-0.002 (.002)	.170
Female	0.082 (.072)	.253	-0.082 (.068)	.227
African American	0.130 (.109)	.233	-0.091 (.100)	.857
Married	0.239 (.073)	.001	-0.020 (.074)	.782
Level 2 N	2,549		1,276	
Level 1 N	37		37	
	(Minimum per cluster = 7; Maximum per cluster = 191)		(Minimum per cluster = 2; Maximum per cluster = 93)	

Table 21
Multi-level Regression – Ballot Access, Third Parties and Government does not Care (2004 GSS)

	Government does not Care	<i>p</i> < <i>z</i>
	<i>B</i> (<i>SE</i>)	
State-level (Level 2)		
Ballot Access	0.004 (.012)	.700
Percent Third Parties	-12.5(9.27)	.212
LCR	-0.014(.018)	.434
Legislative Professionalism	0.037(.326)	.908
Direct Democracy	0.011(.095)	.906
Registration Restriction	0.005(.003)	.112
Competition	0.283(.570)	.619
Individual Level (Level 1)		
Education	-0.033 (.009)	.000
Age	-0.002 (.001)	.203
Female	0.042(.066)	.522
African American	0.014 (.100)	.883
Married	0.232 (.067)	.001
Level 2 N	2,549	
Level 1 N	37	
(Minimum per cluster = 7; Maximum per cluster = 191)		

Ballot access laws and the percent of third parties do not have significant effects on levels of political efficacy. The percentage of seats held by third parties in state legislatures and registration restriction is the only state level variable that has a relationship with political efficacy in the model. However the percent of third parties in state legislatures has only a 0.140 probability value and only in the 2004 GSS model. As the percent of third parties increases in

state legislatures, the more likely respondents were to agree that they did not have any say in what government does.

The negative direction of the relationship between third parties in state legislatures and political efficacy should be explored in future work in state politics. Why third parties in state legislatures would have a negative relationship with political efficacy may seem perplexing, especially given prior research illustrating a positive relationship between third parties and political efficacy. One explanation for this relationship is that third party success and efficacy is endogenous. Voters may feel discontent with the status quo and react by voting in other alternatives. If individuals in states do not feel efficacious due to the two-party system, putting third parties in the state-house may be a way to resolve those feelings. Prior research finds that individuals who vote for third parties are more likely to exhibit more distrust in government (Rosenstone, Behr, and Lazarus 1984; Peterson and Wrighton 1998), which may be the reason for the negative relationship between the percentages of third parties in state legislatures and political efficacy. Other research in comparative politics illustrate that ‘broad coalitions in government’ reduce a sense of efficacy (Karp and Banducci 2008).

Conclusions

In this chapter I examined whether the percentage of parties in state legislatures and state ballot access laws affect citizen political participation and political efficacy. The difference between this analysis and prior analyses on third parties and voter turnout is that I focus on the influence of third parties in *state legislatures* and combined state-level and individual-level analyses. I found that while there is no discernible influence of third party composition on voter turnout at the state and individual levels, less restrictive ballot access laws increase voter turnout

at the state level for the 2000-2010 state house elections, and at the individual level for 2008 federal election. I also found that the stringency of states' ballot access laws affect the ratios of third parties in state legislatures. As a states' signature requirements increase, third parties in state legislatures decrease. Further, even though there was not any significant effect of ballot access laws on political efficacy, third party ratios in state legislatures are associated with lower levels of political efficacy. Future research should evaluate the direction of the relationship, because it may be that higher ratios of third parties exist in the state legislature due to lower levels of political efficacy. Even though the primary focus of this chapter was to find how the institutional characteristics of state legislatures, namely, the diversity of party composition, influences citizens, the findings reveal that variation in state institutional rules should be taken into context.

CHAPTER 5

Summary of Findings and Directions for Future Research

The main purpose of this dissertation was to expand the inquiry on how state-level institutions influences political participation, and go beyond traditional individual-level determinants of political behavior such as SES, gender, and race. Other research in political participation focuses on how electoral rules in the American states, such as voter registration and direct democracy, influence the vote. However, this dissertation filled a gap by taking on a similar comparative approach and examined how differences in governing institutions influence the electorate. I illustrated that the size, capacity, and composition of state legislatures affect the political behaviors of the American public. Altogether, this dissertation addressed normative theoretical discourse on citizen political engagement and democracy (Piven and Cloward 1988; 2000; Teixeira 1992; Hill and Leighley 1992; Lipjhart 1997; Putnam 1995; 2000; Franklin 2004). The vote is a way for citizens to influence politics through the expression of popular will. If the institutional design and composition of legislative assemblies can enhance or deter political expression, then exploring the impact of such institutions is not only important to scholars, but also citizens within democratic political systems. This research showed how variation in the institutional characteristics of state legislatures influences the electorate.

