

2006

Education in belief system coherency and ideological constraint in Massachusetts.

David Ciuk

University of Massachusetts Amherst

Follow this and additional works at: <https://scholarworks.umass.edu/theses>

Ciuk, David, "Education in belief system coherency and ideological constraint in Massachusetts." (2006). *Masters Theses 1911 - February 2014*. 2571.

Retrieved from <https://scholarworks.umass.edu/theses/2571>

This thesis is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Masters Theses 1911 - February 2014 by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.

* UMASS/AMHERST *



312066 0325 0303 2

EDUCATION IN BELIEF SYSTEM COHERENCY
AND IDEOLOGICAL CONSTRAINT IN MASSACHUSETTS

A Thesis Presented

by

DAVID CIUK

Submitted to the Graduate School of the
University of Massachusetts Amherst in partial fulfillment
of the requirements for the degree of

MASTER OF ARTS

May 2006

Political Science

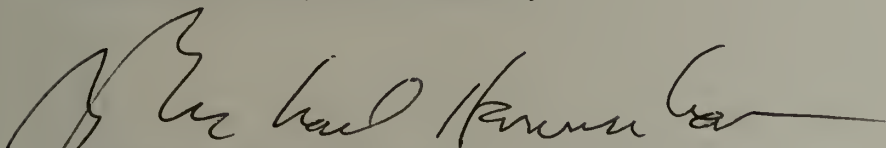
EDUCATION IN BELIEF SYSTEM COHERENCY
AND IDEOLOGICAL CONSTRAINT IN MASSACHUSETTS

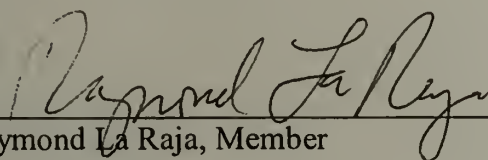
A Thesis Presented

by

DAVID CIUK

Approved as to style and content by:


Michael Hannahan, Chair


Raymond La Raja, Member

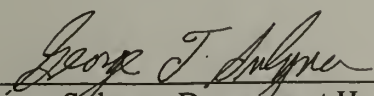

George Sulzner, Department Head
Political Science

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	iv
CHAPTER	
1. INTRODUCTION.....	1
2. PAST SCHOLARSHIP.....	4
3. HYPOTHESES.....	17
4. DATA AND METHODS.....	18
5. RESULTS.....	27
6. DISCUSSION.....	42
7. CONCLUSION.....	44
8. FUTURE RESEARCH.....	47
APPENDICES	
A. MILLER AND SHANKS' EXPLANATORY THEMES AND CAUSAL STAGES.....	49
B. TAX POLICY (EASY ISSUE) QUESTIONS.....	50
C. ABSTRACT POLICY (HARD ISSUE) QUESTIONS.....	52
BIBLIOGRAPHY.....	55

LIST OF TABLES

Table	Page
1. Issue-to-Issue Consistency.....	29
2. Easy Issue-to-Candidate Consistency.....	32
3. Hard Issue-to-Candidate Consistency.....	35
4. Total Issue-to-Candidate Consistency.....	39

CHAPTER 1

INTRODUCTION

It is arguable that the most important aspects of American representative democracy are regular elections and the peaceful changing of elected officials. Elections give voters a chance to communicate their policy preferences, whether they are in favor or out of favor with a particular administration, to political elites. However, it is debatable as to whether the electorate speaks clearly to elites via elections. Underlying the above statement regarding the purpose of elections are two assumptions: First, the electorate has enough political knowledge to form a coherent set of policy preferences that can be understood by elites. Second, the electorate has enough political knowledge to communicate these policy preferences clearly.

For several decades scholars have debated the truth of the two above assumptions. While several scholars express confidence in the sophistication of the American electorate, several others argue that voters lack the necessary skills to let their preferences guide their vote, and thus, are unable to communicate clearly during elections. In addition to the debate over whether or not these assumptions are true, there has also been a debate as to the sources of this sophistication. Scholars have argued that education, political activity, gender, race, income, or any combination thereof affect belief system coherency and ideological constraint.

This study will use Philip Converse's definition of a belief system and his definition of ideological constraint. A belief system is defined as "a configuration of ideas and attitudes in which the elements are bound together by some form of constraint or interdependence."¹ Ideas central to the belief system exhibit stability and are more

¹ Philip Converse, "The Nature of Belief Systems in Mass Publics," *Ideology and Discontent*, ed. Apter (London: Collier-MacMillan Ltd., 1964) 207.

likely to be ends. Ideas that are less central to the belief system are subject to change more rapidly than those central to the belief system. These idea-elements are more likely to be means.

Constraint “refers to the probability that a change in the perceived status of one idea-element... would psychologically require, from the point of view of the actor, some compensating changes in the status of idea-elements elsewhere in the configuration.”² Constraints may be purely logical, or they may be of a more subjective nature. Emotion, sympathy, enthusiasm for a particular policy preference, or past experience may influence constraint in a subjective manner. In an academic setting, it is best to think of constraint as a matter of degree.

This study will only take into account logical constraint due to its objectivity and measurability. Subjective restraint, though it may be prevalent throughout the electorate, is largely inconsistent between individuals and immeasurable. This study assumes that those with the highest degrees of logical constraint are political elites and that this logic is guided by the liberal-conservative continuum. This assumption is a safe one due to the fact that political elites and officials recommend and make policy, and one can conclude with a fair degree of accuracy that an elite in favor of “budget-balancing and tax-cutting... will also tend to oppose expansion of government welfare activities.”³ Voters, on the other hand, cannot be assumed to have such a high degree of ideological constraint. While one may be enthusiastic and cast his vote based on a candidate's willingness to cut taxes, the voter may not also be in favor of budget-balancing or other similar policies. In this case, the particular voter would be acting with a lower degree of ideological constraint and also have less belief system coherency. It is the purpose of this paper to

² Converse, 208.

³ Converse, 210.

further explore belief systems coherency and ideological constraint in the mass public.

This paper deals specifically with the effect of education on belief system coherency and ideological constraint. The question central to this paper is: What is the effect of education on belief system coherency and ideological constraint? An advanced education gives one the tools necessary to build skills to think in the abstract. As many public policies do not affect voters' daily lives, it is necessary to think of these policies in the abstract to form preferences on them. Without the ability to think of policies in the abstract, the electorate would be unable to link certain policy preferences with other related preferences. Further, this public void of ideological constraint would be unable to link their policy preferences with those of candidates and elites. Political scientists, in forming a better understanding of belief system coherency and ideological constraint, will be better able to understand democratic decision making. In knowing who exhibits constraint and who does not, it will become possible to better understand which parts of the electorate communicate clearly using policy preferences during elections and which parts send unclear signals.

The first section of this paper will review several prominent pieces of literature regarding belief systems and ideological constraint. It will discuss the evolution of scholarly thought on the subject over the past several decades and highlight agreements and disagreements in the field. The second section of this paper will include data and methods used as well as hypotheses. The final section of the paper will include a discussion of the role of education in belief system coherency and ideological constraint as well as implications for future research.

CHAPTER 2

PAST SCHOLARSHIP

Philip Converse's piece, "The Nature of Belief Systems in Mass Publics," was among the first scholarly works to challenge the assumption that the American electorate votes rationally and communicates messages based on policy preferences clearly to political elites during elections. Conducting a series of interviews in 1956, Converse was able to classify each of his interviewees into one of five broad categories regarding their ability to think and respond to policy questions in ideological terms. As less than half of these interviewees were able to respond in the correct, abstract ways, Converse was led to believe that much of the American electorate acted similarly. Follow-up interviews conducted in 1960 further decreased the author's confidence in the American electorate as he found that only half of his interviewees were able to discern between liberal and conservative policy preferences and link the particular preferences to the corresponding party. After dismissing the notion that each individual has his own unique cohesive belief system, Converse concluded that much of the electorate relies on social groups for prepackaged belief systems and policy preferences. These prepackaged belief systems, though they do link closely related policy preferences to each other, do not incorporate more remote policy preferences that are abstract to the social group.

Converse linked education, ability to conceptualize, and political activity to high degrees of constraint. In short, those with the cognitive capacity to think about policy preferences abstractly with regards to the liberal-conservative continuum will link policy preferences more effectively, thus resulting in stronger constraints between separate policy preferences.⁴ Roy Bowles and James Richardson effectively expanded on this

⁴ Converse, 225.

notion in their 1969 sociological study, "Sources of Consistency of Political Opinion." The authors hypothesized "that interest in politics and ability to use abstract ideas precede ideological conceptualization, which in turn leads to consistency of opinion."⁵ That is, the ability to use abstract ideas combined with an interest of politics will lead to an ideological conception of political events and the use of the liberal-conservative continuum in organizing ideas. This, in turn, will lead to greater consistency between policy preferences. The authors, conducting a series of interviews with several young Democrats and Republicans in Texas and taking into consideration grade point averages and consistency of opinion tests, were able to determine that the independent variables used (ability to use abstract ideas and interest in politics) effectively predicted liberal-conservative consistency of political opinion. The data supported their hypothesis but also showed an independent relationship between ability and consistency and another between interest and consistency when ideological conception was controlled for.

