

City University of New York (CUNY)

CUNY Academic Works

Student Theses and Dissertations

Baruch College

Spring 5-18-2022

The Gun Control Paradox in the States: Evidence from National Polls

William A. Rose

CUNY Bernard M Baruch College

[How does access to this work benefit you? Let us know!](#)

More information about this work at: https://academicworks.cuny.edu/bb_etds/143

Discover additional works at: <https://academicworks.cuny.edu>

This work is made publicly available by the City University of New York (CUNY).

Contact: AcademicWorks@cuny.edu

The Gun Control Paradox in the States
Evidence from National Polls

William A. Rose

May 2nd, 2022

Faculty Advisor: Professor Alan DiGaetano

Readers:

Professor Thomas Halper

Professor Viviana Rivera-Burgos

Submitted to the Committee on Undergraduate Honors at Baruch College of the City University
of New York in partial fulfillment of the requirements for the degree of Bachelor of Arts in
Political Science with Honors.

Abstract

The majority has supported gun control policies in the U.S. for decades, but these policies have stayed unimplemented. While much progress has been made on research of this “gun control paradox” at the federal level, determining whether this dynamic towards gun control persists amongst state governments has seen next to none. Previously, this was due to lack of polling data to estimate public opinion among state populations. However, today, new resources have become available that allow for reliable estimates to be made. This study uses the disaggregation of national polling data on gun control from the past decade to determine the congruence and responsiveness of six state governments to gun control. This research finds evidence that suggests that the gun control paradox exists in many U.S. states due to a majority of the researched states displaying low congruence and responsiveness.

Contents

Abstract	2
Contents	3
Introduction.....	4
Relevant Literature.....	6
An Overview on the Opinion-Policy Link in the U.S.	8
The Gun Control Paradox	11
Responsiveness and Congruence in the States	16
Methodology	21
Disaggregation & MRP	21
Polling Data.....	22
State Selection Factors	24
Calculating Congruence	25
Calculating Responsiveness	27
Other Concerns.....	28
Results.....	30
Congruence.....	30
Responsiveness.....	32
Conclusions.....	33
Further Research	36
Appendix.....	38
References.....	42

Introduction

Guns have had a huge impact on American life. The U.S. has an enormous number of guns, by far the highest per capita of any nation (Karp 2018). It also has a higher rate of gun deaths than any other developed nation, and hosts a plurality of mass shootings in the world, accounting for just under a third of global mass shootings from 1966-2012 (Lankford 2016, 2; Grinshteyn and Hemenway 2016, 268–69). The regulation of firearms, or gun control, as a result is a highly salient and volatile political issue in the United States. For over half a century, the issue has been an ongoing topic for political debates, campaigns, speeches, bills, and court cases. One concerning dynamic with gun control is that the government seems unresponsive to public opinion on it, since national support for stricter gun control policies in the country has stayed consistently high, while the nation’s gun laws remain incredibly relaxed. The fact that public opinion is not reflected in national gun laws is concerning because it seemingly violates core democratic principles. Scholars have labeled this seeming contradiction the “gun control paradox,” and much research has been done to explain the phenomenon on the national level.

However, the story of gun control politics at the state level differs from that of national arena. The laws governing firearms vary immensely by state, ranging from having minimal restrictions to many. Texas, for example, lacks assault weapons restrictions, universal background checks, or magazine restrictions, while California has implemented all these policies (see Table A). Additionally, there are considerable regional differences in public opinion on guns, since some states’ citizens favor stricter gun regulation policies while other states’ citizens do not. This set of circumstances begs the question: Does the national gun control paradox characterize the relationship between state firearm regulations and public opinion or do state

laws and state public opinion align more harmoniously? More simply, does a “gun control paradox” exist at the level of state governments?

This question warrants investigation for several reasons. For one, while evidence has found that there is a deficit in the congruence of policy to public opinion in state governments, state responsiveness to gun control has not been thoroughly investigated (Lax and Phillips 2012, 164–65). Second, investigating if the gun control paradox exists in the states can shed light the broader issues and dynamics of state government responsiveness. If a disconnect between public opinion and gun control does exist for gun control in the states, it would warrant further research to test for its specific causes. The most important reason, however, is that new methods have been developed and new resources have been made available that allow for the acquisition of opinion estimates from states on the issue of gun control which was previously unattainable.

To test for state paradoxes, this study measures the level of public support for five specific gun control policy proposals as well as general support for stricter gun control measures in six U.S. states. This data was obtained from years of national polls from the Roper Center for Public Opinion Research (<https://ropercenter.cornell.edu/>) and separated by state. Each state’s level of support is compared with the status of the policy’s implementation in the state. To ascertain general gun control support, the study compares changes in levels of support with change in gun law grade for each state’s gun policy measured by Giffords Law Center (<https://giffords.org/lawcenter/>). Through this methodology, this study finds evidence that the gun control paradox exists in the states, as a majority of the state governments researched were incongruent to public opinion on gun control policy and unresponsive to changes in that opinion.

The paper is divided into four sections. The first provides a review on the relevant literature to the study. This starts with a definition and distinction of the concepts of

responsiveness and congruence, which are central to studies on linkages between opinion and policy. Once this distinction is established, the review examines research on the nature of the opinion-policy link nationally and research on the national gun control paradox. Next, the literature on state-level gun control politics is considered, reporting how prior research has measured the responsiveness and congruence of state governments to demonstrate why a more comprehensive investigation of state gun control paradoxes is necessary. Once the literature review is complete, the paper discusses the methodology used for the study and then presents its results. The conclusion section analyzes the data with regard to state government's responsiveness to public opinion on the issue of gun control and is rounded off with suggestions for further research on this topic.

Relevant Literature

Responsiveness and Congruence

The gun control paradox seemingly violates the core ideal of democracy that the policies enacted by government should reflect the desires of the populace. Because this ideal lies at the heart of democratic governance, researchers have long sought to evaluate whether our democratic institutions live up to it. The way that researchers have made this evaluation is through analyzing the link between policy and public opinion. However, this research took some time to emerge. Even though polling on political issues developed rapidly and became widespread in the early 20th century, it took until the 1970s for scholars to use polling to investigate this “opinion-policy link” (Martin 1984, 15–17; Shapiro 2011, 1985). Since then, by comparing public opinion data to implemented policies, scholars have generated numerous studies on government policy making to evaluate how democratic they are. To tackle the question of a state gun control paradox, it is first necessary to make a conceptual distinction and

definition of two concepts central to it: responsiveness and congruence. When reading literature on this subject, this distinction is sometimes overlooked and the terms are even confused or conflated, which is something to be avoided (Beyer and Hänni 2018, S14,S20).

The main reason that it is important to distinguish these two concepts is because they have significantly different functions for evaluating democracy. Beyer and Hänni (2018) offer a comprehensive overview and definition of the two concepts. Responsiveness measures causal changes in opinion and policy over time, whereas congruence measures solely dyadic relationships between policy and public opinion (S18). For example, a measurement of responsiveness would record that it took two years for a policy to be implemented following the time at which public support exceeded 50%. Congruence, in turn, measures the degree to which government policy and public opinion on an issue are in agreement. These concepts examine different relationships between government policy and public opinion. As Beyer and Hänni describe, “responsiveness comes closer to the theoretical idea of representation while congruence is more successful in assessing whether the majority gets what it wants” (2018, S15).

It should be emphasized, however, that although congruence and responsiveness are distinct, they are not mutually exclusive. Beyer and Hänni argue that the opposite is true, as both concepts are important for judging democratic regimes (2018, S15). Simply put, a government that is both more responsive to and more congruent with public views is more democratic than when not. Additionally, the authors emphasize that it is possible for governments to have one but not the other; that is, have congruence but not responsiveness or vice versa (S37). For example, “policy can move in the same direction as public opinion (responsiveness) without being in line with majority will (congruence)” (S19). Therefore, a study seeking to evaluate an opinion-policy

link needs to consider both congruence and responsiveness when devising data gathering methods. Moreover, measuring one without the other can lead to conclusions that are misleading.

An Overview on the Opinion-Policy Link in the U.S.