An additional component of this dissertation took into context aggregate and individual level influences of state legislatures on political behavior. It is broadly recognized that findings may differ when examining relationships at aggregate and the individual level. The danger in making individual level inferences based on aggregate level analyses is notoriously known as the ‘ecological fallacy.’ Fortunately, statistical modeling techniques such as multilevel modeling, or hierarchical models, which were utilized in this dissertation, allowed for me to examine if my

aggregate level findings were generalizable to individual level behavior. Some of the findings in the previous chapters of this dissertation highlights that the influence of state governing institutions may only be evident at the aggregate level. For example, I demonstrated that states with state legislatures that are professionalized and/or have higher numbers of representatives to constituents have higher levels of voter turnout at the state level. However, the effects of LCR and legislative professionalism on individual reports of voting were insufficient to make any causal inference. The influence of LCR and legislative professionalism on self-reports of voting was only evident in the analyses of the 2000 and 2008 elections – two out of three cross-sectional examinations. Further, LCR was negatively related to voting behavior in the 2000 election, and had a positive influence in the 2008 election. It is important to take into consideration research on data that consists of self-reported voting (Bernstein, Chadha, and Montjoy 2000; Ansolabehere and Hersh 2012). These over-reports may misestimate how institutional factors such as LCR, influence voting behavior. Despite these problems, however, it is clear that LCR has a positive effect on aggregate rates of voter turnout when utilizing actual election returns.

Other analyses in this dissertation showed that the characteristics of state legislatures influence behavior and attitudes at the individual level and is contingent on race and gender. Increased percentages of females in state legislatures decreased voter turnout for White females the 2000 election. Conversely, White females were also more likely to report turning out to vote in 2008 election as descriptive representation increased. At the individual-level, African American males who reside in states that had state legislatures with higher levels of descriptive representation reported voting in higher numbers. The percent of females and African

Americans in state legislatures did not have any bearing on voting behavior for African American females.

I had also theorized that another aspect of state legislature composition, specifically the percent of third parties in state legislatures, would have a positive influence on voter turnout. The analyses in Chapter Four did not produce any evidence of such a relationship. The logic behind the hypothesized relationship was based on prior research which illustrates that the lack of a presence of third parties generates negative perceptions towards government (Donovan, Bowler and Terrio 2000; (Karp and Banducci 2008). These negative perceptions should reduce voter turnout because political efficacy is highly related to voter turnout. Although my hypothesis did not yield significant results, the analyses presented in Chapter Four highlight that state institutional rules should be taken into consideration when exploring the influence of governing institutions on political behavior. I found that stringent state ballot access laws reduced aggregate levels of voter turnout and negatively affected the percent of third parties in state legislatures. Even though state electoral rules may influence the characteristics of governing institutions, these rules and not the outcome of them, have a direct effect on the voting public. Conjointly, all of the findings in this dissertation illustrate that not all institutional effects on political behavior are created equal. Some characteristics of governing institutions may contribute to political behavior at the aggregate level, while others at the individual level, or not at all.

American State Legislatures and Political Efficacy

How the characteristics of state legislative assemblies affected an individuals' sense of political efficacy was also explored in this dissertation. The importance of a citizens' sense of

political efficacy resides in giving a sense of control over how government allocates resources. And, citizen control over government is arguably an essential component of democracy (see Pateman 1970). In the analyses of this dissertation, LCR, legislative professionalism and the percent of third parties in state legislatures did not have any positive effect on political efficacy as I had hypothesized. Alternately, there is an indication that even though LCR increases voter turnout, it may reduce feelings political efficacy. However, since the survey instrument did not ask specific questions about efficacy related to local government, the insignificance of the results and direction of relationship should be further explored. Future studies on state legislatures and political attitudes should have direct questions pertaining to efficacy and state and local government. This is because citizens may have distinct experiences with federal, state, and local government.

