2021

When State and Local Policy Clash: The Great Gun Debate in Virginia

Kristin Diane Kremer
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Kristin D. Kremer

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Gregory Koehle, Committee Chairperson,
Criminal Justice Faculty

Dr. Tamara Mouras, Committee Member,
Criminal Justice Faculty

Dr. Joseph McMillan, University Reviewer,
Criminal Justice Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2021

Abstract

When State and Local Policy Clash: The Great Gun Debate in Virginia

by

Kristin D. Kremer

MA, American Military University, 2008

MBA, Baker University, 2001

BA, Loyola University of Chicago, 1991

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Criminal Justice

Walden University

February 2021

Abstract

Gun policy is a highly contested public policy issue in the United States. The majority of gun legislation is enacted at the state level and a clash exists between state and local initiatives to address the problem of gun violence. As demonstrated in Virginia in 2019-2020, when state governments enact stricter firearms laws, local jurisdictions have responded with 2nd Amendment Sanctuary resolutions. Researchers have documented perceptions on gun policy. However, little information is available regarding attitudes on local jurisdictions enacting resolutions aimed at not enforcing federal or state gun laws. The purpose of this quantitative correlational cross-sectional study was to examine the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun control laws and 2nd Amendment Sanctuary resolutions. The theoretical foundation for this study was punctuated equilibrium theory. Online surveys were used to collect data from 192 Virginians and multiple linear regression was used to test the hypotheses. The results indicated a statistically significant relationship for both gun ownership and exposure to gun policy imaging in predicting attitudes on gun control and 2nd Amendment Sanctuary resolutions. The study also demonstrated that the majority of constituents did not support local jurisdictions enacting 2nd Amendment Sanctuary resolutions. Additionally, as evidenced in other studies, both gun owners and non-gun owners strongly support some forms of gun control. This research promotes positive social change by providing policy makers, gun policy advocacy groups, and the general public with information to influence the development of gun control policy that meets the requirement to both protect individual rights and ensure public safety.

When State and Local Policy Clash: The Great Gun Debate in Virginia

by

Kristin D. Kremer

MA, American Military University, 2008

MBA, Baker University, 2001

BA, Loyola University of Chicago, 1991

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Criminal Justice

Walden University

February 2021

Dedication

I dedicate this dissertation to my loving and supportive family. To my mom Janice who has always been my biggest fan. You are the example I always strive to emulate. Thank you for loving me unconditionally. Your encouragement, understanding, advice and guidance help me to be the best I can be. I am eternally grateful for your love and support along the journey of my life. I would not be who I am and where I am today without you as my wonderful mom.

To Pam and Josh, thank you for your patience during this three year process. I know this endeavor impacted the time we had together. Thank you for understanding and supporting me. I love you both and look forward to getting back out on the golf course with you soon.

Finally, in memory of my father Terry and my brother Greg. Both of you were taken too early but I know you would be proud of what I have accomplished. You were both the best men in my life.

Acknowledgements

First and foremost I thank my family and friends for their support and encouragement throughout this three year journey. Special thanks to my mom Janice Kremer for listening to me as I explained my research, proofreading my paper, and encouraging me 100% along the way.

To Dr. Gregory Koehle my dissertation committee chair and mentor, thank you for the support and guidance over the past year. From our first encounter at Residency your encouragement and advice were instrumental in helping me find my path to success on this journey. I truly appreciate your willingness to be my sounding board and the insightful feedback you provided throughout this entire process.

To Dr. Tamara Mouras, thank you for serving as my second committee member. Your knowledge and astute direction were critical to ensuring my dissertation met the highest standards. I am grateful for the time you dedicated in helping me achieve my goal. To Dr. Joseph McMillan, my university research reviewer, thank you for your thorough assessment and constructive comments of my project. Your efforts and support were greatly appreciated.

To Dr. Thomas Diebold, Dr. Zin Htway, and Dr. Reginald Taylor, thank you for tutoring me in quantitative statistics throughout my capstone process. I extend my unwavering gratitude for your patience as you explained the various components to me. Your knowledge, experience, and recommendations regarding multiple linear regression, bootstrapping, and statistical analysis were invaluable to the successful completion of my research.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Overview

Gun violence in Virginia has increased every year since 2012. High-profile incidents such as the April 2007 Virginia Tech shooting, November 2013 shooting of a state senator, August 2015 execution of a reporter and cameraman during a live telecast, and May 2019 mass shooting at Virginia Beach have led to repeated calls for comprehensive gun control legislation (Parsons et al., 2015). Regardless of strong public support for some gun control measures, such as universal background checks, state-level legislative trends throughout the United States in the last 20 years have focused on deregulation vice strengthening gun laws (Reich & Barth, 2017). Extensive literature exists on the interpretation of the 2nd Amendment and rulings by the U.S. Supreme Court. Furthermore, substantial research exists on attitudes toward gun control policy and specific gun control measures' effectiveness. This study's foci were Virginia gun owner and non-gun owner perspectives on gun control initiatives and the 2nd Amendment Sanctuary movement, specifically how their attitudes align with the conflicting legislative efforts at the state and local levels.

This research contributes to the literature by examining an aspect of the gun control policy debate not previously researched, highlighting the extent to which gun owner and non-gun owner attitudes reflect the divergence between state and local gun policy initiatives. This study has the potential to inform lawmakers, policy advocates, special interest groups, and the public about conflicting attitudes toward gun control measures and 2nd Amendment Sanctuary resolutions so that policy that aligns with

constituent beliefs is implemented. This study promotes positive social change by contributing to the literature on gun policy attitudes to assist in the development and implementation of effective and widely endorsed policies to address gun violence in Virginia.

In this chapter, I discuss the research study's background and address the gap in current knowledge. I then introduce the problem statement, the purpose of the study, and research questions and hypotheses. Next, I describe the theoretical framework, nature of the study, assumptions, scope, delimitations, and limitations. The chapter concludes with a synopsis of the study's significance and an overall summary of the main points.

Background

A vital component of the debate over gun control today centers on a "balance between the government's obligation and authority to protect the citizens of the nation not only from foreign invasion but also from each other, and the ability of law-abiding citizens to exercise their constitutional right to self-defense with a firearm" (Cooper, 2015, p. 351). In a move away from historical precedent, the U.S. Supreme Court in *District of Columbia v. Heller* (2008) ruled that an individual had the right to own a firearm to defend themselves. Two years later, in *McDonald v. City of Chicago* (2010), the U.S. Supreme Court determined that an individual's 2nd Amendment rights were protected from infringement by both the federal and state governments (Cooper, 2015). State-level governments enact the majority of firearm legislation, and this shift in interpretation is at the core of the gun policy conflict today.

In response to threats and actions toward more restrictive gun legislation at the state level, local jurisdictions across the country have passed 2nd Amendment Sanctuary resolutions aimed at opposing the enforcement of any gun control law that violates the 2nd Amendment. In Virginia, within a 4-month period, November 2019 to February 2020, more than 95% of the counties throughout the state had declared themselves 2nd Amendment Sanctuaries (Gunter, 2020). The Virginia governor responded, on what was perceived as a more robust gun control mandate during the 2019 elections, by enacting seven new gun control laws in April 2020 (Miller, 2020).

The extensive literature on the effectiveness of specific gun control measures at reducing gun violence shows mixed results. Data inaccuracy, inconsistencies in methodology, subjective scoring or ratings of legislation, use of proxy variables to measure gun ownership, inaccurate measures and testing, and inconsistent definitions lead to skewed research results and conflicting outcomes across the spectrum of studies (Kposowa et al., 2016; Lang, 2016; Makarios & Pratt, 2012; Martin & Legault, 2005; RAND, 2018; Rostron, 2008). Literature is also prevalent regarding the types of exposure to policy imaging that may influence attitudes within the gun policy debate. Specifically, I examined eight categories relevant to policy imaging. Research shows that the media and interest groups, high-profile events such as mass shootings, suicide rates, mental health perspectives, culture, religion, and political identity all influence public attitudes toward gun control policy (Cukier & Eagan, 2018; Kposowa et al., 2016; McGinty et al., 2016; Miller, 2019; Yamane, 2016).

Much of the literature on gun owner and non-gun owner perspectives of gun control concentrates on specific gun control measures coupled with control variables such as race, gender, political or religious affiliation, culture individualism versus collectivism, and rural vice urban identity (Blanco, 2016). A specific gap exists in determining gun owner and non-gun owner attitudes on 2nd Amendment Sanctuaries and the divergent gun policy initiatives between state and local governments. A gap also exists in assessing the effects of exposure to policy imaging regarding gun policy initiatives and 2nd Amendment Sanctuaries related to gun owner and non-gun owner attitudes. This study was needed to help researchers understand the attitudes of gun owners and non-gun owners and the effects of policy images on those attitudes related to 2nd Amendment Sanctuaries and the divergent gun policy initiatives between state and local governments.

Problem Statement

Prior to 2020, the Virginia General Assembly's specific efforts to enact more stringent laws to mitigate gun violence had been largely unsuccessful (Berti, 2019). However, after the 2019 state-wide Virginia General Assembly election, the governor, senate, and House of Delegates were controlled by the Democratic Party for the first time in more than 2 decades. The Democrats had campaigned on stricter gun control and with the shift in power the General Assembly proposed numerous legislative policies aimed at increasing gun control. In protest, between November 2019 and February 2020, more than 95% of counties and 42% of independent cities in Virginia passed a 2nd Amendment Sanctuary resolution. Although these resolutions were mostly a political statement and not legally binding, many local jurisdictions declared they would not enforce state or

federal gun laws perceived to violate the 2nd Amendment to the U.S. Constitution (Gunter, 2020). Regardless of the mobilization of the 2nd Amendment Sanctuary movement in Virginia, during the 2020 general assembly session, seven state-wide gun control bills were passed and signed into law by the governor (Arnold, 2020).

This conflict between state legislative proposals and local jurisdictions is problematic as it suggests a divide within the constituency. Research shows that the majority of firearm legislation is implemented at the state level. However, it is not clear whether state initiatives or local resolutions genuinely reflect the will of the people (Sabbath et al., 2020). Researchers do not know what Virginia gun owner and non-gun owner attitudes are regarding local enactment of 2nd Amendment Sanctuary resolutions and state gun law proposals. Additionally, researchers do not know what policy image factors influence the contradictory perspectives regarding state and local government gun policy initiatives in Virginia. The literature that I reviewed for this study suggested that others have investigated attitudes on gun control, focusing on public preferences, police chief, sheriff and African American legislators' perceptions, media influence, mental health and social issues, school security concerns, and special interest groups (Miller, 2019). None of the literature examined whether gun owner and non-gun owner attitudes support 2nd Amendment Sanctuary resolutions or gun control legislation at the state level or the effects of policy image on those attitudes. My research fills this gap by contributing data to the literature to better understand the gun law conflict between state and local jurisdictions. It potentially influences constituency-endorsed development of policy to mitigate gun violence at the state level.

Purpose of the Study

The purpose of this quantitative cross-sectional correlational research study was to examine Virginia gun owner and non-gun owner attitudes on gun policy and enhance the understanding of the conflict between divergent views that influence gun policy initiatives at the state and local levels. In this study, I examined the attitudes of Virginia gun owners and non-gun owners, specifically on 2nd Amendment Sanctuary resolutions and state-level gun legislation policies and proposals. Additionally, I assessed the influence of policy image factors on the conflicting initiatives proposed at the state and local levels. I assessed Virginia gun owner and non-gun owner attitudes on 2nd Amendment Sanctuary resolutions, policy image, and state-level gun control policies and proposals through primary data gathered from surveys. This study was unique because in it, I addressed an aspect of the gun control debate, specifically attitudes of constituents on divergent state and local policy initiatives, which was under-researched.

In this quantitative cross-sectional correlational study, I focused on a population (gun owners and non-gun owners) that directly influences and participates in the conflict between greater gun control and greater gun freedom, which affects the development of strategies to mitigate gun violence at the state level. The independent dichotomous variable for this study was gun ownership, and the dependent variable was attitudes on 2nd Amendment sanctuary resolutions measured on a 7-point Likert scale. A composite score of gun owner and non-gun owner attitudes based on nine specific gun control laws comprised both a dependent and predictor variable to address the research questions. I assessed gun control laws regarding universal background checks, protective orders,

carrying firearms in sensitive areas, a one-gun-a-month purchase limit, reckless endangerment of a minor, notification of lost or stolen weapons, extreme risk protection orders, assault weapons and magazine bans, and concealed carry. I measured the variables for generating a composite score on a 7-point Likert scale.

I generated a policy image index variable consisting of categorical factors to provide an index score which functioned as a predictor variable. The eight exposure to policy image factors were media coverage, interest group involvement, mass shooting awareness, gun suicide prevalence, mental health impacts, cultural influence, religious influence, and political identity influence. The covariates in this study were the categorical demographic variables, gender, race, and political affiliation.

Research Questions and Hypotheses

RQ1: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws?

$H_0$1: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws.

H_A1: There is a statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws.

- Dependent variable: attitudes on Virginia state gun laws.
- Predictor variables: gun ownership; exposure to gun policy imaging.

RQ2: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries?

$H_0$2: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries.

H_A2: There is a statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries.

- Dependent variable: attitudes on 2nd Amendment Sanctuary resolutions.
- Predictor variables: gun ownership; exposure to gun policy imaging.

RQ3: Do attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation predict attitudes on 2nd Amendment Sanctuaries?

$H_0$3: Attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation are not statistically significant predictors of attitudes on 2nd Amendment Sanctuaries.

H_A3: Attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation are statistically significant predictors of attitudes on 2nd Amendment Sanctuaries.

- Dependent variable: attitudes on 2nd Amendment Sanctuary resolutions.
- Predictor variables: attitudes on Virginia state gun laws, exposure to gun. policy imaging, gun ownership, gender, race, and political affiliation.

Theoretical Foundation

A theoretical foundation shapes the topic, design, goal, and results of the research study by integrating and aligning the research with existing literature. It enables the researcher to place the study relative to other research and findings in the respective field

of study, adds to the body of knowledge and understanding about phenomenon within specific contexts, and ensures the continuous and iterative development of knowledge (Ravitch & Carl, 2016). Jones and Baumgartner's punctuated equilibrium theory (PET) was the theoretical base for this study. PET involves policy change related to setting the agenda and defining the issue within the foundation of periodic stability augmented with sharp disruptions to the status quo. As the public debates, an agenda on the issue changes, and the existing policy can either be strengthened, which may create difficulties for enacting change or challenged providing opportunities for policy change (Jones & Baumgartner, 2012). Gun violence in Virginia and the lack of political action have led to increased public outrage and heightened attention on gun control policy. The conflicting ideas and interest groups resulted in competing coalitions that were attempting to redefine the issue to bolster their influence. This led to increased attention by the state government and involvement of the previously apathetic on both sides of the issue. When one side mobilized the other counterattacked. The result was significant policy changes or punctuations in the near term before interest and political action subsided, and the status quo was re-established (True & Utter, 2002). In Chapter 2 of this study, I will further explain PET.

In this research study, I focused on the attitudes of gun owners and non-gun owners and policy images that influence conflicting gun policy initiatives between state and local governments in Virginia. PET provided a theoretical framework for analyzing the elements such as issue definition, political institutions, and special interests, which influence the gun policy debate. The current focus on gun control versus gun rights in

Virginia was the dominant policy topic that disrupted the traditionally stable political environment. As a critical element of PET, it is essential to examine how exposure to the portrayed image of a policy affects gun owner and non-gun owner attitudes. PET's application coupled with subsequent research provided insights into the punctuated political environment of gun control policy and potential changes in policy to mitigate gun violence (Jones & Baumgartner, 2012).

Nature of the Study

I designed this research study as a nonexperimental quantitative correlational cross-sectional study. The focus was examining Virginian gun owner and non-gun owner attitudes regarding 2nd Amendment Sanctuary resolutions and state gun laws to determine whether they reflect gun policy initiatives at the state and local levels and whether exposure to specific policy images influences those attitudes. To understand this phenomenon, a cross-sectional correlational research approach helped me examine the current situation and identify data that enabled the assessment of multiple factors within the same study. The methodology enabled me to build upon the previously established concepts of PET and related them to gun control policy action at the state and local levels. The research questions aligned with using a correlational analysis to examine the themes and content surrounding Virginia gun owner and non-gun owner attitudes. I converted objective and statistical analysis of the data into numerical values that I statistically analyzed to determine the results (Williams, 2007). The nonexperimental cross-sectional survey necessitated both descriptive statistical analysis to summarize and

interpret the data and inferential statistical testing to generalize the results gathered from the sample population.

I collected data using a SurveyMonkey instrument consisting of 7-point Likert scale questions, dichotomous questions, index questions, and categorical demographics. I administered the survey to Virginians older than 18 years who had resided in the state for at least the last 2 years. According to the Census Bureau (n.d.), in 2020, Virginia had an adult population of more than 6.6 million. Therefore, a minimum of 128 valid responses was required for this study (Faul et al., 2009). I used the SurveyMonkey Audience application to solicit participants and ensure adequate response rates. Surveying gun owners and non-gun owners in Virginia afforded an opportunity to gain insight into their attitudes on gun control and 2nd Amendment sanctuaries and determine whether policy images influence attitudes on these themes.

Definitions

2nd Amendment Sanctuary: A local jurisdiction (county, city, or town) that has adopted a resolution to reject the local enforcement of any firearm law (state or federal) that they perceive as a violation of the 2nd Amendment individual right to bear arms (Mascia, 2020).

Gun control: Any policy or law that regulates the possession, sale, transfer, storage, or use of firearms, ammunition, or accessories such as magazines, bullets, or bump stocks (Perez-Pena, 2015).

Mass shootings: The death of four or more people within a 24-hour period by the same perpetrator or group of perpetrators with no cooling off period (Lott, 2018).

Policy image: The mixture of emotional and empirical material that influences the understanding and portrayal of policy definitions and implications (Baumgartner & Jones, 2009).

Punctuated equilibrium: Sporadic incidents when the evolutionary development of policy traditionally characterized by long periods of little or no change is interrupted by isolated episodes of intense activity (Baumgartner & Jones, 2009).

Assumptions

In quantitative research, reality is assumed to be objective. The variables selected must be sufficient to provide a realistic basis for describing the outcome with an acceptable level of accuracy so that the findings can be generalized to a larger population. This study's ontological model accepted that I was searching for the relationship between the factors being analyzed and the selected phenomenon (Arghode, 2012). In this study, I used numbers and statistics to analyze gun ownership attitudes and quantify the results to either prove or disprove the hypotheses. I assumed the following.

- The selection of PET as the theoretical foundation provided an accurate reflection of the issue being studied. PET was justified because the gun policy debate in Virginia is characterized by long periods of stability augmented with episodic disruptions to the status quo coalesced around exposure to policy images.
- The variables selected realistically and accurately described the phenomenon being studied. The use of gun ownership coupled with gun laws, 2nd Amendment Sanctuary movements, and policy image categories was justified in that they accurately and effectively described the relationship being assessed in the study.

- The survey questions included provided an accurate and consistent measure of the variables. I modified the questions from existing similar instruments, tested for readability, and designed the survey to answer the research questions and ensure validity and understandability.
- The research participants' responses to the questions were honest and accurate. The anonymity and voluntary nature of the survey ensured accurate and truthful answers from the participants.
- The sampling technique and sample size selected for the total population provided representative data to meet statistical standards and the generalizability of the findings. I used G*Power analysis and established sampling methods that determined a minimum of 128 valid responses were needed to ensure representative response totals were collected.
- The statistical tests used were appropriate. I conducted an analysis to determine multiple linear regression testing best measured the variable relationships expressed in the research questions and hypotheses.

These assumptions were critical to the study's meaningfulness because they provided a context for what we think is true regarding the research. The data collected on gun owner and non-gun owner attitudes underwent rigorous analysis, and understanding the assumptions enhanced critical thinking and mitigated bias when drawing conclusions about the outcomes of the study (Simon & Goes, 2013).

Scope and Delimitations

The research study's scope was adult gun owners and non-gun owners who had lived in Virginia for at least the last 2 years. I selected the objectives, research questions, and variables specifically to provide insight into the relationship between gun ownership and gun control laws and 2nd Amendment Sanctuary resolutions in Virginia. I chose this population sample because it offered the best perspective on Virginians' attitudes and the influence of exposure to policy images regarding state gun control laws and the 2nd Amendment Sanctuary movement. I excluded non-Virginians from the study due to their lack of potential knowledge or attitudes on Virginia gun control laws and the 2nd Amendment Sanctuary movement. I also excluded persons 17 years of age and younger due to their inability to legally own a gun in Virginia (Simon & Goes, 2013).

I selected PET as the theoretical framework for this study because it focuses on policy images and episodic policy shifts. Advocacy coalition framework (ACF), introduced by Sabatier and Jenkins-Smith in the 1980s, was another theory that may have been appropriate to this research. ACF is often affiliated with analyzing the policy process because it provides a shared platform for the analysis of multiple actors. ACF focuses on the beliefs that individuals translate into political action. In ACF, a coalition is a disparate group with shared beliefs who coordinate activity to achieve some end state. They then compete to control and influence policy subsystems and those that try to influence the subsystems. This study could have used the theory of ACF to analyze the 2nd Amendment Sanctuary movement and how actors who advocate specific beliefs influence policy. However, I elected not to use ACF because its focus is on the behaviors

of coalition members who attempt to influence policy. Although the 2nd Amendment Sanctuary movement did attempt to influence policy action, the influence of that specific movement on policy was not my focus for this study (Jenkins-Smith et al., 2017). In this research study, I looked at episodic policy shifts. I assessed the relationship of individual attitudes, specifically gun owner and non-gun owner constituents, and the influence of policy image on the deviations between state and local initiatives. By using PET, I incorporated a framework that provided insight into attitudes and policy images that influence policy development at local and state levels, which aligned with my research goals of this study. The results of this research may be generalizable beyond Virginia to states with similar gun control laws or 2nd Amendment Sanctuary movements.

Limitations

Possible limitations to this study were the selected sampling procedure, representativeness in the sample population, and the survey instrument. In surveys, valid response rates may be affected by barriers in access to the sample population, length of the survey, or survey fatigue if the population is inundated with survey requests. I administered the survey instrument for this research study via the web; therefore, a specific limitation was the potential for a low response rate. Using the SurveyMonkey Audience application to solicit participants mitigated constraints and increased valid response rates by using a pre-established panel that met the specific inclusion criteria. Additionally, personalizing the request, establishing a completion deadline, and increasing methods and frequency of contact improved the response rates. Other potential limitations were ensuring representativeness within the sample population and mitigating

researcher bias within the sample selection. Some research participants may have had concerns regarding anonymity, which may have presented a challenge to recruiting participants and response rates. It was important to clearly articulate the details about the study as well as stress the maintenance of participant anonymity to the potential sample population. The survey instrument may also provide limitations to the data collection in several ways. The self-reported nature of the data may result in underreporting or over reporting and open the aperture to potential social desirability bias in the responses. Additionally, the closed and monothematic format of the questions may have limited or affected the responses or limit the information that I collected (Aggarwal, & Ranganathan, 2019). I mitigated both potential limitations through the use of a predetermined survey panel, focused and validated survey questions and a pilot survey.

Significance

The emphasis of this quantitative research was an aspect of gun control not previously studied, specifically the attitudes of Virginia gun owners and non-gun owners with regard to competing state and local gun policy initiatives and whether policy image influences those attitudes. The study's significance is that it contributes to the current literature by educating policymakers, advocacy groups, and the public on attitudes regarding gun control and 2nd Amendment Sanctuary and the influence of policy image on those attitudes. This study was needed to understand the relationship of the phenomenon. It increased the level of understanding and has the potential for positive social change by contributing findings that may provide useful insights into gun control policy development in Virginia and elsewhere in the United States.

Summary

The increase of gun violence in the state of Virginia characterized by several high-profile shootings resulted in a punctuated policy response that upended the decades-old status quo. The Virginia state government passed several new gun control measures in 2020, and more than 95% of the local counties enacted 2nd Amendment Sanctuary resolutions to counter those policies. According to several national surveys and research studies the support for specific gun control measures is on the rise (Barry et al., 2018; Parker et al., 2017; Reich & Barth, 2017). In this study, I aimed to understand the dichotomy between state and local initiatives by examining gun owner and non-gun owner attitudes on gun control and 2nd Amendment Sanctuaries in Virginia.

In Chapter 2, I provide an overview of the literature relevant to this study. It begins with search strategies followed by a comprehensive analysis of Baumgartner and Jones' (1993) theory of punctuated equilibrium. I then review the literature on the interpretation of the 2nd Amendment, 2nd Amendment Sanctuary movements, and Virginia gun control laws backed by studies on gun control effectiveness. The chapter concludes with an analysis of research on gun owner and non-gun owner perspectives of gun control followed by assessments of factors that affect gun policy images within this national debate.

Chapter 2: Literature Review

Introduction

In this chapter, I review the current literature pertinent to my study on Virginians' perspectives on gun control policy and whether they align with the legislative initiatives at the state and local levels. The theoretical foundation for this study was based on Baumgartner and Jones' PET. In this chapter, I explore the tenets of PET and its application to gun policy development at the national, state, and local levels. This literature review includes analysis and synthesis of research studies, peer-reviewed articles, publicly available surveys, and relevant background material on the issues surrounding gun control policy and the variables applicable to the research study. Following the theoretical framework, in the literature review, I provide a perspective on current doctrine regarding the 2nd Amendment and the 2nd Amendment Sanctuary movement. Next is a brief history of gun control policy and existing gun laws in Virginia and an analysis of national survey data and research on the perspectives of gun owners and non-gun owners regarding gun control policy. The literature review concludes with a comprehensive assessment of studies on several key factors that influence the competing perspectives on gun control policy. This combined review of the body of literature provides insights into the theories and variables surrounding my topic. I synthesized the data that I collected to provide context regarding the main ideas and themes within my research and I structured the data to highlight salient ideas prevalent to the research described throughout (Randolph, 2009). This chapter begins with a description of the method and search strategy that I used to select the relevant literature for this review.

Literature Search Strategy

The literature search strategy encompassed a thorough exploration of scholarly sources and key literature for information critical to providing background and addressing the research problem, questions, and hypotheses of this study. Significant research and peer-reviewed material exists on gun control policy explicitly relating to the 2nd Amendment, gun owner and non-gun owner perspectives of gun control, the effectiveness of methods for reducing gun violence, and PET. My search strategies for those areas included online title, keyword, and phrase searches in the Walden University Thoreau database, Sage Publications, and Google Scholar. Search terms included g*un control policy* AND *United States, gun rights* AND *state laws, gun control attitudes, firearm legislation, gun control* AND *reduce violent crime*, *Second Amendment* AND *gun control, Second Amendment* AND *sanctuary* OR *protection* OR *resolution, gun control* AND *state level, gun rights* AND *state government, gun control policy* AND *firearm legislation* AND *state legislators, General Social Survey on gun control*, *gun control effectiveness,* and *punctuated equilibrium theory.* The reference lists in many of the articles provided additional resources. I located material specific to Virginia gun policy through internet searches of official government sites and the Virginia Legislative Information System (VLIS). Peer-reviewed and scholarly articles on the 2nd Amendment Sanctuary movement were almost nonexistent therefore I gathered most of the information for this topic through news articles via online Google searches. I explored as many avenues as possible to ensure comprehensive background material and saturation on the specific themes for this research study.