The scholarly literature has used responsiveness and congruence calculations to produce a sizable literature on the opinion-policy link. Perhaps the most pressing question that scholars have investigated on this topic is the strength of the link between policy and opinion, which ranges from a condition in which the public influences policy making to circumstances in which policy is disconnected from opinion entirely. Reviewing the research on this question gives insight into the way that opinion affects policy in the U.S., which is crucial to understanding the gun control paradox. Reviewing this question will (1) reveal why circumstances like the gun control paradox are not uncommon, and (2) identify the reasons for the existence of circumstances like the gun control paradox.

Research on this question in the United States has provided evidence that the public's will exerts a modest influence over government policies in general. In his overview of the literature on the opinion-policy link *Public Opinion and American Democracy*, Shapiro (2011) concludes that "The above review of a sweeping range of research shows that public opinion matters in policymaking in the United States (999)." He notes that several studies (e.g. Page and Shapiro 1983; Monroe 1979) find that policy congruence rests at around 60% in the U.S. Because this figure is greater than 50%, it indicates that there must be at least some influence of public opinion over policy making, since it is higher than if the policies were picked at random (991). Additionally, Shapiro addresses that the literature also indicates the government is responsive in addition to this congruence (991). He references Page and Shapiro's (1983) research, which compared policy changes one year after changes in opinion. Their study found

evidence for a causal connection between opinion and policy because the effects of opinion over policy was much greater than the reverse effect, i.e., a change of policy after one year did not have much impact on opinion, whereas a change in opinion did influence policy. Further evidence for responsiveness found by Page and Shapiro's (1983) research indicates that the relationship between opinion changes and policy changes were stronger when said opinion changes were greater and when issues were more salient. This suggests a causal relationship between opinion and policy, since these increases are expected from legislators when responding to opinion (Shapiro 2011, 991).

Democratic Performance Failures

Though this scholarly consensus does indicate that democracy is functioning, it also reveals that its performance is not remarkable. Indeed, Shapiro says that "the strongest critique of the opinion-policy studies is that the responsiveness that does occur is limited and incomplete" (2011, 1000). The first failure Shapiro notes is that the ~60 percent congruence figure shows that there are several issues (~40%) on which policy does not reflect opinion. He gives a few examples of such issues, like some policy proposals from the 1950s, that enjoyed high support, but remained unimplemented: term limits for senators, abolishing the electoral college, and lowering the voting age. More recent and enduring examples that he cites are school prayer and gun control. This evidence demonstrates that the gun control paradox and other such instances of policy-opinion disconnection are not an uncommon occurrence. A second performance failure of democracy Shapiro cites is when public opinion and policy move in the opposite directions, the so-called "thermostat effect" (1001). This is when governments "overshoot" policy, i.e., the government implements policy to adjust for public opinion to the degree that the public stops supporting the policy.

The most likely reason for these two democratic performance failures, Shapiro argues, is the increased polarization and party-led politics in the country (1002). Parties, which often favor the extremes of policy positions, “leapfrog” moderate changes in opinion by the public (Caughey and Warshaw 2018). The other possible reasons Shapiro gives for these failures are unequal responsiveness in favor of either those who are rich, economic elites, or actors with high political participation. He cites the work of researchers who have found a considerable body of evidence that demonstrates biases in responsiveness towards these groups (1002-1003).

Methodological Error?

Even the limited evidence of democratic function supported by the literature, however, has been challenged—notably by Barabas (2016), who argues that a researcher’s reliance on polling data is flawed because this data does not reflect a full policy agenda (438). He bases this on the premise that issues with available polling data overrepresent issues with more salience (441). To test this theory, Barabas examined a policy agenda created from analyzing issues reported by *The New York Times*. Of the approximately 3000 issues found, only about 23 percent corresponded with any polling data matched through an archive (445). This suggests that any conclusions about responsiveness and congruence overall can only be made for policies salient enough to garner polling data. For example, the Page and Shapiro (1983) study gets its 66% congruence from 153 policy changes out of 231 instances (178). Barabas argues the denominator of 231 instances likely does not reflect a full policy agenda (440-443). Barabas’ argument demonstrates that Shapiro’s conclusions are not universal in the literature, and that studies should take caution when making conclusions about the opinion-policy link using salient policies.

Regardless, the most pertinent finding of Shapiro’s review is that the connection between opinion and policy, and therefore vitality of democracy, that scholars have found is incomplete.

There are several issues to which the government is unresponsive to and/or its policies are incongruent with public opinion. Gun control is one of them. Additionally, the hypothesized reasons for this incompleteness (party polarization and unequal responsiveness) will prove useful when reviewing the findings of this paper.

The Gun Control Paradox

As discussed, the gun control paradox is just one example of many issues in which there exists a disconnection in the opinion-policy relationship. Fortunately, gun control is well-researched in the scholarly literature, likely due to its salience. For this study, it will be crucial to review the literature on the national gun control paradox for two reasons. For one, the explanations of the national gun control paradox will serve as foundations on which to build any explanations of similar configuration for state paradoxes. Second, the factors that make the gun control paradox a special circumstance of non-congruence and non-responsiveness may also be driving state paradoxes.

One factor that makes the gun control paradox such a unique case of policy-opinion disconnection is its persistence. The issue of a gun control paradox has seen scholarly discussion for half a century. The first scholarly work to record a disconnection between gun control opinion and policy is *The Polls: Gun Control* by Erskine (1972), which reviewed survey data on support for gun control from 1938-1972. Support for gun control during that time never dropped below a two-thirds supermajority, which was measured through a variety of questions on registering all pistols, police permits, and register all gun purchases (Erskine 1972, 457–59). This suggests that the gun control paradox has been an issue for over eighty years. As Erskine argues, “It is difficult to imagine any other issue on which Congress has been less responsive to public sentiment” (1972, 456).

Nonparticipation from Gun Control Supporters

Naturally, scholars were quick to investigate the reasons for this disconnect between opinion and policy. The researchers who gave the “gun control paradox” its name, Schuman and Presser (1977), suspected that instead of the paradox being caused by pressure groups or public lack of information about legislative votes, it was instead caused by the inability of polling data to show true sentiments of the public towards gun control (428). They test three hypotheses that could prove this: (1) It is a matter of how the wording of polling questions create biases toward pro-gun sentiment; (2) Pro-gun opinions are felt with greater intensity than anti-gun opinions; and (3) Anti-gun opinions are held more by those with more political influence (1977, 429).

To test these hypotheses, the authors conducted surveys that asked several follow-up questions after asking about the gun control policy of requiring police permits. Their results found that question wording had little effect, and intensity among both pro-gun and anti-gun respondents was similar (anti-gun was slightly higher). However, more pro-gun respondents held the position that gun rights was for them an issue of the highest priority (1977, 434). Schuman and Presser argue that these fervent pro-gun agents are more likely to act on their beliefs, i.e., write to congresspeople or contribute money, to block the passage of gun control legislation (1977, 434–35).

Schuman and Presser followed up their research with a separate study, *The Attitude-Action Connection and the Issue of Gun Control* (1981), which surveyed respondents on the intensity of their feelings for the issue of police gun permits and asked about self-reported behavior based on those feelings (writing a letter, giving money, or both) (1981, 43). Their results found that intensity was once again slightly higher in anti-gun respondents, but confirmed their previous suspicions that action on feelings was significantly higher among pro-gun

respondents (1981, 44). Furthermore, in 2013, Schuman and Presser re-examined the issue by conducting another survey that asked respondents their actions taken on gun control policy. They found similar results, as opponents of gun control were more likely to have written and given money to policymakers (2013, 69).

Factors of Nonparticipation

The book, *Disarmed: The Missing Movement for Gun Control in America*, furnishes an in-depth explanation of the reasons for the inaction on the part of gun control supporters (Goss 2006). Goss names this problem (the same one evidenced in the work by Schuman and Presser) as the “gun control *participation* paradox.” In the book, Goss explains why a movement for gun control never materialized in the U.S., which she argues is the key factor for explaining the gun control paradox (7). She attributes this absence to structural barriers that have prevented gun control leaders from gaining access to crucial external resources to start a movement, and that gun control leaders have mistakenly chosen strategies that are harmful to building a movement (2006, 28). This explanation is consistent with Shapiro’s (1983) overview, as the low responsiveness and congruence nationally indicates a systemic failure of the government policy to be responsive/congruent with many specific issues.