John C. Pierce's research regarding the relationship between issue salience and linkage organization in mass belief systems described belief systems of 1960s and 1970s voters as "more consistently organized with one another... (and) also more consistently tied to partisan choice."⁶ Controlling for stimulus to issue salience by taking into account election year, cognitive sophistication through interview responses, and issue domain, Pierce found that issue salience accounts for 22 percent of variance in the organization of issues. That is, those issues most central in the public forum displayed the greatest constraint between each other in voters' belief systems. This new reliance on issues, however, might not have been due to increasing voter sophistication. Instead, Pierce

⁵ Roy Bowles and James Richardson, "Sources of Consistency of Political Opinion," *The American Journal of Sociology*, Vol. 4, No. 6. 1969: 676.

⁶ John C. Pierce, "The Relationship Between Linkage Salience and Linkage Organization in Mass Belief Systems," *The Public Opinion Quarterly*, Vol. 39, No. 1. 1975: 102.

argued that political elites and candidates for office were centering their campaigns on issue packages, and it is to the extent that these elites promote these packages that voters become able to effectively link issue preferences together.

Nie, Verba, and Petrocik's 1976 work, *The Changing American Voter*, furthered the notion of an increasingly sophisticated electorate and actually expressed confidence in its ability to make decisions rationally. Nie et al. used national survey data gathered between 1939 and 1974 along with 30,000 interviews in hope of gaining a deeper understanding of the American electorate. Voters, moving from reliance on candidate personality and party affiliation to reliance on policy preference, were becoming more issue-oriented and more independent of prepackaged belief systems assembled by social groups and political parties. To further reinforce this notion, Nie et al. attributed the growing number of independent voters to a decrease in dependence on political parties and an increase in individual ideological thinking.

Along with arguing that the American electorate had become more sophisticated through the 1960s and 1970s, Nie et al. argued that a new range of intense emotional issues present in American politics along with less Eisenhower era "blandness" caused the public to discard its old belief system in favor of a new one. These issues (the Vietnam War, racial issues, the urban crisis, increased drug use, and Watergate)⁷ caught the attention of the public and clustered accordingly. These issues, far removed from traditional party platforms, forced voters to concentrate on their own issue preferences and link these preferences to specific candidates rather than to entire parties. The causal mechanism, argued Nie et al., was reversed. In the 1950s parties and candidates gave issue preferences to voters in neat packages. In the 1960s and 1970s, voters were making

⁷ Norman Nie et. al., *The Changing American Voter*. (Cambridge, MA: Harvard University Press, 1979) 96-109.

their own preferences and linking them to corresponding parties and candidates. Consequently, partisan loyalty weakened among young and old voters alike. In short, due to these new issues, voters were able to develop a clear-cut set of policy preferences and use these preferences as a guide to candidate selection. Further, Nie et al. did not simply attribute the increasing sophistication to changing times as Pierce did. Instead, these authors argued that members of the electorate were actually learning, developing meaningful constraints, and using them to communicate to political elites. They were not simply receiving prepackaged beliefs from elites and applying them as such.

George Bishop's "The Effect of Education on Ideological Consistency" expressed discontent with Nie's 1974 work regarding increased voter sophistication due to his "inadequate control of level of education on attitude consistency."⁸ Bishop argued that rising levels of education throughout the electorate account more accurately for increased ideological consistency than increased salience of certain political issues. Bishop, scrutinizing Nie's salience hypothesis, noted that the "significant rise in ideological consistency among the 'not at all interested' group..." constitutes a problem for Nie. "It is still quite difficult to understand why consistency should have increased by 21 points from 1960 to 1964 among those for whom politics is... a remote concern."⁹ Again, Bishop argued that another force, namely education, is responsible for this increased consistency.

Conducting a more refined analysis of education and employing the use of a more direct indicator of liberal-conservative ideological consistency, Bishop measured each individual's liberal-conservative index scores based on their feelings toward liberals and conservatives. He then compared these scores to attitudes on "various sociopolitical

⁸ George F. Bishop, "The Effect of Education on Ideological Consistency," *The Public Opinion Quarterly*, Vol. 40, No. 3. 1976: 338.

⁹ Bishop, 338.

issues and presidential and vice presidential candidates in the 1964, 1968, and 1972 elections.”¹⁰ The degree to which an individual's attitudes matched his index scores determined the amount of consistency in political opinion. The greater the correlation between the index scores and attitudes was, the greater the liberal-conservative consistency. In short, Bishop found that college graduates were far more likely to use the liberal-conservative continuum in forming their political opinions; therefore, they were far more likely to be ideologically consistent. He further hypothesized that as the quality and quantity of education rose in the nation, ideological consistency would do the same.

Bishop failed to account for the fact that those with only a grade school education were more ideologically consistent in candidate evaluations and issue attitudes than those who completed “some high school,” “high school,” and “some college.”¹¹ If it is odd that those uninterested in politics increased their consistency scores between 1960 and 1964 (as Nie’s data shows), then it is odd that those with the least amount of education scored higher than several other groups on ideological consistency in 1972. It might be the case that those least educated individuals were also those dealing directly with the effects of the Vietnam War, the urban crisis, racial issues, and increased drug use, and that this exposure made all these issues salient in their belief system. This, if it were the case, would lead one to believe that both increased education and heightened issue salience, not only one or the other, led to greater ideological consistency.

Holm and Robinson reached a conclusion contrary to Bishop in their piece, “Ideological Identification and the American Voter.” Here, Holm and Robinson argued that ideological self-identification is a better predictor of the vote than party identification. Further, groups such as independents, the educated, and the youth will

¹⁰ Bishop, 341.

¹¹ Bishop, 345.

more often use ideological identification over party identification in that these groups are “better informed politically, generally more cognizant of policy differences between candidates and, therefore, more likely to make a decision based on policy preferences.”¹² Analyzing the effects of ideological identification and party affiliation on the 1972 presidential vote revealed that both ideological identification and party affiliation had near exact effects on the vote. The effects of ideological identification were much more substantial than in the past election of 1964 and 1968. Also interesting, the authors found that among those groups they thought sensitive to policy concerns, college attendees were more ideological but also more tightly affiliated with a party. In other words, the educated and the youth were no more likely than other groups to use ideology and partisan affiliation in their decision making process.

Carmines and Stimson's 1980 article, “The Two Faces of Issue Voting,” expanded on Holm and Robinson's article and attempted to further differentiate between sophisticated (hard-issue) and unsophisticated (easy-issue) voters. Hard-issue voters, the authors argued, are educated, sophisticated, and informed. These voters are capable of engaging in “sophisticated decision calculus... that represents a reasoned and thoughtful attempt by voters to use policy preferences to guide their electoral decisions.”¹³ Easy-issue voters, on the other hand, rely on issues that have been ingrained in political debate to form “gut responses” to candidates and parties. These voters, relying on gut responses, use no sophistication in their decision making processes and, therefore, are no more sophisticated than non-issue voters.

The authors, using NES data, were able to compare policy preferences of voters

¹² John D. Holm and John P. Robinson, “Ideological Identification and the American Voter,” *The Public Opinion Quarterly*, Vol. 42, No. 2. 1978: 237 (footnote 3).

¹³ Edward G. Carmines and James A. Stimson, “The Two Faces of Issue Voting,” *The American Political Science Review*, Vol. 74, No. 1. 1980: 78.

on one easy and one hard issue, and analyze those policy preferences with the percent of the vote won by McGovern. In examining the hard issue (continue to fight in Vietnam or withdraw forces) and the corresponding votes, one can see that high information voters more consistently linked their policy preference with the correct candidate. That is to say, high information voters who preferred to withdraw from Vietnam more consistently voted for McGovern than medium or low information voters who wanted the same. In examining the easy issue (segregation and desegregation) and the corresponding votes, the reader is able to see that information level does not neatly correspond to policy preference and vote. In this instance, as there was not much mention of race in either candidate's campaign, there does not seem to be much interplay between information, policy preference, and candidate choice. Upon examination, the authors were able to conclude that hard-issue voters used available information to form policy preferences and link these preferences to the correct candidate while easy-issue voters only used gut reactions.

The authors also attempted to find possible sources of voter sophistication in education, political information, and political activity. Using statistical analysis, the authors determined that sophisticated voters are slightly more educated than unsophisticated voters. The same holds true for the other two sources of sophistication. Sophisticated voters are both more informed and more politically active than unsophisticated voters. In sum, sophisticated voters, often more educated, informed, and involved, more ably use available information in connecting their policy preferences and candidate choice while less sophisticated voters decline to use this available information and seem to make their decisions in a less structured manner.

In 1982 Carmines and Stimson revisited the conclusion reached in their 1980 work (that there is a strong relationship between consistency, education and political knowledge) and controlled for racial attitudes as they relate to ideological consistency. The authors hypothesized that the introduction of racial issues into mainstream partisan politics would not greatly affect the constraints of unsophisticated voters while it would alter the constraints of sophisticated voters in that they have the cognitive ability to respond and react to the new political stimuli.