Theoretical Foundation Background

In their 1993 publication *Agendas and Instability*, Frank Baumgartner and Bryan Jones introduced PET, which served as the theoretical foundation for this study on whether Virginians' perspectives on gun control policy align to the legislative initiatives of the state and local governments. PET focuses on the mechanisms that result in policy change and is based on the idea that public policy is developed due to sporadic or fragmented activity that interrupts the routine stable periods that generally typify the development of public policy. Baumgartner and Jones characterized stability in public policy by the inherent rules that constrain change and the emotional and cognitive confines of the actors involved. Stability is maintained by the existing political institutions and the unchanging definitions of the issues they promote (Baumgartner & Jones, 2009).

Baumgartner and Jones' (2009) concept of PET was formed in contrast to the traditional public policy process theories that emerged in the mid-1900s, which were organized around principles of incremental action orchestrated by agenda setting subsystems operating within the political establishment. In these microcosms, the participants made incremental policy adjustments based on their expertise, one-dimensional views of the world, and their assessment of public preferences, to maintain a stable framework for political order (Jones & Baumgartner, 2012). Contrary to the standard policy model, PET emphasizes information processing of environmental signals and their effects on the equilibrium of the policy-making process. The punctuation that upends that equilibrium is characterized by either the strength or accumulation of those

external signals, which can then overcome the inherent resistance built into the political system (Baumgartner & Jones, 2009).

PET was influenced by Redford's (1969) theory on the differentiation of subsystem and macro politics along with Burnham, Schattschneider, Cobb, and Elder who introduced approaches focused on mechanisms of change that could disrupt the status quo. Two examples of those mechanisms are critical elections where political coalitions are redefined and the introduction of special interest topics that generate new participation in the process (Jones & Baumgartner, 2012). PET is grounded in Herbert Simon's bounded rationality theory as well as attention-based choice theories. Bounded rationality surmised that one's capacity to solve complex problems is limited by the inability to obtain and process all the relevant information to make a rational decision (Jones, 2003). It purports that people do not "tally up costs and benefits from a potential decision and then chose the best course of action" (Baumgartner & Jones, 2009, p. xxiii). Attention-based choice theories advocate that identification, categorization, and filtering of the stimuli by the individual determines the distribution of attention toward the choices that affect the decision (Logan, 2004). How the attention is allocated toward an issue and what mental shortcuts are used to parse out the attention leads to a disproportionate split between what information is focused on and what is ignored. The foundation of PET rests soundly on the idea that "decision makers are prisoners to their limited attention spans" (Jones & Baumgartner, 2012, p. 3). Within the policy-making process, whether during equilibrium or a punctuated event, the public policy decisions of both government

institutions and individuals are influenced by their bounded rationality and limited attention spans on the issues (True et al., 2006).

Throughout the policy-making process, punctuations can occur due to a major event that cannot be ignored or through the buildup of minor events with time. Issue definition and agenda setting are related elements critical to any punctuated policy change. Issue definition is linked to image. To recruit new supporters and participants in the process, an issue can be redefined to appeal to a broader constituency. When a policy image is widely accepted generally so is the policy, and change is difficult. When entities disagree on a policy, the proponents will promote one image of the issue and the opponents will promote a different image (True et al., 2006). An example of framing the gun control image is proponents defining it as a public safety issue (i.e., Saving Lives vs. Taking Rights) and opponents framing it as an infringement on the 2nd Amendment (i.e., gun rights vs. gun control). This reimaging opens the aperture on the issue and facilitates a shift in agenda setting. “So long as the possibility exists of mobilizing the previously indifferent through the redefinition of issues” (Baumgartner & Jones, 2009, p. 19), the issue can quickly move to the forefront of the public agenda for policy change.

PET has been applied in numerous research studies to understand the sporadic and episodic policy changes at the national level with regard to the environment, crime, drugs, nuclear energy, education, health care, and firearms control policy (True et al., 2006). As an example, national gun control policy activity is typified by the elements of PET through the analysis of gun policy images, engaged interest groups, and political actors. During the past 225 years, federal gun policy can be summed up by five major

pieces of legislation, in 1934, 1938, 1968, 1986, and 1993. All were enacted due to policy punctuations where the subsystem incrementalism was overwhelmed by pressure from outside the establishment. Each of these changes was characterized by the reimaging and agenda prioritization of the issue followed by a return to the status quo once the policy was implemented and public attention faded (True & Utter, 2002). PET reshaped the national gun policy landscape by embracing the punctuated demands for change at the macro level that the political subsystems could not contain (Jones & Baumgartner, 2012).

Although gun policy is periodically engaged at the national level, within the last two decades much of the activity on gun policy has migrated to the state-level. In the early 1900s, there were several initiatives at the state-level to restrict handguns which were followed by a shift towards loosening regulations which was then followed by a period of complete inaction (Vizzard, 2015). PET accounts for both "long periods of stability and domination of important policy areas by privileged groups of elites, and for rapid change in political outcomes, where apparently entrenched economic interests find themselves on the losing side of the political battle" (Baumgartner & Jones, 2009, p. 3). PET at the state and local levels was demonstrated by the Godwin and Schroedel (2000) study on local gun control policy activity in California in the 1990s. Their study found that the shift from the national level to the local level coupled with a re-imaging of the issue by advocates to a public health crisis and increased involvement by gun control groups resulted in 20 of 26 cities adopting gun control ordinances. My research aligns with PET because most gun control policy change is accounted for by the punctuations to the equilibrium of gun policy. There is limited research on the application for PET below

the national level of policy development. In this research study I applied PET at the state and local levels to gun policy in Virginia which exemplified the PET policy foundation of stabilized activity, characterized by decades of stalemate, punctuated by episodic major policy change, and followed by a return to the status quo. The interactions between issue definition, competing images, engagement of interest groups, and political institutions in the Virginia gun policy debate align with the tenets of PET and provide a solid basis for addressing the research questions in this study (True & Utter, 2002).

History of the 2nd Amendment

The debate surrounding interpretation of the 2nd Amendment of the U.S. Constitution, " a well-regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed" (U.S. Const, amend. II), has been ongoing since it was first ratified in 1791. There has been long-standing controversy over whether the 2nd Amendment applies to an individual's right to own and carry weapons or whether it applies as a states' right in order to regulate militias, and whether it protects individuals from state government infringement on their right to own and carry weapons (Cooper, 2015).

In pre-revolutionary America, the natural right to own a firearm for personal defense was universally recognized as evidenced in the 1765 *Blackstone's Commentaries on the Laws* of *England* (Cooper, 2015). However, there were gun laws to regulate the control of firearms and munitions in colonial America. For example, as early as 1619 the Virginia General Assembly made it illegal to sell or give guns to Native Americans. By the start of the American Revolution there were at least 101 gun laws in the 13 colonies.

However, none of them banned firearms or limited their ownership by free citizens (Spitzer, 2017). When the 2nd Amendment was drafted most states had already incorporated the right to keep and bear arms into their state constitutions, either as an individual right or in relation to a requirement to serve in the militia. Specifically, the language in Section 13 of the Virginia Bill of Rights from 1776, "a well-regulated militia, composed of the body of the people, trained to arms, is the proper, natural, and safe defense of a free state, therefore the right of the people to keep and bear arms shall not be infringed" (Cooper, 2015, p. 346), was the standard used by the members of the Constitutional Convention when drafting the 2nd Amendment to the U.S. Constitution (Cooper, 2015).

Before 2008, Supreme Court decisions regarding the 2nd Amendment supported the interpretation of the right to bear arms as a states' right vice an individual right. Therefore only the federal government was legally bound by the 2nd Amendment and states had the power to regulate firearms in order to maintain the common good. In *United States v. Cruikshank* (1876), this states' rights interpretation was affirmed when the Supreme Court determined that states were allowed to regulate firearms in whatever manner they chose in order to maintain the militia. In *Presser v. Illinois* (1886), the states' rights to regulate firearms were again affirmed in order to protect the public. The *United States v. Miller* (1939), Supreme Court decision in response to a challenge to the 1934 National Firearms Act held that the 2nd Amendment only refers to the federal government and not state laws (Epstein & Konig, 2019).

The individual versus states' rights debate regarding the 2nd Amendment is further complicated by incorporation doctrine. Up until the late 1800s precedent held that protections guaranteed under the Bill of Rights applied only to actions taken by the federal government and not actions taken by states (Cooper, 2015). With the ratification of the 14th Amendment in 1868 states were forbidden from denying individuals the right to life, liberty, or property without due process under the law. By the early 1900s, under incorporation doctrine, the due process clause of the 14th Amendment applied those protections to both federal and state actions. Subsequently, the Supreme Court on a case-by-case basis used selective incorporation to apply the 14th Amendment protections to most of the Bill of Rights. It therefore protected those individual rights from both federal and state government actions (Vernick et al., 2011).

Supreme Court interpretation of the 2nd Amendment changed with the decision in the *District of Columbia v. Heller* (2008). The doctrine was reframed as an individual right for the primary purpose of self-defense vice a states' right connected to a well-regulated militia (Imoukhuede, 2017). The individual right to possess or use a firearm was further upheld in *McDonald v. City of Chicago* (2010) when the Supreme Court decided that the 2nd Amendment protections applied to both the federal and state governments because of the 14th Amendment due process clause (Cooper, 2015). While these rulings dictate that "neither Congress nor state governments have the constitutional authority to disarm law-abiding citizens by regulating the right to keep and bear arms to a point that endangers the right to self-defense with a firearm" (Cooper, 2015, p. 366), both institutions do still have the authority to regulate firearms in the interest of public safety.

The Supreme Court decision did stipulate that the 2nd Amendment protections did not cover all types of firearms i.e., rocket launchers or machine guns. Additionally, it allows the prohibition of gun ownership by categories such as felons or the mentally ill. It also allows gun regulation in certain public or sensitive locations such as government buildings and schools (Imoukhuede, 2017). While the 2nd Amendment was historically deemed a states' rights issue, with the majority of firearm legislation being implemented at the state-level, the transition to an individual right's interpretation by the Supreme Court in 2008 makes firearm legislation at the state and local levels even more provocative (Sabbath et al., 2020).

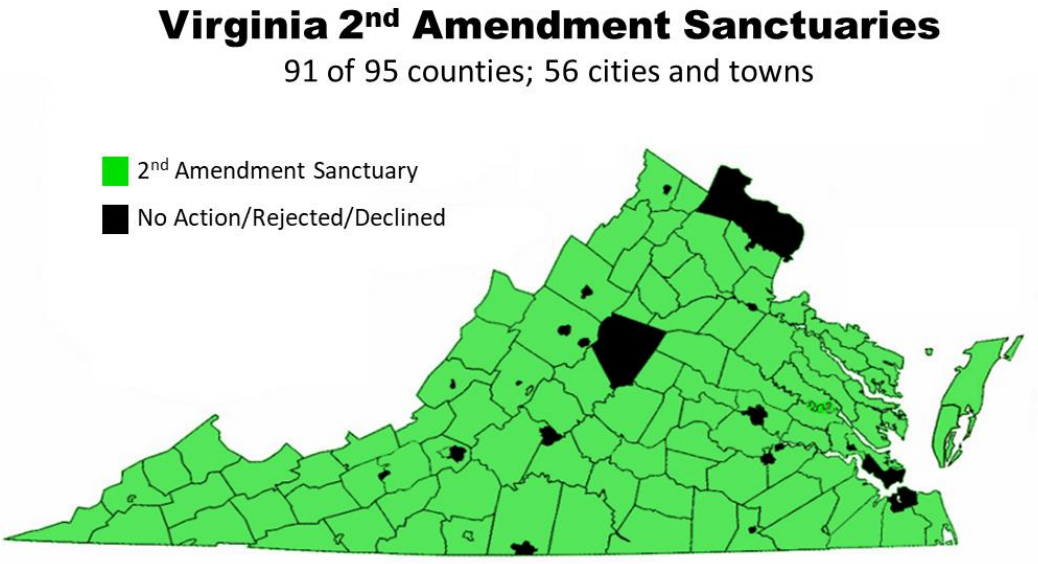
2nd Amendment Sanctuary Movements

The 2nd Amendment sanctuary movement is a relatively recent phenomenon that has swept through the United States in the past decade. The movement advocates gun rights through resolutions established to oppose any gun legislation that the local jurisdiction deems as an unconstitutional infringement on an individual's right to bear arms. The idea, which was mirrored off of the immigration sanctuary cities concept, was born in Effingham County, Illinois as a gun rights response to state gun control proposals and has gained momentum across the country (Mascia, 2020). By the end of 2019, more than 20 states had counties with 2nd Amendment sanctuary resolutions, to include 70 of 102 counties in Illinois, 38 of 64 counties in Colorado, 30 of 33 counties in New Mexico, and 10 of 16 counties in Nevada (Fields, 2020). In late 2019 Virginia became the epicenter of the movement, as local county supervisor meetings were held with standing room only crowds. Between November of 2019 and February of 2020, 91 of 95 counties,

16 of 38 independent cities, and 40 towns (see Figure 1) in Virginia had passed 2nd Amendment sanctuary resolutions (Gunter, 2020).

Figure 1

Map of Virginia Sanctuary Status, 2020



Note. Data on map as of March 20, 2020 adapted from http://vcdl.org.

The advent of the 2nd Amendment sanctuary movement can be traced to several factors. First was the trend of deregulation of gun control at the state-level which began in the 1980s and favored gun rights advocates while disfavoring gun control proponents (Fields, 2020). Specifically, from 2009 to 2013 over 546 gun laws were enacted nationwide and over 50% of them loosened restrictions on firearms access. Additionally, during that timeframe, "52 percent of all gun deregulation measures introduced by state legislatures were enacted into law, versus 36 percent of gun control measures" (Reich & Barth, 2017, p. 489). Virginia led the way on the liberalization of gun regulations approving 24 laws. In this timeframe, 47 states approved at least one gun measure

reducing constraints on gun control (Reich & Barth, 2017). Nine states even went as far as to enact some form of statewide sanctuary legislation aimed at the federal government. In 2010 Alaska passed the Alaska Firearm Freedom Act (AFFA) which sought to "nullify the federal government's ability to regulate personal firearms, firearms accessories, and ammunition that are manufactured entirely in Alaska" (Hill, 2016, p. 126). In 2013 the Kansas legislature "declared that federal laws violating the Second Amendment are null, void, and unenforceable in the state" (Rostron, 2016, p. 353). The second factor leading to increased activity regarding 2nd Amendment Sanctuaries was the recent increase in state enactment of extreme risk protection order (ERPO) laws which allow the court ordered removal of weapons from persons deemed a risk to themselves or others. These laws are perceived as a violation of individual rights to own a firearm and due process by gun rights advocates. A third was the wave of Democrats elected to many state assemblies in 2018 and their promise to pass strict gun control measures in the wake of high profile mass shootings. The fourth was the on-going struggle between localism and state authority (Fields, 2020).

Most 2nd Amendment sanctuary resolutions range from passive symbolic gestures of discontent or noncooperation to more active resistance such as taxpayer funded legal action, deputizing the public, or calling on the "militia' to ensure citizens can own weapons. The sanctuaries are an attempt to resist the enforcement of laws enacted by higher levels of government. While both state and local governments cannot be compelled to enforce federal law under the 10th Amendment and upheld in *Printz v. United States* (1997), local governments do not have those same protections from

enforcing state law (Fields, 2020). The rule of preemption allows state governments to prohibit local governments from enacting any law that is contrary to state law. Traditionally, preemption was a means of maintaining uniformity of the law throughout the state, protecting against jurisdictional or territorial conflicts, and limiting the issues requiring action by local governments (Pough, 2018). However, with the increased divide between local and state institutions preemption has become a political tool wielded by both sides of the political aisle. Some states have approved civil and criminal penalties aimed at local officials who legislate policy in conflict with state preemptive statutes. Localities have responded by challenging the states in court. Forty-four states including Virginia have preemption laws that do not allow local jurisdictions to enact any firearm regulation (Davidson, 2019). Specifically, Virginia follows "Dillion's Rule", "which provides no autonomy for local governments and treats them as entirely subservient subdivisions of the government" (Fields, 2020, p. 26). It is important to note that 2nd Amendment sanctuary resolutions are not binding laws or regulations but are instead attempts to influence policy by refusing to use local resources to enforce state laws. As of November 2020 the legality and enforceability of 2nd Amendment sanctuary resolutions was still up for debate as no judicial test has been ruled on by the courts (Fields, 2020).

History and Effectiveness of Gun Legislation in Virginia

Legislation governing firearms in Virginia dates back to the first Virginia General Assembly in 1619. Since then Virginia has had firearms legislation covering numerous broad categories such as concealed carry, carry and use in sensitive areas, requirements for registration, prohibition of dangerous or unusual weapons, and prohibited use by

select persons (Frassetto, 2013). The current Virginia State Code, Title 18.2, Chapter 7 Crimes Involving Health and Safety has five sub-sections covering over 70 laws regarding firearms (Virginia Legislative Information System [VLIS], n.d.). Some of the historic gun laws in Virginia were predecessors to the types of laws passed by the Virginia General Assembly in 2020. While all legislation must be assessed based on the context of the time period in which it was enacted, it is clear the gun control legislation controversy in Virginia pre-dates the current debate over 2nd Amendment rights.

Following the mass shootings at Virginia Tech on April 16, 2007 which killed 32 people, Governor Kaine established a panel to study the event and make recommendations to prevent any future incidents. Overall the panel made 91 recommendations covering mostly mental health reform and campus security. Although the panel cited several loopholes in Virginia gun laws very little was done about gun control, specifically recommended with no action taken was the issue of universal background checks (Friedenberger, 2019). Twelve years later, following the Virginia Beach mass shooting on May 31, 2019 which killed 12 people, Governor Northam convened a special session of the General Assembly to address eight gun control measures. The special session ended after two hours without any votes and postponed discussion on gun control until after the November 2019 elections. Instead a panel was convened to prepare a report on 78 prospective firearm measures for review by the State Crime Commission (Berti, 2019). In April 2020 Governor Northam signed seven new gun control laws, more in one session than Virginia had passed collectively in over two decades. The actions foreshadowed by the Virginia General Assembly and Governor

Northam were the catalyst for the 2nd Amendment Sanctuary movement in Virginia that was launched statewide between November 2019 and February 2020 (Miller, 2020).

Gun control research demonstrating the effectiveness of specific gun policies is extensive and varied. Data accuracy, reliability and transparency are critical to ensuring research findings are valid. A systemic issue pervasive throughout gun control research is the variation and inconsistency in definitions, methodologies, data, and testing that drives the divergent results regarding effectiveness (Lang, 2016; Makarios & Pratt, 2012; Martin & Legault, 2005; Rostron, 2008). To evaluate effectiveness, often a subjective or arbitrary score is assigned to rate gun control policies such as the Brady Campaign or the Giffords Law Center to Prevent Gun Violence scorecards (Kposowa et al., 2016). Additionally, many research studies use a proxy for gun ownership such as national gun sales, background checks, surveys, state level estimates, and percentages of suicides, homicides, or robberies involving guns. The use of these inaccurate measures can skew the relationship between crime and gun ownership (Lang, 2016). A 2018 analysis of gun control policy research reviewed thousands of studies published since 2003 and found only 62 met the standardized criteria for inclusion based on the methods used to determine causal effects, evidence and rigor (RAND, 2018).

The following is an analysis of the historical context and literature on gun policy effectiveness of Virginia gun laws relevant to this study, which include 1) universal background checks, 2) protective orders, 3) carrying firearms in sensitive areas, 4) a one-gun-a-month purchase limit, 5) reckless endangerment of a minor, 6) notification of lost

or stolen weapons, 7) extreme risk protection orders, 8) assault weapons and magazine bans, and 9) concealed carry.

Prior to July 2020, in compliance with the Brady Law of 1994, Virginia law only required background checks on purchases from licensed dealers and not secondary markets such as gun shows or private sales (Rostron, 2008). Senate Bill 70 now requires mandatory background checks for the sale or transfer of all firearms in Virginia (VLIS, n.d). Policy on background checks has been extensively researched. Sen and Panjamapirom (2012) found that having more background checks is associated with fewer suicides and homicides. A 2016 study on firearm mortality and legislation also found that universal background checks were related to the potential reduction of firearm fatalities (Kalesan et al., 2016). Sabbath et al. (2020) determined an association between reduced homicides in the workplace and strengthened state laws regarding background checks. Conversely, Vernick et al. (2017) and Crifasi et al. (2018) determined that there was no benefit to having comprehensive background checks unless the state law also required a permit to purchase weapons. As of 2020, Virginia does not require a permit or license to purchase or own a weapon (VLIS, n.d). Lang (2016) found no "significant relationship between homicide and background check rates…[and] all violent crimes with the exception of rape are insignificantly related to background checks" (Lang, 2016, p. 64). A comprehensive review on gun control studies to determine the effectiveness of the policy outcomes by RAND (2018) found that universal background checks were inconclusive at reducing mass shootings and suicide, however they had moderate success at reducing violent crime.

The inconsistency of data compiled in the National Instant Criminal Background Check Systems (NICS) is another factor affecting universal background checks. Data for NICS is pulled from several databases. There is no universal standard for the type of data required to be reported to NICS by each law enforcement jurisdiction, which leads to gaps in quality and timeliness (Crifasi et al., 2019). Additionally, NICS "relies on states to voluntarily report the names of individuals who fall into one of the prohibited categories… [as] Congress cannot compel states to contribute to a federal regulatory system" (Record & Gostin, 2014, p. 562). A Kessler (2007) study found that millions of records that would generally disqualify an individual from purchasing a weapon were not included within the NICS system, which led to the NICS Improvement Amendments Act (NIAA) of 2008. The act is aimed at refining the records provisioning and maintenance and requires states to estimate the availability for inclusion in NICS of seven categories of records that would prohibit an individual from purchasing firearms (Krouse, 2019).

Newly enacted Virginia Senate Bill 479 prohibits persons subject to a protective order from possessing a firearm. These types of gun laws are aimed at reducing familial and intimate partner gun violence. Between 2004 and 2013 Virginia had an intimate partner gun homicide rate for women 21% greater than the national average (Parsons et al., 2015). A RAND (2018) analysis of gun policy studies found that while protective order laws had inconclusive results in lowering suicides they did show moderate success at reducing violent crime. Evidence also supports that prohibited persons most often acquire weapons from acquaintances or the secondary market so other laws in

conjunction with protective orders, such as universal background checks may be required to determine their overall effectiveness at reducing gun violence (Vizzard, 2015).

Virginia Senate Bill 35 authorizes local ordinances to prohibit the possession or carrying of firearms in government buildings, public parks, recreation or community centers, or public streets and sidewalks open to the public or requiring a permit (VLIS, n.d.). Dating back to 1794 Virginia had a law prohibiting the armed presence of individuals at fairs, markets or in the presence of justices (Frassetto, 2013). Federal law already bars firearms in some sensitive areas or gun-free zones, such as schools, post offices, and federal buildings (Wolfson et al., 2017). A 2017 study on public opinion drawn from the GfK Knowledge Panel (n=3949) found that both gun owners and non-gun owners supported some restrictions on areas where guns could be legally carried to include college campuses, places of worship, sports stadiums and bars (Wolfson et al., 2017). The RAND (2018) analysis found no applicable research to determine the effectiveness of these types of prohibitions on gun violence.

Virginia Senate Bill 69 prohibits anyone who is not a licensed handgun dealer from purchasing more than one handgun in a 30-day period (VLIS, n.d.). In 1993 Virginia enacted a law to limit the number of guns an individual could purchase within a month called the One-Gun-A-Month law, which was repealed in 2012. At the time the law was introduced Virginia was ranked 1st as the largest source for crime guns used in the northeast corridor of the United States and the law was put in place to stop the trafficking of guns from Virginia to areas to the north with stricter gun laws (Evans, 2019). A study by Weil and Knox (1996) found that this law was effective at reducing the

interstate trafficking of crime guns out of Virginia, however a subsequent study by Webster et al. (2009) contradicted these earlier results and found no effect of the One-Gun-A-Month law on reducing the interstate trafficking of firearms out of Virginia. Kalesan et al. (2016) found no association between limiting the number of guns purchased and reducing gun violence. Senate Bill 69 restored the One-Gun-A-Month law in Virginia in April 2020.

Child access protection (CAP) laws are aimed at limiting children's access to guns by allowing the prosecution of adults who negligently or carelessly allow unsupervised access to guns (RAND, 2018). Prior to 2020, Virginia had a CAP law which was modified through House Bill 1083 which states that any person who recklessly leaves a loaded or unsecured firearm in a manner that endangers the life or limb of a person under the age of 14 is guilty of a class 1 misdemeanor. This bill was controversial and went through several iterations where the age was debated between 21, 18, or 14. Ultimately the law was amended to keep the age at 14 but increase the penalty from a Class 3 misdemeanor to a Class 1 misdemeanor, which could mean up to 12 months in jail (VLIS, n.d.). There is limited peer-reviewed research on CAP laws. A Webster and Starnes (2000) comprehensive analysis of CAP laws in 15 states found that only one state showed a significant decrease in the rate of unintentional gun-related deaths among children; the remaining 14 states showed no effect. A subsequent study by Lott and Whitley (2001) concluded no reduction in accidental gun deaths or suicides due to CAP laws. The Kalesan et al. (2016) study found that CAP laws had no significant association with reducing homicides or suicides while the RAND (2018) analysis of the

literature found limited evidence to support decreases in suicides or unintentional injury or death due to CAP laws.

Virginia House Bill 9 requires a person to notify police within 48 hours of discovering the loss or theft of a firearm. Failure to notify results in a $250 fine; however if the notification is made then any civil or criminal liability is waived if the gun is used in a future crime (VLIS, n.d.). The intent of this law is to limit the availability of guns on the illegal market and to better account for and trace guns used in violent crimes. There is limited research on this element of gun control. A study by Kalesan et al. (2016) did find an association between mandatory theft reporting and reduced homicides or suicides but the RAND (2018) analysis did not find any studies that corroborated those findings.

One of the most controversial new laws was Senate Bill 240 which allows any attorney for the Commonwealth or a police officer to apply to a court for a 14 day emergency substantial risk order to prohibit a person who poses a risk from purchasing, possessing or transporting a firearm (VLIS, n.d.). By 2020 extreme risk protection orders (ERPO) or red flag laws had been passed in at least 17 states and the District of Columbia (Kohrman & Stephens, 2020) “authorizing pre-emptive, risk-based, time-limited gun removal orders” (Bonnie & Swanson, 2018), for persons deemed a danger to themselves or others. ERPO laws are designed to reduce suicides which account for almost two-thirds of gun deaths, protect against domestic and intimate partner homicide, and stop violent offenders such as mass shooters and terrorists by interceding before they can take action (Bonnie & Swanson, 2018). Opponents argue that red flag laws are a violation of an individual’s 2nd Amendment and the right to due process (Kohrman & Stephens,

2020). ERPO laws are touted as an evidence-based policy grounded on the premise that denying access to firearms reduces firearm violence (Vernick et al., 2017), however relatively limited statistical research exists on ERPOs and the RAND (2018) study found inconclusive results. Empirical evidence from two other studies suggests that suicide rates have declined by as much as 7.5% in Indiana and in Connecticut ERPO laws averted one suicide for every 10-20 gun removals (Bonnie & Swanson, 2018).