In this dissertation, the most compelling effect of the characteristics of state legislatures on citizens' feelings of political efficacy was through descriptive representation. As descriptive representation increases, White women had reported increased internal efficacy political efficacy. As for African Americans, increased descriptive representation resulted in a decrease in external political efficacy. However, as the percentage of African Americans in state legislatures increased, internal political efficacy decreased for African American males, and there was no relationship for African American females. The historic exclusion from government could possibly be the reasons why external efficacy reduces as descriptive representation increases for African Americans. However, it cannot explain why descriptive representation does not affect African American women. On its' face these results may seem confounding. In state legislatures and in the national legislature, both women and African Americans have had increased proportions of descriptive representation over time. Future research should explore the

intersection of gender and race when exploring how descriptive representation influences the political behaviors and attitudes of African American females. Further, given that new generations of young women and African Americans, as a whole, have not faced discrimination with similar intensity, future research should explore whether or not there is a generational cohort effect. It may be that descriptive representation in state legislatures increase internal and external political efficacy for younger populations, while it decreases efficacy for older populations of both groups.

Further, as discussed in Chapter Three, the findings on descriptive representation counter Bobo and Gilliam's (1990) claim that political efficacy should increase among African Americans as African Americans are in more positions of power. Although the results presented in Chapter Three are consistent with Avery's (2006) findings, that the stronger the group-consciousness leads to mistrust of government because of perceptions of racial inequality – it is worth investigating if there is a generation gap and/or if there are significant regional differences. African Americans in southern states or in urban areas may be driving those results.

Additional analysis concerning the influence of third parties on political efficacy is also warranted. Although the results were not significant, there was a negative direction in the relationship between third parties in state legislatures and political efficacy future work in state politics should explore this relationship. Third party success and political efficacy may be endogenous. Since prior research finds that individuals who vote for third parties are more likely to exhibit more distrust in government (Rosenstone, Behr, and Lazarus 1984; Peterson and Wrighton 1998), voters may react by voting in other alternatives.

The Future of State Legislatures and Citizen Political Engagement

This examination of American state legislatures also provided a context to challenge current proposals aimed at changing some state legislative assemblies. Recently, there have been movements to decrease the number of representatives that serve in state assemblies as well as to de-professionalize state legislatures. The research in this dissertation may help to inform how such changes will influence citizen political behavior as well as the political behavior of state legislators.

The discourse surrounding reducing the size of state legislatures argue a multitude of consequences. While proponents argue that reducing membership size will save money and break legislative gridlock, those contesting these measures argue that policy deliberation could be stalled. This is because broad political coalitions would form and one political party could easily dominate (see Ehrenhalt 2001; Benefield 2006; Jacobson 2011) – which could arguably reduce citizen political efficacy as well (Karp and Banducci 2008). Prior research has illustrated that some reduction schemes have actually increased spending (Fitzpatrick 2002), however research has not been conducted on whether or not smaller legislatures induce legislative effectiveness or party domination. Future research in comparative state politics should further examine if state legislative size influences policymaking and dominant political party systems.

Interestingly, whether or not legislative size influences actual political behavior of citizens has not been addressed in popular discourse. The results presented in Chapter Two illustrate that it does – citizens will turn out to vote more often in states with higher LCR and more professionalized state legislative offices. The results present a potential problem for citizen-led groups that advocate downsizing and de-professionalizing state legislatures. If successful, it is possible that the voice of popular will through the vote will soften.

On the other hand, opponents of reducing the size of state legislatures argue that face-to-face interaction between constituents and representatives will diminish if there are fewer representatives to constituents (see NCSL 2012). Research on the national legislature supports these claims (see Hibbing and Alford 1990; Oppenheimer 1996). Despite these claims and scholarship, I found that state legislatures with higher LCR actually reduce the propensity of state legislators to contact citizens. While citizens are more likely to participate in politics, representatives are less engaged. One caveat, however, is that higher LCR in conjunction with legislative professionalism increases representative to citizen contact – which may be the reason why smaller legislator to citizen ratios increase representative contact in studies examining the phenomenon at the national level.

Finally, it is unclear as to how changes in size of state legislatures would impact other areas of political behavior. Would reducing the number legislators to citizens change the policy directives of representatives? If representatives have to tend to more interests within their districts, then policy proposals may become broader. Further, if the number of seats available to run for elective office diminishes, then it is questionable whether or not reducing the size of legislatures would decrease the number of opportunities for individuals and groups with minority status to enter into the electoral arena. These aforementioned unknowns illustrate that research on how state legislatures influence the public and politicians is important – and that there are an abundance of areas to explore in future research.