The authors, analyzing issue constraint and issue type, were able to recognize that racial issues, between 1964 and 1973, became more central to belief systems across the nation. With further analysis of the 1972 presidential election, between the conservative Nixon and the liberal McGovern, the authors hoped to determine whether short term stimuli (hard issues) or race, defined as an easy issue as it has long been a central issue in politics but only for a short time in partisan politics, was at the core of constraint in 1972. If race were at the core of constraint then controlling for it would greatly reduce the level of constraint among the politically sophisticated. If several short term stimuli were central then controlling for race would produce only marginal change in level of constraint.

Without controlling for racial attitudes, the authors found precisely what they expected. Those in the highest cognitive ability group had a good deal more constraint between policy preferences than those in the lower cognitive ability groups. However, controlling for race greatly reduced the restraint among even the most sophisticated group. In fact, variance in the top group was only 2.5 percentage points higher than that in the lowest group.¹⁴ In short, controlling for racial attitudes¹⁴ made it apparent that none

¹⁴ Edward G. Carmines and James A. Stimson, "Racial Issues and The Structure of Mass Belief Systems." *The Journal of Politics*, Vol. 44, No. 1. 1982: 11.

of the four groups classified by cognitive ability showed the ability to constrain beliefs without the binding force provided by race. Contrary to their previous article, this piece of scholarship concluded that race and easy issues are central to the organization of political beliefs even when they should not be. Apparently, according to this article, cognitive ability has little to do with the amount of constraint in belief systems. Instead, it seems as though issue salience is the most efficacious factor regardless of cognitive capacity. Again, it appears as though the American electorate is less sophisticated than Nie et al. concluded.

Mikel Wyckoff's 1987 article assessed the measures of ideological sophistication as indicators of attitudinal consistency. Wyckoff criticized previous scholarship in that it assumes "persons who analyze political affairs using abstract dimensions of judgment will display policy attitudes that fit into coherent and recognizable patterns."¹⁵ The author contended that previous studies have required those being analyzed to possess one-dimensional policy preferences and these studies do not account for the possibility of more complex multidimensional belief systems. Also, those studies done at the aggregate level do not allow for unique and idiosyncratic structures regardless of their sophistication. After performing a series of validity tests on previous measures of attitudinal consistency, Wyckoff concluded that ideological sophistication is, in fact, not an incredibly accurate measure of attitudinal consistency. That is, varying education and conceptualization levels do not neatly correspond to ideological consistency.

Wyckoff, using statistical analysis, went onto test the relationship between such things as political interest, knowledge, socioeconomic status, and education on consistency. In short, he found that "political knowledge, educational achievement, and

¹⁵ Mikel L. Wyckoff, "Measures of Attitudinal Consistency as Indicators of Ideological Sophistication: A Reliability and Validity Assessment," *The Journal of Politics*, Vol. 49, No. 1. 1987: 148.

socioeconomic status display the highest validity coefficients, but even these relationships (as they pertain to consistency) are weak...”¹⁶ He also found that level of conceptualization does not necessarily lead to attitudinal consistency. In a later article, Wyckoff again reached the conclusion that a scholar should be wary to link attitudinal consistency with political and ideological sophistication. In sum, Wyckoff came to the conclusion that scholars, for quite some time, have been mistaken to measure attitudinal consistency with cognitive ability. Instead, Wyckoff proposed that more accurate predictors of attitudinal consistency might be socioeconomic status or partisan affiliation.

Thus far, most prominent literature in the field has either argued with Converse, in that the American electorate is largely unable to create coherent belief systems with adequate ideological constraints or with Nie et al., in that a change has occurred and the public is capable of communicating clearly with elites. Miller and Shanks took a different route in *The New American Voter*. Here, the authors repeatedly emphasized the stability the American electorate has exhibited since the 1950s. The two argued that one's partisan identification is the best predictor of the vote. “Partisan identification... represents the only type of general attitude or predisposition that is... guaranteed to have... an influence on national elections... it is always activated... in elections that call for voters to choose between the two major parties.”¹⁷

Another development in Miller and Shanks' work was their multiple-stage explanation of political preferences. The authors argued that one's vote can be explained through eight causal stages that follow a specific temporal sequence. The sequence starts with non-political factors, moves to partisan identification and a series of policy predispositions, and eventually moves through the evaluation of current conditions,

¹⁶ Wyckoff, 158.

¹⁷ Warren Miller and J. Merrill Shanks, *The New American Voter* (Cambridge: Harvard University Press, 1996) 287.

candidates, and parties. Eventually, this process results in a vote for a particular candidate.¹⁸ This sequence exhibits one-way causality such that earlier stages affect later stages, but later stages cannot affect earlier ones. For example, partisan identification or policy predispositions can affect the evaluation of a candidate, but the evaluation of a candidate cannot affect policy predispositions. In sum, while all stages affect the vote, earlier stages exhibit more efficacy than later stages. Further, partisan identification remains the best predictor of one's decision between candidates because of easily recognized cues.

Mark Smith's "Ballot Initiatives and the Democratic Citizen" worked to show that states that employ the use of ballot initiatives and referenda create more knowledgeable voters than states that do not. He also hypothesized that "voters in states using initiatives increase their levels of political knowledge but non-voters in the same states do not."¹⁹ Smith measured political knowledge with an index created from seven factual questions regarding political names, parties, policies, and the liberal-conservative continuum. Smith's independent variable of interest was the number of ballot initiatives and referenda that appeared on the ballot in the given state, and he controlled for race, gender, age, education, income, and attention to news media. Smith concluded that states that use ballot measures tend to have more knowledgeable voters and attributes this to the fact that ballot initiatives do not provide partisan cues to voters. Voters, when deciding on initiatives, are forced to think through the policy and its possible effects. Smith also found, contrary to his second hypothesis, that voters and non-voters in these states tend to exhibit equal amounts of political knowledge. Smith also concluded that there are other good predictors of political knowledge including education, income, race, gender, and

¹⁸ See Appendix A.

¹⁹ Mark A. Smith, "Ballot Initiatives and the Democratic Citizen," *The Journal of Politics*, Vol. 64, No. 3, 2002: 894.

attention to campaigns.

Regina Branton's piece, "Examining Individual-Level Voting Behavior on State Ballot Propositions," also used ballot initiatives as an indicator of ideological constraint. Branton, attempting to find a "consistent relationship between partisanship and individual-level voting behavior,"²⁰ examined the results of several ballot propositions regarding economics, term limits, and moral issues. Branton's independent variable of interest was partisan identification, and her model included ideology, age, sex, income, and education. She concluded that partisanship is related to voting behavior on economic initiatives, term limits, and moral issues. That is, voters are able to pick up on cues other than partisan cues to cast a vote that corresponds to their partisan affiliation. She also concluded that education plays a significant role in voting behavior such that college graduates tend to link partisan identification to their vote. This is especially true on social and moral initiatives.

There are two relatively distinct sides to the debate regarding the political sophistication of the American public. On one hand there is a group of scholars that argue much of the public relies on social groups or political parties to provide prepackaged belief systems for voters. These scholars, including Converse, Pierce, Holm and Robinson, Carmines and Stimson, Wyckoff, and Miller and Shanks, express limited confidence in the electorate's ability to reason through separate policy preferences and link these preferences to the appropriate candidate. Instead, voters rely on easily recognizable cues to build policy preferences and choose candidates.

On the other hand, there is another group of scholars that express confidence in many voters to form coherent belief systems and communicate clearly with elites. This

²⁰ Regina P. Branton, "Examining Individual-Level Voting Behavior on State Ballot Propositions," *Political Research Quarterly*, Vol. 56, No. 3. 2003: 368.

group, including Bowles and Richardson, Nie et al., Bishop, Branton, and Smith, argue that certain groups in the electorate have the ability to identify their own policy preferences and then link them to the appropriate candidate during elections.

There has been a significant increase in the amount of scholarship produced on belief system coherency and ideological constraint since the 1950s. Virtually all of this scholarship agrees to the utility of high amounts of constraint. That is, a great amount of constraint in the American electorate would produce high belief system coherency and also give the electorate a more powerful voice. While this is in agreement, the same scholars disagree about the amount of constraint in the electorate and what types of variables produce this constraint.

Methodologically, most past studies have relied largely upon survey data. While this method of data collection offers the scholar the opportunity to analyze and make generalizations about individual voters, there are many factors that may contribute to analytical confusion. First, it is not guaranteed that respondents to the survey will read and interpret each question in exactly the same manner. Second, while respondents to surveys may have specific policy preferences and candidate preferences, they may not be regular voters. If this is the case, the scholar may be measuring a part of the population that he is not explicitly interested in. Third, studies that side-step the second problem by using exit poll data may run into another problem: the problem of self-reporting. Voters may falsely report the way they cast their votes in an effort to seem smarter or more knowledgeable to those conducting the poll. There are also concerns regarding question selection, phrasing, and order.

CHAPTER 3

HYPOTHESES

As stated before, it is in the interest of political scientists to get a better understanding of the belief system coherency and ideological constraint of the electorate because with this knowledge comes the possibility to better understand messages sent to political elites via elections. It is logical that education would play a significant role in exhibited ideological constraint as well as clearly communicating with elites through elections due to the fact that education gives one the necessary tools to think about and evaluate abstract policy preferences. This ability is necessary to link each policy preference with the next and effectively compare personal preferences with the preferences of candidates for office.