In addition to the seven laws from 2020, two other gun control measures are publicly contested in Virginia. First is a ban on assault weapons and high capacity magazines and second is concealed carry permits. The 2020 Virginia General Assembly considered an assault weapons ban, however it did not make it out of the Senate Judiciary Committee. House Bill 961 would have made the sale or transfer of assault weapons, silencers, and magazines holding greater than 12 rounds illegal. Governor Northam has stated he will re-introduce the bill during the 2021 session (Booker, 2020).

In 1994 the federal government enacted an assault weapons ban which expired in 2004. The term “assault weapon” is a misnomer as assault weapons do not technically exist. An assault rifle is a military style shoulder fired weapon that can switch between semi-automatic mode (requires one trigger pull for each shot) and automatic mode (one trigger pull fires multiple bullets continuously). In most gun policy and gun violence research the terms assault weapon or assault rifle are used interchangeably to refer to a semi-automatic rifle that looks similar to a military style rifle. An example would be an AR-15, which actually stands for Armalite Rifle not automatic rifle and requires one trigger pull for each bullet fired. A significant difference between automatic and semi-

automatic weapons is how they are regulated by the government. While it is relatively easy to acquire a semi-automatic handgun or rifle, all automatic weapons are heavily regulated by the 1934 National Firearms Act (Lord, 2019). According to Kleck (2012), "assault weapons" account for less than 1.2% of the firearms used in homicides. According to Federal Bureau of Investigation statistics most gun violence incidents do not involve firing more than three rounds. A 2001 preliminary analysis of the federal assault weapons ban found the ban had "no effect on gun violence" (Koper & Roth, 2001, p. 67). This finding was substantiated in a study of state-level assault weapons bans by Kalesan et al. (2016) who found no decrease in homicide mortality due to assault weapons bans and no association between high capacity magazine bans and reducing firearm mortality rates. However, when assessing only the effect on public mass shootings, which account for less than 4% of gun violence deaths each year (Cukier & Eagan, 2018), a de Jager et al. (2018) study found that from 2000 to 2017, 24.6% of active shooter incidents (n=248) involved a semi-automatic rifle and that when a semi-automatic rifle is involved more people were killed or injured. RAND (2018) found inconclusive evidence to determine whether a ban of specific assault weapons and magazine types had any effect on overall gun deaths or mass shootings. Research suggests that an assault weapon and high capacity magazine ban will affect the number of casualties, specifically in mass shootings; however the evidence does not show that a ban would have an effect on overall gun violence and mortality rates in the United States.

Concealed carry permits is another gun policy issue contested in Virginia. In 1838 the state passed its first conceal carry prohibition. The law was amended after 1868 so

that anyone deemed of good character could carry a concealed weapon with an approved application (Frassetto, 2013). Currently Virginia is a “Shall Issue” state which means that a license is required, however as long as specific criteria are met the state must issue a concealed carry permit without any discretion to deny it. As of June 2020 there are approximately 640,000 concealed carry permits issued in Virginia. Virginia does not require guns to be registered with the state or local law enforcement, it is legal to openly carry a gun without any permit as long as applicable laws are adhered to, and you can defend yourself with no duty to retreat as long as you are not the initial aggressor (U.S. Concealed Carry Association, n.d.). There are mixed results in the literature on the relationship between shall issue concealed carry laws and gun homicides with most research showing no clear effect (RAND, 2018). In a 2017 study researchers evaluated data from 25 years (1991-2015) comparing concealed carry shall issue laws and handgun homicide rates and found a significant relationship with 8.6% higher firearm homicide rates and 10.6% higher handgun homicide rates in shall issue states (Seigel et al., 2017). In contrast, a Hamill et al. (2018) study of 30 years of data (1986-2015) did not find a statistically significant association between homicide rates and liberalized concealed carry policies. A 2019 study of concealed carry permits among young adults aged 18-20 found no increase in murder, robbery, or assault rates by allowing concealed carry (Kleck, 2019). The RAND (2018) analysis of studies on shall issue law effects concluded that there is inconclusive evidence on their effect on gun homicides, robberies or assaults. However, the RAND (2018) study did find minimal evidence that shall issue concealed carry laws result in an increase in overall violent crime and unintentional firearm injury.

Gun Owner and Non-Gun Owner Perspectives on Gun Control

Individual perspectives of gun control are often associated with varying characteristics and demographics, such as political affiliation, individualism versus collectivism, race, gender, rural vice urban identity, religious affiliation, or culture (Blanco, 2016). The purpose of this quantitative research study was to examine Virginia gun owner and non-gun owner attitudes on gun policy, and enhance the understanding of the conflict between divergent views that influence gun policy initiatives at the state and local levels. Recent comprehensive analysis comparing perspectives of gun owners to non-gun owners on a national level has been accomplished through a 2017 Pew Research Center study and a 2018 national survey through the non-partisan and objective research organization (NORC) at the University of Chicago.

American society has a long and complex association with guns. According to the 2017 Pew survey, over 30% of Americans own guns and 66% of those gun owners own more than one firearm. An additional 11% of Americans live with someone who owns a gun. Over half (52%) of Americans think that gun laws should be more strict, however 64% think that most people should be able to legally own a firearm. Interestingly, in 2017, 51% of Americans thought it was more important to control gun ownership than to protect the right to own a gun which is the inverse of 2016 when 52% said it was more important to protect gun rights than control gun ownership. As to why they own guns, 67% of gun owners say it is for their own protection. Hunting, sport shooting, and gun collecting are other major factors contributing to gun ownership in the United States (Parker et al., 2017).

The 2017 Pew survey assessed several gun control policy perspectives between gun owners and non-gun owners (see Table 1). There is relatively close agreement between gun owners and non-gun owners on prohibiting the mentally ill and individuals on no-fly lists from purchasing guns, and on employing universal background checks for all gun purchases. Yet there is a large variance on creating a federal database to track gun sales and banning assault weapons and high capacity magazines (Parker et al., 2017).

Table 1

Pew Survey Results, 2017

Gun Policy	Gun Owners Support	Non-Gun Owners Support
Preventing mentally ill from purchasing guns	89%	89%
Barring gun purchases by people on no-fly or watch lists	82%	84%
Background checks for private sales and at gun shows (universal background checks)	77%	87%
Creating a federal database to track gun sales	54%	80%
Banning assault-style weapons	48%	77%
Banning high-capacity magazines	44%	74%

In addition to the Pew survey, a 2018 study by Barry et al. used the NORC online panel to compare gun owner and non-gun owner opinions on 24 firearm policies. The sample population (n=2124) was gathered from a probability based representative pool covering 95% of American households. There was a 75% completion rate from the sample population. Of the 24 policies assessed eight had a disparity of support greater than 10 percentage points between the two groups. There were 10 policies assessed in the Barry et al. study which correlate to the scope of my research study (see Table 2).

Table 2

NORC Survey Results, 2018

Gun Policy	Gun Owners Support[a]	Non-Gun Owners Support[a]
Requiring a background check system for all gun sales (universal background checks)	85%	90%
A person who can legally carry a concealed gun should be required to pass a test	83%	85%
Requiring states to report a person to the background check system who is prohibited from a buying a gun due to involuntary commitment or declared mentally incompetent	84%	84%
Prohibiting a person subject to a temporary domestic violence restraining order from having a gun	77%	83%
Allowing family members to ask the court to temporarily remove guns if a relative is at risk of harming himself or other (red flag law)	73%	80%
Allowing law enforcement to temporarily remove guns from individuals who pose an immediate threat to themselves or others (red flag law)	69%	78%
Requiring by law that a person lock up guns in their home to prevent handling by children	58%	79%
Banning the sale of military style semi-automatic assault weapons	44%	68%
Banning the sale of large capacity ammunition clips or magazines holding more than ten rounds	41%	67%
Allowing legal concealed carry on school grounds (K-12)	43%	19%

[a] Percentages are approximate based on data provided in the Barry et al. (2018) study.

Of the relevant policies, universal background checks (87.8%), requiring a person to pass a test in order to carry a concealed weapon (84.7%), reporting individuals disqualified from owning a gun due to mental health background checks (83.6%), and ERPO or red flag laws (78.9%) garnered the most support overall from both gun owners and non-gun owners (Barry et al., 2018).

Factors Affecting Imaging of Gun Policy

Media Coverage and Interest Groups

Within the gun policy debate divergent definitions and imaging are shaped by the media and advocacy groups who often use evidence, scientific studies, public opinion polls, regulations, laws, celebrity endorsements, or lobbying efforts to advocate for their policy agenda (Smith-Walter et al., 2016). The competing narratives portrayed in the media and by advocacy messaging can influence the outcome of public policy discussions by shifting engagement and support among key constituencies not normally engaged in the issue. “Policy makers and interest groups frame issues in ways that they believe will shape policy debates in their favor and work to garner news coverage that uses those frames” (McGinty et al., 2016, p. 9).

Both the content and volume of news coverage on gun policy is often a result of punctuated incidents such as mass shootings or assassinations. After the Columbine School shooting in 1999, 42% of the media stories defined the problem of school shootings as “too many guns or too few gun controls” (Kleck, 2009, p. 1448). Within six months of the Sandy Hook Elementary School shooting in 2012, the intense media

coverage coupled with public opinion polls, led to an influx of over 1500 legislative proposals on gun control at both the federal and state levels (McGinty et al., 2016).

In 2016 a study assessed policy imaging in the media on gun control by examining the volume of coverage, frequency, and level of advocacy on both sides of the issue of universal background checks right after Sandy Hook. The results demonstrated that immediately following a high profile incident the volume of coverage peaked within four months and then dropped off precipitously coinciding with the defeat or implementation of legislation. By a margin of 23%, news coverage was more likely to favor pro-gun control messages than anti-gun control messages and only 32% of news reports presented both the supporting and opposing message. Counter-arguments by advocacy groups were used often with 43% of the message framing on universal background checks cited as a means of keeping guns away from dangerous people while 24% cited universal background checks as ineffective (McGinty et al., 2016).

Media coverage of high profile events often affects public opinion, and gun policy is no different. Seate et al. (2012) assessed the effects of media coverage on attitudes regarding gun policy following the 2007 Virginia Tech mass shooting which killed 32 people and wounded 15. The results showed that for non-gun owners' media exposure to news regarding gun violence did influence their opinions on gun control while for gun owners it did not. This is consistent with other research that showed that media messages are not accepted if they are seen as a threat to an individual's social identity.

In assessing how advocacy groups use narrative strategies and certain types of evidence regarding gun policy, Smith-Walter et al. (2016) compared the policy stance of

the Brady Campaign to Prevent Gun Violence and the National Rifle Association (NRA). The results demonstrated that Brady Campaign narratives target emotional and intellectual responses by combining their interpretation of statistical and legal truths with evocative portrayals of victims and heroes. The strategy of this approach is "designed to draw in more participants and expand the scope of conflict" (Smith-Walter et al., 2016, p. 1073). Conversely the NRA narrative focuses on the groups arrayed against them who threaten intrinsic values such as liberty and freedom. The strategy of the NRA is to define the problem as us vs. them where an elitist enemy is determined to take away the rights of the average American citizen. This type of framing relies on emphasizing "the power of an opponent while understating the power of the narrating group or coalition" (Smith-Walter et al., 2016, p. 1073). The interpretation of evidence by coalitions is critical to how the narrative on gun policy is received and promulgated.

Mass Shootings

There is no universally accepted definition of a mass shooting. Therefore the results of research studies can vary drastically, which can affect the messaging and image of this highly volatile topic. Prior to 2013 the FBI historically defined a mass murderer as someone who kills four or more individuals in a single incident however in 2013 the definition was changed to three or more. Most academic researchers continue to use the death of four or more people within a 24 hour period with no cooling off period as their definition of a mass shooting (Lott, 2018).

Statistics show that mass shootings account for less than 4% of the more than 35,000 gun deaths in the United States each year, however due to the lethality of these

types of attacks they are often the epicenter for renewed gun control debate (Cukier & Eagan, 2018). According to Lott (2018) the United States is not unique when it comes to mass shootings. Between 1998 and 2015 the United States accounted for 2.2% of the world's mass public shootings and 1.5% of the worldwide mass shooting casualties. In a per capita ranking the United States ranks 64th out of 97 countries in the number of mass shooting attacks. Additionally, the growth rate in the number of mass shootings is not as high as the rest of the world; however there has been an increase in the annual number of mass shootings in the United States over the last five years. Analysis of data from the Global Terrorism Database strongly supports Lott's findings. Of the 58,445 mass shootings worldwide since 1970 only 402 were instigated in the United States. In contrast a study by Lankford (2016), which consisted of a data set derived from 292 cases of mass shootings worldwide between 1966 and 2012, found that the United States accounted for 31% of the world's mass shootings.

Mass shootings typically garner a high level of media attention which leads to increased gun policy debate. In the 12 months after Columbine more than 800 pieces of firearm legislation were introduced, however only about 10% ever became law (Schildkraut & Hernandez, 2014). Research from 2012 showed a divide among gun owners and non-gun owners on the causes of mass shootings. Republicans typically blame the individual shooter while Democrats blame weak gun laws and poor mental healthcare. A follow-up study in 2017 found that both gun owners and non-gun owners attributed the most blame to the shooter however, gun owners next blamed parents, then pop culture, then gun laws, while non-gun owners blamed gun laws followed by parents

and then pop culture (Joslyn & Haider-Markel, 2012). A study by Lemieux (2014) found that gun availability did have an effect on mass shootings from which the author surmised that increased gun control would reduce access and therefore reduce mass shootings. However, a RAND (2018) comprehensive review on gun control studies to determine the effectiveness of the policy outcomes found there is inconsistent evidence from the studies they reviewed that any gun control measure reduces mass shootings. The contradictory findings highlight that the discrepancy in the definitions and data sets in mass shooting research affects the results and affects perceptions and messaging within the gun control debate.

Suicide and Mental Health

Another category integral to the policy image on gun control is the relationship of suicides and mental health to the overall gun violence problem. Over 60% of all gun deaths each year in the United States are from suicides and over 50% of all suicides involve a firearm (Alban et al., 2018). Re-framing the gun violence problem as a public health crisis to address suicides and mental health deficiencies has had a significant effect on increasing the involvement of the medical community in the gun policy debate and led to an increase in gun violence research motivated by that lens.

Kposowa et al. (2016) examined the effect of gun ownership, firearm storage, and state level firearm laws on suicide rates. The results showed that gun ownership slightly increases the gun suicide rate, maintaining unloaded firearms in the home increases the rate by 50% and keeping them unsecured by as much as 75%, and there is a small relationship between strict gun regulations and decreased suicide rates. These findings

were supported by a 2018 study which used the Brady Scorecard rankings for state firearm regulations and compared them to the National Inpatient Sample (NIS) of hospital admissions for firearm related suicide injuries. The study found that over a 14 year period, firearm suicide attempts occurred significantly more frequently in states with less restrictive gun laws (Alban et al., 2018). Another study examined four specific gun regulations and their effect on suicide rates between 2013 and 2014. The outcomes exemplified mixed results. Although there were significant differences in suicide rates between states with universal background checks and mandatory waiting periods and states without those restrictions, they found no significant differences in suicide rates for gun locks or open carry restrictions between states that had those types of laws and those that did not (Anestis et al., 2017).

The mental health component of gun violence is amplified by mass shootings, however only 3% - 5% of all violence can be attributed to an individual who has a serious mental illness (Miller, 2017). Federal law does not mandate that all mental health records be included in the NICS background check system, and does not address reporting of those who have never been deemed mentally unfit, never received outpatient treatment, or never been committed to a mental health institution (Schildkraut & Hernandez, 2014). At the time of the 2007 Virginia Tech shooting, Virginia state law only required information on admissions or detention in a mental health facility be included and not medical records. As a consequence, although the perpetrator Seung Hui Cho had been temporarily detained and ordered to receive outpatient mental health treatment, it was not reported and he was able to pass the required checks and purchase a gun. Also at that

time the one-gun-a-month law was in effect in Virginia so Cho waited 30 days and purchased the second gun he used to ultimately kill 32 people. Subsequently Virginia enacted an executive order to increase reporting requirements regarding mental health disabilities (Davies, 2007).

Culture, Religion, and Political Identity

There are numerous variables that have been associated with attitudes on gun control. All of which are used to frame the image on gun policy. The General Social Survey (GSS), a representative stratified multi-stage probability sample of American households used for numerous gun control studies, includes many of these applicable control variables such as political views, religion, gender, race, age, and urbanization. There are also several gun-related variables within the GSS that measure gun ownership and attitudes. GSS data from 1984-1998 consisting of a stratified probability sample (n=7174) was used to demonstrate that gun ownership is related to cultural values. Specifically, possessing individualistic cultural traditions is a strong predictor of attitudes against requiring gun permits (Celinska, 2007). Yamane (2016) also used GSS data from 2006-2014 to study the influence of religious affiliation and religiosity on gun ownership. The results showed that sects of Protestantism are more likely to own a gun than other religions, with Evangelicals being the most likely. These findings were enhanced by a Merino (2018) study using a random sample survey from the Public Religion Research Institute (n=1006). The results demonstrated that Evangelical Protestants are more likely to oppose stricter gun control laws than other religions. A later study conducted by Miller (2019) assessed 26 waves of the data from the GSS from 1972 to 2016 and found that

neither increased political partisanship nor the urban/rural divide caused a significant reduction in support for gun control. The results demonstrated that most Republicans support some measure of gun control and that the polarization on gun control policy is not at the level of the general population but instead resides within the political elite. The Miller (2019) study provides an underpinning for evaluating the effect of policy image from the perspective of political affiliation and the difference between constituent attitudes regarding local and state level policy initiatives.

While GSS data is useful in assessing general attitudes of varying demographic groups on gun control, the use of GSS data for my research study was not feasible due to the focus of the gun related questions not addressing the perspectives of gun owners and non-gun owners towards specific gun control policies and the 2nd Amendment Sanctuary movement in Virginia.

Summary

The controversial issue of gun policy in America has been extensively examined from many different viewpoints. It is consistently characterized by outrage, then action, followed by reaction which specifically aligns to Baumgartner and Jones' theory of punctuated equilibrium (Watkins, 1997). There is an abundance of contradictory research about the effectiveness of gun control policies at reducing gun violence. However, there is a lack of literature specifically addressing the perspectives of gun owners and non-gun owners as it relates to contrasting legislative initiatives at the state and local levels. It is important to analyze and understand this issue as overall current opinion polls show an increase in public support for some gun regulation which is in contrast with the trend

from the last two decades which was marked by a decline in public support for more regulation (Vizzard, 2015). This study explores the dichotomy between public opinion polls and the rise of the 2nd Amendment Sanctuary movement in Virginia. Examining what factors drive engagement contributes to the existing literature on gun policy and may influence future policy development aimed at curbing gun violence while protecting individual rights. The next chapter describes how the study was conducted and how the participants were selected. It also explains the rationale for the type of study methodology, instrumentation design, data analysis as well as reviews any validity and ethical considerations.

Chapter 3: Research Method

Introduction

The purpose of this quantitative cross-sectional correlational research study was to examine Virginia gun owner and non-gun owner attitudes on gun policy and enhance the understanding of the conflict between divergent views that influence gun policy initiatives at the state and local levels. It is unknown what Virginia gun owner and non-gun owner attitudes are regarding local enactment of 2nd Amendment Sanctuary resolutions and state gun law proposals or if gun policy imaging exposure influences the contradictory perspectives regarding state and local government gun policy initiatives in Virginia. The dichotomy between the explosion of localized 2nd Amendment Sanctuary resolutions and the enactment of state level gun legislation sets the stage for assessing the attitudes behind both initiatives and the effect of various gun policy images on those attitudes. In this chapter, I focus on the research questions and variables, explain the rationale for the quantitative nonexperimental cross-sectional correlational study design, and articulate any constraints. I also address the methodology by defining the population, discussing sampling procedures and participant recruitment, and conclude with a breakdown of the data collection procedures and threats to validity. The chapter ends with a summary of the key points.

Research Design and Rationale

I designed this quantitative nonexperimental cross-sectional correlational study to assess the attitudes of Virginia gun owners and non-gun owners on gun control laws, 2nd Amendment sanctuary resolutions and the influence of policy images on their attitudes.

The independent variable for this study was gun ownership. This dichotomous variable was represented by 1 = yes and 2 = no. Attitudes on 2nd Amendment sanctuary resolutions was a dependent variable measured on a 7-point Likert scale. I measured the composite score of the attitudes on nine specific gun control laws: universal background checks, protective orders, carrying firearms in sensitive areas, a one-gun-a-month purchase limit, reckless endangerment of a minor, notification of lost or stolen weapons, extreme risk protection orders, assault weapons and magazine bans, and concealed carry on a 7-point Likert scale which functioned as both a dependent variable and a predictor variable to address the research questions. The policy image factors that potentially influence attitudes on gun control were also predictor variables. These eight variables: media coverage, interest groups, mass shootings, suicides, mental health, culture, religion, and political identity, were measured to provide an index score of positive, negative, and no effect for analysis. Additionally, the categorical variables for the demographics of gender, race, and political affiliation functioned as covariates.

In establishing a research design, I used quantitative analysis to convert observed data into a format that could be manipulated using statistical techniques to provide an explanation or description of the outcomes. I used a nonexperimental approach because the independent variable was not subject to any manipulation, a cross-sectional approach because the collected observational data came from samples of a pre-existing group within the studied population at a single point in time, and a correlational design to measure a statistical relationship between variables (Babbie, 2017). These four criteria were characterized in the design of this study. I converted the collected data into

numerical values represented by dichotomous, categorical, or interval values. I did not manipulate the independent variables. The sample population was a pre-existing group of Virginians at least 18 years of age who had resided in the state for a minimum of 2 years. I used multiple linear regression to test for a relationship between the variables. Analysis of the empirical data collected using a quantitative nonexperimental cross-sectional correlational approach efficiently and effectively addressed the aspects of the research questions in this study of Virginians' attitudes on gun control and 2nd Amendment Sanctuary resolutions.

In this study I used a quantitative nonexperimental cross-sectional correlational design due to the compressed timeframe and constrained resources characteristic of this research study. This approach incorporated the use of statistical tools for data analysis, which provided a means for accurate and timely outputs without any manipulation of the variables by me, the researcher. A survey enabled me to describe the characteristics of the phenomenon being studied. Using a survey required little interaction between the study participants and me, which saved time and resources. With web-based tools such as SurveyMonkey, I was able to design and administer an instrument to a large cross-section of the population within a short timeframe at little to no cost. Ultimately, this design streamlined the process and allowed for robust statistical analysis for determining the outcomes.

Attitudes and perceptions of sample populations at a given time are often measured in quantitative studies where the data are converted into numerical elements and then analyzed through statistical procedures (Creswell, 2013). The design of this

study was consistent with this type of research. The use of this method enabled me as the researcher to compare the differences in attitudes between gun owners and non-gun owners and advance the knowledge of incongruent perspectives on gun policy at the state and local levels.

Methodology

Population, Setting, and Sample

The target population for this research study was the adult population of the Commonwealth of Virginia who were at least 18 years of age and therefore legally eligible to own a firearm. As of July 2020, anyone 18 years or older in Virginia can purchase a rifle or shotgun; however, the individual must be 21 years old to purchase a handgun. According to the U.S. Census Bureau (n.d.), Virginia's total adult population as of June 2020 was estimated at 6.657 million. Virginia's population was 49% male and 51% female and was composed as follows: approximately 61% White, 20% Black, 10% Hispanic, 7% Asian, and 2% other. More than 89% of the population had a high school degree and 38% had a bachelor's degree or higher. The median household income was $71,564 with 10.7% of the population living in poverty.

I determined two other important demographics for this study using proxy data. Virginia recognizes only two official political parties: Democrat and Republican. In 2016, approximately 49% of the population of Virginia voted Democrat and 44% voted Republican (Virginia Department of Elections, n.d.). Because Virginia does not require registration with a specific political party to vote, the demographic for political affiliation in this study was instead based on the proxy data from overall party identification in the

United States. In 2020, a Pew survey found that 33% of Americans identified as Democrat, 29% identified as Republican, and 34% identified as Independent (Gramlich, 2020).

Gun ownership is also difficult to determine because Virginia does not have a requirement to register firearms. In 2020, RAND conducted a study, "State-Level Estimates of Household Firearm Ownership," which assessed years of survey data from the Behavioral Risk Factor Surveillance System (BRFSS), GSS, Pew Research Center, and Gallup along with proxy measures of the rates from gun suicides, hunting licenses, and *Guns & Ammo* magazine subscriptions to determine household firearm rates (HFR). The result for Virginia was an HFR of 44% (Schell et al., 2020). This number may be high because several individual survey estimates of gun ownership in Virginia quote lower numbers. Specifically, the Pew study had a gun owner rate for Virginia closer to 30% (Parker, 2017). In this study, I used the HFR score of 44% as the baseline for comparing gun ownership rates between the sample population and demographics for Virginia.

In research to determine the probability of an outcome, a robust representative random sample of the population being studied is required. *Probability* is defined as the measure of whether an event will happen in relation to the total number of possible outcomes. A random selection means that each participant has an equal chance of being selected. However, probability samples are not always feasible or appropriate. Therefore, due to the nature of this nonexperimental study design, I used a nonprobability sampling technique to gather the sample by a means unrelated to random selection and probability

theory (Babbie, 2017). In this study, I selected a subset of Virginians older than 18 years using the SurveyMonkey application. I sent the survey to individuals who met the screening criteria which provided a basis for examining the attitudes of a segment of the population. Using this technique for this study ensured that a large enough sample that was generally representative of the target population was collected. This enabled statistically sound assessments of the data (Babbie, 2017). I compared the overall demographics for the population of Virginia with the sample population in the study using chi-square analysis to demonstrate the representativeness of the sample.

SurveyMonkey (n.d.) consists of a panel of volunteers who agree to participate in research studies. The sample obtained from SurveyMonkey was limited based on the number of participants maintained within their database. The population size was the entire population represented in this study which is an estimated 6.6 million Virginians who are 18 years of age or older (Census Bureau, n.d.). The confidence level shows how reliable the outcomes are and for this study it was set at 95%. The margin of error informs how much of a deviation there is in the sample population from the total population and for this study the margin of error was 5%. The G*Power (see Figure 2) sample size results showed that a minimum of 128 valid responses were needed as the sample for this study. The representativeness of the SurveyMonkey sample was assumed but could not be validated although a chi-square analysis was conducted to assess the representativeness of the sample. The population was screened to include only those who have lived in Virginia for at least the last 2 years and were 18 years or older. SurveyMonkey only included those participants who self-reported that they met the

screening criteria, and any survey responses that did not meet the screening criteria were excluded from the study. All potential respondents were provided with an informed consent letter attached to the survey that articulated the study purpose, the voluntary nature of their participation, and the parameters of their involvement in the study. Those who consented to the survey and met the criteria were able to participate in the study (SurveyMonkey, n.d.).