Since the publication of *Disarmed*, other studies have uncovered evidence for other factors that appear to contribute to the gun control paradox. Bouton et al. (2014) conducted a study that found evidence that electoral incentives for members of Congress might discourage enactment of gun regulation. They found that the likelihood for senators to vote against gun regulation was correlated with how close they were to re-election. They also found that only Democratic senators would change opinions on guns when they had a significant percentage of gun control supporters within their constituency. The authors suggest that this indicates that the

minority of voters who are pro-gun have an outsized impact on senatorial voting preferences, especially during election years (28-30).

Aronow and Miller (2016) discovered through survey data that supporters of gun control might have a misconception of current gun laws. That is, people do not know what current national gun laws are and/or think that gun regulations are already in place. Their national survey asked respondents if they thought universal background checks had been implemented, a proposal supported by upwards of 75 percent of Americans. Forty-one percent stated that they believed universal background checks were national policy even though this was not the case. The authors suggest that this could contribute to lack of mobilization around gun control since a significant number of supporters of the policy believed they had already been implemented (223).

Another contributing factor to the gun control paradox, identified by the research of Brennan, Lizotte, and McDowall (1993), is southern gun culture. Their study found evidence that southerners, regardless of whether they owned a gun, were more likely to oppose stronger regulations and handgun bans than in other regions. This would go a long way in explaining the gun control paradox as it might mean that anti-control advocates are motivated by cultural factors to get involved in political action.

Contrasting Evidence?

One somewhat contrasting response to the gun control paradox is voiced by Bordua (1983), who argues that the polls that indicate high support for stronger gun control are flawed. He does not disagree with the fact that support for gun control in the United States appears to be very high (364–65). Rather, he presents evidence that the public does not actually support gun control based on several surveys that show high support for opinions that are seemingly

contradictory to gun control. For example, he argues polls instead indicate the public believes gun control is ineffective against crime and that the public does not believe gun owners would be willing to comply with gun control laws (348-350). He backs this polling evidence up by referencing failed campaigns to implement gun control regulations in Massachusetts and California. Despite the opposition (pro-gun) supporters vastly outspending the gun control advocates in both campaigns, Bordua argues that the initiative's failures still indicate the public's distaste for gun control because both had low turnouts (364).

Whereas the other scholarship reviewed here has argued that the public was seemingly indifferent to the passage of gun control laws, Bordua's argument is that the public does not want gun control. Bordua's conclusion is that the public (1) believes gun control is not a particularly important issue; (2) guns are important for self-defense; and (3) gun control policies are ineffective (1983, 355). As noted, Schuman and Presser found evidence against (1) salience being a major factor in the gun control paradox, as salience was found to be slightly higher for gun control supporters in all three of their studies (1977; 1981; 2013). With regards to points (2) and (3), a response to can be found in *Disarmed* (2006). The author, Goss, says that arguments such as (2) and (3) gained traction among the public due to failures on the part of gun control leaders during the 1970's who focused on handgun bans, which Goss argues obfuscated the goals of the movement and led to effective attacks from the gun lobby (2006, 173-75). The two gun control initiatives Bordua uses as evidence to support his hypothesis were, in fact, a handgun ban in 1976 (MA) and a handgun registration law in 1982 (CA). This might suggest that the evidence on which Bordua relies could be limited to that era of the gun control debate. Indeed, research by Wolpert and Gimpel (1998) indicates handgun bans evoke stronger self-interest effects on public opinion than other gun control regulations (256).

The above works present many different reasons for the persistence of the gun control paradox that are largely consistent with one another (excluding Bordua (1983)). When combined, this scholarly consensus suggests that the gun control paradox is caused by the fact that gun control supporters lack strong motivation to action and mobilization, while their anti-regulation counterparts are mobilized, organized, and motivated. This lack of action on the part of gun control supporters results from structural barriers, failures in judgment by gun control leaders, misconceptions about gun laws, electoral incentives that discourage policy makers to enact strong restrictions, and other similar factors. One thing to highlight about this consensus is that it differs significantly from commonly held beliefs about the gun control paradox. As Goss describes, “Whether one is at a dinner party or a scholarly meeting, all questions about gun control politics seem to boil down to the same, three-letter answer: N-R-A (National Rifle Association)” (Goss 2006, 22). While the NRA certainly plays a big part in the paradox, mostly because the NRA has been extremely effective in persuading pro-gun advocates to put pressure on members of Congress (Schuman and Presser 2013, 69; Wolpert and Gimpel 1998, 255), the evidence indicates that the NRA is far from being the sole or even the foremost factor in explaining the gun control paradox.

Responsiveness and Congruence in the States

There is a general consensus in the scholarly literature on the reasons behind the gun control paradox in the context of the national government. However, this study focuses on discovering if this paradox extends to states. To address this, this section reviews the literature on the opinion-policy link in state gun control politics. First, this review of the literature on states highlights differences between the opinion-policy link as manifested in state politics in comparison to national gun control politics. Then, two methods that are used by researchers to

estimate public opinion in the states are considered. Last, this section reviews some of the evidence that points to a deficit in state congruence and other evidence that indicates the existence of a state gun control paradox.

In contrast to the federal government, where large amounts of polling data on policy preferences have been available for decades, polling on individual state's public opinion is more difficult to acquire. This is because, for one, national polls usually have a sample size that is too small for the use of state samples within those surveys, and second, polling within individual states is performed sparingly, and when it is, it is rarely done along with polling in other states (Shapiro 2011, 997). Because of this scarcity of data, less sweeping and decisive conclusions can be made about the research on the state responsiveness and congruence than on the federal level. New research methods, however, are beginning to mine state data more effectively.

One method that researchers have used successfully to estimate state opinions is disaggregation, which is the use of data from nationwide polls and separating their respondents by state. Historically, there have been two issues associated with this method. The first is that national polls usually do not have enough respondents to create sample sizes that are significant enough for estimating the structure of public opinion for individual states. One way around this, however, is to combine data from multiple years of national polling in order to increase the state samples. The problem with this, in turn, is that changes in opinion cannot be measured using this method. Recall that responsiveness requires measuring opinion changes and policy changes over time. Thus, most research on state responsiveness lacks this crucial temporal dimension necessary for measurement of democratic function (Lax and Phillips 2009a, 371; Caughey and Warshaw 2018, 899). However, what these studies have been successful in doing is demonstrating the effects of public opinion on state policy making in many policy areas, like

abortion, gay rights, taxes and others (Shapiro 2011, 998). One study that does measure responsiveness using disaggregation was conducted by Caughey and Warshaw (2018) employing myriad national polls to measure “mass liberalism,” i.e., recording the leanings of state publics when responding to policy questions. Their research found that states are responsive to changes in mass liberalism overall, offering “reassurance regarding the health of American democracy” (34). Additionally, the authors find that this responsiveness to mass liberalism has been gradual, as “Large policy shifts are the result of the cumulation of incremental responsiveness over many years” (4).

In recent years, researchers have also applied the method of multilevel regression and poststratification (MRP) to estimate state public opinion. This method has been pioneered by Lax and Phillips to conduct research on state responsiveness and congruence (e.g. 2009a; 2012). A very basic description of MRP is that it uses demographic data from state surveys in combination with data about each demographic’s policy preferences to give an estimate of the state’s overall opinion on the policy. Using this method, Lax and Phillips (2012) uncovered what they call a “democratic deficit” in state congruence, as the policies they measured were congruent with opinion less than 50 percent of the time, despite high responsiveness (153). They also tested many hypotheses to explain this deficit, and found that higher salience, term limits, and “professionalization” (the degree to which state legislators are career politicians) correlated the most to higher congruence (164-165).

One other thread of research on states worth briefly mentioning is that on “direct democracy” laws. These are programs which many states have implemented where citizens can vote to pass policies without approval from the legislature. Indeed, it seems logical to suspect that states with these laws might exhibit a higher level of congruence/responsiveness than states

without them. However, research on whether these programs influence responsiveness and congruence is very mixed, with many studies showing evidence on both sides (Simonovits, Guess, and Nagler 2019, 407).

In summary, most scholars agree that the states generally exhibit a degree of responsiveness to public opinion, similar to that of the national government, but research also indicates that many policies are nonetheless incongruent with public opinion (Shapiro 2011, 999). A MRP-based study that illustrates this dynamic by Simonovits, Guess, and Nagler (2019) found that while minimum wage laws *responded* to public opinion in the states, (i.e., when the public wanted an increase, they got an increase) the minimum wage policies implemented were on average \$2.26 less than what the public favored. This failure on the part of state governments to adopt policies favored by opinion might help explain at least in part a state gun control paradox, just as the failure of federal government's low congruence plays a part in the national gun control paradox

A Gun Control Paradox in the States?