This being the case, this study will offer two hypotheses:

Hypothesis 1: This study hypothesizes that populations with a greater amount of educated voters will more accurately link practical policy preferences with more abstract policy preferences.

Hypothesis 2: Populations with more educated people will more effectively compare their policy preferences with the policy preferences of candidates for office and vote accordingly.

In this way, it is expected that more educated populations will communicate messages with greater clarity during elections.

CHAPTER 4

DATA AND METHODS

This study conducts a case study to test these hypotheses. The case it will examine is the state of Massachusetts. The units of analysis are the 351 cities and towns in the state.

Massachusetts is an appropriate choice for this case study for several reasons. First, Massachusetts employs the use of ballot initiatives and tracks these returns at the town level. Ballot initiatives, as was stated in both Smith (2002) and Branton (2003), make the voter read, analyze, and choose a preference without the help of explicit partisan cues. This being true, it is possible to analyze policy preferences, as they pertain to a town, with only minimal confounding effects of partisan affiliation. Further, it is possible to examine several similar policy preferences, and thus, a significant portion of a mass belief system, with minimal confounding effects of partisan affiliation. In short, a single ballot initiative forces a voter to think through the entire policy and its implications. Several ballot initiatives force one with a coherent belief system to think in the abstract of how each ballot initiative affects the next. Collecting and analyzing the results of these ballot initiatives gives a unique perspective regarding a town's political leaning toward conservative or liberal policy preferences.

Second, as a state, Massachusetts has the highest percentage of citizens with a bachelor's degree or higher.²¹ The effects of education on the dependent variables should be apparent. While there are a high percentage of people in the state with a bachelor's degree or higher, there is also an adequate range and variance in percent of people with a bachelor's degree between observations. This study, using this case, will be able to

²¹ 33.2% according to <http://factfinder.census.gov/>

effectively compare the effects of education on belief system coherency and ideological constraint on demographically diverse towns.

This case poses a good test for the two aforementioned hypotheses derived from past scholarship on belief systems, ideological constraint, and variables that might affect each. While the case can be classified as a theory-testing case, it cannot be classified as a most-likely or least-likely case for the theory behind the hypotheses. Instead, the case can best be classified as a “more-likely” case for the theories claiming education has a significant positive effect on ideological constraint and message clarity.

In the testing of hypothesis 1, the dependent variable of interest is issue-to-issue consistency. Issue-to-issue consistency can be defined as the amount of consistency between groups of related policy preferences exhibited by a town. This study measured issue-to-issue consistency for each town on a scale of 0 to 100. The point at which each town falls on the scale was determined by subtracting the absolute value of the difference between two conservatism index scores from 100. The first index score taken into account for each town was its “simple conservatism index score.” The second score taken into account was the “difficult conservatism index score.”²²

The simple conservatism index score for each town was calculated by finding the percentage of conservative votes cast on three individual tax policy ballot initiatives²³ then taking the sum of the three percentages and dividing by 300.²⁴ Essentially, this index score measures how conservative each town is with respect to tax policy issues.

This study treats tax policy issues as “easy issues” because the debate over tax policy has become “so ingrained over a long period that it structures voters’ gut

²² If a town’s simple conservatism index score was 55 and its difficult conservatism index score was 60, then its issue-to-issue consistency score would be $100 - (|55 - 60|) = 95$.

²³ See Appendix B for the list of tax policy questions.

²⁴ If 65% of a town voted conservatively on tax policy question 1, 55% on question 2, and 30% on question 3 its simple conservatism index score would be $(65 + 55 + 30) / 300 = 50$.

responses”²⁵ to particular parties. Tax policy has been a central issue of nearly every campaign for decades, and candidates and parties over the years have made it central to campaigns. This repetitiveness has conditioned voters to react similarly to most tax policy questions without requiring abstract thought and analysis. Due to the fact that these gut responses require little conceptual sophistication, it is expected that consistency between these questions will be distributed evenly across the population.

The difficult conservatism index score for each town was calculated by finding the percentage of conservative votes cast on three separate ballot initiatives dealing with more abstract policy measures.²⁶ Specifically, one initiative dealt with education policy, one dealt with health care policy, and one dealt with environmental policy. This index score is meant to measure how conservative each town is with respect to more abstract policy issues.

This study considers these issues as “hard issues” because they are rather abstract to everyday life. These issues have not been ingrained into voters' minds, and they do not evoke a gut response. The voter, in order to effectively analyze and evaluate these policies, must think of them in the abstract as they relate to other policy preferences. Policy preference, in this case, should be “the final result of a sophisticated decision calculus...”²⁷ It is expected that consistency between these issues, and consistency between easy issues and hard issues, will be exhibited more often in towns with higher percentages of college graduates.

This hypothesis test will use multiple regression analysis to find the relationships between the independent and dependent variables. Again, the dependent variable is issue-to-issue consistency. The primary independent variable of interest is education, and

²⁵ Carmines and Stimson (1980), 78.

²⁶ See Appendix C for the list of difficult questions.

²⁷ Carmines and Stimson (1980), 78.

education is measured as the percent of a town that has earned a bachelor's degree or higher. Control variables are age, Republican enrollment, Democrat enrollment, and an interaction variable between education and Democrat enrollment.

The independent variable age was measured as the median age of a town. This study controls for the effects of age on issue-to-issue consistency because it is possible that age could affect policy preference. Miller and Shanks argue that as people grow older they become set in their voting ways, regardless of if they are consistent with their policy preferences. In short, this model takes age into consideration to separate its effects from those of education on issue-to-issue consistency.

The independent variable Republican enrollment is measured as the percent of a town enrolled as a Republican. The variable Democrat is measured as the percent of a town enrolled as a Democrat. This study controls for these variables as they have influence on the formation of policy preferences and issue-to-issue consistency. Miller and Shanks argue that partisan affiliation and policy related predispositions form at about the same time in a person, and that they have nearly equal effect on one's vote. In this way, partisan affiliation may interfere with the effects of education on issue-to-issue consistency, and therefore it is controlled for.

The interaction term between Democrat enrollment and education measures the combined effects of education and Democrat enrollment on issue-to-issue consistency. The value of this variable was found for each town by multiplying education with Democrat enrollment. This variable was added as a control because of its possible effect on consistency. It will also shed valuable light as its effect will be separate from that of Democrat enrollment alone.

Race was measured as the percentage of a town that is non-white. Gender was measured as the percentage of a town that is female. These two were included on the model due to the fact that they may influence one's decision making. In this way, they could also affect consistency. Including these two variables in the model separates their effects from those of education.

Other independent variables that were considered but excluded from the model included per capita income, an interaction between education and Republican enrollment, and interactions between age and party enrollment. Income was excluded because of its strong correlation with education ($r = 0.86$). Income, in this case, measures much the same thing as education. Including it would cause a problem of multicollinearity.

The interaction variables were strongly considered for this model. The three variables, interaction between Republican enrollment and education, interaction between Republican enrollment and age, and interaction between Democrat enrollment and age, were added into preliminary models for this study. They were excluded from the final model, however, because of their insignificance.

In addition to finding the mathematical relationship between education and issue-to-issue consistency while controlling for variables, this study will also assess the overall impact of education on the statistical model. This will be done by running the regression once without including the education variable and the interaction variable combining Democrat enrollment and education, then running it again with education and the interaction variable. Comparing the adjusted R-squared scores and the F-statistics will shed light on how much the addition of the variable education actually improves the performance of the model.

The test for hypothesis 2 will consist of running three multiple regressions. The primary independent variable of interest will again be education, and the control variables will again be median age, Republican enrollment, Democrat enrollment, race, gender, and the interaction term between Democrat enrollment and education. They are included in these three models for the same reasons they are included as controls in the test of hypothesis 1.

The dependent variable of interest in the first of the three regressions is easy issue-to-vote consistency. Easy issue-to-candidate consistency can be thought of as the amount of consistency between a town's simple conservatism index score and the percentage of votes cast for Republican Mitt Romney in the 2002 Massachusetts Gubernatorial election. This consistency was measured on a scale between 0 and 100. The point at which each town falls on the scale was determined by subtracting the absolute value of the difference between the simple conservatism index score and the percent of the town that cast a vote for Romney from 100.²⁸

The dependent variable of interest in the second of the three regressions is hard issue-to-vote consistency. Hard issue-to-candidate consistency can be thought of as the amount of consistency between a town's difficult conservatism index score and the percentage of votes cast for Romney in the 2002 Massachusetts Gubernatorial election. Again, this consistency was measured on a scale between 0 and 100. The point at which each town falls on the scale was determined by subtracting the absolute value of the difference between the difficult conservatism index score and the percent of the town that cast a vote for Romney from 100.²⁹

²⁸ If a town's simple conservatism index score was 60, and 75% of the town voted for Romney, then the easy issue-to-candidate consistency score would be $100 - (|60 - 75|) = 85$.

²⁹ If a town's difficult conservatism index score was 50, and 45% of the town voted for Romney, then the difficult issue-to-candidate consistency score would be $100 - (|50 - 45|) = 95$.