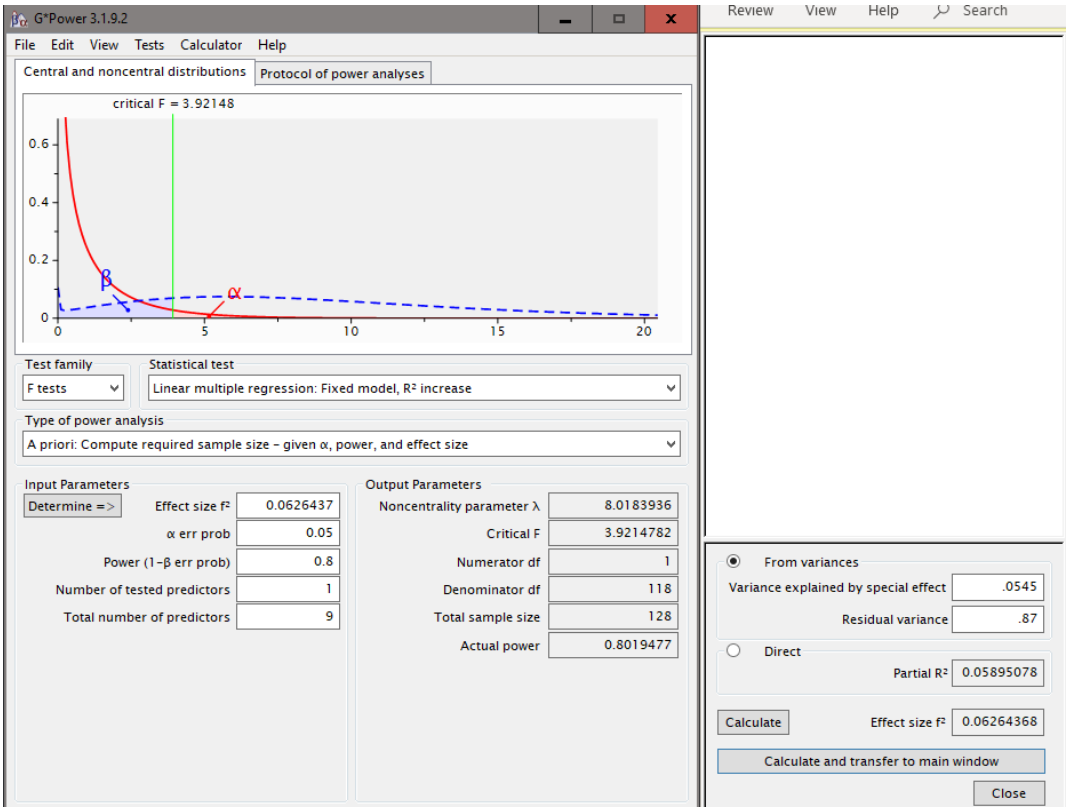
Power Analysis

Power analysis is typically used by researchers to ensure that the sample size is large enough to determine with some degree of confidence that an effect can be detected. There are four elements to power analysis; sample size, effect size, significance level (alpha), and power (beta). In knowing any three of the elements the fourth can be determined. The sample size is the minimum number of participants or subjects required in the analysis to prove a statistically significant result. Effect refers to the outcome or results of what was actually studied regardless of how many subjects were included. The expected effect is traditionally assessed based on findings from similar studies and knowledge of the topic and is ranked as small, medium, or large. The study design will also influence the effect size benchmarks that should be used. The effect size is a measurement of the strength or significance of the study results independent of the size of the sample. The significance level or *p*-value refers to the likelihood that an effect is not a result of chance. Power refers to the probability that the effect that is present will be found (Hunt, 2015).

The purpose of conducting a power analysis for this study was to exemplify the number of subjects needed to prove that the effect is statistically significant and not due to chance. It ensured that a statistically significant predictor could be detected from the sample size. Prior to beginning the research I conducted a priori power analysis to show the feasibility of the multiple linear regression statistical tests used in this study and determine the size of the sample needed. The power analysis used G*Power version 3.1.9.2 software for the specific statistical tests (Faul et al., 2009).

Figure 2

Power Analysis for Multiple Linear Regression



In multiple linear regression Cohen (1988) states that a medium effect size is f^2 = .15, which equates to a .13 medium effect size for multiple-R^2 and a .059 medium effect

size for a partial r^2. When calculating to remove any shared variance from the partial r^2, the result is a part r^2 of .0545 which accounts for any unique variance of a specific predictor. When conducting the multiple linear regression analysis the residual variance is defined as the proportion of variance that is not explained by the entire set of predictors and equates to 1 – multiple-R^2 or .87 for a medium effect size of the overall multiple-R^2. To detect a medium effect size part r^2 of a predictor within an overall medium effect size multiple-R^2 the power analysis values are a Cohen's f^2 = .0626, p = .05, and power = .80 (Cohen, 2003).

The result of the G*Power analysis (see Figure 2) was a required minimum sample size of 128 to ensure there was a 5% chance that the null hypothesis is correct but will be rejected and an 80% probability of finding a significant relationship in the effect. I have multiple predictors in my test and the sample size of 128 remains consistent for up to 37 predictors (Cohen 2003).

Participant Recruitment and Data Collection

Recruitment of participants for this study was managed through the SurveyMonkey (n.d.) application which drew from a pool of participants who met the screening criteria. The SurveyMonkey panel of participants for this study was comprised of individuals who live in Virginia. SurveyMonkey encourages participation and honest input by offering incentives such as donations to the participants' favorite charity and opportunities to win prizes. The survey was sent directly to the participants via an email link. The email also contained the purpose of the study, the participant consent letter, information on the length of the survey, the approximate time required to complete it, and

contact information in case any participant requests the results or has a question. The participant consent letter included a guarantee of anonymity and informed on the potential risks, harms and benefits of participating in the study (Babbie, 2017). Once the participant agreed to the terms outlined in the consent letter they were granted access to the survey instrument. The survey took approximately 5 minutes to complete. Once the survey was completed the participants received an auto-generated thank you that appeared after they clicked the submit button. The results from the survey were compiled by SurveyMonkey and the raw data made available to me for statistical analysis. It was expected to take approximately 5 days to collect the data for this study (SurveyMonkey, n.d.).

Cognitive Testing Pilot Study

Cognitive testing of the questions is conducted when developing a survey to determine if the questions perform as designed. It ensures that the respondents are able to correctly understand what is being asked and provide accurate responses. Specifically, is the intent of the question captured and does it make sense to the audience? The test examines four aspects of each question which include comprehension of the topic, recall of relevant knowledge, bias or sensitivity, and completeness of the response format. The goal of a cognitive pilot is to improve the survey quality by addressing any misunderstandings or concerns prior to fielding the survey to the sample population (Centers for Disease Control and Prevention, n.d.).

In this study I administered a cognitive pilot (see Appendix B) to test the readability and understandability of eight of the survey questions that were not pulled

from established and verifiable survey instruments. These eight questions related to the influence of policy images on attitudes towards gun control. The format for the questions was based on the Political Attitudes Questionnaire (PAQ) developed by Koleva et al. (2012). The question design used a multiple choice option of three contrasting statements to garner the pro, con, or no effect view of the participant by asking which statement about the issue was closest to their views. My survey questions inserted the policy imaging issues into the pro, con, no effect formatted statements. The policy imaging elements were an index and did not constitute a scale measure. Therefore neither factor analysis nor a Cronbach's alpha was appropriate nor necessary since the variables were not correlated or coalesced into a common variance construct (Warner, 2013).

The pilot was administered to 12 participants who met the criteria of the sample population using convenience sampling. The pilot only included the eight requisite questions and made no reference to the other survey questions. The pilot participants were asked to provide any comments or recommendations in writing geared towards improving the readability and understandability of the survey questions. The feedback was assessed and incorporated as required into the final survey instrument. The cognitive pilot outcomes and modifications to the final survey instrument are discussed in the study outcomes.

Instrumentation and Operationalization of Constructs

Survey Development

The survey instrument I used in this study (see Appendix A) was comprised of 25 questions pulled from two empirically validated survey instruments and my cognitive

pilot. The authors granted permissions to use the survey questions and modify them where necessary to fit the scope of my study. My survey consists of two screening questions for participation, four multiple choice demographic questions, one dichotomous question on gun ownership, one Likert scale question on 2nd Amendment Sanctuary attitudes, nine Likert scale questions on gun control attitudes, and eight multiple choice questions on the influence of gun policy imaging.

The 2017 Pew Research Center's American Trends Panel (ATP) consists of a nationally randomly selected representative group of adult respondents n = 3930 and asks 99 questions related to American gun attitudes. Pew survey material is free to the public for use and written permission to use the questions without any modification was granted by Ms. Julia O'Hanlon via email on July 27, 2020 (see Appendix C). Pew uses a multi-step approach to designing and validating survey instruments. They assess wording, format, and ordering through focus groups and pilots. Questions from the ATP are used over many years on various survey instruments to ensure consistency and validity in the collected data. The 2017 survey margin of error was 2.8% with a 95% confidence interval. My survey included the verbatim question on gun ownership measured as a yes or no and demographic questions on race, gender, and political affiliation taken from the 2017 Pew survey (Parker et al., 2017).

The Police Chiefs' Perceptions of Firearm Policies (PCPFP) survey is a 29 item instrument designed by Dr. Amy Thompson in 2006 to assess support for various firearm regulations by Police Chiefs. The questions ask respondents to rate on a 5-point Likert scale how strongly they agree or disagree with specific gun regulations. The survey

design aligned with my questions on gun regulations and was modified to address the nine specific Virginia gun laws and incorporate a 7-point Likert scale. Written permission to use and modify the questions as appropriate was granted by Dr. Thompson via email on July 27, 2020 (see Appendix C). The PCPFP survey content was validated through two iterations of a pilot consisting of a convenience sample of 20 police chiefs. The correlation coefficient was .64 and the Cronbach's $\alpha = .90$ on the firearm regulation questions. The survey instrument was used in a 2006 study of police chiefs $n = 405$ perceptions and a subsequent 2011 study of sheriffs $n = 398$ perceptions (Thompson et al., 2006).

The PAQ instrument was developed by Koleva et al. (2012) to assess the attitudes on specific political issues. The instrument was pulled from the PsycTests database and written permission was not required for use in educational research (see Appendix C). The questions were collected and adapted from national polls conducted by Gallup, Inc., the New York Times, and the Pew Research Center. The survey was administered to self-selected volunteers from the general population $n = 14{,}517$. For my study the format design of eight of the questions was a modified version from PAQ and tested for readability and understandability with a cognitive pilot of 12 participants.

Variable Definitions, Measures, and Scales

1. Gun Ownership - legally owning one or more firearms to include handguns, rifles, and shotguns (Parker et al., 2017).
2. 2nd Amendment Sanctuary - a local jurisdiction (county, city, or town) that has adopted a resolution to reject the local enforcement of any firearm law (state or

federal) that they perceive as a violation of the 2nd Amendment individual right to bear arms (Mascia, 2020).

3. Universal Background Checks - requiring a mandatory review of records in the National Instant Criminal Background Check System (NICS) to legally purchase or transfer any firearm (VLIS, n.d.).
4. Protective Orders - prohibiting any person subject to a legal protective order issued by a magistrate or judge from possessing a firearm (VLIS, n.d.).
5. Carrying in Sensitive Areas - authorizing local ordinances to prohibit carrying or possessing firearms or requiring a permit to carry or possess a firearm in government buildings, public parks, recreation or community centers, or public streets and sidewalks (VLIS, n.d.).
6. One Gun a Month Limit - prohibiting anyone who is not a licensed gun dealer from purchasing more than one handgun in a 30-day period (VLIS, n.d.).
7. Reckless Endangerment of a Minor - mandating any person who recklessly leaves a loaded or unsecured firearm in a manner that endangers the life or limb of a person under the age of 14 is guilty of a class 1 misdemeanor (VLIS, n.d.).
8. Notify of Lost or Stolen Weapon - requiring a person to notify police within 48 hours of discovering the loss or theft of a firearm (VLIS, n.d.).
9. Extreme Risk Protection Orders - allowing any attorney for the Commonwealth or a police officer to apply to a court for a 14-day emergency substantial risk order to prohibit a person who poses a risk from purchasing, possessing or transporting a firearm (VLIS, n.d.).

10. Assault Weapons and Magazine Ban - prohibiting the sale or transfer of assault weapons, silencers, and magazines holding greater than 12 rounds (VLIS, n.d.).
11. Concealed Carry - requiring a legally issued permit to carry a concealed handgun in public (VLIS, n.d.).
12. Media Coverage of Gun Policy - general attention and exposure to policy initiatives related to gun violence and crime in print, television, radio, the internet, or social media.
13. Interest Group Involvement in Gun Policy - familiarity with or membership in a group or an organization with a specific common interest in gun rights or gun control advocacy or issues that attempt to influence public policy.
14. Mass Shooting Awareness - the familiarity or knowledge of a gun violence incident that involves the death of four or more people within a 24 hour period by the same perpetrator or group of perpetrators with no cooling off period (Lott, 2018).
15. Gun Suicide Prevalence - familiarity or knowledge of the prevalence of gun use by people who intentionally killed themselves.
16. Mental Health Aspect of Gun Violence - the familiarity or knowledge of an incident that involves an individual with diminished psychological, emotional, and social capacity that results in gun violence.
17. Cultural Influence on Gun Policy - the shared beliefs, values, knowledge, social norms and characteristics that affect attitudes towards gun policy.

18. Religious Influence on Gun Policy - the organized system of beliefs or attitudes related to the worship of God or the supernatural that influence support or opposition to gun policy.
19. Political Identity Influence on Gun Policy - the knowledge and support of a set of political ideals or issues that inform an individual belief system on gun policy.

Table 3

Variable Measures and Scales

Variable	Measure	Scale
Gun Ownership	Predictor	Dichotomous
Attitudes on 2nd Amendment Sanctuary	Dependent	Interval
Attitudes on Gun Control Policies (universal background checks, protective orders, carrying firearms in sensitive areas, a one-gun-a-month purchase limit, reckless endangerment of a minor, notification of lost or stolen weapons, extreme risk protection orders, assault weapons and magazine bans, and concealed carry)	Dependent and Predictor	Interval w/ a composite score
Exposure to Policy Imaging (media coverage, interest group involvement, mass shooting awareness, gun suicide prevalence, mental health effects, cultural influence, religious influence, and political identity influence)	Predictor	Categorical w/ an index score
Demographics (gender, race, and political affiliation)	Covariate	Categorical

Data Analysis Plan

Multiple linear regression was used in this study to test the relationship between the variables and determine if the null hypotheses should be rejected for each of my three

research questions. This type of test was used to estimate how the dependent variable might change when exposed to changes in the independent or predictor variables. The predictor variable gun ownership is dichotomous and the exposure to policy imaging variable is categorical. The dependent and predictor variables on attitudes regarding gun control and 2nd Amendment sanctuary resolutions are measured on a 7-point Likert scale which is traditionally considered ordinal. There is an ongoing debate among researchers as to whether Likert scale values should be treated as ordinal or interval. This differentiation affects the types of parametric or nonparametric statistical tests that can be applied. Some statisticians prefer to use parametric analysis if all assumptions are met whereas others are less stringent and prefer parametric methods due to their enhanced statistical power. If Likert scale data is treated as ordinal then nonparametric testing should be used meaning there is no assumption that the data is distributed normally. Conversely if they are treated as intervals then parametric testing applies meaning it is assumed that there is a normal distribution within the data (Warner, 2013). A 2017 study by Wu and Leung demonstrated that increasing the number of points on the Likert scale improves the approximation to true intervals, reduces kurtosis and skewness, and increases the normality of the distribution. Based on other research (Knapp, 1990; Lovelace & Brickman, 2013; Wu & Leung, 2017) regarding the treatment of Likert scale variables, the projected sample size, and the assumption that the sample will be evenly distributed, I elected to treat the data from the 7-point Likert scales as interval and apply parametric testing in this study.

The software used to analyze the data in this study was the IBM Statistical Product and Service Solutions (SPSS) v27. Before beginning any analysis the data gathered from the surveys was screened to ensure accuracy, consistency, and identify outliers or missing data elements. Outliers are data points that are significantly different from the rest of the data. These extremes fall outside the normal distribution or *z* scores. A boxplot, histogram or scatterplot was used to identify outliers. If outliers are detected the data set may be trimmed or the outliers converted to a mean or median. For missing data the course of action will depend on the amount that is missing. If the missing data equals less than 3.29% of the total it will be omitted; if it is greater than 3.29% then values will be randomly imputed using the SPSS software (Warner, 2013).

The data were tested for any assumptions relative to the statistical tests that were used. For multiple linear regression this includes linearity, normality, multicollinearity, and homoscedasticity. If the assumptions were not met then further action was applied for the variable in question. The linear relationship between the dependent and independent variables was assessed by testing for the linearity assumption. Normality assumed that there was a normal distribution of the variables' scores. The multicollinearity assumption tested for the correlation between predictor (independent) variables. Homoscedasticity assumed equal variances for the populations being assessed (Warner, 2013).

I tested Hypothesis 1 using multiple linear regression to determine the relationship between the predictor variables (gun ownership and exposure to gun policy imaging) and the dependent variable (attitudes on Virginia state gun laws). The test provided descriptive statistics, confidence intervals, regression coefficients r^2 or

estimated effect, standard error which shows the variation in the estimates, *t* statistic, and *p*-value (Warner, 2013).

I tested Hypothesis 2 using multiple linear regression to determine the relationship between the predictor variables (gun ownership and exposure to gun policy imaging) and the dependent variable (attitudes on 2nd Amendment Sanctuary resolutions). The test provided descriptive statistics, confidence intervals, regression coefficients r^2, standard error, *t* statistic, and *p*-value (Warner, 2013).

I tested Hypothesis 3 using multiple linear regression to determine the relationship between the dependent variable (attitudes on local 2nd Amendment Sanctuary resolutions) and multiple predictor variables including (gun ownership, attitudes on gun control, exposure to policy imaging, race, gender and political affiliation). These covariates were added to the analysis to increase the precision of the predictions and reduce any bias. The test provided descriptive statistics, confidence intervals, estimated effect, and variation in the estimates, *t* statistic, and *p*-value. Additionally, the Part R-squared values were assessed to learn the relative importance of the predictors (Warner, 2013).

The research questions and hypotheses for this study were:

RQ1: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws?

$H_0$1: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws.

H_A1: There is a statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws.

- Dependent variable: attitudes on Virginia state gun laws.
- Predictor variables: gun ownership; exposure to gun policy imaging.

RQ2: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries?

$H_0 2$: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries.

$H_A 2$: There is a statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries.

- Dependent variable: attitudes on 2nd Amendment Sanctuary resolutions.
- Predictor variables: gun ownership; exposure to gun policy imaging.

RQ3: Do attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation predict attitudes on 2nd Amendment Sanctuaries?

$H_0 3$: Attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation are not statistically significant predictors of attitudes on 2nd Amendment Sanctuaries.

$H_A 3$: Attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation are statistically significant predictors of attitudes on 2nd Amendment Sanctuaries.

- Dependent variable: attitudes on 2nd Amendment Sanctuary resolutions.

- Predictor variables: attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation.

Threats to Validity

Threats to External Validity

External validity is determined when the results of the research are valid across many different contexts such as time, settings, or individuals. The idea is to ensure generalizability of the results within the context of the entire population even though they were not explicitly included in the research. The more closely the study resembles the real world the stronger the external validity. A potential external threat to validity in this research study was experimenter effect or the unintentional influence of the participants by the researcher. This was mitigated by the online anonymous nature of the survey instrument and the specific survey questions included in the instrument. Another potential factor effecting external validity was the specific nature or selection bias associated with the variables being assessed. This was minimized through the use of established and meaningful definitions of the variables extracted from comparable studies on attitudes and gun control (Burkholder et al., 2016).

Threats to Internal Validity

Internal validity addresses the rigor of the study so that there is no plausible explanation other than the outcome you reached. In quantitative research a threat to internal validity is an alternative explanation that challenges the validity of a proposition. The issue is that in research you must consider whether one explanation is better than a rival explanation; basically you must be able to reasonably infer that the outcome is

accurate by ruling out any threats (Burkholder et al., 2016). The category of history was a potential threat to internal validity in this study. This threat appears when during the course of the study an event occurs that may influence the results. The topic of attitudes on gun control and policy image could be influenced by major high profile events such as a mass shooting, rising crime, riots, and other events that affect individual perceptions. This potential internal threat was mitigated by ensuring the survey data was collected within a short span of time so that outside influencers did not alter respondent answers to the survey questions. Gun control is a volatile topic that garners extreme attitudes on both sides of the debate. A second possible threat to internal validity was statistical regression which is when an extreme position negatively affects the outcome. In this study there is a potential threat to statistical regression if the attitudes of the respondents are so extreme that they lead to a significant regression towards the mean. To mitigate this threat the survey responses were collected using SurveyMonkey to generate a diverse sample population. A third threat was selection bias which will be mitigated by conducting the survey online via SurveyMonkey where the sample populations are generated from a panel that enables a representative although not completely random group of respondents (Babbie, 2017).

Threats to Construct Validity

Construct validity assesses the relationship between the variables based on whether or not the instrument reliably measures what it is designed to measure. It demonstrates how well your ideas regarding your research match the measures you plan to use. There are several factors to consider when assessing the construct validity in your

study. Content is assessed to determine if specific criteria associated with the topic are clearly defined and deemed applicable. The correlation between variables is considered to determine if there is a predictable relationship. The measures are evaluated to see if they can distinguish between groups and therefore discriminate between concurrent relationships. The convergent and discriminant relationships are also reviewed to demonstrate validity of the instrument. Threats to construct validity include poor definition of the measures, limited application of the measures, confounding factors, and researcher expectations (Trochim, 2020b). To mitigate these threats well defined and validated questions were used in the survey instrument gleaned from previously established and comparable surveys. A cognitive test pilot was conducted for the eight questions not pulled from other instruments. Additionally, exposure to other factors that may influence the sample population was limited and protocols were instilled to limit researcher bias such as the use of an anonymous online survey.

Threats to Statistical Conclusion Validity

Statistical conclusion validity requires the selection of the correct statistical test and appropriate sample size to ensure accurate and reliable conclusions. It expresses the extent to which the conclusions about the relationship between the variables is credible. In quantitative research if you are looking for a relationship between variables the expected answer is the relationship either does or does not exist. However, as a researcher you must consider that your conclusion may be incorrect, and therefore statistical conclusion validity should be assessed to determine if the conclusion is reasonable. The threats to statistical conclusion validity may include factors such as reliability,

implementation, and statistical power. Reliability refers to the quality and consistency of the measures being used in the study. Threats to reliability in this study were mitigated by using established and validated questions from comparable survey instruments related to gun control and attitudes and conducting a cognitive pilot. The threat from statistical power was limited by ensuring an adequate sample size and by applying the appropriate significance level and effect size during the statistical analysis of the data. The threat to good implementation of the study was minimized by using a standardized survey instrument and corroborated protocols (Trochim, 2020a).

Ethical Procedures

There are numerous ethical procedures required when conducting research studies to ensure the protection of the participants, data, and researchers. These include but are not limited to the concepts of voluntary participation, informed consent, risk of harm, confidentiality, and anonymity. Voluntary participation means that no one should be coerced to participate in the research. Informed consent requires that the researcher ensure that all prospective participants understand the risks and procedures of the research study and that they agree to participate. A typically informed consent letter would include things such as a statement about what the research involves and its purpose, a description of potential risks and benefits, a disclosure on any alternative treatments, confidentiality expectations, or compensation, a point of contact for questions, and a statement asserting the voluntary participation of the subjects. The risk of harm relates to the three principles outlined in the *Belmont Report* that include making sure that the individuals are respected, not harmed, and that the research is fairly shared.

Confidentiality is applied when the researcher assures the participants that any identifying information acquired during the course of the study will not be provided or made available to those who are not directly involved with the research. Anonymity implies that the individuals involved in the study will remain unknown to everyone including the researcher (Babbie, 2017).

This research study complied with the Walden University Institutional Review Board guidelines. The Walden University's IRB approval number for this study is 10-25-20-0912272 and it expires on October 24, 2021. All potential participants in the research were given an informed consent letter that articulated the purpose, procedures, benefits and risks associated with the study. There was no compensation provided by me for participation although SurveyMonkey (n.d.) does offer opportunities for prizes to individuals registered in their panel pool. No individuals were harmed during this study. The participants were all volunteers and able to withdraw from the study at any time. No specific identifiable information was collected other than basic demographics and results from the data collection were coded to ensure anonymity. The data will be stored for the requisite five-year period in a locked cabinet and then destroyed.

Summary

In this quantitative research study a survey methodology was employed to gather primary data to assess gun owner and non-gun owner attitudes on 2nd Amendment Sanctuary resolutions, exposure to policy imaging, and state level gun control policies and proposals. This study addressed attitudes of constituents on divergent state and local gun policy initiatives, an under-researched area of gun control. The sample for this study

was obtained through SurveyMonkey (n.d.), an online tool designed to include access to a population pool that meets specific screening criteria. The survey instrument was designed to assess the attitudes of gun owners and non-gun owners providing numerical data for quantitative statistical analysis. Hypotheses were tested using multiple linear regression to answer the research questions in this study. Any threats to validity and ethical procedures were assessed and mitigation strategies were employed.

Chapter 4 summarizes the results of my study and outlines the data collection process as it relates to the population studied. The chapter includes an in-depth explanation of the study results consisting of an analysis of the descriptive statistics and evaluation of any assumptions. Specifically, the results of the statistical analysis are reported regarding each research question and hypothesis. This includes the results for any statistical tests accompanied by graphs, charts, tables, and figures. The chapter concludes with a summary of the answers to each of the research questions and a transition to the final chapter of the study which focuses on the interpretation of the findings, limitations of the study, recommendations for further research, and implications for positive social change.

Chapter 4: Results

Introduction

The purpose of this research study was to examine Virginia gun owner and non-gun owner attitudes on gun policy to better understand the divergent views that influence gun policy initiatives at the state and local levels. To gain insight into Virginia gun owner and non-gun owner attitudes on the local enactment of 2nd Amendment Sanctuary resolutions and state gun law proposals, I analyzed survey data of gun owners and non-gun owners older than 18 years who had resided in Virginia for at least the last 2 years. The results provided an opportunity to explore the dichotomy between the explosion of localized 2nd Amendment Sanctuary resolutions and the enactment of state-level gun legislation and whether policy image had any influence on attitudes toward those elements. The research questions and hypotheses for this study were as follows:

RQ1: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws?

$H_0$1: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws.

H_A1: There is a statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws.

RQ2: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries?

$H_0$2: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries.

H_A2: There is a statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries.

RQ3: Do attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation predict attitudes on 2nd Amendment Sanctuaries?

H_03: Attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation are not statistically significant predictors of attitudes on 2nd Amendment Sanctuaries.

H_A3: Attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation are statistically significant predictors of attitudes on 2nd Amendment Sanctuaries.

In this chapter, I discuss the pilot study and its effect on the final survey instrument. I provide a detailed overview of the data collection timeline and process. This is followed by a comprehensive review of the data analysis including, descriptive statistics and results. The chapter concludes with a summary of the research outcomes.

Pilot Study

I conducted a pilot study from November 27 to November 30, 2020, to assess the understandability and readability of eight of the survey questions that I developed specifically for this research study. These eight questions related to the influence of policy images on attitudes toward gun control and were designed with a multiple-choice option to garner the pro, con, or no effect views of the participants by asking which statement about the issue was closest to their views. I used the pilot to ensure the

questions performed as designed and that respondents were able to correctly understand what was being asked and provide accurate responses.