Gun control policy in individual states has been subjected to extensive research, however, its relationship to public opinion has not been a part of this effort. This is largely because state polling on the issue of gun control has historically been minimal. The only work that has directly investigated the topic of a state gun control paradox is from Goss (2006) and is included in the notes section of *Disarmed*. Because of the lack of reliable measurements of state gun control support, she instead uses NRA membership obtained from magazine circulation figures. She then compares these figures to the strength of state gun laws, obtained from the Open Society Institute index (220-221). She concludes that “statistical analysis shows that state gun laws are far from a

perfect reflection of citizen preferences,” (26) and finds that NRA membership only accounts for 18% of the variance in state gun laws (220).

While I hypothesize that Goss is correct in her assessment that state gun laws and public opinion are weakly correlated, her methodology may not be appropriate for determining if a state gun control paradox exists. First, as noted in the literature review, findings based solely on responsiveness *or* congruence can lead to inaccurate portrayals of opinion-policy relationships. Goss limits her research to a comparison of the congruence of aggregate policy to aggregate laws in one year, 1999. This needs to be complemented by a comparison on changes in policy and laws to changes (if any) in public opinion to show a full picture of their disconnection.

Second, using NRA membership might not reliably account for anticontrol sentiment. The data gathered from national polls in this study finds support for loosening gun laws nationwide from 2007-2019 has a mean of about 10%. Therefore, around 30 million Americans oppose gun control. The NRA reported around 5 million members in 2019, according to their own reporting (Gutowski 2019). Assuming these figures reflect those of 1999, NRA members are a relatively small fraction (~15%) of pro-gun advocates in the country. For NRA membership to be a reliable estimate of anticontrol opinion, distribution of NRA membership would have to be reliably reflective of anticontrol opinion in each state.

Third, there are two important questions about state gun control paradoxes on which the Goss study neglects to elaborate. One is recording *which* states have paradoxes. This is important because if there exist any similar factors among states with paradoxes, a case can be made for causal links between those factors and state paradoxes. Additionally, incongruence between policy and opinion in certain states might indicate that citizens of those states are less likely to act upon their beliefs about gun control. The second question is recording whether region and

culture play important roles in the manifestation of state paradoxes. Evidence provided by Brennan, Lizotte, and McDowall (1993) and Miller (2019) indicates that region and culture are important factors in people's attitudes towards gun control.

The paucity of research on the relationship between gun control policy and public opinion at the state level provide ample justification for this study. Most importantly, however, at the time of Goss' study, there was little to no way to obtain polling data from the states, especially about gun control (2006, 220). Today, there are two comprehensive ways to obtain such data that have been developed: disaggregation and multilevel regression. These developments alone warrant more comprehensive study of the gun control policy-opinion linkages in the states.

Methodology

Disaggregation & MRP

This study uses the disaggregation of national polls to estimate public opinion on gun control in six U.S. states. There are multiple factors that make disaggregation the right choice for this study; however, it does have its drawbacks when compared with its competitor, MRP. The main problem with disaggregation when making state opinion estimates has historically been the lack of polling data. MRP, employed for state opinion estimation by scholars like Lax and Philips (2009a; 2009b), hurdles this problem using demographic data that is more widely available than standard polling. However, new resources have made standard polling much more accessible, most notably by the Roper Center for Public Opinion Research (<https://ropercenter.cornell.edu/>), which has made thousands of polls available for researchers through their iPoll service. This increased availability makes using disaggregation a more viable option for conducting a study like this one.

While it may seem that one benefit disaggregation has over MRP is that it uses actual polling data while MRP “simulates” it, this is likely not as advantageous as it might appear. Lax and Philips (2009b) compared the two methods and found that MRP is more effective than disaggregation when working with small and medium-sized samples for state-level data (120). They conclude that MRP is the superior method when a high level of accuracy is required but only a small amount of polling data exists for that policy. However, they also note that if the level of accuracy required for the study is less, and the amount of polling data is sufficient, polling of standard sizes (1000-2000 respondents) generates estimates for states that generally reflect the structure of public opinion through disaggregation (120).

Based on this rationale, the most realistic option for this study is disaggregation because polling data on gun control is abundant enough to satisfy the low requirements for accuracy that the study’s question requires. This goal of this study, to find evidence for a state gun control paradox, does not require extremely precise measurements of state opinion because evidence of low congruence/responsiveness should be found with high margins of error. For example, a measurement of 80% support for a gun control policy is more desirable than 52% support, since 80% support will nearly guarantee congruence/incongruence for that policy while 52% support will not. Large margins like these are to be expected since similarly high support figures are found for gun control policies nationally. Therefore, the decrease in margin of error from MRP is not worth the additional hurdles that it poses to the research.

Polling Data

The polling data for this study was retrieved from the Roper Center’s iPoll service, which hosts thousands of individual polls going back decades. However, there were filters that limited the number of polls that could be used for this research. First, only polling data in which full

datasets were available from the Roper Center could be used, and second, each respondent's state needed to be recorded in all polls used, since it is required for disaggregation. Downloadable datasets were only available for around half of questions (~1500/3000) relating to guns in Roper's Longstanding Methods Collection. However, a vast majority of these datasets (~90%) did have respondent's state listed.

Two different question types were collected from this pool of data. The first was to be used for estimating congruence and the second for estimating responsiveness (although the second type was eventually used for congruence, too). The first sort of question (Type I) included those that directly related to a specific gun control policy. For example, questions in this category were worded in the following fashion: "Would you support or oppose a policy that did X?" or "Would you support the passage of X law?" Although wording was not entirely consistent across the polls, there was enough similarity among questions of this type to make comparisons across states. Almost all the questions allowed for 3 responses: "Support," "Oppose," or "Unsure/Don't Know," with a handful dropping the latter option, although this had little effect on support figures. Respondents from these questions were disaggregated by state and placed into a dataset to calculate congruence and responsiveness. Though there were a total of 13 different policies for which responses to questions were collected, only 6 had a significant enough number of respondents over separate years to be used in the calculation of congruence. These six policies were: assault weapons bans, universal background checks, preventing those with a mental illness from purchasing firearms, banning high-capacity magazines, instituting a gun purchases database, and arming teachers. It should be noted that arming teachers is not a "gun control" proposal per say, however, it is related to gun control which is why it was included. The proposal of arming teachers has largely been made by pro-gun advocates as a

contrasting policy option to gun control. Determining congruence to arming teachers will still offer insights into overall gun control congruence because it should serve as a “negative” to the gun control proposals. This is because it is expected to display low support whereas gun control policies display high support.

The second type of question (Type II) used to calculate responsiveness consists of questions that ask about respondent’s opinion on their desired strictness of gun control levels. These questions were selected to estimate what is referred to as “policy mood,” which is the public’s general feelings on gun control as a whole rather than their attitudes toward individual policies (Beyer and Hänni 2018, S22–23). The question was usually worded such as: “Do you think the laws covering the sale of guns should be more strict, less strict, or kept as they are now?” Again, changes in wording had little effect on support levels for this question. This question type was by far the most frequently asked of all gun control questions, with polling available for every year between 2007-2019.

A total of 43 polls were used for the collection of responses to these questions. These polls were mostly sponsored by media outlets but were in the main executed by survey-based research organizations. Though I searched the collection of polling from the past two decades, the available polls came from the 2007-2019 period. The decade of the 2010s represented a huge increase in polling on gun control, reflecting its increased salience during that time. A table showing each poll, research organization, and corresponding questions can be found in the appendices (Table I).

State Selection Factors

Six states were selected to estimate public opinion on gun control. While disaggregating the polling data for all 50 states would show a more detailed picture of state-level opinions, a

small selection of states is enough to show the systematic disconnection between opinion and policy that would be indicative of a state gun control paradox. However, this state selection had to be significantly diversified to ensure that the data would not be skewed in any direction. To do this, there were several factors were considered in the selection of states. (A chart listing each state's data for these factors can be found in the appendices, Table E)

Party Control – The six states were first selected on the basis of party control of the legislature and governor's offices over the past two decades. Two states were controlled almost entirely by Democrats, two by Republicans, and two states split in party control these governing institutions (see Table E). This was done based on the assumption that partisanship plays a large role in the passage of gun control legislation and the gun control paradox.