The dependent variable of interest in the third of the three regressions is total issue-to-vote consistency. Total issue-to-candidate consistency can be thought of as the amount of consistency between a town's total index score and the percentage of votes cast for Romney in 2002. The total conservatism index score for each town was calculated by taking the percentage of conservative votes cast on all six ballot initiatives, then taking the sum of the six percentages and dividing by 600.³⁰ Essentially, this index score measures how conservative each town is with respect to all issues examined. Again, this consistency was measured on a scale from 0 to 100, and the point at which each town fell on the scale was determined by subtracting the absolute value of the difference between the total conservatism index score and the percent of the town that cast a vote for Romney from 100.³¹

The significance of education to the regression models will be determined in the hypothesis test the same way as it was determined in the test of hypothesis 1. Each of the three regression models will be run without education and the interaction between education and Democrat enrollment as independent variables and then run again with them. The overall impact of education on the models will be determined by comparing adjusted R-squared scores and F-statistics.³²

This study, in running these regression models, attempts to make explicit the relationship between education and belief system coherence and ideological constraint. Ideological constraint, as was stated before, is the mechanism that connects one policy preference with the next, and a belief system is one's complex network of policy

³⁰ If 50% of a town voted conservatively on question 1, 60% on question 2, 45% on question 3, 70% on question 4, 65% on question 5, and 30% on question 6 its total conservatism index score would be $(50 + 60 + 45 + 70 + 65 + 30) / 600 = 53.33$.

³¹ If a town's total conservatism index score was 50, and 40% of the town voted for Romney, then the total issue-to-candidate consistency score would be $100 - (|50 - 40|) = 90$.

³² This study uses analytical weights to control for town population. Each town was assigned a weight based on the number of registered voters in the town. This was done so towns with more registered voters had a greater impact on the statistical output than towns with less registered voters.

preferences. A researcher, in examining an ideal belief system with perfect ideological constraint, would find that all policy preferences are logically linked. This researcher, when examining this ideal belief system, could correctly predict preferences at the perimeter of the network by knowing preferences at the core.

In the American political system, where preferences are often split between liberal and conservative, a belief system with perfect ideological constraint would contain preferences that were either all liberal or all conservative. The researcher, upon observing and analyzing this particular belief system, could conclude that his subject uses the liberal-conservative continuum to guide his policy preferences and that he can effectively link core preferences with abstract preferences with implications in mind. In this way, consistency along the liberal-conservative continuum indicates ideological constraint, and belief systems with higher degrees of constraint are more coherent than belief systems with less constraint.

It is important to note that this study uses aggregate data. The elections data are from 1998, 2000, and 2002. The demographic data were collected during the 2000 Census, and the party enrollment data were collected in 2004. The overall change in population in Massachusetts between 2000 and 2004 is estimated at 1.1 percent,³³ and it is safe to assume that the population change between 1998 and 2004 is less than two percent. The small change in population will not skew the general voting trends this study analyzes, and this small change in population is not a threat to validity.

In order to avoid an ecological fallacy that might come with the use of aggregate data, this study is not analyzing individual voters, nor is it identifying causal mechanisms that explain why individual voters form preferences or vote in a particular fashion. This

³³ <http://quickfacts.census.gov/qfd/states/25000.html>

study, as it uses data at the town level, can only make general claims about the voting behavior of towns. For example, rather than claim that individual voters with education vote in a more consistent fashion than voters with less education, this study will claim that towns with a higher percentage of college graduates tend to vote more consistently than towns with lower percentages of college graduates. While this type of data and analysis may lead to predictions regarding individual voters, it will not make causal claims at the individual voter level.

CHAPTER 5

RESULTS

A brief examination of the correlation coefficients between easy issue ballot initiatives and hard issue ballot initiatives shows that towns with higher rates of education tend to have greater correlation between easy issue questions. Specifically, towns with a greater than average percentage of college graduates (towns in which more than 34.5% of people have a bachelor's degree) have an average correlation coefficient of $r = 0.85$. Towns with a lower than average percentage of college graduates have an average correlation coefficient of $r = 0.57$. While the difference in education is not overwhelming, it does seem as though more educated towns vote more consistently on tax issues than less educated towns.

The examination of correlation coefficients for hard issue initiatives yields a different conclusion. Towns with a greater than average percentage of college graduates have an average correlation coefficient of only $r = 0.18$. Towns with a lower than average percentage of college graduates have a nearly the same average correlation coefficient at $r = 0.19$. In this case, it seems as though more educated towns act with the same amount of constraint as towns with less education.

At first glance it appears as though this study was wrong to expect that consistency between easy issue questions would be distributed evenly throughout the population while consistency between hard issue questions would be more prevalent in towns with a greater percentage of educated people. Instead, it seems as though the opposite is true. Consistency on easy issue questions is greater in more educated towns while hard issue consistency is distributed evenly across the population. More refined multiple regressions analyses will help to further clarify the role of education in voter

consistency.

The average issue-to-issue consistency score across all towns was much higher than expected at 86.25. Aside from the high average score, there are many surprising findings in examining the results of the regression of issue-to-issue consistency on education and the control variables. The results of the regression (Table 1) showed there to be a significant negative linear relationship between education and issue-to-issue consistency, but it also showed there to be a strong positive linear relationship between the interaction of education and Democrat enrollment and the dependent variable. It is also surprising to find that there is a strong negative linear relationship between Democrat enrollment and the dependent variable.

An examination of the adjusted R-squared statistics and the F-statistics reveals there to be a significant difference in the two models. The second regression model accounts for over one quarter of variance between predicted values and observed values while the first regression only accounts for 12.6 percent. A calculation in the difference in the F-statistics between the two models reveals there to be a statistically significant difference at the five percent level. In sum, the addition of the two independent variables does help to explain issue-to-issue consistency.

While the difference between the two regression models was expected, the exact nature of the differences comes as a surprise. It was expected that there would be a positive linear relationship between education and the dependent variable. Instead, there is a strong negative relationship. Also, the strong negative linear relationship between Democrat enrollment and issue-to-issue consistency was unexpected. The only expected and observed outcome of the regression was the strong positive linear relationship between the interaction term and the dependent variable.

Table 1: Issue-to-Issue Consistency³⁴

	Regression 1	Regression 2
Median Age	-.106 (.072)	-.046 (.068)
Democrat	.048 (.036)	-.136** (.043)
Republican	-.145* (.068)	-.057 (.071)
Female	.236 (.140)	.142 (.131)
Non-White	-.016 (.024)	-.003 (.022)
Education		-.205** (.041)
Interaction Term		.006** (.001)
Constant	79.64 (6.66)	86.81 (6.23)
R-Squared	0.1385	0.2717
Adjusted R-Squared	0.1261	0.2569
F-Statistic	11.10	18.28

The results of the regression suggest that interest in politics and the increased ability to think in the abstract are necessary elements for a cohesive belief system in the mass public. Towns, when unguided by explicit partisan cues, seem to generate policy preferences in a rather inconsistent manner. The theory linking high rates of education and increased consistency was stated before; however, the hypothesis neglected the

³⁴*Denotes statistical significance at the $p < .05$ level

**Denotes statistical significance at the $p < .01$ level

This study takes uses data from an entire population. The study identifies statistical significance to highlight strong relationships between independent and dependent variables. The study does not identify statistical significance to identify the probability of finding the reported results if the null hypothesis were true.

potential effect of political interest on consistency. It appears as though education and the ability to conceptualize, without interest in politics, do not result in consistency, ideological constraint, and belief system coherency. An interest in politics, represented in towns by high party enrollment, is a necessity in linking everyday policies to those more abstract, and therefore, it is a necessity for high degrees of ideological constraint and belief system coherency in a mass public setting.

With regards to hypothesis 1, it is inaccurate to conclude that education has a clear impact on issue-to-issue consistency or ideological constraint. However, it is also inaccurate to conclude that education has no effect on constraint. Converse, in his 1964 piece, observes that while educated voters tend to vote more consistently than uneducated voters, those with the highest degrees of constraint were those voters who expressed an interest in politics and had the ability to think in the abstract. Here, this study agrees with Converse. Education, in combination with political interest, leads to the highest degrees of ideological constraint and belief system coherency in towns.

The test for hypothesis 2 concerns both policy preference and linking these preferences to the vote for governor. First, before examining the results of the several regressions, it is necessary to note another unexpected finding. To reiterate, easy issues evoke gut responses in voters and these responses are easily linked with a particular party or candidate. The analysis of hard issues requires considerable abstract thought and linking these preferences to candidates is more difficult. This study, for the aforementioned reasons, expected easy issue-to-candidate consistency scores to be higher than hard issue-to-candidate consistency scores. Empirical results showed the expectations to be wrong. The mean easy issue-to-candidate consistency score was 87.68 while the mean hard issue-to-candidate consistency score was 93.47. The mean total

issuc-to-candidate consistency score was 93.20. All of these means were higher than expected.

The first set of regressions run in testing hypothesis 2 used easy issue-to-candidate consistency as the dependent variable. The results of the regressions (Table 2) show there to be a relatively weak relationship between education and the dependent variable, and a significant positive linear relationship between the interaction term and the dependent variable. There were also noteworthy relationships between median age and consistency, Democrat enrollment and consistency, and Republican enrollment and consistency.