For the pilot study, I sent the eight relevant survey questions (see Appendix B) to 12 friends and family via direct email. I asked the pilot participants to review each of the eight survey questions and answer whether they were clear and easy to follow, easy to read and understand, whether the answer options were clear and easy to understand, and whether the answer options accurately reflect their view or if a different answer option was necessary. All 12 pilot participants responded and provided comments. None of the responses to the specific eight multiple choice survey questions were included in the final statistical data analysis for this research study

Overall, the results of the pilot study demonstrated that the instructions were clear, the questions were easy to read and understand and formatted correctly, and the answer choice options were valid. Based on specific feedback from the pilot, I made some minor adjustments to the final survey instrument to ensure clarity for three of the questions. Specifically, for the first pilot question on news media, several respondents highlighted that social media was a distinct platform from the internet, so I added social media to this question as an example of a source of news media. This addition corresponded to the definition of the variable in Chapter 3, which did include social media. For the second question, several pilot participants were not familiar with the examples of gun control advocacy groups presented and pointed out that both pro and con groups have an influence on policy image. To mitigate this confusion, I modified the second question to include both pro and con gun policy advocacy. Examples from both

types of groups were added to clarify the intent. This addition also matched the definition for this variable in Chapter 3. For the third question on mass shootings, it was recommended that a more noteworthy example outside of Virginia be added to enhance understanding of mass shootings. Therefore, I added another example of a mass shooting, specifically Las Vegas 2017, to the question. Additionally, I corrected one grammatical and one spelling error. None of the implemented changes affected the intent of the survey instrument, data analysis, or strategies for the research study.

Data Collection

I collected the data for this research online via SurveyMonkey during a 4-day timeframe between November 2, 2020, and November 5, 2020. The target population included Virginians 18 years or older who had lived in Virginia for at least the last 2 years, since November 1, 2018. I incorporated screening questions to ensure participants met the criteria for participation in the study. I used the SurveyMonkey Audience tool, and sent the surveys to 202 potential respondents, of which 192 responded and fully completed the survey for a response rate of 93%. All respondents provided informed consent via the online form prior to gaining access to and completing the survey. The survey responses were anonymous, and no identifying data or IP addresses were provided to me. On average, the survey took the participants 4 minutes and 59 seconds to complete.

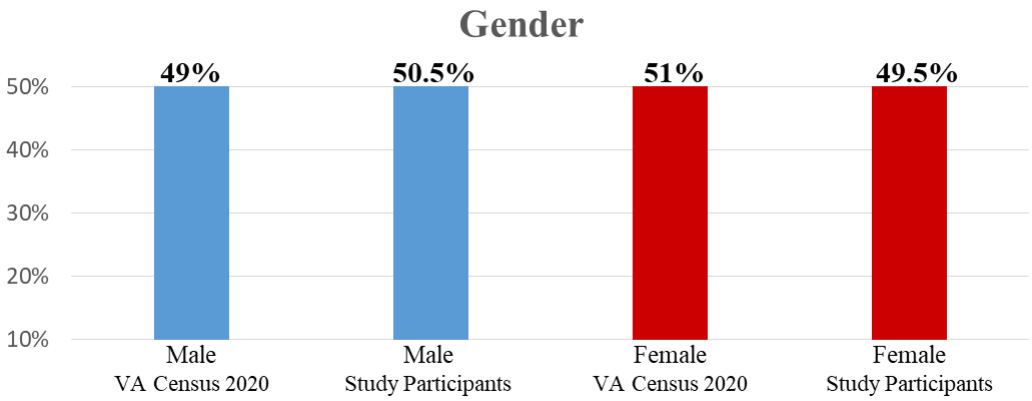
Prior to any analysis, I screened the data for any missing values using frequency counts. No cases of missing values were present within the dataset. I also screened the data for outliers by transforming the raw scores to *z* scores and comparing them to the

critical value of ± 3.0 with $p < .001$. Based on the z scores and boxplots, seven outliers were detected in the dataset for the demographic variable of race and outliers were found in four of the gun control variables (protective order = 4, reckless endangerment = 2, lost or stolen weapon = 4 and concealed carry = 3). In analyzing the outliers, I determined that neither a measurement error nor a sample population anomaly caused the outliers. The outliers were a natural part of the population being studied, and all 192 records were therefore included in the statistical analysis (Warner, 2013).

I compared the respondents' descriptive and demographic characteristics from the survey and those automatically provided by SurveyMonkey with the population in Virginia in 2020 to ensure I used a comparable sample population in the study.

Figure 3

Gender Demographic Comparison



According to the U.S. Census Bureau (n.d.), Virginia's population in 2020 was 49% male and 51% female. The survey participants' gender breakout (see Figure 3) was similar, with 50.5% male (n = 97) and 49.5% female (n = 95). Analyzing the results of the chi-square one-way goodness of fit test, the covariate of gender for the sample population

was not statistically different at $p = .563$, which indicates the sample matched the expected gender breakout of the population of Virginia.

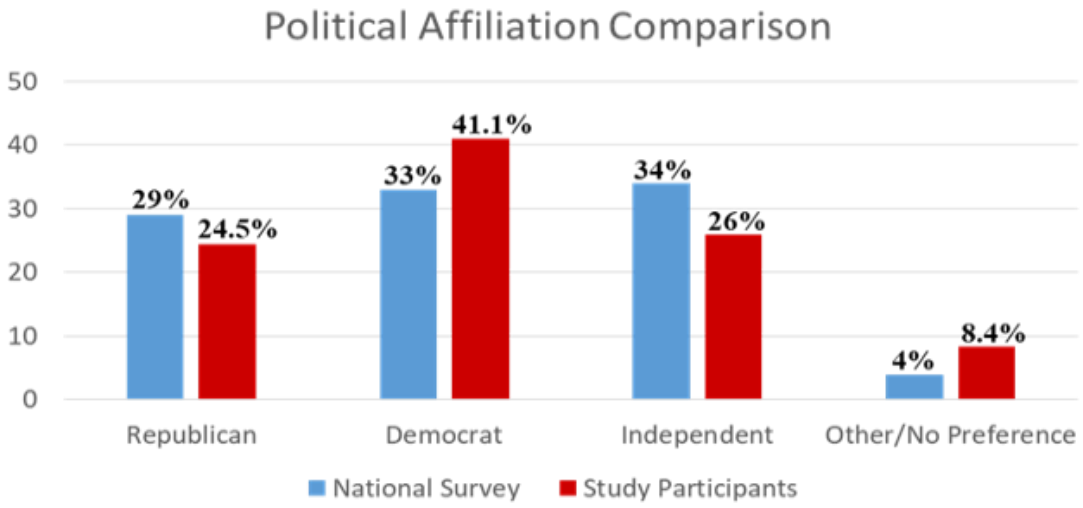
Both the median household income and racial demographics for the survey participants were skewed as compared to the overall Virginia demographics. The median household income of survey participants was categorized in SurveyMonkey as $75,000 - $99,000 while the Virginia median household income in 2020 was approximately $71,564. This demographic was not a covariate in the study analysis. The racial breakout of survey respondents was statistically different from Virginia at $p < .001$. For example 92.2% of respondents identified as White ($n = 177$) which was much higher than the state population of approximately 61% White. As a result the other racial categories were much lower than the Virginia demographic breakout for race (U.S. Census Bureau, n.d.).

As stated in Chapter 3, political affiliation and gun ownership are difficult to accurately measure. In assessing the results for political affiliation it is important to note that Virginia only recognizes two political parties. The voting statistics from 2016 were measured as approximately 49% of the population voted Democrat and 44% voted Republican (Virginia Department of Elections, n.d.). However, the national party identification in 2020 was 33% Democrat, 29% Republican, and 34% Independent (Gramlich, 2020). These national statistics differ slightly from the study participants where 41.1% identified as Democrat ($n = 79$), 24.5% identified as Republican ($n = 47$) and over 1/3 of the survey respondents ($n = 66$), 34.4% identified as Independent, No-Preference, or Other (see Figure 4). In comparing the survey respondents to the overall

United States political affiliation Democrats were more statistically represented while Republicans and Independents were slightly underrepresented in the study population.

Figure 4

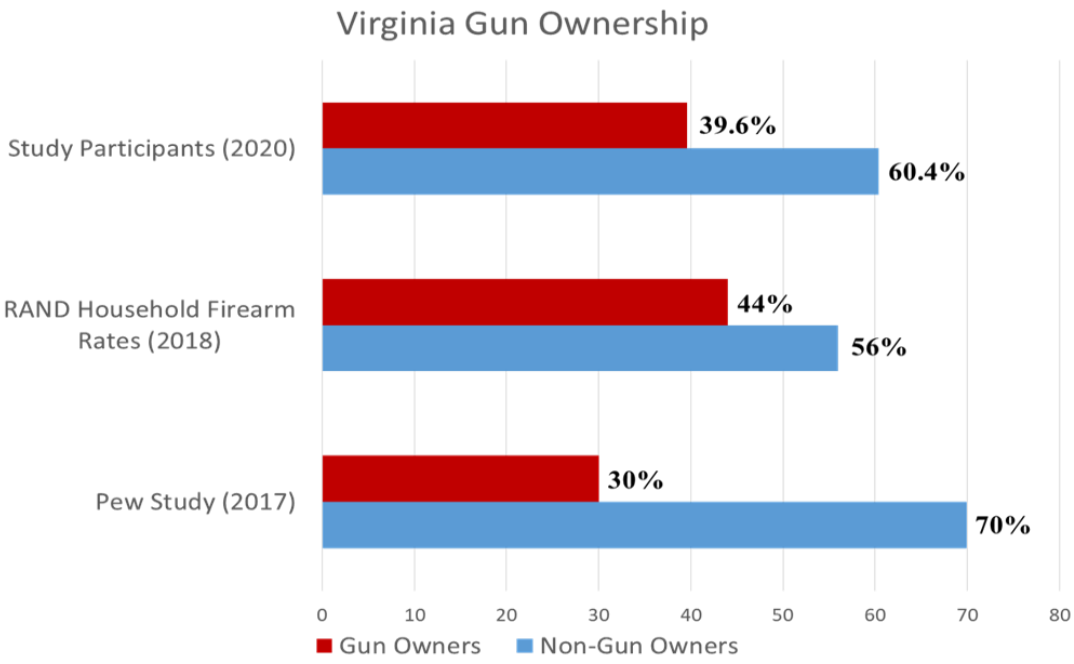
Political Affiliation Comparison



For gun ownership the RAND (2020) study was used to approximate a baseline household firearm rate (HFR) in Virginia of 44% which is significantly higher than the Pew (Parker et al., 2017) study which approximated gun ownership in Virginia at closer to 30%. The survey participant results for this study reported gun ownership (n = 76) at 39.6% and non-gun ownership (n = 116) at 60.4% (see Figure 5). The gun ownership percentage is closer to the HFR rate of 44% than the Pew approximation of 30%. Of the total participants 24.5% of the males and 15.1% of the females were gun owners. Additionally, gun owners were comprised of 39.5% Republican, 22.4% Democrat, and 27.6% Independent, with 10.5% identifying as Other/No Preference.

Figure 5

Gun Ownership Comparison

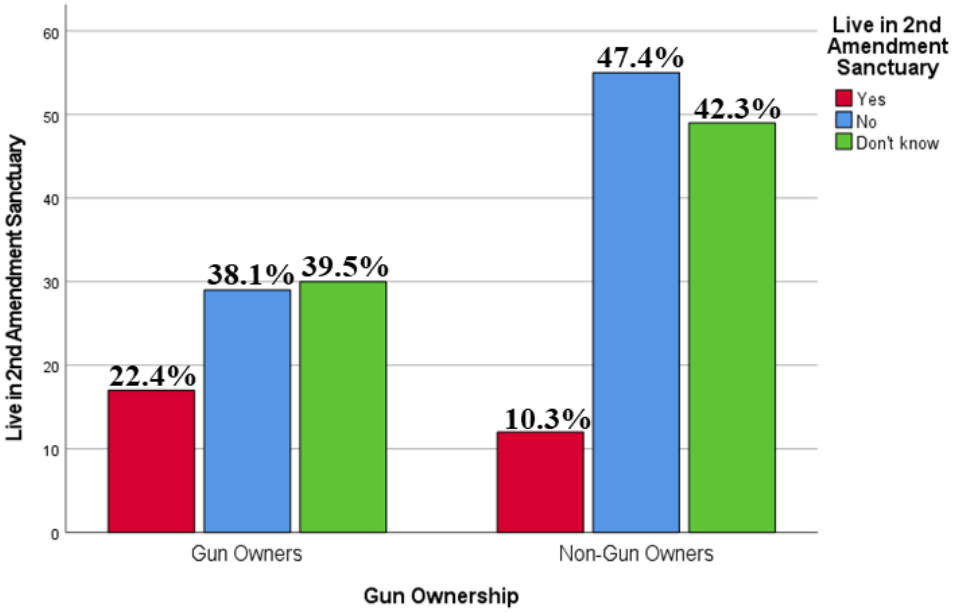


Since November 2019, 91 out of 95 counties and 56 independent cities and towns in Virginia passed some form of 2nd Amendment Sanctuary resolution. One additional demographic question on the survey asked respondents if they lived in a 2nd Amendment Sanctuary county, city, or town. Of the survey participants 41.1% responded that they did not know if they lived in a 2nd Amendment Sanctuary county, city, or town. While 43.8% responded they did not live in a 2nd Amendment Sanctuary county, city, or town and 15.1% responded that they did live in one. Of gun owners 39.5% responded they did not know and of non-gun owners 42.3% responded they did not know. It is interesting that while more than 95% of counties in Virginia are 2nd Amendment Sanctuaries, over 40% of participants (relatively evenly split between gun owners 39.5% and non-gun

owners 42.3%) are seemingly unaware of whether or not their local government passed a 2nd Amendment Sanctuary resolution (see Figure 6).

Figure 6

Live in 2nd Amendment Sanctuary Comparison



The analysis and comparison of the descriptive and demographic characteristics of the survey respondents and Virginia's overall population were determined to be representative of the total population for the covariate gender but not for the race variable. Both the predictor variable gun ownership and the covariate political affiliation were compared to proxy data which is difficult to measure accurately. The survey data for those two variables approximate the baseline proxy data established in this study for the total population and therefore were used to reflect the characteristics of the sample population. Based on the comparison of the demographics and descriptive data between

the total population and sample population the overall data was determined generally representative and appropriate for use in this study.

Results

To conduct the statistical analysis and answer the research questions several variables were combined to produce both a composite and index variable. Nine interval variables on gun policy were combined to produce a composite score for attitudes on gun control policies. Eight nominal variables were used to produce an index variable for the influence of policy image. To assess the outcomes for each of the research questions descriptive statistics of the dependent and independent variables were evaluated followed by an analysis of the multiple linear regression tests for each hypothesis to include details on the assumptions and results.

Prior to developing the composite gun control variable the raw data on gun owner and non-gun owner attitudes regarding the nine specific Virginia gun control measures was assessed (see Table 4). When compared with previous research conducted by Parker et al. (2017) and Barry et al. (2018) all three studies demonstrated that both gun owners and non-gun owners overwhelmingly supported several gun control policies such as universal background checks to purchase a firearm, prohibiting persons with a protective order from purchasing a firearm, extreme risk protective orders or red flag laws, and requiring tests or permits for concealed carry of a firearm. The studies consistently demonstrated conflicting opinions between gun owners and non-gun owners on bans for assault weapons and magazines, laws that limit firearm purchases to one gun a month, and laws that prohibit the carrying of firearms in certain sensitive areas. The results of the

survey of Virginia gun owner and non-gun owner attitudes on specific gun policies reinforce prior research that shows gun owners and non-gun owners both strongly support some types of gun legislation while they diametrically oppose others.

Table 4

Study Participant Gun Control Support Results, 2020

Gun Policy	Gun Owners Support	Non-Gun Owners Support
A law requiring a mandatory background check to purchase or transfer any firearm including private sales and gun shows. Commonly referred to as universal background checks.	71%	97%
A law prohibiting anyone subject to a legal protective order from possessing a firearm.	78%	91%
A law authorizing local ordinances to prohibit carrying or possessing firearms in government buildings, public parks, recreation or community centers, or public streets and sidewalks open to the public.	41%	81%
A law prohibiting anyone from purchasing more than one handgun in a 30-day period.	51%	83%
A law requiring criminal sanctions for any adult who recklessly leaves a loaded or unsecured firearm in a manner that endangers the life or limb of a person under the age of 14.	74%	94%
A law requiring a person to notify police within 48 hours of discovering the loss or theft of a firearm.	74%	96%
A law allowing any attorney for the Commonwealth or a police officer to apply to a court for a 14 day emergency substantial risk order to prohibit a person who poses a risk from purchasing, possessing or transporting a firearm.	68%	96%
A law prohibiting the sale or transfer of assault weapons, silencers, and magazines holding greater than 12 rounds.	51%	90%
A law requiring a legally issued permit to carry a concealed handgun in public.	79%	97%

Descriptive Statistics

Descriptive statistics were analyzed for the dependent, independent, and covariate variables in the study. This data provided information on the variables' sample size (n =

192), mean to illustrate central tendency, and standard deviation (within ± 3.0) to depict how far spread out the data was from the mean. The skewness score (within ± 3.0) depicted if the distribution had symmetry and kurtosis (within ± 10.0) exemplified the shape and spread of the data as having either a heavy or light tail (Warner, 2013). For this study the dependent variable attitudes on Virginia state gun laws was developed as a composite of the data from the nine questions on gun control measured on a 7-point Likert scale. This composite score was developed in SPSS by multiplying the mean or average of the nine specific gun control variables. The Gun Control Composite scale variable reliability had a Cronbach's $\alpha = .939$, which is greater than the generally accepted baseline $\alpha > .70$. This demonstrated a very strong internal consistency of the items in the composite variable. The nine variables in the composite had a strong to moderate correlation coefficient ranging between .475 and .798 at a significance of $p < .001$ (Warner, 2013). The predictor variable exposure to gun policy imaging was developed as an index variable. The data was nominal based on a pro, con, and no effect assessment. The index was computed using the sum of the eight policy image variables and then dividing them by the total number of variables. Neither a factor analysis nor Cronbach's alpha was applicable because the index variable was not measured on a scale.

The descriptive statistics for the dependent scale variable Gun Control Composite ($n = 192$, $M = 5.829$, $SD = 1.471$) had a negative skewness of -1.287 which was within ± 3.0 and kurtosis was .505 which fell between ± 10.0 (see Table 5). The dependent scale variable Second Amendment Sanctuary ($n = 192$, $M = 3.35$, $SD = 2.445$) had a positive skewness at .364 and kurtosis of -1.585 both within acceptable ranges (see Table 5).

Table 5

Descriptive Statistics: Gun Control Composite and 2nd Amendment Sanctuary

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
GunControlComposite	192	1.56	7.00	5.8293	1.47181	-1.287	.175	.505	.349
SecondAmendSanct	192	1	7	3.35	2.445	.364	.175	-1.585	.349
Valid N (listwise)	192								

The descriptive statistics for the dichotomous predictor variable of Gun Ownership (n = 192, M = 1.60, SD = .490) resulted in skewness of -.429 which was within the range of ± 3.0 and kurtosis of -1.835 which was also within tolerance of ± 10.0 (see Table 6). A cross-tabulation was conducted comparing Gun Ownership to agreement with 2nd Amendment Sanctuary resolutions (see Table 7). While more total participants (n = 105) did not agree with establishing 2nd Amendment Sanctuaries (54.7%), the results showed that 55% of gun owners agreed that counties, cities, or towns should enact 2nd Amendment Sanctuary resolutions to not enforce state or federal gun laws deemed a violation of the 2nd Amendment. In comparison 24.1% of non-gun owners supported enacting resolutions (see Figure 7).

The Policy Image Index nominal predictor variable (n = 192, M = 13.3229, SD = 3.969) was outside the acceptable range of ± 3.0. This indicates that the data may not precisely follow a normal Gaussian distribution and require more than three standard deviations to get 99.7% of the data within the norm. The skewness was .555 and the kurtosis was -.450, both within acceptable ranges (see Table 6).

Table 6

Descriptive Statistics: Gun Ownership and Policy Image Index

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
GunOwnership	192	1	2	1.60	.490	-.429	.175	-1.835	.349
PolicyImageIndex	192	8.00	24.00	13.3229	3.96977	.555	.175	-.450	.349
Valid N (listwise)	192								

Table 7

Cross Tabulation for Gun Ownership and 2nd Amendment Sanctuary

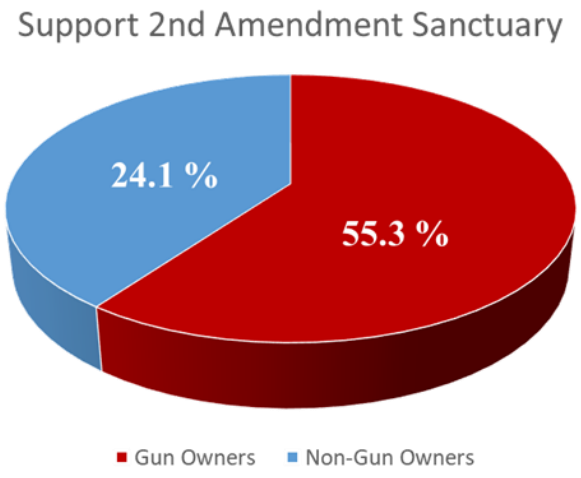
*GunOwnership * SecondAmendSanct Crosstabulation*

Count

		SecondAmendSanct							
		Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree	Total
GunOwnership	Yes	20	4	5	5	5	15	22	76
	No	62	13	1	12	5	13	10	116
Total		82	17	6	17	10	28	32	192

Figure 7

Comparison of Support for 2nd Amendment Sanctuary Resolutions



The dichotomous covariate of Gender (n = 192, M = 1.49, SD = .501) had a skewness of .021 which was within the range of ± 3.0 and kurtosis of -2.021 which was also within tolerance of ± 10.0 (see Table 8). Political Affiliation was a categorical covariate (n = 192, M = 2.20, SD = .952). Both skewness of .613 and kurtosis of .167 fell within the acceptable range (see Table 8). The categorical covariate Race (n = 192, M = 1.17, SD = .653) had both skewness of 4.039 and kurtosis of 15.863 outside the acceptable range meaning there was a heavy tail in the distribution which was very peaked on one end (see Table 8). The non-normal distribution was also evident in the demographics analysis discussed previously where 92.2% of the survey respondents indicated they were white and the other race percentages were well below the total population baseline.

Table 8

Descriptive Statistics: Gender, Political Affiliation and Race

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Gender	192	1	2	1.49	.501	.021	.175	-2.021	.349
PoliticalAff	192	1	5	2.20	.952	.613	.175	.167	.349
Race	192	1	5	1.17	.653	4.039	.175	15.863	.349
Valid N (listwise)	192								

Assumptions and Statistical Analysis

Regression analysis is an assessment of the residuals which are characterized as the difference between the dependent variable observed value and predicted value. Therefore before assessing the outcomes in a multiple linear regression model the assumptions of normality, linearity, multicollinearity, and homoscedasticity must be met.

This means the residuals must be close to normally distributed, be independent of each other, and have a constant variance (Warner, 2013). To account for any violations of the assumptions during the regression analysis bootstrapping was applied to estimate distributions in the sample. Bootstrapping involves resampling the data set of the studied population to create multiple new samples from the original sample population. The new samples served as a proxy for the total population based on the assumption that the sample data accurately reflected the total population. The outcome produced confidence intervals and the normalization of the sample to combat any assumption violations (Frost, n.d.). Following the validation of the assumptions I used multiple linear regression testing and inferential statistics to inform the conclusions.

Hypothesis 1

$H_0$1: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws.

To evaluate Hypothesis 1 with a multiple linear regression model SPSS v27 was used to determine if there was a statistically significant relationship between gun owner and non-gun owner attitudes and exposure to policy image factors in predicting Virginians' attitudes on state gun control laws. The assumption of normality was not violated. This assumes the residuals were distributed normally as evidenced by the histogram for the dependent variable Gun Control Composite which depicted a normal distribution (see Figure 8). The assumption of linearity was not violated as the residual points generally followed the line on the predicted probability plot (see Figure 9). Additionally the Cook's distance was used to measure whether outlier data influenced the

slope. For Hypothesis 1 the Cook's distance minimum value was .000 and the maximum value was .075 which was below the threshold of .7915 and indicated that outliers should not affect the results.

Figure 8

Hypothesis 1 Assumption of Normality Results

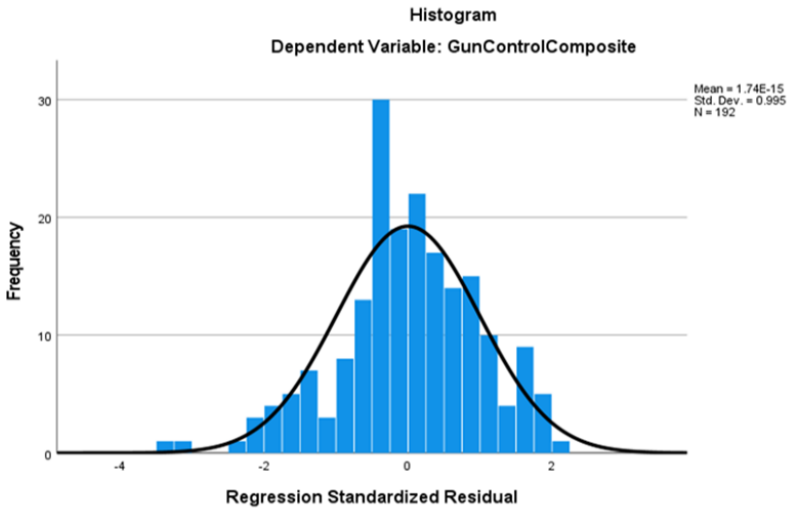
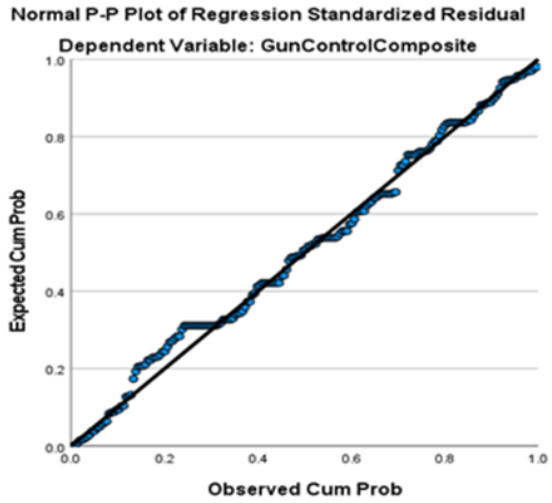


Figure 9

Hypothesis 1 Assumption of Linearity Results



The assumption of multicollinearity was not violated as the Variance Inflation Factor (VIF) was 1.215 which was less than 10 and indicated a low correlation between the predictor variables (see Table 9). In this model the assumption of homoscedasticity was violated as the scatterplot residuals fell into a fan-shaped pattern and two points were outside the ± 3.0 range on the y axis which indicates heteroscedasticity (see Figure 10).