Gun Ownership – States were selected to display a wide range of gun ownership in case this was a factor for the gun control paradox.

Gun Regulation – The list was selected to reflect a wide range of states in terms of the amount of gun regulation they have. Data on the stringency of gun laws were sourced by ratings developed by the Giffords Law Center (<https://giffords.org/>).

Population – The selection reflected a diverse range of population sizes and a mix of urban and rural populations.

Region – The selection includes states from all four U.S. Census regions (Northeast, South, Midwest, West).

Calculating Congruence

Calculating congruence with the polling data was straightforward, as it simply compares the support values of Type I questions with the state's implementation/non-implementation of a policy. For example, if the polling data shows 56% support for universal background checks, but

the state does not have universal background checks, it is incongruent. If the state has implemented background checks, then there is public opinion-policy congruence. However, there were two complicating factors in determining congruence. The first complication has to do with the margin of error (MOE). Each state had a different sample size which made the MOE different for each year, with some years being much larger than others. One solution to this problem is combining support from all the years to create a larger sample size and thus reduce the MOE (this was done in Table A). However, determination of congruence for individual years was also important to ensure that any findings from average years (Table A) were consistent. To do this, Table B reports the number of congruent years from when MOE is under 8%, or if MOE would not affect congruence value. Not affecting congruence value means, for example, if Minnesota in 2011 recorded 65% support for a policy it has implemented with an MOE of 14%, this MOE could not change the congruence value for that policy (congruent or not congruent), since even if error is 14%, support would still be above 50%. In this case, 2011 would be included on Table B (An unadjusted table is available in the Appendix of this paper, Table F).

The second complication in calculating congruence is determining when a policy is congruent or not. For some of the polling questions, this was simple. For example, it is very easy to determine whether a state has passed a universal background check law, assault weapons bans or magazine restrictions. However, determining whether a state prevents the mentally ill from purchasing guns or whether a state has instituted a gun control database is not as straightforward. For mental illness bans, the problem is that it is technically illegal for mentally ill people to possess firearms under federal law; however, the states differ on *reporting* when people are considered mentally ill. Therefore, for this question, states were considered congruent when they had laws that required reporting to the FBI's National Instant Criminal Background Check

System (NICS) in all three categories outlined by Giffords Law Center (which is used to determine all state laws to calculate congruence). States with these restrictions essentially require that all mentally ill people be reported to the NCIS, and subsequently will be unable to purchase guns, which is what the polling question asks. In the case of “instituting a database to track gun sales,” the issue is that no state has a “database” per say. However, some states do require that all firearms sales are reported to law enforcement, which is what was used to determine congruence to support for this question.

The last congruence calculation entails congruence of policy mood to policy grade (Table C). The difference of each state’s support for implementing stricter gun policies (Type II) to national support is compared with each state’s rank from Giffords Law Center. These ranks were decided by recording changes in gun laws and ranking each state (1-50) for strictness of its gun laws. Each state is also given a grade (A-F). Originally, congruence was assessed by the state’s grade deviation from the middle rank, 25. However, because national support reflects the country’s population rather than the states’, this proved to be inaccurate. The more accurate assessment of congruence uses the state’s deviation from the middle rank of states graded C, which was consistently around rank 14.

Calculating Responsiveness

Calculating responsiveness is more complex than congruence because it requires the measurement of change in opinion. To calculate the responsiveness of the states to changes in policy mood (using question Type II), the 10-year period of polling data in which Giffords Law Center has recorded the rank of each state, 2010-2019, was employed. First, the change between the 5-year averages of support at the start and end of the 10-year period (2010-2014 and 2014-2019) was measured. Second, the average ranks of each state for the same 5-year periods were

then used to calculate their percent change in rank. Finally, the difference between these two terms, change in rank versus change in support, was calculated. The lower the difference between the change in rank against the change in support, the higher responsiveness the state has. The use of 5-year averages was adopted instead of individual years because of the high margin of error for individual years in the smaller states (CT, MN, and SC). According to previous evidence, using these 5-year averages should not be a problem, as responsiveness in the states has generally been evidenced to be a slow, gradual process (Caughey and Warshaw 2018).

One problem with this method is how to evaluate the comparison of change in rank to change in opinion. Should we expect a one-to-one percentage change of rank to increases in public support? For example, if the citizens of Connecticut increased their support of gun control laws by 20 percent, should one expect to see a 20 percent increase in its rank from Giffords Law Center? The answer is probably not, since these changes are not exactly correlated. This method can, however, show that if Connecticut's citizens increased their support for stricter gun laws by 20 percent, but Connecticut's rank decreased by 20%. Data such as these indicate low responsiveness. Additionally, we can look at comparisons with the other states. For example, if California has very little difference between its change in rank and change in opinion but Minnesota does, then it is probably true that California is more responsive than Minnesota.

Other Concerns

There are some other possible concerns with the methodology of this study that should be reviewed. The first possible problem is that respondents to national polling questions might not reflect opinions about the same questions in state polls. For example, some of the questions from the polls used are worded, "Would you support or oppose that the federal government pass X policy?" An issue could arise if people responded differently depending on if their state has

passed the policy in question. This issue was addressed in Schuman and Presser's (1983) study, where they found that specifically asking a question using a federal indicator did not change public opinion on the issue of gun registration (428). Their conclusion is reflected in this study's results, as there is very little variation in polling regardless of question wording. This should also quell concerns about differences in question wording in general.

The second possible concern is that some states selected could be considered outliers regarding gun control responsiveness and congruence. Indeed, in Goss' (2006) research on state responsiveness, she argues that the states show low congruence after filtering out "a dozen or so states that have particularly strong gun laws, or particularly weak ones" (221). Though her study does not identify these states, I suspect that at least some of these states selected for this research were considered outliers. However, the issue with filtering out these states is that most states have extremely weak gun laws. According to Giffords Law Center's 2020 gun law scorecard, 21 states received an F score, whereas only 8 received an A. Because of this, filtering out "outlier" states on the ends of the spectrum might skew responsiveness and congruence lower than it is, since it would remove a larger percentage of the states with stronger gun laws than lower strength ones. Regardless, this outlier issue is likely the most concerning for this study because it cannot be determined if any given state is an outlier without data from all other 50 states.

A third concern with the methodology is the problem that more salient policies might fail to represent an entire policy agenda, a concern raised by Barabas (2016) in the context of national responsiveness. This issue applies to the policy questions (Type I) of this study because the selected policies from the polling data were the ones questioned the most. Therefore, these questions likely fail to represent a full gun control agenda. As was seen in previous studies on the opinion-policy link, issues with higher salience seemed to exhibit higher rates of responsiveness

and congruence than issues with lower salience (Shapiro 2011, 991). Because of this, the results of this study should be biased towards more responsiveness and congruence. However, this also means that results that indicate low responsiveness/congruence would have overcome this salience bias, which would reinforce evidence for a gun control paradox. Additionally, policy mood congruence (Table C) likely better reflects a full gun control agenda.

Results

Congruence

As expected, the data gathered for this study generally shows very high support in all states for individual gun control policies, with the exception being arming teachers (See Appendix, Fig. A for details). What these results yielded is that a majority of states (4/6) show incongruence with gun control policies because those states lack the gun control restrictions that their publics support (Table A). Additionally, these results show that the national government is incongruent with the same policies, consistent with a national gun control paradox. Only two states, California and Connecticut, achieved more than half congruence with the six policies in contrast to the other states. In fact, both states displayed high levels of congruence.

Table A: Congruence of All-Year Averages							
	NAT	CA	CT	MN	SC	TX	VA
Assault Ban	N	Y	Y	N	N*	Y*	N
Backgrnd Chk	N	Y	Y	N	N	N	N
MntIllnessBan	Y**	Y	N	N	N	N	Y
HighCapLimit	N	Y	Y	N	N	N*	N
Database	N	Y	Y	N	N	N	N
ArmTeach	Y	Y	Y	Y*	Y*	N*	Y*
TOTAL	2	6	5	1	1	1	2
% Congruent/6	33%	100%	83%	17%	17%	17%	33%
NAT = National/Federal Data *Congruence within MOE **Federal law relies on state mental health reporting Source of Gun Policy for Congruence: Giffords Law Center							

This incongruence from a majority of the states was also reflected in the congruence calculation using individual years (Table B), where the only change was slightly higher congruence being found in Texas and Virginia. California and Connecticut still displayed high levels of congruence, and the National government is again mostly incongruent. Unadjusted years saw little difference from this majority incongruence as well. Yet, we do find slightly lower congruence in California and Connecticut and slightly higher congruence in the other states in unadjusted years (Appendix, Table E). However, the change was not significant enough to make any difference to the overall findings.