A comparison of the two adjusted R-squared statistics here reveals there to be no significant improvement in model performance with the addition of the two independent variables of interest. A comparison of the F-statistics, though each F-statistic is high, reveals there to be virtually no change in performance with the addition of the variables. It appears that education and the interaction between education and interest have only a minor effect on easy issue-to-candidate consistency. This, however, is not a surprise considering the nature of these easy issues. Judging from the data, it does appear that easy issue-to-candidate consistency is evenly distributed throughout the population and that an increase in education and interest will not greatly impact these consistency scores.

An examination of the coefficients and significance of the control variables reveals an interesting trend in voting behavior. The results of the regression show that median age, Democrat enrollment, and Republican enrollment all have significant impact on easy issue-to-candidate consistency. Median age and Democrat enrollment both have negative linear relationships with the dependent variable while Republican enrollment has a positive linear relationship with the dependent variable.

Table 2: Easy Issue-to-Candidate Consistency

	Regression 1	Regression 2
Median Age	-.350** (.085)	-.324** (.085)
Democrat	-.326** (.042)	-.402** (.054)
Republican	.524** (.080)	.554** (.089)
Female	-.017 (.164)	-.063 (.165)
Non-White	-.037 (.029)	-.032 (.028)
Education		-.080 (.051)
Interaction Term		.003* (.001)
Constant	106.28 (7.80)	109.51 (7.85)
R-Squared	0.6554	0.6627
Adjusted R-Squared	0.6504	0.6558
F-Statistic	131.25	96.27

Miller and Shanks theorize that monumental events shape the preferences of those who experience them. These preferences, while times may change, often stay with individuals for the rest of their lives. In this way, as people age, they become accustomed to voting for a certain party that backs those preferences that are central to their belief systems, and this is true even when these preferences become dated. It is possible that these towns with a high median age continue to vote for a particular party even though their current policy preferences differ from the parties. For example, it is quite possible

that a great majority of these voters in towns with high median ages are in favor of tax cuts. Despite this, they continue to vote for the Democratic candidate due to the fact that Democrats supported New Deal policies in the past. It is possible that this relationship is negatively linear simply because older voters are entrenched in voting habits that were formed several decades ago.

The negative linear relationship existing between Democrat enrollment and the dependent variable supports another Miller and Shanks theory. The pair, in their multiple-stage explanation of political preferences, suggests that partisan affiliation occurs prior to the formation “current policy preferences,” prior to the perception of current conditions, and prior to candidate evaluations. Partisan affiliation, because it forms earlier in the policy preference and vote formation process, exerts influence on current policy preferences, perception of conditions, and candidate evaluation. Massachusetts is largely a one-party state favoring the Democrats, and it is probable that many of the voters that were raised in the state were influenced by the political environment. It is also probable that these people were exposed to and influenced by the Democratic Party before they were able to think through and decide on policy preferences for themselves. These people, now grown and registered voters, have the ability to form their own policy preferences. In fact, many of these preferences may be conservative. However, when these people participate in elections, they dismiss these preferences and simply vote for the Democrat candidate. Miller and Shanks' theory adequately explains the negative linear relationship seen here. According to the theory, many Democrats do not take into consideration their own policy preferences when voting for governor. Instead, they rely on explicit partisan cues to determine their vote.

The difference in the relationships between Democrat enrollment and Republican

enrollment with the dependent variable become clear and explainable when one takes into account Massachusetts status as a one-party dominant state. It is likely that many of the Republicans in the various towns were subject to the same exposure to the Democrats that others were during their youth. However, it seems to be the case that these Republicans took initiative to break away from the state norm because of their attention to politics and their policy preferences, and thus, the Republican variable acts much like the interaction variable. In short, it seems to be the case that in this relationship is positive linear because in towns with increasing Republican enrollment voters take into consideration their policy preferences on tax issues while in the voting booth. Further, voters in towns with high rates of Republican enrollment link preferences to candidates more effectively than towns in which there is lower Republican enrollment. This increased public attention to the easy issues seems to explain the positive linear relationship.

The second regression in hypothesis test 2 uses hard issue-to-candidate consistency as the dependent variable. The results of the regressions (Table 3) show there to be a strong negative linear relationship between education and the dependent variable. There are also strong negative relationships between Democrat enrollment and the dependent variable and between Republican enrollment and the dependent variable. There is also a noteworthy strong positive linear relationship between median age and hard issue-to-candidate consistency.

Table 3: Hard Issue-to-Candidate Consistency

	Regression 1	Regression 2
Median Age	.411** (.079)	.408** (.077)
Democrat	-.102** (.039)	-.141** (.049)
Republican	-.334** (.074)	-.185* (.081)
Female	.033 (.152)	.152 (.150)
Non-White	.024 (.026)	.027 (.025)
Education		-.128** (.046)
Interaction Term		.002 (.001)
Constant	84.44 (7.25)	80.00 (7.13)
R-Squared	0.1463	0.2023
Adjusted R-Squared	0.1339	0.1860
F-Statistic	11.83	12.43

The adjusted R-squared scores show some difference in performance in the models, and the difference in the F-statistics between the two models is 1.91. This difference is relatively small, but it deserves discussion nonetheless. Again, as in hypothesis test 1, the coefficient of education is negative while the coefficient of the interaction term is positive. This again suggests that ability to think in the abstract alone is not enough to build ideological constraint. An interest in politics along with this ability to think creates ideological constraint. Again, towns in which there are high rates of education and interest in politics are more likely to link hard issues preferences with

candidates and exhibit this constraint.

Comparing the regression results in Table 2 with those in Table 3 reveals very interesting differences in with respect to variables' relationships with consistency. In Table 2, median age was correlated negatively with easy issue-to-candidate consistency. In Table 3, median age is shown to have a positive correlation with hard issue-to-candidate consistency. The difference in the correlations suggests that towns with a high median age tend to think of tax issue and abstract issues differently with respect to candidate choice. It is possible, extending the theory of Miller and Shanks, that these more abstract issues relate to past events and are thus linked to a certain party or candidate.

Another possibility that seems more likely comes from Converse's line of thinking. Converse defines core idea-elements in a belief system as those which are unlikely to change, and these core idea-elements are likely to be policy ends. For example, core idea-elements in a belief system may be the protection of the environment, an expansive health care system, or racial equality. Converse's theory suggests that these abstract policy preferences are central to many belief systems in towns with a high median age. This leads one to believe that abstract policy preferences are more central to older populations than they are in younger populations. The reasons why these issues seem to be more central are numerous. It might be the case that belief systems in towns where there is a high median age are more refined and oriented toward policy ends rather than means. It might also be the case that abstract issues are more central in towns with a high median age because these issues are strongly linked with past events and evoke partisan responses. This issue of age and hard issue-to-candidate consistency is quite interesting and unresolved, and it warrants a closer inspection.

The Republican enrollment variable acted in an opposite manner as median age between the two regressions described in Table 2 and Table 3. While median age had a negative coefficient in Table 2 and positive coefficient in Table 3, Republican enrollment had a positive coefficient in Table 2 and a negative coefficient in Table 3. Converse's theory suggests that tax issues are simply more central to belief systems in towns where there is high Republican enrollment. Further, it is quite possible that tax cuts and decreased spending, rather than more abstract issues, are policy ends in towns with high Republican enrollment. These issues are more readily linked to candidates.

Democrat enrollment has acted consistently throughout each regression thus far. Again, with respect to hard issues and the vote for governor, it is clear that towns with high Democrat enrollment tend to act with less constraint. This is likely due to the fact that Massachusetts is largely a one party state. Voters, out of habit, hold allegiance with the Democrat party. A significant portion of voters let partisan cues guide their vote rather than policy preferences.

The final regression for hypothesis test 2 takes into account both easy issue conservatism and hard issue conservatism. The dependent variable is total issue-to-candidate consistency. Like each of the consistency scores examined so far, the mean total issue-to-candidate consistency score was much higher than expected at 93.2. Further, most scores were highly concentrated around this mean. The lack of variance and unusual distribution of scores made it necessary to use the natural logarithm of these consistency scores rather than the actual scores themselves. The acute interpretation of the coefficients changes with the use of the natural log of the dependent variable, but the general interpretation of relationships remains similar. This study, due to the lack of variance and the use of the natural log of the dependent variable, will not make bold

claims regarding the relationships between variables in this regression.

The results of this regression (Table 4) are largely consistent with the results of previous regressions. Education is shown to have a strong negative linear relationship with total issue-to-candidate consistency, and the interaction term has a positive linear relationship (though not statistically significant) with the dependent variable. The Democrat variable has a very strong negative linear relationship with the dependent variable while the Republican variable has a strong positive linear relationship with it. Median age, which had statistically significant relationships with the dependent variables in the first two regressions of hypothesis test 2, now has no significant relationship with the dependent variable.

An examination of the adjusted R-squared scores shows there to be no major difference in the performance of each model. The difference in the F-statistics, while each F-statistic is high again, is minimal. This lack of difference between the models suggests that education is not a huge contributor to total issue-to-candidate consistency.

In this particular regression, the two independent variables with the most impact on the dependent variable are Democrat enrollment and Republican enrollment. Democrat enrollment again has a negative coefficient, and this is likely because of the political environment in Massachusetts. Again, increased Democrat enrollment in a town leads to a significant portion of voters failing to link policy preferences with the vote for governor. Further, it is likely that it is Democrats in these towns, not Republicans or unenrolled voters, which are the voters that vote inconsistently with their policy preferences.