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Appendix

Table A.1 Legislator to Citizen Ratios (2010)

State	Total	Lower House	Upper House	VEP	SL/VEP (per 100,000)
Alabama	140	35	105	3,399,625	4.12
Alaska	60	20	40	478,834	12.53
Arizona	90	30	60	4,080,672	2.21
Arkansas	135	35	100	2,035,689	6.63
California	120	40	80	21,969,364	0.55
Colorado	100	35	65	3,442,271	2.91
Connecticut	187	36	151	2,455,684	7.16
Delaware	62	21	41	623,784	9.94
Florida	160	40	120	12,438,310	1.29
Georgia	136	56	180	6,385,863	2.13
Hawaii	76	25	51	897,902	8.46
Idaho	105	35	70	1,033,112	10.16
Illinois	177	59	118	8,777,032	2.02
Indiana	150	50	100	4,636,944	3.23
Iowa	150	50	100	2,197,090	6.82
Kansas	165	40	125	1,975,682	8.35
Kentucky	138	38	100	3,161,677	4.36
Louisiana	145	39	105	3,151,124	4.56
Maine	186	35	151	1,025,251	18.14
Maryland	189	47	141	3,895,192	4.85
Massachusetts	200	40	160	4,663,629	4.29
Michigan	148	38	110	7,269,131	2.04
Minnesota	201	67	134	3,725,529	5.40
Mississippi	174	52	122	2,110,998	8.24
Missouri	197	34	163	4,306,160	4.57
Montana	150	50	100	741,326	20.23
Nebraska	49	Unicameral		1,279,151	3.83
Nevada	43	21	42	1,653,623	2.60
New Hampshire	424	24	400	999,931	42.40
New Jersey	120	40	80	5,848,620	2.05
New Mexico	112	42	70	1,377,669	.85
New York	212	62	150	13,135,795	1.61
N. Carolina	170	50	120	6,547,878	2.60
N. Dakota	141	47	94	487,822	28.90
Ohio	132	33	99	8,551,781	1.54
Oklahoma	149	48	101	2,582,609	5.77
Oregon	90	30	60	2,692,727	3.34
Pennsylvania	253	50	203	9,396,732	2.69
Rhode Island	113	38	75	756,471	14.94
S. Carolina	170	46	124	3,279,702	5.18
S. Dakota	105	35	70	598,741	17.54
Tennessee	132	33	99	4,538,274	2.91
Texas	181	31	150	14,770,779	3.99
Utah	104	29	75	1,778,152	5.49
Vermont	180	30	150	487,663	36.91
Virginia	140	40	100	5,509,452	2.54
Washington	147	49	98	4,538,669	3.24
W. Virginia	134	34	100	1,410,274	9.50
Wisconsin	132	33	99	4,112,848	3.21
Wyoming	90	30	60	389,721	23.10

Table A.2
State Legislative Professionalism (Squire 2007)

California	0.63	Delaware	0.15
New York	0.48	Kentucky	0.15
Wisconsin	0.44	Idaho	0.14
Massachusetts	0.38	Nevada	0.14
Michigan	0.34	Vermont	0.14
Pennsylvania	0.34	Kansas	0.13
Ohio	0.3	Rhode Island	0.13
Illinois	0.26	Georgia	0.12
Alaska	0.23	South Carolina	0.12
Arizona	0.23	Tennessee	0.12
Florida	0.22	West Virginia	0.12
Hawaii	0.22	Arkansas	0.11
Colorado	0.2	Mississippi	0.11
North Carolina	0.2	New Mexico	0.11
Texas	0.2	Indiana	0.1
Washington	0.2	Maine	0.09
Connecticut	0.19	Montana	0.08
Maryland	0.19	Alabama	0.07
Oklahoma	0.19	South Dakota	0.06
Iowa	0.17	Utah	0.06
Minnesota	0.17	North Dakota	0.05
Missouri	0.17	Wyoming	0.05
Oregon	0.16	New Hampshire	0.03