	NAT		CA		CT		MN		SC		TX		VA	
Assault Weapons Ban	0	8	7	7	4	4	3	4	0	1	5	6	0	2
Univ. Background Checks	0	7	7	7	4	4	0	6	0	6	0	7	0	7
Mental Illness Ban*	5	5	5	5	0	2	0	4	0	3	0	5	5	5
Magazine Limits	0	5	4	4	2	2	0	1	0	3	2	3	0	3
Gun Sale Database	0	4	4	4	0	0	0	2	0	1	0	3	0	1
Arming Teachers*	4	4	4	4	1	1	0	0	0	0	0	0	0	0
Total Congruent / Total Years	9	33	31	31	11	13	3	17	0	14	7	24	5	18
Congruent Years %	27%		100%		85%		18%		0%		29%		28%	
Source of Gun Policy for Congruence: Giffords Law Center														

Congruence of policy mood (Table C), however, tells a slightly different story than congruence of individual policies. Support for generally stricter gun policies (question type 2) was not as overwhelming as for individual policies in most states (See Appendix Fig. A). California and Connecticut did not display a huge lead over the other states due to their restrictive gun laws deviating from the average gun law grade more than their population's support deviated from the national average support. Minnesota and Virginia fared far better in this calculation, as their middling grade ranks reflected the relatively average support held by their populations for stricter gun policies. However, South Carolina and Texas both showed

incongruence due to their populations having just under 50 percent support for more restrictive gun policies yet deviating largely from the average grade.

Table C: Congruence with Policy Mood (Lower Difference = Higher Congruence)						
	% Population Support of Stricter Gun Laws	Dev. from National Support (~50%)	Avg. Gun Law Rank (2010-2019)	Rank Difference from 14 (median)	% Dev. from 14	Difference between Support & Rank
CA	59%	9%	1	13	26%	11%
CT	67%	16%	2.75	11.25	22.5%	6.5%
MN	53%	2%	12.625	1.3.75	2.75%	.75%
SC	47%	-3%	29.75	-15.75	-31.5%	28.5%
TX	46%	-4%	30.75	16.75	33.5%	37.5%
VA	57%	7%	20.625	6.625	13.25%	6.25%

Dev = deviation. Source of Gun Policy for Congruence: Giffords Law Center

Responsiveness

The responsiveness figures of the six states suggest similar findings to the congruence figures; that is, responsiveness was generally low (Table D). For the most part, support for stricter gun policies during the 10-year period increased across all the states except Connecticut, however, the states in which support increased the most did not generally see a corresponding increase in rank, indicating low responsiveness. We still see significant variation among the states, the same variation as seen in the congruence figures, with California and Connecticut displaying the highest congruence. However, the responsiveness differences between the states are not as pronounced. This could be because change in gun law ranking is a relatively rare occurrence. For example, California never lost its spot as the number one ranked state in the country during the entire 10-year period. In contrast, change in support seems to be more easily moved, fluctuating every year by a few percentage points. Still, there seemed to be very little connection between the two figures of change in rank and change in support, indicating discordance between the public's mood towards gun control and lawmaker's actions.

Table D: Difference in Rank Change to Support Change (Lower Difference = Higher Responsiveness)						
	CA	CT	MN	SC	TX	VA
Change in Rank between 5 yr. Average Ranks	0	0	0.25	0	-5.5	-3.25
% Change in Rank out of 50	0%	0%	1%	0%	-11%	-7%
Change between 5 yr. Avg. Support Figures	9%	-4%	17%	27%	14%	8%
Rank Chng and Support Chng Difference	9%	4%	17%	27%	25%	15%
*See Appendix Tables G & H for specific rank & support figures over the 5-year periods Source of Gun Law Grade: Giffords Law Center						

Conclusions

The evidence derived from the disaggregation of national polling data on gun control indicates that it is likely that a gun control paradox exists in most states. This is because, for one, a majority of the six states investigated show a disconnection between their public's opinion on gun control policies and their gun control laws, indicating low congruence of state governments to gun control. Second, a majority of the six states also showed low responsiveness to changes in support for stricter gun policies not affecting changes in gun policy.

The evidence shows that California and Connecticut have high congruence and responsiveness to gun control policies, certainly more than their counterparts in this study. However, it would be wrong to think that this indicates that many or most states display similar attributes. Most states are like the four incongruent/less responsive cases from this study because most states have not implemented the gun control policies that the public supports. Recall that 21 states scored an F in the Giffords Law Center grading, meaning more than 40 percent of states have similar gun laws to South Carolina and Texas (both scored Fs), and likely have similar congruence and responsiveness figures as well. Only additional research on all 50 states can confirm this inference, however.

Regarding the scholarly literature, the evidence from this study generally fits with previous research, however, there are some slight deviations. On the surface, the results of Table C appear to contradict the results of Goss' (2006) study, since it records that 4/6 states had

decent congruence with policy mood, whereas Goss' study found that congruence with policy mood was generally low (220-221). There are two reasons that might explain why the results of the two studies are more similar than it seems. The first is once again that most states probably reflect South Carolina and Texas' results for the same reasons noted. Second, Goss' study removed outliers, possibly skewing her results towards less congruence. For these reasons, it is likely that policy mood congruence is low in most states, though more research is required to confirm this.

This study does expand on Goss' findings by testing the congruence of individual gun control policies (Tables A & B). The evidence demonstrated that certain states (California and Connecticut) displayed much higher congruence on individual policies than others. The most likely reason for this difference in congruence (between Tables A/B and C) likely stems from the fact that the policies tested in Tables A and B represent salient gun control policies, whereas policy mood represents all policies. Salient policies, as evidenced by the work of Page and Shapiro (1983) and Lax and Phillips (2012), are more likely to be congruent to public opinion. This would also corroborate Barabas' (2016) arguments that such salient policies cannot be used to reflect a full gun control agenda.

This study also expands upon Goss' (2006) research by showing that most states generally exhibit low responsiveness to gun control in addition to low congruence. This is especially crucial evidence for the gun control paradox in the states because congruence only tells half of the story, as governments can have congruence but low responsiveness (Beyer and Hänni 2018). Indeed, obtaining data on opinions for both is even more necessary in state research because states have been shown to exhibit a deficit in congruence while having high responsiveness (Lax

and Phillips 2012). This study shows that a situation of low congruence/high responsiveness is not the case regarding gun control.

As for the reasons for the state gun control paradox, this study's evidence is consistent with most of the explanations for the national gun control paradox but cannot confirm that they are in effect. The best evidence from this study for the main explanation of the gun control paradox, that gun control supporters are lacking in political action, comes from the results in California and Connecticut. This is because, according to Goss (2006), gun control advocates did have success in "a small handful of states," like California and Connecticut (10). Other than that, more research would be needed to confirm this main explanation, such as disaggregating polling on political action like those from Schuman and Presser's (2013; 1981) research.

As for the other factors for the national paradox, the data is again largely consistent with them, but not confirming. The southern states of the study (SC, TX, & VA) exhibit less congruence and responsiveness than the others. This could be seen as evidence towards Brennan, Lizotte, and McDowall's (1993) conclusions, especially since Minnesota, the state with the highest rates of gun ownership of all six states, displays far more congruence and responsiveness than the southern states. The difference in support for individual policies of gun control versus support for generally stricter gun laws (Appendix, Fig. A) could be seen as evidence for Aronow and Miller's (2016) hypothesis that people have misconceptions about which gun laws are already implemented. The fact that the two completely Democrat-controlled states (CA and CT) were the only ones that were congruent with salient gun control policies is consistent with the study from Bouton et al. (2014), which found that only Democratic representatives would change their position on gun control. This last point also reflects the findings of Shapiro's (2011)

argument that political polarization, unequal responsiveness, and the “thermostat effect” contribute to instances of opinion-policy discordance.