Table 4: Total Issue-to-Candidate Consistency

	Regression 1	Regression 2
Median Age	-.001 (.0008)	-.001 (.0005)
Democrat	-.004** (.0004)	-.004** (.0005)
Republican	.003** (.0008)	.004** (.0009)
Female	-.0004 (.002)	.0000 (.002)
Non-White	-.0001 (.0003)	-.0001 (.0003)
Education		-.001* (.0005)
Interaction Term		.00002 (.00001)
Constant	4.68 (0.077)	4.67 (0.077)
R-Squared	0.6516	0.6571
Adjusted R-Squared	0.6466	0.6501
F-Statistic	129.07	93.91

The effect of Republican enrollment on total issue-to-candidate consistency is opposite to the effect of Democrat enrollment. It is likely that many Republicans in the state made a conscious choice to break away from the dominant Democrat party that was motivated by policy preference. In short, Republican voters likely have the knowledge necessary and the political awareness to break away from the state norm. An accumulation of this knowledge and awareness, in a town setting, leads to increased observed ideological consistency and belief system cohesion.

Generally, it is useful to think of the interaction term in much the same manner as Republican enrollment. It was stated before that Republicans in Massachusetts used political knowledge and awareness in their decision to break from the dominant party, and that this knowledge and awareness contributes to consistency. The interaction term, insofar that it measures cognitive capacity (education) and political awareness (enrollment), measures much the same thing as Republican enrollment. At the town level, increased education leads to the increased ability to think in the abstract and link preferences and candidates. Increased Democrat enrollment and political awareness, when combined with the ability to link preferences and candidates, leads to increased constraint and more belief system coherency. It is likely that, at the individual voter level, while these voters go along with the dominant party in the state, they do so with while being aware and acting in accordance with their policy preferences.

The observed role of education has been consistently negative, though with varying significance, throughout each regression. This result comes as quite a surprise. The reason for this negative linear relationship with consistency is rather unclear. The coefficients of education, however, are somewhat similar to the coefficients of Democrat enrollment. The two variables, however, are not correlated ($r = -.06$). Further, index scores between high education towns and low education towns are virtually equal. Even the most educated towns have only slightly lower index scores than towns with less than average percentages of college graduates. Keeping all this in mind, it is still possible that there is a link between Democrat enrollment and education that was not measured in this study. It comes as an interesting surprise that these two variables, when combined in a town setting, result in high degrees of ideological constraint and belief system coherency. Each variable alone, however, contributes to decreased ideological constraint and towns

that seemingly do not vote according to their policy preferences. These variables, their interaction, and their effect on ideological constraint and belief system coherency deserve further study.

It suffices to say that education alone plays a rather insignificant role in increasing issue-to-candidate consistency. Education in combination with political awareness, however, should not be discarded altogether. While party enrollment plays a much larger role in the degree to which towns act with constraint in Massachusetts, this combination deserves a closer look. Although it is inaccurate to say hypothesis 2 is completely wrong, it is accurate to say that other control variables play a far more significant role than education in the degree to which constraint is observed.

CHAPTER 6

DISCUSSION

In every regression that was run, education had a negative linear relationship with the dependent variables. While the interaction term played a significant positive role in increasing constraint between policy preferences, it played a weaker role in linking preferences to candidates. It is apparent that, in terms of issue-to-candidate consistency, the party enrollment variables played a larger and more significant role.

While the reason for the education variable's negative linear relationship with dependent variables is largely unexplained, it is clear that the interaction between education and political awareness is essential for high degrees of ideological consistency in towns. High rates of education in a mass setting result in large portions of towns capable of thinking in the abstract. High rates of political awareness in a mass setting, measured in this study by Democrat and Republican enrollment, lead to large portions of towns interested in politics. The combination of these two variables, in a mass setting, results in towns with large portions of their populations capable of linking preferences to candidates and willing to take the time to do so. These populations, with the ability and willingness to link preferences and candidates, exhibit high degrees of ideological consistency and belief system coherency.

The Republican enrollment variable, though it is not an explicit interaction between education and awareness, can be thought of in much the same way as the previously discussed variable. It is likely, however, that this can only be done in a political environment where one party is dominant over the other. In situations like this, many voters enrolled in the minority party consciously took the time to evaluate their policy preferences, link them to candidates and the appropriate party, and enroll. Those

that go through this process, in essence, display ability to think in the abstract and the interest to do so. In a town setting, this combination of cognitive ability and political awareness results in high degrees of ideological consistency and belief system coherency.

In a one party dominant state, a town with a high percentage of its voters enrolled in the dominant political party will not necessarily exhibit high degrees of constraint. In fact, as this study has shown, towns with large portions of voters enrolled in the majority party will likely exhibit low constraint. This is due to the political environment's long term influence on voters. In Massachusetts, it is likely that many voters gravitate toward the political left simply because they have been exposed to it since their youth. Further, it is likely that many of these voters will continue to vote for the Democratic Party even if their own policy preferences are in contrast with it. In a town setting, large portions of voters gravitating toward one party without regard for their own policy preferences will lead to low degrees of observed ideological constraint and low belief system coherency. Only when large portions of towns are aware of and link their preferences to candidates do they exhibit greater constraint.

CHAPTER 7

CONCLUSION

The results of this study suggest that messages sent by voters to political elites during elections are not always clear. Often, voters fail to effectively link certain policy preferences with other policy preferences. Further, voters fail to effectively compare their own policy preferences to those of candidates, and thus, they cast votes based on past experience, partisan cues, or other irrelevant factors. The results, while in favor of a particular candidate, may have little bearing on the electorate's policy preferences.

According to this study, messages sent by towns with high partisan enrollment are largely unclear. Also, messages sent by towns with high rates of education are often unclear. The clearest messages sent to political elites during elections come from towns in which there are high rates of education and high rates of political awareness. In these towns, large portions of the voting population are aware of their policy preferences, and they vote in accordance with them. These towns exhibit the highest degrees of ideological constraint and belief system coherency.

Turning again to past scholarship, this study tends to agree more with the group of scholars arguing that much of the electorate relies on social groups or political parties to guide them during elections. This study agrees with Wyckoff's conclusion that education is not a good measure of political sophistication. It also agrees with Converse's argument that political awareness and the ability to think critically are necessary components for high degrees of ideological constraint and belief system coherency.

This study also agrees with the argument of Miller and Shanks regarding the influence of partisan affiliation on one's vote. The pair argues that partisan affiliation exerts influence on policy preference. Further, because partisan affiliation happens prior

to the formation of many policy preferences, it exerts a larger influence on the eventual vote. This study, taking into account the analysis of the aggregate data, concludes that partisan affiliation plays a larger role in election results than policy preferences. The exceptions here are when high rates of education and political awareness are combined in a town, and similarly, when large portions of a town go against the state's partisan norm.

This study, as it is a single case study, does not claim to disprove the claims made by the opposing group of scholars. It is quite possible that many towns, especially those not in a one party dominant state, are less influenced by partisan affiliation when it is in contrast with policy preferences. This study suggests, however, that these scholars take into account one party states in their conclusions. In a one party state, towns that tend to have a large portion of voters enrolled in the dominant party do not exhibit high degrees of ideological constraint in linking preferences and candidates. It is likely that this is so because partisan affiliation distracts voters from acting strictly with their preferences in mind. Explicit partisan cues overpower policy preferences.

A weakness of this study is that it is forced to make probabilistic claims, rather than concrete causal claims, about individual voters due to the use of aggregate data. While this study cannot claim that all uneducated democrats use explicit partisan cues rather than policy preferences in voting or that all Republicans are politically aware and use policy preferences as a guide, it can analyze town level voting trends and apply them. The study is confident with its conclusions as they agree with and are backed by credible scholars and theory.

Political elites and scholars, when evaluating election results, should be wary to conclude that, for example, a Democratic candidate won office because his policy preferences are in accordance with the electorate's preferences. Further, these elites and

scholars should be wary to evaluate the passing of public policy based on these messages sent during elections. In evaluating policy based on election results, analysts might consider examining certain towns more closely than other towns. Analyzing election results in certain towns more closely than in other towns, with respect to policy preferences, could lead to more accurate evaluations. Towns that exhibit high degrees of ideological constraint and belief system coherency might be more valuable in policy evaluation than towns that tend to vote in contrast with their policy preferences.

CHAPTER 8

FUTURE RESEARCH

This study has shed some light on the role played by education in ideological constraint and belief system coherency, but improvements can be made on future research. First, this study is only a single case study. Studies done in the future may reach more thorough conclusions if a greater number of cases are analyzed. Future studies, if they are to be done on voting behavior in a one party state, might examine towns in California. They also might focus in on election results of cities such as Boston or Los Angeles.

Studies that are to explore the effect of education on consistency in a more bi-partisan setting might examine the cases of Florida, Iowa, Michigan, or Ohio. All of these states use ballot initiatives, and comparing data from these states to this study would help political scientists gain a deeper understanding of education and voting behavior.