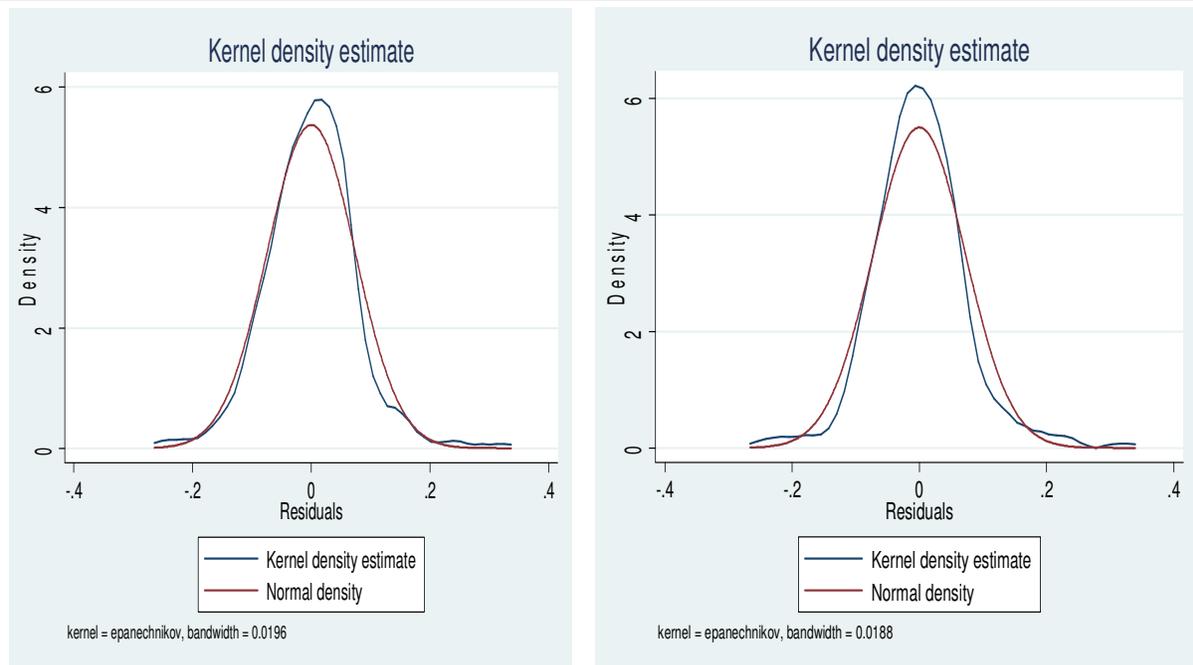
Table A.3
Descriptive Statistics

Variable	Mean	Median	Minimum	Maximum	SD	Variance
Voter turnout ¹⁰⁷	.462	.460	.223	.784	.112	.012
LCR (per 100,000)	6.61	3.67	.35	44.91	8.10	8.10
Legislative Professionalism	.185	.15	.03	.63	.123	.015
MMD	.191	0	0	1	.369	.136
Direct Democracy			0	1		
Voter Registration	20.1	25	0	30	10.7	114.10
Term Limit			0	1		
Runoff			0	1		
Gubernatorial Election			0	1		
Presidential Election			0	1		
Competition	.864	.880	.299	.999	.098	.009
Poverty	12.3	12	5.3	21.6	3.06	9.41
Percent African American	10.2	7.18	.4	37.5	9.53	90.89
South		0	1			

Figure A.1
Kernel Density Plot

Regression Model 1

Regression Model 2 (New Hampshire Controlled)



¹⁰⁷ 2000 - 2010 state lower chamber legislative election for 43 states.

Table A.4
 Voter Turnout in State House Elections – LCR and LnPopulation

Variable	Coefficient (s.e)
LCR	0.006** (.002)
Legislative Professionalism	0.228* (.100)
MMD	-0.086** (.023)
Runoff	0.020 (.036)
Term Limit	-0.005 (.022)
Electoral Competition	-0.024 (.080)
Presidential Election Year	0.122*** (.008)
Gubernatorial Election Year	-0.015 (.007)
Direct Democracy	0.030 (.020)
Registration Restriction	-0.002* (.001)
Percent African American	-0.003 (.001)
Poverty	-0.003 (.003)
South	-0.057 (.036)
LnPopulation	-0.002 (.105)
Constant	0.507*** (.153)
R^2	.581

N= 243 (43 Clusters); *p <.05; **p < .01; ***p < .001 (s.e.)

*All coefficients are unstandardized beta coefficients, with robust standard errors.