Further Research

Further research on the state gun control paradox can improve upon the findings of this paper in two ways. First, new studies should be more extensive and detailed. All fifty states should be included, and more policies should be researched. This would likely necessitate the use of MRP. That is, while polling data on gun control is more extensive than in most policy fields, it is not as extensive as such comprehensive research would require. One reason that this increased detail is important is to determine whether most states exhibit low responsiveness and congruence to gun control. While the evidence from this paper does suggest that this is the case, there is still a possibility that the states used were outliers and that most states display congruence and/or responsiveness. Second, the reasons for the state gun control paradox should be tested. While the explanations for the state gun control paradox most likely reflect the reasons for the national gun control paradox, this is not certain, as individual states can present significantly different political dynamics in comparison to the national government. This can be done in many ways, such as, as suggested, disaggregation of polling that asks about respondent’s actions towards gun control.

Lastly, polling within individual states should be greatly expanded. While resources like the Roper Center are huge improvements over what was available in the past, there still exists an appreciable scarcity of data. This seriously limits the amount of research that can be done on states, as methods to estimate state data such as MRP are resource intensive. State laws vary immensely, and not just in the field of gun control. Because of this variation, determining the responsiveness and congruence of state governments is incredibly important. State governments

are arguably “closer” to the people, making understanding their congruence and responsiveness dynamics crucial to research on the opinion-policy link.

Sources: Party Control: <https://ballotpedia.org/>, Ownership: RAND Corporation (Schell et al. 2020), Grade: Giffords Law Center (<https://giffords.org/>), Population: 2010 U.S. Census. Reg=Gun Regulation

	Nat		CA		CT		MN		SC		TX		VA	
Assault Weapons Ban	0	8	7	8	7	8	6	8	5	8	6	8	2	8
Univ. Background Checks	0	7	7	7	7	7	0	7	0	7	0	7	0	7
Mental Illness Ban*	5	5	0	5	0	5	0	5	0	5	0	5	5	5
Magazine Limits	0	4	4	4	4	4	0	4	0	4	2	4	0	4
Gun Sale Database	0	4	4	4	4	4	0	4	0	4	0	4	0	4
Arming Teachers*	4	4	4	4	4	4	4	4	4	4	0	4	4	4
Total Congruent / Total Years	9	32	26	32	26	32	10	32	9	32	8	32	11	32
Congruent Years %	28%		81%		81%		31%		28%		25%		34%	

Year	CA		CT		MN		SC		TX		VA	
2010	45	139	4	14	9	35	4	21	29	106	19	51
2011	236	398	29	39	37	77	30	61	89	215	69	126
2012	188	325	30	47	35	77	21	62	72	179	100	162
2013	254	429	65	79	61	110	31	74	130	307	145	258
2014	81	137	8	14	19	40	11	29	54	100	19	42
2015	73	121	12	15	7	14	8	15	15	21	28	45
2016	69	112	10	14	16	21	12	18	39	73	20	32
2017	243	377	12	28	39	62	27	41	125	235	47	82
2018	187	250	16	21	24	36	19	27	68	113	41	58
2019	53	93	8	9	20	31	10	14	32	61	12	17
Sum 2010-14	804	1428	136	193	161	339	97	247	374	907	352	639
Sum2015-19	625	953	58	87	106	164	76	115	279	503	148	234
2010-14 Avg	0.563025	0.003	0.704663	0.007	0.474926	0.005	0.392713	0.006	0.412348	0.003	0.550861	0.004
2015-19 Avg	0.655824	0.003	0.666667	0.007	0.646341	0.008	0.660879	0.009	0.554672	0.004	0.632479	0.006
Diff 5 Yr Avg	9%		-4%		17%		27%		14%		8%	

Year	CA	CT	MN	SC	TX	VA
2010		1	5	15	23	19
2013		1	2	12	34	31
2014		1	2	12	34	29
2015		1	2	12	28	33
2016		1	2	12	29	34
2017		1	3	12	29	32
2018		1	3	13	30	34
2019		1	3	13	31	34

Average	1	2.75	12.625	29.75	30.75	20.625
2010-14 Avg	1	2.75	12.75	29.75	28	19
2015-19 Avg	1	2.75	12.5	29.75	33.5	22.25
Diff. 5 Yr Avg	0	0	0.25	0	-5.5	-3.25
Source: Rank is from Giffords Law Center Annual Scorecards						

Table I: Polls Used (Continues on next page)				
Poll Name	Year	Question/s	Survey Organization	Roper ID
NPR/PBS NewsHour/Marist Poll: December 2019	2019	Background, AssaultBan	Marist College Institute for Public Opinion	31116969
NPR/PBS NewsHour/Marist Poll: September 2019 Gun Violence	2019	Background, AssaultBan, ArmTeachers, MagLimit	Marist College Institute for Public Opinion	31116763
NPR/PBS NewsHour/Marist Poll: February 2019 Gun Violence	2019	Strictness, Background, ArmTeachers, AssaultBan, Database, MentalIllnessBan, HighCapacityBan	Marist College Institute for Public Opinion	31116083
NPR/PBS NewsHour/Marist Poll: July 2019	2019	Background, AssaultBan	Marist College Institute for Public Opinion	31116608
ABC News/Washington Post Poll: Trump/2020 Presidential Election/Gun Control	2019	Background, AssaultBan, MagLimit	Langer Research Associates	31116757
ABC News/Washington Post Poll: Trump/Gun Laws/Russia	2019	AssaultBan	Langer Research Associates	31114983
Associated Press-NORC Center for Public Affairs Research Poll: The March 2018 AP-NORC Center Poll	2018	Strictness, Background, AssaultBan, ArmTeachers, MentalIllnessBan	The Associated Press-NORC Center for Public Affairs Research	31114955
CNN Poll: February 2018 - Poll 3	2018	AssaultBan, MagLimit, MentalIllnessBan	SSRS (Social Science Research Solutions)	31114892
CBS News Poll: February 2018	2018	Strictness, AssaultBan, ArmTeachers	SSRS	31115726
Associated Press-NORC Center for Public Affairs Research Poll: Gun Laws, Ownership, and Violence in America	2017	Strictness	The Associated Press-NORC Center for Public Affairs Research	31114585
CBS News Poll: Trump/Health Care/Border Wall	2017	Strictness	SSRS	31114313
CNN Poll: October 2017 - Poll 10	2017	Strictness, AssaultBan, MagLimit	SSRS	31114550
CBS News Poll: December 2017	2017	Background, AssaultBan, ArmTeachers	SSRS	31114736
CBS News Poll: Terrorism/Gun Control Laws/Orlando Nightclub Shooting	2016	Strictness	SSRS	31102968
Pew Research Center: August 2016 Political Survey	2016	Background, AssaultBan, Database, MagLimit	Princeton Survey Research Associates International	31096310
CNN/ORC Poll: 2016 Presidential Election/ Gun Control Laws/ Acts of Terrorism in the United States	2016	Background, AssaultBan, MagLimit, MentalIllnessBan	Opinion Research Corporation	31095605
CBS News/New York Times Poll: 2016 Presidential Campaign/Gun Laws/Planned Parenthood	2016	Strictness	SSRS	31091610
Pew Research Center: July 2015 Political Survey	2015	Background, AssaultBan, Database, MentalIllnessBan	Princeton Survey Research Associates International	31096290
CBS News/New York Times Poll: Political Parties/National Issues	2014	Strictness	SSRS	31091596
CBS News/60 Minutes/Vanity Fair Poll: Various Issues	2013	Strictness	CBS News	31091063
CBS News Poll: Economy/Sequester/Same-Sex Marriage	2013	Strictness	CBS News	31091061
CBS News Poll: Barack Obama	2013	Strictness	CBS News	31091059
CBS News/New York Times Poll: Economy/Government/Gun Control	2013	Strictness	CBS News; New York Times	31091589
Pew Research Center Poll: May 2013 Political Survey	2013	Background, AssaultBan, ArmTeachers, Database	Princeton Survey Research Associates International	31096193
CBS News/New York Times Poll: Obama and the Republicans in Congress/Gun Control/Syria	2013	Strictness, Background, AssaultBan	CBS News; New York Times	31091591