Future studies might also consider controlling for more independent variables. In particular, controlling and examining media exposure and campaign dollars spent could sharpen knowledge. Media exposure, whether on ballot initiatives or candidate campaigns, most certainly affects policy preference and vote choice. This could be measured by taking into consideration newspaper advertisements for candidates or ballot initiatives, television advertisements, signs posted around towns, and pamphlet distribution.

Controlling for campaign dollars spent would also be useful as campaign messages influence policy preferences and the vote. Measuring campaign dollars spent could be difficult at the town level. However, it is likely that it could be done at a county

level. Controlling for media exposure in a town or county and campaign dollars spent in a town or county would separate their influences that otherwise could confound other variable's effects on consistency.

Increased understanding of ideological constraint and belief system coherency will lead to a better understanding of message sent from the electorate to political elites via elections. A better understanding of these messages would help to improve the evaluation of governmental action and public policy. Future studies that examine more cases or add variables for analysis will help to accomplish this end.

APPENDIX A

MILLER AND SHANKS' EXPLANATORY THEMES AND CAUSAL STAGES

Stage	Substantive Content of Themes Assigned to Each Stage
1	(1) Stable Social and Economic Characteristics
2	(2) Partisan Identification and (3) Policy-related Predispositions
3	(4) Current Policy Preferences and (5) Perceptions of Current Conditions
4	(6) Retrospective Evaluations of the President Concerning Governmental "Results"
5	(7) Impressions of the Candidates' Personal Qualities
6	(8) Prospective Evaluations of the Candidates and the Parties
	Vote Choice

APPENDIX B

TAX POLICY (EASY ISSUE) QUESTIONS

Question 1, 2002:

Do you approve of the law summarized below...?

This proposed law would provide that no income or other gain realized on or after July 1, 2003, would be subject to the state personal income tax. That tax applies to income received or gain realized by individuals and married couples, by estates of deceased persons, by certain trustees and other fiduciaries, by persons who are partners in and receive income from partnerships, by corporate trusts, and by persons who receive income as shareholders of "S corporations" as defined under federal tax law...

A yes vote (coded as a conservative response) would eliminate any state personal income tax for income or other gain realized on or after July 1, 2003.

A no vote would make no change in state tax laws.

Question 4, 2000:

Do you approve of the law summarized below...?

This proposed law would repeal the law setting the state personal income tax rate on Part B taxable income (such as wages and salaries), which was 5.95% as of September 1, 1999, and would set the rate at 5.6% for tax year 2001, 5.3% for tax year 2002, and 5% for tax year 2003 and after. If the legislature set a lower rate for any of those years, that lower rate would apply...

A yes vote (coded as a conservative response) would reduce the state personal income tax rate in steps over three years to 5%.

A no vote would make no change in state tax laws.

Question 3, 1998:

Do you approve of the law summarized below...?

The proposed law would change the state income tax rate on interest and dividend income, which was 12% as of September 1997, to whatever rate applies to Part B taxable income (such as wages and salaries), which was 5.95% as of September 1997. The change would take effect starting in tax year 2000.

A yes vote (coded as a conservative response) would reduce the state income tax rate.

A no vote would make no change in state tax laws.

APPENDIX C

ABSTRACT POLICY (HARD ISSUE) QUESTIONS

Question 5, 2000:

Do you approve of the law summarized below...?

This proposed law would set up a state Health Care Council to review and recommend legislation for a health care system that ensures comprehensive, high quality health care coverage for all Massachusetts residents. Until the Council decided that such a system had been set up, the proposed law would prohibit the conversion of non-profit hospitals, HMOs, and health insurance firms to for-profit status. The proposed law would also require health insurance carriers to provide certain rights to patients and health care professionals, starting January 1, 2001...

A yes vote would require health insurance carriers to guarantee certain rights to their patients and providers, and it would prohibit the conversion of non-profit hospitals, HMOs, and health-insurers into for-profit entities until a system is created to provide comprehensive health care coverage for all Massachusetts residents.

A no vote (coded as a conservative response) would make no change in the laws governing health insurance and health care.

Question 2, 2002:

Do you approve of the law summarized below...?

This proposed law would replace the current state law providing for transitional bilingual education in public schools with a law requiring that, with limited exceptions, all public school children must be taught English by being taught all subjects in English and being placed in English language classrooms.

This proposed law would require public schools to educate English learners (children who cannot do ordinary class work in English...) through a sheltered English immersion program, normally not lasting more than one year... Under the current law, a child stays in the (English learning) program for three years or until the child can perform successfully in English-only classes, whichever occurs first...

A yes vote (coded as a conservative response) would require that, with limited exceptions, all public school children must be taught English by being taught all subjects in English and being placed in English language classrooms.

A no vote would make no changes in English language education in public schools.

Question 4, 1998:

Do you approve of the law summarized below...?

The law changes the state's electric utility industry... The law requires electric utilities to continue energy efficiency and demand management programs until 2003 and directs the new state Department of Telecommunications and Energy (DTE) to ensure that such programs are cost effective. The law imposes a charge on electricity consumers to promote renewable energy projects and to help cities and towns pay to add pollution control equipment to existing trash-to-energy plants. By 2003, power suppliers must provide an annually increasing percentage of power from new renewable sources, and fossil-fuel power plants must start to meet efficiency standards limiting pollution...

The law changes the state Department of Public Utilities to the new DTE, controlled by a 5-member commission with expertise on specific issues...

A yes vote would require that the state's electric utility industry change.

A no vote (coded as a conservative response) would make no changes in the state's electric utility industry.

BIBLIOGRAPHY

Journal Articles

Beck, Paul Allen, and Suzanne Parker. "Consistency in Policy Thinking." *Political Behavior*, Vol. 7, No. 1 (1985): 37-56.

Bishop, George F. "The Effect of Education on Ideological Consistency." *The Public Opinion Quarterly*, Vol. 40, No. 3 (1976): 337-348.

Bowles, Roy T., and James T. Richardson. "Sources of Consistency of Political Opinion." *The American Journal of Sociology*, Vol. 74, No. 6 (1969): 676-684.

Branton, Regina P. "Examining Individual-Level Voting Behavior on State Ballot Propositions." *Political Research Quarterly*, Vol. 56, No. 3 (2003): 367-377.

Carmines, Edward G., and James A. Stimson. "The Two Faces of Issue Voting." *The American Political Science Review*, Vol. 74, No. 1 (1980): 78-91.

Carmines, Edward G., and James A. Stimson. "Racial Issues and The Structure of Mass Belief Systems." *The Journal of Politics*, Vol. 44, No. 1 (1982): 2-20.

Holm, John D., and John P. Robinson. "Ideological Identification and the American Voter." *The Public Opinion Quarterly*, Vol. 42, No. 2 (1978): 235-246.

Pierce, John C. "The Relationship Between Linkage Salience and Linkage Organization in Mass Belief Systems." *The Public Opinion Quarterly*, Vol. 39, No. 1 (1975): 102-110.

Smith, Mark A. "Ballot Initiatives and the Democratic Citizen." *The Journal of Politics*, Vol. 64, No. 3 (2002): 892-903.

Smith, Mark A. "The Contingent Effects of Ballot Initiatives and Candidate Races on Turnout." *American Journal of Political Science*, Vol. 45, No. 3 (2001): 700-706.

Wyckoff, Mikel L. "Belief System Constraint and Policy Voting: A Test of the Unidimensional Consistency Model." *Political Behavior*, Vol. 2, No. 2 (1980): 115-146.

Wyckoff, Mikel L. "Measures of Attitudinal Consistency as Indicators of Ideological Sophistication: A Reliability and Validity Assessment." *The Journal of Politics*, Vol. 49, No. 1 (1987): 148-168.

Wyckoff, Mikel L. "Issues of Measuring Ideological Sophistication: Level of Conceptualization, Attitudinal Consistency, and Attitudinal Stability." *Political Behavior*, Vol. 9, No. 3 (1987): 193-224.

Books Chapters

Converse. "The Nature of Belief Systems in Mass Publics." *Ideology and Discontent*. Ed. Apter. London: Collier-MacMillan Ltd., 1964. 206-261.

Books

Miller, Warren, and J. Merrill Shanks. *The New American Voter*. Cambridge, MA: Harvard University Press, 1996.

Nie, Norman H, Sidney Verba, and John D. Petrocik. *The Changing American Voter*. Cambridge, MA: Harvard University Press, 1979.

Government Documents

The Commonwealth of Massachusetts. The Elections Division. *Massachusetts Elections Statistics 1998*. Boston: Commonwealth of Massachusetts, 1998.

The Commonwealth of Massachusetts. The Elections Division. *Massachusetts Elections Statistics 2000*. Boston: Commonwealth of Massachusetts, 2000.

The Commonwealth of Massachusetts. The Elections Division. *Massachusetts Elections Statistics 2002*. Boston: Commonwealth of Massachusetts, 2002.

The Commonwealth of Massachusetts. The Elections Division. *Party Enrollment Statistics: Enrollment Breakdown as of 2/11/04*. August 2005. February 2006
<<http://www.sec.state.ma.us/ele/elepdf/partyenrollstat.pdf>>

Websites

US Census Bureau. *American Fact Finder*. August 2005. March 2006
<<http://factfinder.census.gov/home/saff/main.html>>