Table A.5
 Variance Inflation Factor Scores – LCR and LnPopulation

LnPopulation	8.21
LCR	6.51
South	4.94
Runoff	3.86
Legislative Professionalism	3.34
Percent Black	3.42
Direct Democracy	2.29
MMD	1.72
Poverty	1.64
Term Limit	1.44
Registration Restriction	1.36
Gubernatorial Election	1.08
Presidential Election	1.07
Mean VIF	3.26

Table A.6
 Variance Inflation Factor Scores – Voter Turnout LCR and Legislative Professionalism

South	4.79
Runoff	4.36
Percent African American	3.34
Direct Democracy	2.23
LCR	2.18
MMD	1.66
Poverty	1.63
Legislative Professionalism	1.62
Term Limit	1.44
Competition	1.28
Registration Restriction	1.28
Gubernatorial Election	1.08
Presidential Election	1.07

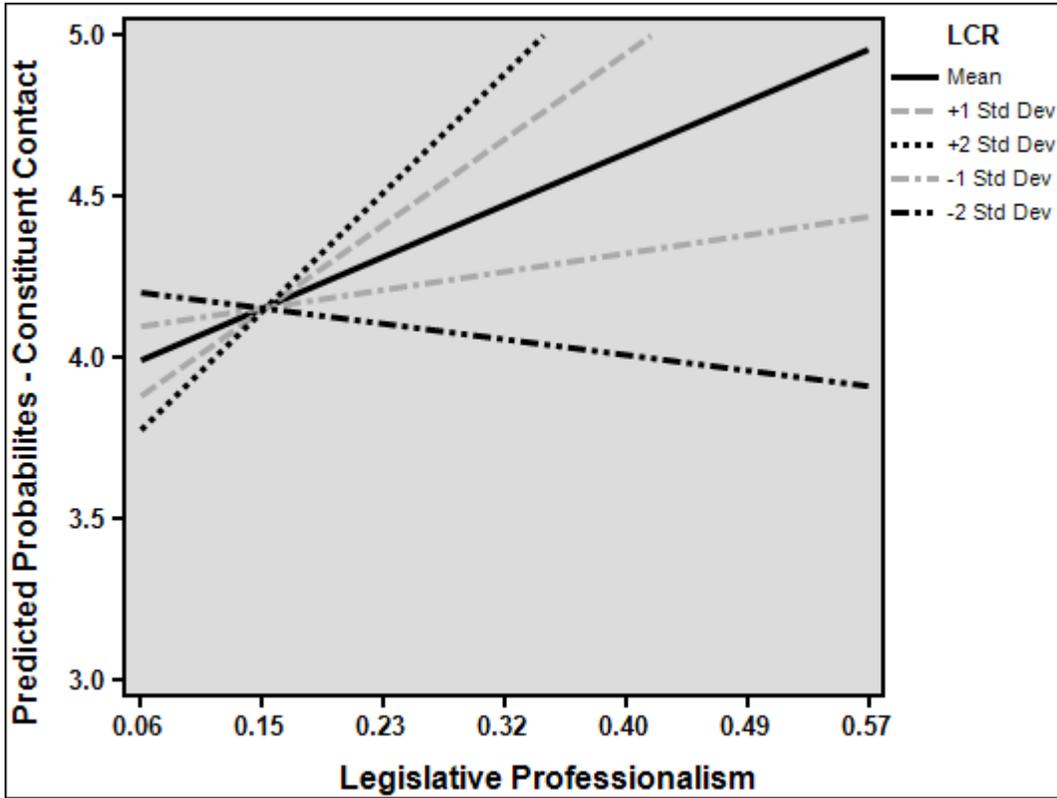
Table A.7
Multilevel Regression Analyses – Constituent Contact

Level 2 (State Level)	Constituent Contact B(SE)
LCR	-0.018*** (.003)
Legislative Professionalism	0.587* (.300)
Level 1 (Individual Level)	
Retire	0.047 (.036)
Ambitious Congress	0.108* (.048)
Ambitious Appointive Office	0.111* (.049)
Female	-0.157***(.037)
Random Effects Variance	0.187 (.028)
Level 2 N (State Level)	50
Level 1 N (Individual Level) ¹⁰⁸	2,924
Minimum observations per cluster = 25; Maximum observations per cluster = 189 p < .05; **p < .01; ***p < .001	

¹⁰⁸ Raudenbush and Bryk (2002) and well as Gelman and Hill (2007, 276) argue that two observations per cluster is enough to make inferences with multi-level models.