Table 9

Hypothesis 1 Assumption of Multicollinearity Results

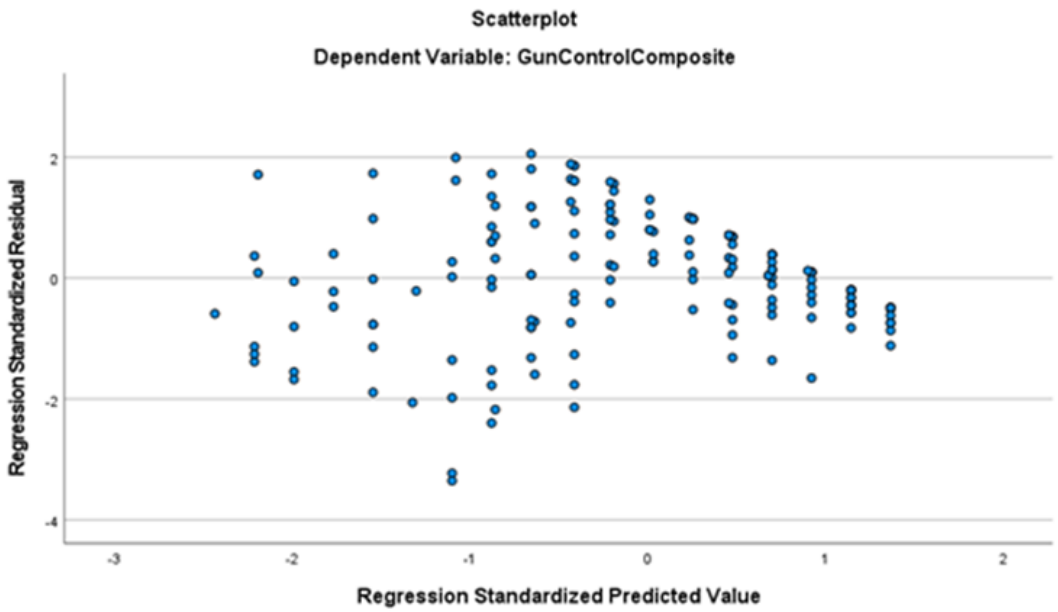
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	8.436	.401		21.014	.000					
	GunOwnership	.547	.145	.182	3.781	.000	.479	.265	.165	.823	1.215
	PolicyImageIndex	-.261	.018	-.705	-14.634	.000	-.782	-.729	-.640	.823	1.215

a. Dependent Variable: GunControlComposite

Figure 10

Hypothesis 1 Assumption of Homoscedasticity Results



To account for this homoscedasticity assumption violation a bootstrapping technique called bias corrected accelerated (BCa) was conducted during the multiple linear regression analysis to stabilize the parameter estimate variance by producing confidence intervals to test the hypothesis (Frost, n.d.). The bootstrap in SPSS v27 consisted of 2,000 iterations of sampling to estimate the distribution.

For Hypothesis 1 the output of the multiple linear regression test was based on a generally representative sample size (n = 192). The R square was used to show the proportion of dependent variable variance explained by the predictor variables collectively (Warner, 2013). The R^2 = .639 with a statistical significance p < .001 indicated that 63.9% of the variability for Gun Control Composite was explained by Gun Ownership and Policy Image Index (see Table 10).

Table 10

Hypothesis 1 Model Summary Results

Model Summary[b]

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.799[a]	.639	.635	.88925	.639	167.111	2	189	.000

a. Predictors: (Constant), PolicyImageIndex, GunOwnership

b. Dependent Variable: GunControlComposite

The outputs from the coefficient correlation (see Table 9) showed the predictor variables were statistically significant p < .001 from zero. So they both had a statistically significant effect on Gun Control Composite. The Part correlation coefficient for Gun Ownership .165 and Policy Image Index -.640 indicated the unique contribution of each variable (Warner, 2013). This demonstrated that Gun Ownership accounted for only 2.7%

(.165 x .165) of the variance in Gun Control Composite while Policy Image Index uniquely accounted for 41% (-.640 x -.640) of the variance (see Table 9).

The bootstrapped coefficient (see Table 11) depicted the calculated confidence interval with a significance level. The results for the estimated model exemplify how much variance between Gun Control Composite and one predictor variable when the other predictor was held constant. When the bootstrap confidence intervals do not cross zero between the lower and upper bound they are assumed to be statistically significant and align with the *p*-value (Frost, n.d.).

Table 11

Hypothesis 1 Bootstrap Coefficient Results

Bootstrap for Coefficients

			Bootstrap[a]				
						BCa 95% Confidence Interval	
Model		B	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
1	(Constant)	8.436	.019	.429	.000	7.630	9.317
	GunOwnership	.547	-.008	.162	.002	.234	.856
	PolicyImageIndex	-.261	.000	.019	.000	-.300	-.227

a. Unless otherwise noted, bootstrap results are based on 2000 bootstrap samples

Controlling for Policy Image Index, the regression coefficient for Gun Ownership [β = .547, 95% C.I. (.234, .865) p = .002] suggests that with each one unit increase in Gun Ownership, Gun Control Composite increases by approximately .547. The Part correlation suggests that 97.3% of the variation in Gun Control Composite cannot be explained by Gun Ownership alone.

Controlling for Gun Ownership, the regression coefficient for Policy Image Index [β = -.261, 95% C.I. (-.300, -.227) p < .001] suggests that with each one unit increase in

Policy Image Index, Gun Control Composite decreases by approximately .261. The Part correlation suggests that 59% of the variation in Gun Control Composite cannot be explained by Policy Image Index alone.

The results of the multiple linear regression for Hypothesis 1 revealed Gun Ownership and Policy Image Index to be statistically significant predictors to the model ($p < .05$). Both of the predictor variables had a 95% confidence interval that did not contain zero, which means the null hypothesis was rejected.

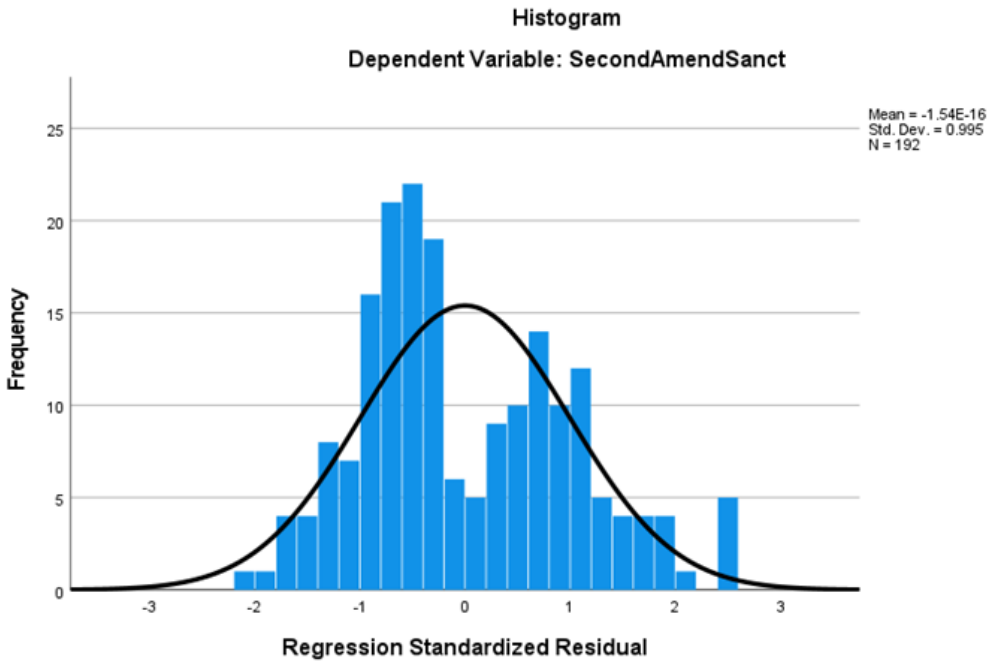
Hypothesis 2

$H_0$2: There is no statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries.

Hypothesis 2 was evaluated with a multiple linear regression model using SPSS v27 to determine if there was a statistically significant relationship between gun owner and non-gun owner attitudes and exposure to policy image factors in predicting Virginians' attitudes on 2nd Amendment Sanctuary resolutions. The assumption of normality was not met. The residuals were not distributed normally as shown by the histogram for the dependent variable 2nd Amendment Sanctuary (see Figure 11). This violation lends itself to inaccurate results for the *p*-values and confidence intervals. Bootstrapping was used to address the issue of non-normality and fit the data within a linear model framework. The intent of bootstrapping was to simulate the sampling distribution to enough instances whereby a normal distribution was approximated due to the Central Limit Theorem (Pek et al., 2018). In SPSS v27, the bootstrap consisted of 2,000 iterations of sampling to estimate the distribution.

Figure 11

Hypothesis 2 Assumption of Normality Results



The assumption of linearity was met as the residual points generally followed the line on the predicted probability plot. Although there were some minor deviations overall linearity was assumed (see Figure 12). Cook's distance was reviewed and had a minimum value of .000 and a maximum value of .107 which was below the threshold of .7915 for this model which indicated that outliers should not affect the results. The assumption of multicollinearity was met as the VIF of 1.215 was less than 10 and indicated low correlation between the predictor variables (see Table 12). The assumption of homoscedasticity was not met as the residuals depicted on the scatterplot (see Figure 13) showed a clear pattern although no points were outside the ± 3.0 range. A bootstrap

(BCa) was conducted to produce confidence intervals to correct for this assumption violation and ensure statistically valid conclusions (Pek et al., 2018).

Figure 12

Hypothesis 2 Assumption of Linearity Results

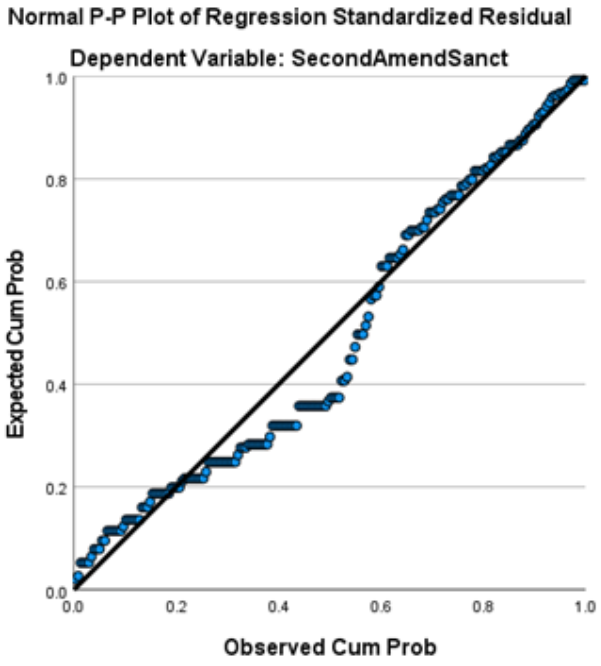


Table 12

Hypothesis 2 Assumption of Multicollinearity Results

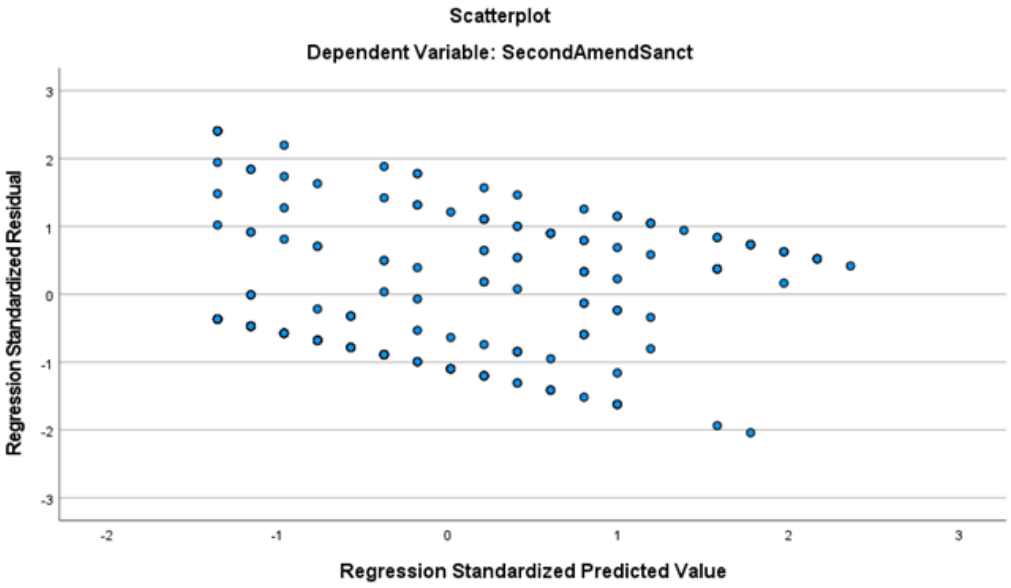
Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.789	.977		1.831	.069					
	GunOwnership	-.906	.352	-.182	-2.575	.011	-.337	-.184	-.165	.823	1.215
	PolicyImageIndex	.227	.043	.368	5.212	.000	.444	.354	.334	.823	1.215

a. Dependent Variable: SecondAmendSanct

Figure 13

Hypothesis 2 Assumption of Homoscedasticity Results



For Hypothesis 2 the multiple linear regression output was based on a generally representative sample size (n = 192). The R square was used to show the proportion of dependent variable variance explained by the predictor variables (Warner, 2013). The R^2 = .225 with a statistical significance p < .001 indicated that 22.5% of the variability for 2nd Amendment Sanctuary was explained by Gun Ownership and Policy Image Index collectively (see Table 13).

Table 13

Hypothesis 2 Model Summary Results

Model Summary[b]

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.474[a]	.225	.217	2.164	.225	27.396	2	189	.000

a. Predictors: (Constant), PolicyImageIndex, GunOwnership

b. Dependent Variable: SecondAmendSanct

The coefficient correlation (see Table 12) showed the predictor variables Gun Ownership (p = .011) and Policy Image Index (p < .001) were statistically significant from zero and therefore had a statistically significant contribution to 2nd Amendment Sanctuary. The Part correlation coefficient for Gun Ownership -.165 and Policy Image Index .334 indicated each variable's unique contribution (Warner, 2013). This demonstrated that Gun Ownership accounted for only 2.7% (-.165 x -.165) of the variance in 2nd Amendment Sanctuary while Policy Image Index uniquely accounted for 11.2% (.334 x .334) of the variance (see Table 12).

The bootstrapped coefficient (see Table 14) shows the confidence interval and a significance level. The results for the bootstrap model portray the amount of variance between 2nd Amendment Sanctuary and one predictor variable when the other predictor is held constant (Frost, n.d.).

Table 14

Hypothesis 2 Bootstrap Coefficient Results

Bootstrap for Coefficients

			Bootstrap[a]				
						BCa 95% Confidence Interval	
Model		B	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
1	(Constant)	1.789	-.036	1.092	.108	-.345	3.948
	GunOwnership	-.906	.012	.370	.011	-1.633	-.177
	PolicyImageIndex	.227	.001	.047	.000	.136	.320

a. Unless otherwise noted, bootstrap results are based on 2000 bootstrap samples

Controlling for Policy Image Index, the regression coefficient for Gun Ownership [β = -.906, 95% C.I. (-1.633, -.177) p = .011] suggests that with each one unit increase in Gun Ownership, 2nd Amendment Sanctuary decreases by approximately .906. The Part

correlation suggests that 97.3% of the variation in 2nd Amendment Sanctuary cannot be explained by Gun Ownership alone.

Controlling for Gun Ownership, the regression coefficient for Policy Image Index [$\beta = .227$, 95% C.I. (.136, .320) $p < .001$] suggests that with each one unit increase in Policy Image Index, 2nd Amendment Sanctuary increases by approximately .227. The Part correlation suggests that 88.8% of the variation in 2nd Amendment Sanctuary cannot be explained by Policy Image Index alone.

The results of the multiple linear regression for Hypothesis 2 revealed Gun Ownership and Policy Image Index to be statistically significant predictors to the model ($p < .05$). Both of the predictor variables had a 95% confidence interval that did not contain zero, which means the null hypothesis was rejected.

Hypothesis 3

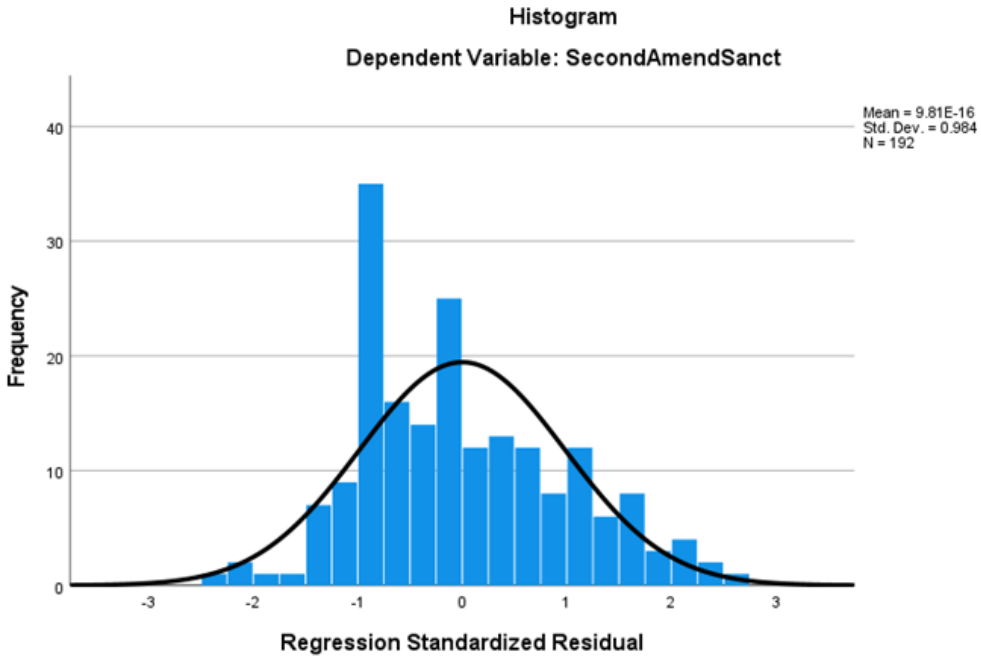
$H_0$3: Attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation are not statistically significant predictors of attitudes on 2nd Amendment Sanctuaries.

Hypothesis 3 was assessed in SPSS v27 with a multiple linear regression model to determine if there was a statistically significant relationship between gun owner and non-gun owner attitudes towards gun policies, exposure to policy image factors, gun ownership, gender, race, and political affiliation in predicting Virginians' attitudes on 2nd Amendment Sanctuary resolutions. The assumption of normality was not met. The residuals were not distributed normally with a slight positive tail as shown by the histogram for the dependent variable Second Amendment Sanctuary (see Figure 14).

Bootstrapping in SPSS v27 of 2,000 iterations was used to ensure accurate results for the *p*-values and confidence intervals.

Figure 14

Hypothesis 3 Assumption of Normality Results



The assumption of linearity was met as the residual points generally followed the line on the predicted probability plot. There were some minor deviations; however the overall linearity was assumed (see Figure 15). The Cook's distance minimum of .000 and a maximum of .056 were below the .7915 threshold and signified that no outliers would affect the analysis. The assumption of multicollinearity was met as the VIF for all six variables was less than 10 which demonstrated a low correlation between the predictor variables (see Table 15).

Figure 15

Hypothesis 3 Assumption of Linearity Results

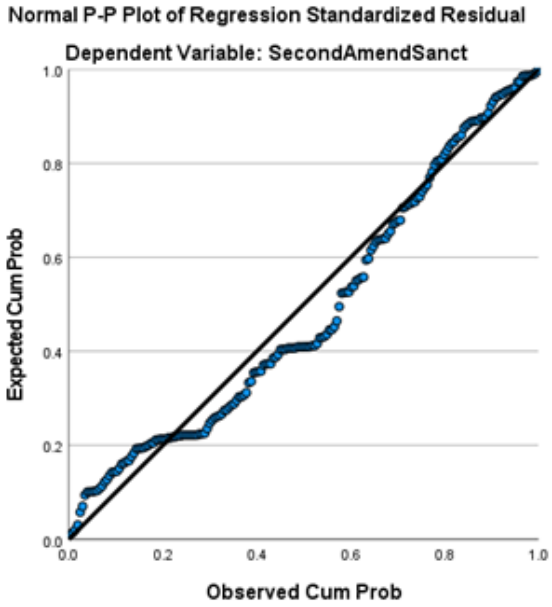


Table 15

Hypothesis 3 Assumption of Multicollinearity Results

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	7.044	1.691		4.166	.000					
	GunOwnership	-.590	.341	-.118	-1.730	.085	-.337	-.126	-.103	.757	1.321
	GunControlComposite	-.851	.174	-.512	-4.898	.000	-.531	-.339	-.292	.324	3.088
	PolicyImageIndex	.014	.059	.023	.238	.812	.444	.017	.014	.381	2.622
	Gender	1.093	.308	.224	3.551	.000	.040	.253	.211	.889	1.125
	PoliticalAff	-.030	.164	-.012	-.184	.854	-.186	-.014	-.011	.872	1.147
	Race	.394	.226	.105	1.746	.082	.106	.127	.104	.975	1.026

a. Dependent Variable: SecondAmendSanct

The assumption of homoscedasticity was violated. The residuals of the scatterplot (see Figure 16) depicted a pattern and overlap of some points even though no points were outside the ± 3.0 range. To produce confidence intervals and ensure conclusions were

statistically valid a bootstrap was conducted to correct for heteroscedasticity (Pek et al., 2018).

Figure 16

Hypothesis 3 Assumption of Homoscedasticity Results

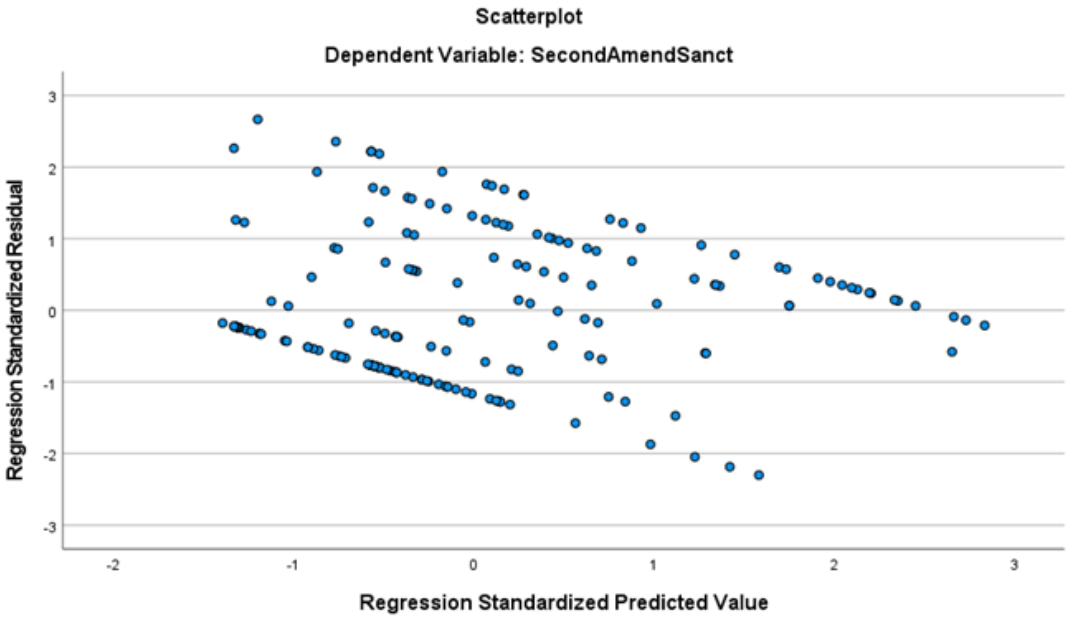


Table 16

Hypothesis 3 Model Summary Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.587[a]	.345	.323	2.011	.345	16.210	6	185	.000

a. Predictors: (Constant), Race, GunOwnership, PoliticalAff, Gender, PolicyImageIndex, GunControlComposite

b. Dependent Variable: SecondAmendSanct

The multiple linear regression output for Hypothesis 3 was based on a generally representative sample size (n = 192). The R square demonstrated the proportion of dependent variable variance explained by the predictor variables (Warner, 2013). The R^2

= .345 with a statistical significance $p < .001$ indicated that 34.5% of the variability for 2nd Amendment Sanctuary was explained by the combined predictors and covariates (see Table 16).

The coefficient correlation (see Table 15) showed the variables Gun Ownership ($p = .085$), Policy Image Index ($p = .812$), Political Affiliation ($p = .854$) and Race ($p = .082$) were not statistically significant from zero. The variables Gun Control Composite ($p < .001$) and Gender ($p < .001$) had a statistically significant effect on the dependent variable 2nd Amendment Sanctuary. The Part correlation coefficients (see Table 15) demonstrated Gun Control Composite (-.292) had a unique contribution of 8.5% and Gender (.211) uniquely contributed 4.5% to the variable 2nd Amendment Sanctuary (Warner, 2013).

Table 17

Hypothesis 3 Bootstrap Coefficient Results

Bootstrap for Coefficients

			Bootstrap[a]				
						BCa 95% Confidence Interval	
Model		B	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
1	(Constant)	7.044	-.034	1.706	.000	3.968	10.367
	GunOwnership	-.590	.023	.374	.115	-1.362	.229
	GunControlComposite	-.851	-.003	.159	.000	-1.153	-.546
	PolicyImageIndex	.014	.002	.064	.826	-.128	.141
	Gender	1.093	-.006	.290	.000	.529	1.624
	PoliticalAff	-.030	-.007	.153	.830	-.323	.243
	Race	.394	.012	.270	.134	-.141	.952

a. Unless otherwise noted, bootstrap results are based on 2000 bootstrap samples

The bootstrapped coefficient (see Table 17) exemplified the confidence intervals with a significance level. The results for the estimated model show the amount of

variance between 2nd Amendment Sanctuary and one predictor variable when the other predictor variables are held constant. For Hypothesis 3 the multiple linear regression revealed the predictor variables Gun Ownership, Policy Image Index, Political Affiliation and Race were not statistically significant ($p < .05$) predictors of the model. However, the results of the multiple linear regression did indicate a statistically significant association between Gun Control Composite and Gender as predictors of the model (Wood, 2005).

Controlling for Gender, the regression coefficient for Gun Control Composite [$\beta = -.851$, 95% C.I. (-1.153, -.546) $p < .001$] suggests that with each one unit increase in Gun Control Composite, 2nd Amendment Sanctuary decreases by approximately .851. The Part correlation suggests that 91.5% of the variation in 2nd Amendment Sanctuary cannot be explained by Gun Control Composite alone.

Controlling for Gun Control Composite, the regression coefficient for Gender [$\beta = 1.093$, 95% C.I. (.529, 1.624) $p < .001$] suggests that with each one unit increase in Gender, 2nd Amendment Sanctuary increases by approximately 1.093. The Part correlation suggests that 95.5% of the variation in 2nd Amendment Sanctuary cannot be explained by Gender alone.

The results of the multiple linear regression for Hypothesis 3 revealed Gun Control Composite and Gender to be statistically significant predictors to the model ($p < .05$). Both of the predictor variables had a 95% confidence interval that did not contain zero, which means the null hypothesis was rejected.