CNN/ORC Poll: Obama/Gun Control	2013	Strictness	Opinion Research Corporation	31095547
CBS News Poll: Politics/Federal Budget/Life	2012	Strictness	CBS News	31091057
CBS News/60 Minutes/Vanity Fair Poll: Driving and Cost of Gas/Mother's Day/Life	2012	Strictness	CBS News	31091050
Time Magazine/Abt SRBI Poll: Constitution	2011	Strictness	Abt SRBI, Inc. (Schulman, Ronca, & Bucuvalas, Inc.)	31097943
CBS News/New York Times Poll: Government/Economy/Budget/Healthcare Reform	2011	Strictness	CBS News; New York Times	31091564
NBC News/Wall Street Journal Poll: America's Future/2012 Presidential Election/Tucson Shootings	2011	Strictness	Hart and McInturff Research Companies	31094896
CBS News Poll: Gun Control/Arizona Shooting	2011	Strictness	CBS News	31091030
USA Today/Gallup Poll: December Wave 2--Gun Control/Newtown School Shooting/Travel Plans/Sports/Religion	2011	Strictness, Background, AssaultBan, MagLimit	Gallup Organization	31089824
CNN/ORC Poll: Obama/Gun Control/Economy/Arizona Shooting	2011	Background, AssaultBan, MagLimit	Opinion Research Corporation	31095481
ABC News/Washington Post Poll: January Monthly--Barack Obama/Tucson Shooting/Health Care Reform/Gun Control	2011	AssaultBan, MagLimit	Langer Research Associates; TNS Intersearch	31086989
CBS News/New York Times Poll: Government/Tea Party Movement	2010	Strictness	CBS News; New York Times	31091558
CNN/ORC Poll # 2009-006: Economy/International Relations	2009	Strictness	Opinion Research Corporation	31095450
NBC News/Wall Street Journal Poll: October, 2009--Barack Obama/Health Care Reform	2009	AssaultBan	Hart and McInturff Research Companies	31094884
NBC News/Wall Street Journal Poll: April, 2009--Barack Obama	2009	AssaultBan	Hart and McInturff Research Companies	31094880
USA Today/Gallup Poll # 2008-09: Post-Super Tuesday Poll	2008	Strictness	Gallup Organization	31089685
CNN/ORC Poll # 2008-007: 2008 Presidential Election/Price of Gasoline/Gun Control	2008	MentalIllnessBan	Opinion Research Corporation	31095428
CBS News/New York Times Poll: Environment	2007	Strictness	CBS News; New York Times	31091531
Associated Press/Ipsos Public Affairs Poll: Gun Control	2007	Strictness	Ipsos-Public Affairs	31090106
DOI link to polls is: https://doi.roper.center/?doi=10.25940/ROPER- (Roper ID fills blank) Access to further data from the polls used in this study can be found at https://www.williamrose.net/				

References

- “Annual Gun Law Scorecard.” n.d. Giffords Law Center. Accessed April 12, 2022.
<https://giffords.org/lawcenter/resources/scorecard/>.
- Aronow, Peter M, and Benjamin T Miller. 2016. “Policy Misperceptions and Support for Gun Control Legislation.” *The Lancet* 387 (10015): 223. [https://doi.org/10.1016/S0140-6736\(16\)00042-8](https://doi.org/10.1016/S0140-6736(16)00042-8).
- Barabas, Jason. 2016. “Democracy’s Denominator: Reassessing Responsiveness with Public Opinion on the National Policy Agenda.” *Public Opinion Quarterly* 80 (2): 437–59. <https://doi.org/10.1093/poq/nfv082>.
- Beyer, Daniela, and Miriam Hänni. 2018. “Two Sides of the Same Coin? Congruence and Responsiveness as Representative Democracy’s Currencies.” *Policy Studies Journal* 46 (S1): S13–47. <https://doi.org/10.1111/psj.12251>.
- Bordua, David J. 1983. “Adversary Polling and the Construction of Social Meaning - Implications in Gun Control Elections in Massachusetts and California Firearms and Firearms Regulation: Old Premises, New Research.” *Law & Policy Quarterly* 5 (3): 345–66.
- Bouton, Laurent, Paola Conconi, Francisco Pino, and Maurizio Zanardi. 2014. “Guns and Votes.” *National Bureau of Economic Research Working Paper Series* No. 20253. <https://doi.org/10.3386/w20253>.
- Brennan, Pauline Gasdow, Alan J. Lizotte, and David McDowall. 1993. “Guns, Southernness, and Gun Control.” *Journal of Quantitative Criminology* 9 (3): 289–307.
- Caughey, Devin, and Christopher Warshaw. 2018. “Policy Preferences and Policy Change: Dynamic Responsiveness in the American States, 1936–2014.” *American Political Science Review* 112 (2): 249–66. <https://doi.org/10.1017/S0003055417000533>.
- Erskine, Hazel. 1972. “The Polls: Gun Control.” *The Public Opinion Quarterly* 36 (3): 455–69.
- Goss, Kristin A. 2006. *Disarmed*. Princeton University Press.
<http://www.jstor.org/stable/j.ctt7t494>.
- Grinshteyn, Erin, and David Hemenway. 2016. “Violent Death Rates: The US Compared with Other High-Income OECD Countries, 2010.” *The American Journal of Medicine* 129 (3): 266–73. <https://doi.org/10.1016/j.amjmed.2015.10.025>.
- Gutowski, Stephen. 2019. “NRA Membership Dues, Contributions Rebounded In 2018.” *Washington Free Beacon*, May 30, 2019. <https://freebeacon.com/author/stephen-gutowski/>.

- Karp, Aaron. 2018. *Estimating Global Civilian-Held Firearms Numbers*. Small Arms Survey. <http://lib.ugent.be/catalog/ebk01:4100000010162008>.
- Lankford, Adam. 2016. "Public Mass Shooters and Firearms: A Cross-National Study of 171 Countries." *Violence and Victims*, no. 2: 187–99. <https://doi.org/10.1891/0886-6708.VV-D-15-00093>.
- Lax, Jeffrey R., and Justin H. Phillips. 2009a. "Gay Rights in the States: Public Opinion and Policy Responsiveness." *American Political Science Review* 103 (3): 367–86. <https://doi.org/10.1017/S0003055409990050>.
- . 2009b. "How Should We Estimate Public Opinion in the States?" *American Journal of Political Science* 53 (1): 107–21.
- . 2012. "The Democratic Deficit in the States." *American Journal of Political Science* 56 (1): 148–66.
- Martin, John L. 1984. "The Genealogy of Public Opinion Polling." *The Annals of the American Academy of Political and Social Science* 472 (1): 12–23. <https://doi.org/10.1177/0002716284472001002>.
- Miller, Steven V. 2019. "What Americans Think About Gun Control: Evidence from the General Social Survey, 1972–2016." *Social Science Quarterly* 100 (1): 272–88. <https://doi.org/10.1111/ssqu.12555>.
- Monroe, Alan D. 1979. "Consistency between Public Preferences and National Policy Decisions." *American Politics Quarterly* 7 (1): 3–19. <https://doi.org/10.1177/1532673X7900700101>.
- Page, Benjamin I., and Robert Y. Shapiro. 1983. "Effects of Public Opinion on Policy." *The American Political Science Review* 77 (1): 175–90. <https://doi.org/10.2307/1956018>.
- Schell, Terry L., Samuel Peterson, Brian G. Vegetabile, Adam Scherling, Rosanna Smart, and Andrew R. Morral. 2020. *State-Level Estimates of Household Firearm Ownership*. Santa Monica, CA: RAND Corporation. <https://doi.org/10.7249/TL354>.
- Schuman, Howard, and Stanley Presser. 1977. "Attitude Measurement and the Gun Control Paradox." *The Public Opinion Quarterly* 41 (4): 427–38.
- . 1981. "The Attitude-Action Connection and the Issue of Gun Control." *The Annals of the American Academy of Political and Social Science* 455: 40–47.
- . 2013. "The Gun Control Paradox." *Contexts* 12 (2): 68–69.
- Shapiro, Robert Y. 2011. "Public Opinion and American Democracy." *The Public Opinion Quarterly* 75 (5): 982–1017.

- Simonovits, Gabor, Andrew M. Guess, and Jonathan Nagler. 2019. "Responsiveness without Representation: Evidence from Minimum Wage Laws in U.S. States." *American Journal of Political Science* 63 (2): 401–10. <https://doi.org/10.1111/ajps.12412>.
- Wolpert, Robin M., and James G. Gimpel. 1998. "Self-Interest, Symbolic Politics, and Public Attitudes toward Gun Control." *Political Behavior* 20 (3): 241–62.
- Wright, James D. 1981. "Public Opinion and Gun Control: A Comparison of Results from Two Recent National Surveys." *The Annals of the American Academy of Political and Social Science* 455: 24–39.