Figure A.2

Interactive Effects LCR at varying levels of Legislative Professionalism on Constituent Contact¹⁰⁹



¹⁰⁹ Intercepts for LCR at the mean has a slope of 1.89 (standard error [se] of slope is .079); +1sds above the mean, the slope = 3.12 (se of slope = .159); +2sds above the mean, the slope = 4.36 (se of slope is .241); -1sd below mean, slope = .663 (se of slope = .039); -2sds below the mean, slope = -.569 (se of slope = .104).

Table A.8
 Logistic Regression with Clustered Standard Errors (not weighted) – LCR, Legislative Professionalism and Individual-level Voting¹¹⁰

	Vote 2000		Vote 2004		Vote 2008	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level						
LCR	-0.014 (.010)	.187	0.037 (.012)	.003	0.058 (.024)	.018
Legislative Professionalism	0.258 (.622)	.678	-0.508 (.380)	.182	0.554 (.393)	.159
MMD	0.304 (.232)	.189	-0.105 (.119)	.378	-0.038 (.375)	.919
Gubernatorial Election	-0.117 (.188)	.533	0.052 (.122)	.672	0.183 (.351)	.602
Direct Democracy	-0.021 (.128)	.867	0.195 (.146)	.181	-0.015 (.178)	.929
Interparty Competition	0.756 (1.12)	.501	1.52 (.649)	.019	0.389 (.488)	.425
Registration Restriction	0.001 (.006)	.777	-0.004 (.004)	.389	-0.009 (.003)	.010
Individual Level						
Education	0.262 (.006)	.000	0.293 (.032)	.000	0.219 (.048)	.000
Income	-0.111 (.004)	.014	0.144 (.025)	.000	-0.001 (.002)	.656
Age	0.049 (.004)	.000	0.035 (.002)	.000	0.032 (.003)	.000
Female	-0.205 (.116)	.077	0.214 (.091)	.019	0.364 (.099)	.000
African American	0.432 (.164)	.008	0.433 (.138)	.002	0.377 (.134)	.005
Political Ideology	0.089 (.072)	.258	-0.077 (.048)	.109	0.222 (.066)	.001
Pseudo R ²	.154		.148		.119	
State Level N	37		39		39	
Individual Level N	1,203		3,142		1,717	

¹¹⁰ All models have one-tailed test of significance

Table A.9
 Logistic Regression with Clustered Standard Errors (Weighted) – LCR, Legislative Professionalism and Individual-level Voting¹¹¹

	Vote 2000		Vote 2004		Vote 2008	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level						
LCR	-0.022 (.011)	.040	0.016 (.013)	.218	0.065 (.024)	.007
Legislative Professionalism	0.473 (.399)	.678	-0.483 (.464)	.299	0.515 (.447)	.249
MMD	0.396 (.116)	.189	-0.025 (.104)	.809	0.247 (.416)	.552
Gubernatorial Election	-0.051 (.189)	.787	-0.008 (.090)	.928	-0.134 (.401)	.738
Direct Democracy	-0.128 (.119)	.282	0.208 (.144)	.150	-0.127 (.189)	.500
Electoral Competition	0.646 (.969)	.505	0.999 (.895)	.265	0.750 (.538)	.163
Registration Restriction	0.002 (.006)	.787	-0.004 (.003)	.241	-0.019 (.004)	.003
Individual Level						
Education	0.259 (.028)	.000	0.308 (.033)	.000	0.249 (.035)	.000
Income	-0.134 (.004)	.001	0.129 (.030)	.000	-0.005 (.002)	.022
Age	0.053 (.005)	.000	0.038 (.003)	.000	0.039 (.004)	.000
Female	-0.279 (.122)	.022	0.134 (.112)	.231	0.508 (.124)	.000
African American	0.497 (.181)	.006	0.471 (.169)	.005	0.349 (.180)	.005
Political Ideology	0.132 (.073)	.070	-0.001 (.049)	.998	0.159 (.073)	.031
Pseudo R ²	.173		.145		.147	
State Level N	37		39		39	
Individual Level N	1,203		3,142		1,717	

¹¹¹ All models have one-tailed test of significance

Table A.10
 Regression with Clustered Standard Errors (weighted) – LCR, Legislative Professionalism and Political Efficacy