Summary

In this quantitative correlational cross-sectional research study the online survey methodology was used to collect primary data from 192 Virginians over the age of 18 who had resided in Virginia for at least the last 2 years. The survey instrument consisted of 25 questions designed to address three research questions on gun owner and non-gun owner attitudes towards state level gun control policies, 2nd Amendment Sanctuary resolutions, and exposure to policy imaging. Demographics were collected and provided a description of the sample population that demonstrated the general representativeness of the sample to the total population.

In this study multiple linear regression analysis was used to answer the research questions. Both confidence intervals and *p*-values were assessed to determine if the observed difference aligned to the predicted difference in the total population. To increase statistical precision and mitigate assumption violations bootstrapping was implemented to decrease variability and increase observations. For the three research questions confidence intervals and *p*-values were used to demonstrate the probable effect within the population parameter and indicate whether or not the observed data matched the null hypothesis (Ranstam, 2012).

RQ1: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on Virginia state gun laws?

RQ2: What is the relationship of gun ownership and exposure to gun policy imaging in predicting attitudes on 2nd Amendment Sanctuaries?

RQ3: Do attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation predict attitudes on 2nd Amendment Sanctuaries?

The RQ1, RQ2, and RQ3 assessment of the confidence intervals indicated the independent variables were a statistically significant predictor of the outcome. Therefore the null hypothesis for all three questions was rejected. The findings for RQ1 and RQ2 demonstrated a statistically significant relationship between gun ownership and exposure to gun policy imaging in predicting both attitudes on Virginia state gun laws and attitudes on 2nd Amendment Sanctuaries. The RQ3 findings indicated two of the independent variables, attitudes on gun control and gender, were a statistically significant predictor of attitudes on 2nd Amendment Sanctuaries.

The next chapter provides an overview, exploration, and interpretation of the outcomes of this research study. A thorough analysis of the findings is presented within the context of Baumgartner and Jones' theory on punctuated equilibrium coupled with descriptions of any limitations to the research. Chapter 5 provides recommendations for further research and a detailed assessment of the implications for positive social change. The chapter concludes with a synopsis of the key elements captured in the study.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative nonexperimental cross-sectional correlational research study was to examine Virginia gun owner and non-gun owner attitudes on gun policy and 2nd Amendment Sanctuary. Gun violence is a national epidemic in the United States. I designed this study to enhance the understanding of the conflict between divergent views that influence gun policy initiatives at the state and local levels.

In 2019 and 2020, a noted disparity existed between the exponential increase in 2nd Amendment Sanctuary resolutions in Virginia and the enactment of state-level gun legislation. This research assessed the attitudes of gun owners and non-gun owners regarding both initiatives and the effect of various gun policy images on those attitudes. The overall findings showed there was a statistically significant relationship between gun ownership and policy image in predicting Virginians' attitudes toward gun control and 2nd Amendment Sanctuary resolutions. Additionally, the study findings indicated that attitudes on gun control and gender were statistically significant predictors of attitudes on 2nd Amendment Sanctuary resolutions.

In this final chapter, I discuss a summary of the three research questions findings and how they relate to the theoretical framework. Next, I provide a synopsis of the study limitations and recommendations for further research on this topic. I conclude with an analysis of the implications for positive social change followed by a summation of the study's chief elements.

Interpretation of Findings

The participants in this research study (n = 192) consisted of Virginians older than 18 years who had resided in Virginia since at least November 1, 2018. With the exception of the race demographic, the sample population was generally representative of the total population of Virginia in 2020. Gender for the sample population was on par and evenly split between males (50.5%) and females (49.5%). Political affiliation aligned with the baseline national party affiliation data in the United States at 41.1% Democrat, 24.5% Republican, and 34.4% Independent, no preference, or other. Gun ownership also matched proxy data for Virginia with 39.6% of study participants owning a gun and 60.4% not owning a firearm.

I examined the descriptive statistics for the dependent and independent variables, which provided general observations about the data set. The central tendency, standard deviation, and distribution symmetry allowed for a comparison summary for all 192 respondents. A cross-tabulation of the variables gun ownership and 2nd Amendment Sanctuary disclosed that 54.7% of participants in this study did not agree with enacting 2nd Amendment Sanctuary resolutions. A total of 8.8% of respondents neither agreed nor disagreed, and 36.5% agreed. The results demonstrated that the majority of constituents did not support local jurisdictions enacting 2nd Amendment Sanctuary resolutions. This statistic directly contradicted the local government actions in Virginia where more than 95% of counties enacted 2nd Amendment Sanctuaries in 2019 to 2020. Although gun owners (55%) were overall more supportive of enacting resolutions than non-gun owners

(24.1%), an apparent disconnect exists between constituent support and action by local governments on 2nd Amendment Sanctuary resolutions.

Some of the findings from this research confirmed certain aspects presented in previous literature. Specifically, gun owners and non-gun owners strongly support some forms of gun control, although they disagree on others. As noted by Parker et al. (2017) and Barry et al. (2018) and evidenced in this research, universal background checks to purchase a firearm, prohibiting persons with a protective order from purchasing a firearm, extreme risk protective orders or red flag laws, and requiring tests or permits for concealed carry of a firearm are overwhelmingly supported by gun owners and non-gun owners alike. Conversely, bans for assault weapons and magazines, laws that limit firearm purchases to one gun a month, and laws that prohibit the carrying of firearms in certain sensitive areas were not supported by gun owners but were strongly endorsed by non-gun owners. All three studies validated that gun owners and non-gun owners do agree on some forms of gun control.

In this study, I used multiple linear regression to statistically test hypotheses and answer the research questions. This testing procedure required an assessment of four assumptions: normality, linearity, multicollinearity, and homoscedasticity. Due to the violation of the normality and homoscedasticity assumptions for multiple linear regression, I conducted a bootstrap of the data to estimate the distributions in the sample. I then tested the hypotheses for the three research questions based on the bootstrap to produce confidence interval results. I used inferential statistics to assess the results from

the linear regression. An interpretation of the findings for the three research questions and an overall synopsis of the study outcomes follow.

The first research question in this study queried whether gun ownership and exposure to gun policy imaging had a statistically significant relationship in predicting attitudes on Virginia state gun laws. The results of the data analysis indicated that with a 95% confidence interval (CI), both gun ownership and exposure to gun policy imaging were statistically significant predictors ($p < .05$) of Virginians' gun control attitudes.

The second research question in this study queried whether gun ownership and exposure to gun policy imaging had any relationship in predicting attitudes on 2nd Amendment Sanctuaries. The data analysis results demonstrated that with a 95% CI, both gun ownership and exposure to gun policy imaging were statistically significant predictors ($p < .05$) of Virginians' attitudes on 2nd Amendment Sanctuary resolutions.

This study's third research question queried whether attitudes on Virginia state gun laws, exposure to gun policy imaging, gun ownership, gender, race, and political affiliation predicted attitudes on 2nd Amendment Sanctuaries. The data analysis results exemplified with a 95% CI that gun control attitudes and gender were statistically significant predictors ($p < .05$) of Virginians' attitudes on 2nd Amendment Sanctuary resolutions.

The combined findings of the research analysis illustrated several points. First, in Virginia in 2019 and 2020, a divide existed between constituent views on gun policy and local jurisdiction gun policy initiatives. More than half of the participants in the study (54.7%) indicated a lack of general support for 2nd Amendment Sanctuary resolutions,

which contrasts with the fact that more than 95% of local county governments enacted a 2nd Amendment Sanctuary resolution during that period. Although gun owners (55.3%) were more likely to support 2nd Amendment Sanctuary resolutions, they represent only approximately 39.6% of the constituency. In analyzing the results, it could be inferred that actions taken by local governments may be influenced by a vocal and involved minority and therefore do not accurately reflect the attitudes of the majority of the constituency.

Second, the research participants reaffirmed that gun owners overwhelmingly support some forms of gun control. Specifically, five of the seven gun control laws passed in Virginia in 2020 were strongly supported by gun owners in this study; universal background checks (71%), legal protective orders (78%), reckless endangerment of a minor (74%), reporting lost or stolen firearms (74%), and ERPO/red flag laws (68%). In assessing the outcomes from this research, it is clear that although gun control as a whole is a contentious topic of debate, specific gun control measures hold strong appeal for both gun owners and non-gun owners.

Third, Virginians' attitudes on gun control and 2nd Amendment Sanctuaries are predicted by both gun ownership and exposure to gun policy imaging. Specifically, gun ownership and exposure to gun policy imaging combined account for 63.9% of the variability in gun control attitudes ($R^2 = .639$, $p < .001$) and 22.5% of the variability in attitudes on 2nd Amendment Sanctuaries ($R^2 = .225$, $p < .001$). Additionally, attitudes on gun control and gender were also strong predictors of attitudes on 2nd Amendment Sanctuary resolutions. Combined, they accounted for 32.2% of the variability in attitudes

on 2nd Amendment Sanctuaries ($R^2 = .322$, $p < .001$). In interpreting these results, it is clear that several factors contribute in varying degrees to predicting Virginians' attitudes on gun control and 2nd Amendment Sanctuaries.

This research contributed to the extensive body of knowledge on gun policy. It demonstrated that local policy initiatives, such as 2nd Amendment Sanctuary resolutions, do not necessarily represent the attitudes of the majority of the constituency. Additionally, the outcomes provided information that supported previous studies on attitudes towards gun policy. This research expanded the body of knowledge by providing information on an area not previously studied. Specifically, it measured gun owner and non-gun owner attitudes regarding the rapidly growing 2nd Amendment Sanctuary movement, along with an analysis of factors such as views on gun control, gun policy image and gender that contribute to those attitudes.

Interpretation of the Theoretical Foundation

Baumgartner and Jones' theory of punctuated equilibrium was the theoretical foundation for this study. PET is based on the premise that public policy is the result of sporadic or fragmented activity that interrupts the status quo. I used the elements of PET to understand the mechanisms that influence gun policy initiatives at the state and local levels in Virginia. The policy debate and activity on gun policy in Virginia between 2019 and 2020 is similar to the national level gun policy debate. Both typify PET through the analysis of gun policy images, engaged interest groups, and political actors. Within the context of PET, state and local gun policy initiatives are exemplified by intermittent action that interrupt a routine stable policy period (Baumgartner & Jones, 2009).

For the past 25 years, gun policy in Virginia was characterized by stability. The existing political institutions and unwavering definition of the gun control debate resulted in no significant gun policy action at the state or local level. That changed when the political sub-systems at both the state and local levels in Virginia were overwhelmed by pressure from outside the establishment. Each of these changes was characterized by the re-imaging of the issue by advocates. The result was agenda prioritization for gun policy followed by a return to the status quo once the policy was implemented and public attention waned.

At the state level high-profile incidents of gun violence coupled with increased engagement resulted in a policy image promoting a prioritization for gun control legislation. The result was a change in political actors and a shift in agenda setting. In the first three months of 2020, the Virginia legislature passed seven new gun control laws, more than the previous 25 years combined. The results of this study demonstrated that policy image did affect attitudes towards gun control policy. Both gun owners and non-gun owners strongly supported five of the seven gun laws passed by the Virginia General Assembly in 2020. The re-imaging of the debate focused on safety, increased engagement by interest groups, and a shift in political actors epitomizes PET and the disruption to the status quo by the sporadic development of state level gun control policy.

The threat of gun control laws due to policy re-imaging, increased engagement, and a shift in political actors at the state level resulted in a counter-movement. Amplified local advocacy and a policy image focused on protecting individual rights and freedoms led to a punctuation in the status quo at the local level. The results were a political

tsunami of 2nd Amendment Sanctuary resolutions at the local level where over 95% of local county governments enacted a 2nd Amendment Sanctuary resolution between November 2019 and February 2020. The results of this study demonstrated that policy image did affect attitudes towards 2nd Amendment Sanctuary. Based on the fact that more than half of the study participants (54.7%) indicated a lack of general support for 2nd Amendment Sanctuary resolutions, I concluded that gun policy images, pressure from outside the establishment, and actions by the previously apathetic led to the disruptive policy activity at the local level.

PET characterizes public policy as generally stable periods defined by the inherent rules that constrain change. This characterization is coupled with the emotional and cognitive restrictions of the actors involved. The sporadic events that interrupt that stability are driven by challenges to those constraints and restrictions. The Virginia gun policy landscape in 2019 and 2020 encompassed the elements of punctuated demands for change at the state and local levels followed by a return to a level of low engagement on the issue. Gun owner and non-gun owner perspectives on gun control policy and 2nd Amendment Sanctuary resolutions embody challenges to the restrictions of the status quo at the state and local levels. In Virginia gun policy exemplified PET through complex issue re-definition, competing policy images, increased advocacy engagement, and shifting political institutions. This study showed that punctuated equilibrium not only encapsulates the national gun policy debate. The tenets of PET clearly reflect the dynamics of state and local gun policy development in Virginia (True & Utter, 2002).

Limitations of the Study

To significantly contribute to the literature on gun policy, it is essential to recognize the limitations of this study and how they may affect the outcome. The research design, sampling procedure, and survey instrument all presented varying degrees of limitation to the research. The correlational cross-sectional design had two limiting factors. The correlational design meant there was no ability to determine causation. The study was able to determine the existence of a relationship between the dependent and independent variables. While an experimental approach would be needed to determine any causation, the results of this correlational study were very informative in understanding that gun ownership is a predictor of attitudes on gun control policy and 2nd Amendment Sanctuary. Additionally, the cross-sectional approach provided a snapshot in time of gun owner and non-gun owner attitudes. To better understand the effects of policy image on those attitudes it would be necessary to measure the influence of policy images and gun owner and non-gun owner attitudes at different points in time with a longitudinal study. This would illuminate any patterns or changes in participant attitudes related to policy image and gun ownership not apparent in a cross-sectional approach.

The sampling procedure was another limitation of this study. The sample population was derived from a SurveyMonkey panel. This provided a pre-screened group that met the inclusion criteria and exceeded the minimum required sample with a very high 93% response rate. However, the lack of a truly random sample population and use of proxy baseline demographics affected the representativeness of the sample population

and the generalizability of the results. Although gender, gun ownership, and political affiliation were relatively aligned to the total population of Virginia, the approximation of the baseline for gun ownership and political affiliation affected data precision. The race demographic of the sample population was significantly skewed and therefore limited the accuracy of the outcome regarding that variable. Despite the limitations of nonrandom sampling the research was able to provide a generalizable approximation of Virginia gun owner and non-gun owner attitudes on gun control policy and 2nd Amendment Sanctuary resolutions.

The survey instrument also presented some limitations to the study. The survey was designed to provide scale responses on attitudes. However, the survey format limited the quality and content of information that was collected. The development of an index and composite score limited the assessment of specific individual variables. While a pilot study was conducted to determine an appropriate means for assessing the influence of policy image, developing a different method for assessing policy image may provide more robust data for analysis of gun owner and non-gun owner attitudes. Additionally, the self-report nature and contentious topic presented a potential for social desirability bias in the responses. Overall these limitations did not detract from the validity and reliability of the data gathered and assessed in this research study.

Recommendations for Further Research

My research study contributed to the body of knowledge on gun violence and gun control policy by assessing attitudes on 2nd Amendment Sanctuaries, an area not previously addressed in the literature. However, the limitations of the study highlight

avenues for consideration in future research studies. First, a qualitative approach to the study design would enhance this research by providing additional insights into the attitudes of gun owners and non-gun owners. A phenomenological approach designed to explore the lived experiences of the sample population might provide evidence of a causal relationship. Interviewing participants would accumulate a depth and breadth of understanding on the predictors of attitudes on gun control policy and 2nd Amendment Sanctuaries not likely in an online survey.

Second, to generalize the findings an in-depth exploration of sample populations outside of Virginia would be beneficial. The literature referenced other states within the United States, such as Illinois, Colorado, New Mexico, Nevada, Kansas, and Alaska who have a large 2nd Amendment Sanctuary movement. By replicating this study with an analysis of gun owner and non-gun owner attitudes in different states, more generalizability to the findings would be feasible. Additionally, assessing differing demographic characteristics may also enhance the understanding of the attitudes of gun owners and non-gun owners. Factoring in parameters such as regional locations or rural vs. urban settings may expand the knowledge. Or an in-depth assessment of race, education level, or income may demonstrate other predictors of attitudes on gun policy and 2nd Amendment Sanctuary movements.

Third, the survey instrument limited the data collected and applicable analysis. The attitudes on gun control were combined into one composite score and the attitudes on policy image were combined into an index score. A more comprehensive survey instrument could be designed for future research that assesses the specific influence of

individual factors on attitudes. The research findings in this study supported the literature reviewed. Some gun control policies are more widely supported by both gun owners and non-gun owners. By assessing specific gun policies or gun policy images this approach would enable researchers to pinpoint what factors directly predict attitudes on gun control and 2nd Amendment Sanctuaries.

A final recommendation to gather wide-ranging data for analysis would be to conduct a longitudinal study that assesses gun owner and non-gun owner attitudes over time. The participant responses in this study were self-reported attitudes and therefore potentially driven by social bias or environmental influences such as news cycles or societal events. A longitudinal approach might remove some of this bias or influence by assessing the attitudes of the sample population and how they change over time. Additionally, this type of approach could factor in the applicability of PET to the changing political and societal landscape on gun policy and 2nd Amendment Sanctuaries. Specifically assessing the awareness and support of 2nd Amendment Sanctuaries within the gun policy debate. This would provide enhanced insights and understanding on factors that influence gun policy development at the state and local levels in the United States.

Implications for Positive Social Change

The findings from my research study promote positive social change for society by providing useful insights into gun control policy development in Virginia and elsewhere in the United States. The outcomes could be beneficial to policymakers, gun policy advocacy groups, and the general public. Public policy development often

involves an assessment of public preferences. All groups involved must process environmental signals to determine their strategies and how they can affect the policymaking process. As outlined in PET, public policy decisions of both government institutions and individuals are influenced by their bounded rationality and limited attention spans on the issues (True et al., 2006).

This study found that gun ownership and gun policy image are predictors of attitudes on gun control and 2nd Amendment Sanctuaries. The significance of these findings and implications for positive social change are inherent in providing a better understanding of the multifaceted nuances surrounding the development of gun policy. For policymakers knowing constituents' perspectives on gun control policy will ensure legislative initiatives at the state and local levels align with public sentiment. For groups advocating gun rights or gun control, characterizing their message through the strength and accumulation of external signals can overcome any inherent resistance built into the political system (Baumgartner & Jones, 2009). For the general public recognizing the dichotomy between state and local initiatives provides a broad understanding of the issue and an informed base upon which to debate and act.

Gun violence is an epidemic affecting individuals and communities throughout the United States. The attitudes of gun owners and non-gun owners reflect the complexity involved in establishing gun policy that balances the requirements to protect individual rights and ensure public safety. Implementing change based on a perceived notion of public support can lead to ineffective, contradictory, and unpopular policy. To mitigate gun violence it is necessary to understand all perspectives regarding gun control and 2nd

Amendment Sanctuary and the influence of policy image on those attitudes. Assessing perspectives from both sides of the issue highlights commonalities that can be used to build trust. It also highlights gaps and potential areas for compromise. Systemic social change is needed to address the gun violence problem in America. The findings from this research provide stakeholders in the gun policy debate with a foundation for developing strategies for establishing comprehensive gun policy. The outcome would be positive social change aimed at mitigating gun violence at the state and local levels.

Conclusion

Gun violence is prevalent in the United States and accounts for over 35,000 deaths every year. Additionally, there are approximately seven nonfatal shootings for every homicide that involves a gun (Cukier & Eagen, 2018). There are numerous contributing factors to the gun violence problem and no single solution can address them all. To mitigate this problem it is imperative that multiple avenues be explored to develop comprehensive and effective solutions that balance the need to protect the public with the requirement to ensure Constitutional rights.

The purpose of this research study was to examine Virginia gun owner and non-gun owner attitudes on gun policy and enhance the understanding of the conflict between divergent views that influence gun policy initiatives at the state and local levels. Previous research illustrated the relationship between gun ownership and some forms of gun control. However, through the underpinnings of PET, this research demonstrated the environmental influence on gun policy at the state and local levels. Specifically, years of status quo were upended by an episodic period of activity triggered by a combination of

gun policy re-imaging, engaged interest groups, and shifting political actors. The findings of this study demonstrated gun ownership and policy image were both significant factors in predicting attitudes on gun control policy and 2nd Amendment Sanctuary.

The significance of this research is that it enhances the body of existing knowledge. It aids policymakers, advocacy groups, and the general public in expanding their understanding of this complex narrative so that they can collaboratively develop strategies for addressing gun violence. Ultimately gun policy that encompasses a multi-layered approach incorporating the various aspects of the problem can meet the requirements to both protect individual rights and ensure public safety.

References

Aggarwal, R., & Ranganathan, P. (2019). Study designs: Part 2 – Descriptive studies. *Perspectives in Clinical Research, 10(1)*, 34-36. https://doi.org/10.4103/picr.PICR_154_18

Alban, R. F., Nuno, M., Ko, A., Barmparas, G., Lewis, A. V., & Margulies, D. R. (2018). Weaker gun state laws are associated with higher rates of suicide secondary to firearms. *Journal of Surgical Research, 221*, 135-142. https://doi.org/10.1016/j.jss.2017.08.027

Anestis, M. D., Anestis, J. C., & Butterworth, S. E. (2017). Handgun legislation and changes in statewide overall suicide rates. *American Journal of Public Health, 107(4)*, 579-581. https://doi.org/10.2105/AJPH.2016.303650

Arghode, V. (2012). Qualitative and quantitative research: Paradigmatic differences. *Global Education Journal, 2012(4)*, 155-163. Retrieved from http://www.franklinpublishing.net

Arnold, T. (2020, March 9). Last-second gun-control bills pass Virginia Senate, head to Northam's desk. *The Washington Examiner*. Retrieved from https://www.washingtonexaminer.com/politics/last-second-gun-control-bills-pass-virginia-senate-head-to-northams-desk

Babbie, E. (2017). *The basics of social research* (7th ed.). Cengage Learning.

Barry, C. L., Webster, D. W., Stone, E., Crifasi, C. K., Vernick, J. S., & McGinty, E. E. (2018). Public support for gun violence prevention policies among gun owners and

non–gun owners in 2017. *American Journal of Public Health, 108(7),* 878-881. https://doi.org/10.2105/AJPH.2018.304432

Baumgartner, F. R., & Jones, B. D. (2009). *Agendas and instability in American politics*. The University of Chicago Press.

Berti, D. (2019, August 21). State panel sheds light on Virginia's gun violence. *The Prince William Times*. Retrieved from https://www.princewilliamtimes.com/news/state-panel-sheds-light-on-virginia-s-gun-violence/article_97965318-c416-11e9-b72c-7b47f88eb 804.html

Blanco, D. V. (2016). The gun control debate: Why experience and culture matters. *International Journal of Public Administration, 39(8),* 620-634. https://doi.org/10.1080/01900692.2015.1028639

Bonnie, R. J., & Swanson, J. W. (2018). Extreme risk protection orders: Effective tools for keeping guns out of dangerous hands. *Developments in Mental Health Law, 37(2),* 2-5. Retrieved from https://ilppp.virginia.edu/PublicationsAndPolicy/Index

Booker, B. (2020, February 17). *Virginia governor's bill to ban assault weapons fails, with help from his own party*. National Public Radio. Retrieved from https://www.npr.org/2020/02/17/806663375/virginia-governors-bill-to-ban-assault-weapons-fails-with-help-from-his-own-part

Burkholder, G. J., Cox, K. A., & Crawford, L. M. (2016). *The scholar-practitioner's guide to research design*. Laureate Publishing.

Celinska, K. (2007). Individualism and collectivism in America: The case of gun ownership and attitudes toward gun control. *Sociological Perspectives, 50(2)*, 229-247. https://doi.org/10.1525/sop.2007.50.2.229

Centers for Disease Control and Prevention. (n.d.). *Appendix 4: Cognitive testing interview guide*. Retrieved from https://www.cdc.gov/nchs/data/washington_group/meeting5/WG5_Appendix4.pdf

Coates, M., & Pearson-Merkowitzz, S. (2017). Policy spillover and gun migration: The interstate dynamics of state gun control policies. *Social Science Quarterly, 98(2)*, 500-512. https://doi.org/10.1111/ssqu.12422

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Lawrence Erlbaum Associates.

Cooper, A. C. (2015). Fully loaded: An alternative view of the gun control debate. *Albany Government Law Review, 8*, 337-380. http://www.albanygovernmentlawreview.org/Articles/Vol08_1/8.1.337-Cooper.pdf

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications.

Crifasi, C. K., Merrill-Francis, M., McCourt, A., Vernick, J. S., Wintemute, G. J., & Webster, D. W. (2018). Association between firearm laws and homicide in urban

counties. *Journal of Urban Health, 95*, 383-390. https://doi.org/10.1007/s11524-018-0273-3

Cukier, W., & Eagan, S. A. (2018). Gun violence. *Current Opinion in Psychology, 19*, 109-112. https://doi.org/10.1016/j.copsyc.2017.04.008

Davidson, N. M. (2019). The dilemma of localism in an era of polarization. *Yale Law Journal, 128(4)*, 954-1000. https://www.yalelawjournal.org/

Davies, G. K. (2007). Connecting the dots: Lessons from the Virginia Tech shootings. *Change, 40(1)*, 8-15. https://doi.org/10.3200/CHNG.40.1.8-15

de Jager, E., Goralnick, E., McCarty, J .C., Hashmi, Z. G., Jarman, M. P., & Haider, A. H. (2018). Lethality of civilian active shooter incidents with and without semiautomatic rifles in the United States. *Journal of American Medical Association, 320(10)*, 1034-1035. https://doi.org/10.1001/jama.2018.11009

Epstein, L., & Konig, D. T. (2019). The strange story of the second amendment in the federal courts, and why it matters. *Washington University Journal of Law & Policy, 60*, 147-170. https://openscholarship.wustl.edu/law_journal_law_policy/

Evans, W. (2019, July 8). *A look back at Virginia's one-gun-a-month law as democrats work to revive it*. National Public Radio. https://vpm.org/news/articles/3622/a-look-back-at-virginias-one-gun-a-month-law-as-democrats-work-to-revive-it

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160. https://www.gpower.hhu.de

Fields, S. (2020). Second amendment sanctuaries [pending publication 2021]. *Northwestern Law Review, 115*, 1-52. https://doi.org/10.2139/ssrn.3536682

Frassetto, M. (2013). Firearms and weapons legislation up to the early twentieth century. *SSRN*. https://doi.org/10.2139/ssrn.2200991

Friedenberger, A. (2019, October 8). *12 years after Virginia Tech shootings, majority of safety recommendations adopted, review shows*. The Roanoke Times. https://roanoke.com/news/politics/12-years-after-virginia-tech-shootings-majority-of-safety-recommendations-adopted-review-shows/article_d7894fb1-e6f1-5b61-be68-a8fee8a0ca95.html

Frost, J. (n.d.). *Introduction to bootstrapping in statistics with an example*. Statistics by Jim. https://www.statisticsbyjim.com

Godwin, M. L., & Schroedel, J. R. (2000). Policy diffusion and strategies for promoting policy change: Evidence from California local gun control ordinances. *Policy Studies Journal, 28(4)*, 760-776. https://doi.org/10.1111/j.1541-0072.2000.tb02061.x

Gramlich, J. (2020, October 26). *What the 2020 electorate looks like by party, race and ethnicity, age, education and religion*. FactTank. https://www.pewresearch.org

Gunter, J. (2020, February 13). *Sanctuary counties: Inside Virginia's gun rights resistance*. BBC News. https://www.bbc.com/news/world-us-canada-51483541

Hamill, M. E., Hernandez, M. C., Bailey, K. R., Zielinski, M. D., Matos, M. A., & Schiller, H. J. (2018). State level firearm concealed-carry legislation and rates of homicide and other violent crime. *Journal of American College of Surgeons, 228*, 1-8. https://doi.org/10.1016/j.jamcollsurg.2018.08.694

Hill, J. (2016). North to the future of the right to bear arms: Analyzing the Alaska Firearms Freedom Act and applying firearm localism to Alaska. *Alaska Law Review, 33(1)*, 125-155. https://alr.law.duke.edu/

Hunt, A. (2015). *A researcher's guide to power analysis*. Statistical Consulting Studio, Utah State University. https://research.usu.edu//irb/wp-content/uploads/sites/12/2015/08/A_Researchers_Guide_to_Power_Analysis_USU.pdf

Imoukhuede, A. A. (2017). Gun rights and the new lochnerism. *Seton Hall Law Review, 47(2)*, 329-390. https://scholarship.shu.edu/shlr/about.html

Jenkins-Smith, H. C., Nohrstedt, D., Weible, C. M., & Sabatier, P. A. (2017). The advocacy coalition framework: Foundations, evolution, and ongoing research. In C. M. Weible, & P. A. Sabatier (Eds.), *Theories of the Policy Process* (4th ed. pp. 183-210). Routledge.