	Political Efficacy (2004 GSS)		Political Efficacy (2006 GSS)	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level (Level 2)				
LCR	-0.021 (.012)	.075	-0.030 (.030)	.332
Legislative Professionalism	0.077 (.333)	.817	-0.366 (.403)	.369
Direct Democracy	0.013 (.090)	.884	-0.070 (.105)	.509
Registration Restriction	0.001 (.003)	.822	-0.012 (.007)	.107
Electoral Competition	0.064 (.381)	.867	0.081(.822)	.922
Individual Level (Level 1)				
Education	0.045(.015)	.004	0.094(.001)	.000
Age	-0.001 (.002)	.507	-0.002 (.002)	.443
Female	0.082 (.090)	.371	-0.048 (.087)	.582
Black	0.082(.122)	.502	0.145 (.126)	.258
Married	0.211 (.104)	.051	0.007 (.098)	.939
R ²	.012		.049	
State Level N	38		38	
Individual Level N	2,607		1,292	

*unstandardized coefficients – one tailed.

Table A.11
 Regression with Clustered Standard Errors (unweighted) – LCR, Legislative Professionalism and
 Political Efficacy

	Political Efficacy (2004 GSS)		Political Efficacy (2006 GSS)	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level (Level 2)				
LCR	-0.023 (.011)	.045	-0.030 (.030)	.262
Legislative Professionalism	0.088 (.379)	.818	-0.461(.411)	.269
Direct Democracy	0.078(.092)	.400	0.058(.094)	.539
Registration Restriction	0.001(.002)	.575	-0.010(.006)	.097
Electoral Competition	0.101(.399)	.802	0.335(.823)	.686
Individual Level (Level 1)				
Education	0.038(.014)	.011	0.095(.001)	.000
Age	-0.001 (.002)	.616	-0.002 (.001)	.094
Female	0.073 (.092)	.433	-0.107(.059)	.080
Black	0.173(.087)	.055	-0.000 (.114)	.994
Married	0.250 (.085)	.006	0.004(.076)	.948
R ²	.013		.051	
State Level N	38		38	
Individual Level N	2,607		1,292	

*unstandardized coefficients – one tailed.

Table A.12
 Regression with Clustered Standard Errors (weighted) – LCR, Legislative Professionalism and
 Political Efficacy, and Political Interest

	Government does not Care		Political Interest	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level				
LCR	-0.019 (.013)	.148	-0.012 (.008)	.134
Legislative Professionalism	0.077 (.262)	.769	0.160 (.202)	.431
Direct Democracy	-0.013 (.075)	.862	0.038 (.072)	.603
Registration Restriction	0.003(.002)	.194	0.002 (.002)	.249
Competition	0.046 (.323)	.887	0.090 (.359)	.802
Individual Level				
Education	0.039 (.013)	.005	-0.016 (.013)	.230
Age	-0.002 (.002)	.344	-0.004 (.001)	.008
Female	0.049 (.081)	.551	0.071(.058)	.229
Black	-0.062 (.123)	.614	0.113 (.107)	.293
Married	0.183 (.108)	.100	0.068 (.055)	.225
R ²	0.012		0.010	
State Level N	38		38	
Individual Level N	2,607		2,607	

*unstandardized coefficients – one tailed.

Table A.13
 Regression with Clustered Standard Errors (unweighted) – LCR, Legislative Professionalism and
 Political Efficacy, and Political Interest

	Government does not Care		Political Interest	
	<i>B</i> (SE)	<i>p</i> < <i>z</i>	<i>B</i> (SE)	<i>p</i> < <i>z</i>
State-level				
LCR	-0.022 (.013)	.107	-0.012(.007)	.119
Legislative Professionalism	0.070(.336)	.836	0.103(.214)	.631
Direct Democracy	0.054(.081)	.641	0.037(.001)	.562
Registration Restriction	0.004(.002)	.060	0.003(.001)	.057
Competition	0.189(.616)	.689	0.183(.346)	.599
Individual Level				
Education	0.033(.012)	.015	-0.018 (.010)	.077
Age	-0.002 (.002)	.405	-0.004 (.001)	.003
Female	0.028(.080)	.721	0.074(.058)	.215
Black	0.002 (.087)	.979	0.189 (.092)	.048
Married	0.238 (.088)	.010	0.078 (.044)	.088
R ²	0.013		.027	
State Level N	38		38	
Individual Level N	2,607		2,607	

*unstandardized coefficients – one tailed.

Vita

Robynn Kuhlmann received her bachelor's degree in Political Science at the University of San Francisco. She also earned her Master's degree from California State University, Chico. Robynn entered the department of Political Science PhD program at the University of New Orleans in 2007 and was hired as Assistant Professor at the University of Central Missouri in 2012.