Jones, B. (2003). Bounded rationality and political science: Lessons from public administration and public policy. *Journal of Public Administration Research and Theory, 13(4)*, 395-412. https://doi.org/10.1093/jopart/mug028

Jones, B. D., & Baumgartner, F. R. (2012). From there to here: Punctuated equilibrium to the general punctuation thesis to a theory of government information processing. *Policy Studies Journal, 40(1)*, 1-19. https://doi.org/10.1111/j.1541-072.2011.00431.x

Joslyn, M. R., & Haider-Markel, D. P. (2012). Gun ownership and self-serving attributions for mass shooting tragedies. *Social Science Quarterly, 98(2)*, 429-442. https://doi.org/10.1111/ssqu.12420

Kalesan, B., Mobily, M. E., Keiser, O., Fagan, J. A., & Galea, S. (2016). Firearm legislation and firearm mortality in the USA: A cross-sectional, state-level study. *The Lancelot, 387,* 1847-1855. https://doi.org/10.1016/S0140-6736(15)01026-0

Kessler, J. (2007). *Missing records: Holes in background check system – how they allow illegal buyers to get guns*. The Third Way Culture Project. https://www.thirdway.org/report/missing-records-holes-in-the-background-check-system-how-they-allow-illegal-buyers-to-get-guns

Kleck, G. (2009). Mass shootings in schools: The worst possible case for gun control. *American Behavioral Scientist, 52(10),* 1447-1464. https://doi.org/10.1177/0002764209332557

Kleck, G. (2012). Gun control after Heller and McDonald: What cannot be done and what ought to be done. *Fordham Urban Law Journal, 39(5),* 1383-1420. https://ir.lawnet.fordham.edu/ulj/

Kleck, G. (2019). Regulating guns among young adults. *American Journal of Criminal Justice, 44,* 689-704. https://doi.org/10.1007/s12103-019-09476-6

Knapp, T. R. (1990). Treating ordinal scales as interval scales: An attempt to resolve the controversy. *Nursing Research, 39(2),* 121-123. https://doi.org/10.1097/00006199-199003000-00019

Kohrman, M., & Stephens, A. (2020, February 18). *States are embracing red flag laws for gun owners. Here's how they work.* The Trace. https://www.thetrace.org/2020/02/states-are-embracing-red-flag-laws-for-gun-owners-heres-how-they-work/

Koleva, S. P., Graham, J., Iyer, R. Ditto, P. H., Haidt, J. (2012). Tracing the threads: How five moral concerns (especially Purity) help explain culture war attitudes. *Journal of Research in Personality, 46*, 184-194. https://doi.org/10.1016/j.jrp.2012.01.006

Koper, C. S., & Roth, J. A. (2001). The impact of the 1994 Federal Assault Weapon Ban on gun violence outcomes: An assessment of multiple outcome measures and some lessons for policy evaluation. *Journal of Quantitative Criminology, 17(1)*, 33-74. https://doi.org/10.1023/A:1007522431219

Kposowa, A., Hamilton, D., & Wang, K. (2016). Impact of firearm availability and gun regulation on state suicide rates. *Suicide and Life-Threatening Behavior, 46(6)*, 678-696. https://doi.org/10.1111/sltb.12243

Krouse, W. J. (2019). *Gun control: National Instant Criminal Background Check System (NICS) operations and related legislation*. Congressional Research Service. https://crsreports.congress.gov_R45970

Lang, M. (2016). State firearm sales and criminal activity: Evidence from firearm background checks. *Southern Economic Journal, 83(1)*, 45-68. https://doi.org/10.1002/soej.12134

Lankford, A. (2016). Public mass shooters and firearms: A cross-national study of 171 countries. *Violence and Victims, 31(2)*, 187-199. https://doi.org/10.1891/0886-6708.VV-D-15-00093

Lemieux, F. (2014). Effect of gun culture and firearm laws on gun violence and mass shootings in the United States: A multi-level quantitative analysis. *International Journal of Criminal Justice Science, 9(1)*, 74-93. http://www.sascv.org/ijcjs/

Logan, G. D. (2004). Cumulative progress in formal theories of attention. *Annual Review of Psychology, 55,* 207-234. https://doi.org/10.1146/annurev.psych.55.090902.141415

Lord, D. (2019, August 3). Assault weapon vs. assault rifle: What is the difference? *Journal-News*. https://www.journal-news.com/news/national/assault-weapon-assault-rifle-what-the-difference/LPXLAj8ZcHkPn2rLn3bOGK/

Lott, J. R., & Whitley, J. E. (2001). Safe-storage gun laws: Accidental deaths, suicides, and crime. *Journal of Law and Economics, 44(2),* 659-687. https://doi.org/10.1086/338346

Lott, J. R. (2018). *Comparing the global rate of mass public shootings to the U.S.'s rate and comparing their changes over time*. Crime Prevention Research Center. https://doi.org/10.2139/ssrn.3289010

Lovelace, M. & Brickman, P. (2013). Best practices for measuring students' attitudes toward learning science. *CBE Life Sciences Education, 12,* 606-617. https://doi.org/10.1187/cbe.12-11-0197

Makarios, M. D., & Pratt, T. C. (2012). The effectiveness of policies and programs that attempt to reduce firearm violence: A meta-analysis. *Crime & Delinquency, 58(2),* 222-244. https://doi.org/10.1177/0011128708321321

Martin, R. A., & Legault, R. L. (2005). Systematic measurement error with state-level crime data: Evidence from the "More Guns, Less Crime" debate. *Journal of Research in Crime and Delinquency, 42(2),* 187-210. https://doi.org/10.1177/0022427804270052

Mascia, J. (2020, January 14). *Second amendment sanctuaries, explained*. The Trace. https://www.thetrace.org/2020/01/second-amendment-sanctuary-movement/

McGinty, E. E., Wolfson, J. A., Sell, T. K., & Webster, D. W. (2016). Common sense or gun control? Political communication and news media framing of firearm sale background checks after Newtown. *Journal of Health Politics, Policy and Law, 41(1)*, 3-40. https://doi.org/10.1215/03616878-3445592

Merino, S. M. (2018). God and guns: Examining religious influences on gun control attitudes in the United States. *Religions, 9*, 189-202. https://doi.org/10.3390/rel9060189

Miller, J. (2017, October 3). *Gun violence and mental illness: Myths and evidence-based facts*. American Mental Health Counselors Association. https://www.amhca.org/blogs/joel-miller/2017/10/03/gun-violence-and-mental-illnessmyths-and-evidence-based-facts

Miller, R. (2020, April 10). *Virginia Gov. Northam signs host of gun control bills into law months after Richmond rally*. USA Today. https://www.usatoday.com/story/news/nation/2020/04/10/virginia-governor-northam-signs-gun-control-measures-law/5129936002/

Miller, S. V. (2019). What Americans think about gun control: Evidence from the General Social Survey, 1972-2016. *Social Science Quarterly, 100(1)*, 272-288. https://doi.org/10.1111/ssqu.12555

Parker, K., Horowitz, J., Igielnik, R., Oliphant, B., & Brown, A. (2017) *America's complex relationship with guns: An in-depth look at the attitudes and experiences of*

U.S. adults. Pew Research Center. https://www.pewsocialtrends.org/wp-content/uploads/sites/3/2017/06/Guns-Report-FOR-WEBSITE-PDF-6-21.pdf

Parsons, C., Daly, T., & Weigend, E. (2015, October 17). *Virginia under the gun*. Center for American Progress. https://www.americanprogress.org/issues/guns-crime/reports/2015/10/27/124132/virginia-under-the-gun/

Pek, J., Wong, O., & Wong, A. C. (2018, November 6). How to address non-normality: A taxonomy of approaches, reviewed and illustrated. *Frontiers in Psychology*. https://doi.org/10.3389/fp-syg.2018.02104

Perez-Pena, R. (2015, October 7). *Gun control explained*. The New York Times. https://www.nytimes.com/interactive/2015/10/07/us/gun-control-explained.html

Pough, B. (2018). Understanding the rise of super preemption state legislatures. *Journal of Law and Politics, 34(1),* 67-116. http://www.lawandpolitics.org/

RAND Corporation. (2018). *The science of gun policy: A critical synthesis of research evidence on the effects of gun policies in the United States*. https://www.rand.org/content/dam/rand/pubs/research_reports/RR2000/RR2088/RAND_RR2088.pdf

Randolph, J. J. (2009). A guide to writing the dissertation literature review. *Practical Assessment, Research & Evaluation, 14(13),* 1-13. https://www.researchgate.net/publication/251499995_A_Guide_to_Writing_the_Dissertation_Literature_Review

Ranstam, J. (2012). Why a p-value culture is bad and confidence intervals a better alternative. *Osteoarthritis and Cartilage, 20(8),* 805-808. https://doi.org/10/1016/j.joca.2012.04.001

Ravitch, S. M., & Carl, N. M. (2016). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. SAGE Publications.

Record, K. L., & Gostin, L. O. (2014). What will it take? Terrorism, mass murder, gang violence, and suicides: The American way, or do we strive for a better way? *University of Michigan Journal of Law Reform, 47(3),* 555- 574. https://mjlr.org/

Redford, E. S. (1969). *Democracy in the administrative state*. Oxford University Press.

Reich, G. & Barth, J. (2017). Planting in fertile soil: The National Rifle Association and state firearms legislation. *Social Science Quarterly, 98(2),* 485-499. https://doi.org/10.1111/ssqu.12423

Rostron, A. (2008). Incrementalism, comprehensive rationality, and the future of gun control. *Maryland Law Review, 67(3),* 511-568. https://digitalcommons.law.umaryland.edu/mlr/

Rostron, A. (2016). A new state ice age for gun policy. *Harvard Law & Policy Review, 10(2),* 327-350. https://harvardlpr.com/

Sabbath, E. L., Hawkins, S. S., & Baum, C. F. (2020). State-level changes in firearm laws and workplace homicide rates: United States, 2011 to 2017. *American Journal of Public Health, 110,* 230-236. https://doi.org/10.2105/AJPH.2019.305405

Schell, T. L., Peterson, S., Vegetabile, B. G., Scherling,, A. Smart, R., Morral, A. R. (2020). *State-level estimates of household firearm ownership*. RAND Corporation. https://www.rand.org/pubs/tools/TL354.html

Schildkraut, J., & Hernandez, T. C. (2014). Laws that bit the bullet: A review of legislative responses to school shootings. *American Journal of Criminal Justice, 39,* 358-374. https://doi.org/10.1007/s12103-013-9214-6

Seate, A. A., Cohen, E. L., Fujioka, Y., & Hoffner, C. (2012). Exploring gun ownership as a social identity to understanding the perceived media influence of the Virginia Tech news coverage on attitudes toward gun control policy. *Communication Research Reports, 29(2),* 130-138. https://doi.org/10.1080/08824096.2012.667773

Sen, B., & Panjamapirom, A. (2012). State background checks for gun purchase and firearm deaths: An exploratory study. *Preventive Medicine, 55,* 346-350. https://doi.org/10.1016/j.ypmed.2012.07.019

Siegel, M., Xuan, Z., Ross, C. S., Galea, S., Kalesan, B., Fleegler, E., & Goss, K. A. (2017). Easiness of legal access to concealed firearm permits and homicide rates in the United States. *American Journal of Public Health, 107,* 1923-1929. https://doi.org/10.2105/AJPH.2017.304057

Simon, M. K., & Goes, J. (2013). *Assumptions, limitations, delimitations, and scope of the study*. Dissertation & Scholarly Research Recipes for Success. https://www.dissertationrecipes.com/wp-content/uploads/2011/04/Assumptions-Limitations-Delimitations-and-Scope-of-the-Study.pdf

Smith-Walter, A., Peterson, H. L., Jones, M. D., & Marshall, A. N. R. (2016). Gun stories: How evidence shapes firearm policy in the United States. *Politics & Policy, 44(6),* 1053-1088. https://doi.org/10.1111/polp.12187

Spacey, J. (2016, November 18). *What is message framing?* Simplicable. https://

simplicable.com/new/message-framing-definition

Spitzer, R. J. (2017). Gun law history in the United States and second amendment rights. *Law & Contemporary Problems, 80(2)*, 55-83. https://lcp.law.duke.edu/

SurveyMonkey (n.d.). *Audience*. Retrieved July 20, 2020, from https://www.surveymonkey.com/

Thompson, A., Price, J. H., Dake, J. A., & Tatchell, T. (2006). Police chiefs' perceptions of the regulation of firearms. *American Journal of Preventive Medicine, 30(4)*, 305-312. https://doi.org/10.1016/j.amepre.2005.11.009

Trochim, W. M. (2020a, April 28). *Conclusion validity*. The Research Methods Knowledge Base. https://conjointly.com/kb/conclusion-validity/

Trochim, W. M. (2020b, April 28). *Construct validity*. The Research Methods Knowledge Base. https://conjointly.com/kb/construct-validity/

True, J. L., Jones, B. D., & Baumgartner, F. R. (2006). Punctuated equilibrium theory: Explaining stability and change in public policymaking. In P. A. Sabatier (Ed.), *Theories of the Policy Process* (2nd ed., pp. 155-187). Westview Press.

True, J. L., & Utter, G. H. (2002). Saying "yes," "no," and "load me up" to guns in America. *American Review of Public Administration, 32(2)*, 216-241. https://doi.org/10.1177/02774002032002005

U.S. Census Bureau. (n.d.). *Quick facts Virginia*. Retrieved July 14, 2020, from https://www.census.gov/quickfacts/fact/table/VA/PST045219

U.S. Concealed Carry Association. (n.d.). *Virginia concealed carry reciprocity map & gun laws*. Retrieved June 25, 2020, from https://www.usconcealedcarry.com/

resources/ccw_reciprocity_map/va-gun-laws/

U.S. Const, amend. II

Vernick, J. S., Rutlow, L., Webster, D. W., & Teret, S. P. (2011). Changing the constitutional landscape for firearms: The US Supreme Court's recent second amendment decisions. *American Journal of Public Health, 101(11),* 2021-2026. https://doi.org/10.2105/AJPH.2011.300200

Vernick, J. S., Alcorn, T., & Horwitz, J. (2017). Background checks for all gun buyers and gun violence restraining orders: State efforts to keep guns from high-risk persons. *Journal of Law, Medicine & Ethics, 45,* 98-102. https://doi.org/10.1177/1073110517703344

Virginia Citizens Defense League (2020, March 20). *Second amendment sanctuaries*. Retrieved July 6, 2020, from https://vcdl.org

Virginia Department of Elections. (n.d.). *Election results*. Retrieved August 5, 2020, from https://www.elections.virginia.gov

Virginia Legislative Information System. (n.d). *Code of Virginia*. Retrieved June 25, 2020, from https://law.lis.virginia.gov

Vizzard, W. J. (2015). The current and future state of gun policy in the United States. *The Journal of Criminal Law & Criminology, 104(4),* 879-904. https://jclc.law.northwestern.edu/

Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). SAGE Publications.

Watkins, C. (1997). Gun control. *Social Education, 61*, 250-255. http://www.ncss.org/

Webster, D. W., & Starnes, M. (2000). Reexamining the association between child access prevention gun laws and unintentional shooting deaths of children. *Pediatrics, 106(6),* 1466-1469. https://doi.org/10.1542/peds.106.6.1466

Webster, D. W., Vernick, J. S. & Bulzacchelli, M. T. (2009). Effects of state-level firearm seller accountability policies on firearm trafficking. *Journal of Urban Health, 86(4),* 525-537. https://doi.org/10.1007/s11524-009-9351-x

Weil, D. S., & Knox, R. (1996). *Evaluating the impact of Virginia's one-gun-a-month law*. National Criminal Justice Reference Service. Retrieved June 25, 2020 from https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=157342

Williams, C. (2007). Research methods. *Journal of Business & Economic Research, 5(3),* 65-71. https://doi.org/10.19030/jber.v5i3.2532

Wolfson, J. A., Teret, S. P., Azrael, D., & Miller, M. (2017). US public opinion on carrying firearms in public places. *American Journal of Public Health, 107(6),* 929-937. https://doi.org/10.2105/AJPH.2017.303712

Wood, M. (2005). Bootstrapped confidence intervals as an approach to statistical inference. *Organizational Research Methods, 8(4),* 454-470. https://doi.10.1177/1094428105280059

Wu, H. & Leung, S. (2017). Can Likert scales be treated as interval scales? –A simulation study. *Journal of Social Service Research, 43(4),* 527-532. https://doi.org/10.1080/01488376.2017.1329775

Yamane, D. (2016). Awash in a sea of faith and firearms: Rediscovering the connection between religion and gun ownership in America. *Journal for the Scientific Study of Religion, 55(3)*, 622-636. https://doi.org/10.1111/jssr.12282

Appendix A: Survey Instrument

Virginian Attitudes on Gun Control and 2nd Amendment Sanctuary Survey

1. Are you 18 years of age or older?

- Yes, I am 18 years of age or older
- No, I am not 18 years of age or older

2. Have you lived in Virginia for at least the last two years (since November 1, 2018)?

- Yes, I have lived in Virginia for at least the last two years
- No, I have not lived in Virginia for at least the last two years

For questions 3-7 please select the answer that best describes you (select only one answer per question).

3. What is your gender?

- Male
- Female

4. Which category best describes your ethnic or racial background?

- White
- Black or African American
- Hispanic
- Asian
- Other or Mixed

5. In politics TODAY, do you consider yourself a Republican, Democrat, or Independent?

- Republican
- Democrat
- Independent
- No Preference
- Other Party

6. Do you personally own any guns (NOT including air guns, such as paintball, BB or pellet guns)?

- Yes, I own a gun
- No, I don't own any guns

7. Do you live in a county, city, or town that has passed or enacted a 2nd Amendment Sanctuary resolution?

- Yes, I live in a 2nd Amendment Sanctuary county, city or town
- No, I don't live in a 2nd Amendment Sanctuary county, city, or town
- I don't know if my county, city or town is a 2nd Amendment Sanctuary

Below is a list of current and proposed Virginia state firearm regulations. Please indicate how strongly you support or oppose each regulation by selecting the answer that best represents your beliefs (select only one answer per question).

8. A law requiring a mandatory background check to purchase or transfer any firearm including private sales and gun shows. Commonly referred to as universal background checks.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

9. A law prohibiting anyone subject to a legal protective order from possessing a firearm.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

10. A law authorizing local ordinances to prohibit carrying or possessing firearms in government buildings, public parks, recreation or community centers, or public streets and sidewalks open to the public.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

11. A law prohibiting anyone from purchasing more than one handgun in a 30-day period.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

12. A law requiring criminal sanctions for any adult who recklessly leaves a loaded or unsecured firearm in a manner that endangers the life or limb of a person under the age of 14.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

13. A law requiring a person to notify police within 48 hours of discovering the loss or theft of a firearm.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

14. A law allowing any attorney for the Commonwealth or a police officer to apply to a court for a 14 day emergency substantial risk order to prohibit a person who poses a risk from purchasing, possessing or transporting a firearm.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

15. A law prohibiting the sale or transfer of assault weapons, silencers, and magazines holding greater than 12 rounds.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

16. A law requiring a legally issued permit to carry a concealed handgun in public.

Strongly Oppose	Oppose	Somewhat Oppose	Neither Support Nor Oppose	Somewhat Support	Support	Strongly Support
○	○	○	○	○	○	○

For the next question please indicate how strongly you agree or disagree with the following statement (select only one answer).

17. A county, city, town, or municipality should enact a resolution stating that the locality will not enforce any federal or state gun laws that they deem unconstitutional? (Commonly referred to as 2nd Amendment Sanctuary)

Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree Nor Disagree	Somewhat Agree	Agree	Strongly Agree
○	○	○	○	○	○	○

The following eight questions address individual opinions on what may or may not influence attitudes on gun control. Gun control refers to any law or policy that regulates the manufacture, sale, transfer, possession, modification or use of any type of firearm. There is no "right" or "wrong" answer. Please consider your own experience and select the statement for each subject that most closely aligns with your views (select only one answer for each question).

18. News Media coverage of gun violence and crime in newspapers, on television, radio, social media or the internet:

- Has made me more supportive of gun control.
- Has had no effect on my attitude towards gun control.
- Has made me less supportive of gun control.

19. Gun control or gun rights advocacy by special interest groups such as the Brady Campaign, Everytown for Gun Safety, the National Rifle Association, or Gun Owners of America:

- Has made me more supportive of gun control.
- Has had no effect on my attitude towards gun control.
- Has made me less supportive of gun control.

20. Mass Shooting incidents in the United States such as Virginia Tech (2007), Las Vegas (2017) and Virginia Beach (2019):

- Have made me more supportive of gun control.
- Have had no effect on my attitude towards gun control.
- Have made me less supportive of gun control.

21. The number of suicides in the United States committed with guns:

- Has made me more supportive of gun control.
- Has had no effect on my attitude towards gun control.
- Has made me less supportive of gun control.

22. Gun violence committed by people with mental health issues:

- Has made me more supportive of gun control.
- Has had no effect on my attitude towards gun control.
- Has made me less supportive of gun control.

23. My personal cultural values:

- Have made me more supportive of gun control.
- Have had no effect on my attitude towards gun control.
- Have made me less supportive of gun control.

24. My current religious beliefs:

- Have made me more supportive of gun control.
- Have had no effect on my attitude towards gun control.
- Have made me less supportive of gun control.

25. My current political beliefs:

- Have made me more supportive of gun control.
- Have had no effect on my attitude towards gun control.
- Have made me less supportive of gun control.

Appendix B: Cognitive Test Pilot Survey

The purpose of this pilot study is to test the readability and understandability of eight survey questions that will be used in my Dissertation research. Your participation is completely voluntary and you can withdraw from this pilot at any time for any reason.

I have intentionally not included any information about the study or the remainder of the survey to test if the questions being asked perform as designed. The intent is to ensure that respondents correctly understand what is being asked and that they can provide accurate responses. I ask that you consider the following as you answer the eight pilot questions and specifically address these elements in the comments section at the end.

1. Are the survey question instructions clear and easy to follow?

2. Are the questions easy to read and do you understand what is being asked?

3. Are the answer options for each question clear and easy to understand?

4. Did you feel that a different answer option should be made available or did at least one of the options accurately reflect your answer?

Your responses in this pilot are confidential and any data collected will not be used in the actual research study. Your comments will only be seen and used by me to refine or modify the survey questions for readability and understandability and will not be included in any portion of the Dissertation.

Please take the following eight question pilot survey and then provide written comments at the end.

Survey Instructions:

The following eight questions address individual opinions on what may or may not influence attitudes on gun control. There is no "right" or "wrong" answer. Please consider your own experience and select the statement for each subject that most closely aligns with your views (select only one answer for each question).

1. News Media coverage of gun violence and crime in newspapers, on television, radio or the internet:

- ☐ Has made me more supportive of gun control.
- ☐ Has had no effect on my attitudes towards gun control.
- ☐ Has made me less supportive of gun control.

2. Gun control advocacy campaigns by special interest groups such as Everytown, USA:

- ☐ Have made me more supportive of gun control.
- ☐ Have had no effect on my attitudes towards gun control.
- ☐ Have made me less supportive of gun control.

3. Mass Shooting incidents in the United States such as Virginia Tech (2007) and Virginia Beach (2020):

- ☐ Have made me more supportive of gun control.
- ☐ Have had no effect on my attitudes towards gun control.
- ☐ Have made me less supportive of gun control.

4. The number of suicides in the United States committed with guns:

- ☐ Has made me more supportive of gun control.
- ☐ Has had no effect on my attitudes towards gun control.
- ☐ Has made me less supportive of gun control.

5. Gun violence involving people with mental health issues:

- ☐ Has made me more supportive of gun control.
- ☐ Has had no effect on my attitudes towards gun control.
- ☐ Has made me less supportive of gun control.

6. My personal cultural values:

- ☐ Have made me more supportive of gun control.
- ☐ Have had no effect on my attitudes towards gun control.
- ☐ Have made me less supportive of gun control.

7. My current religious beliefs:

- ☐ Have made me more supportive of gun control.

☐ Have had no effect on my attitudes towards gun control.

☐ Have made me less supportive of gun control.

8. My current political beliefs:

☐ Have made me more supportive of gun control.

☐ Have had no effect on my attitudes towards gun control.

☐ Have made me less supportive of gun control.

Pilot Study Feedback: Please provide written feedback and any suggestions for improving the readability and understandability of the questions.

1. Are the survey question instructions clear and easy to follow? If not please provide specific recommendations to improve the clarity of the instructions.

2. Are the questions easy to read and do you understand what is being asked? If not please provide the number of the specific question that was not easy to read or understand and suggestions for improving it.

3. Are the answer options clear and easy to understand? If not please provide suggestions on how to improve or re-word the answers.

4. Did you feel that a different answer option should be made available or did at least one of the options accurately reflect your view? If another option would better reflect your response what optional answer you would include or remove.

Appendix C: Permissions To Use Survey Instruments

Police Chiefs' Perceptions of Firearms Policy Survey

Kristin Kremer
To
Dr. Amy Thompson
On Jul 27, 2020, at 1:17 PM

Hello Dr. Thompson,

My name is Kristin Kremer and I am a doctoral candidate at Walden University. I read your dissertation and the article on *Police Chiefs' Perceptions of the Regulation of Firearms* in the American Journal of Preventive Medicine. I am currently studying the differences in attitudes between gun owners and non-gun owners in Virginia with regards to 2nd Amendment Sanctuary, recently implemented gun laws in Virginia, and message framing.

I saw the survey questions on the AJPM site for the survey instrument used in your study and would like your permission to use or modify some of the questions for use in my study if they are applicable to my hypotheses or research questions. I will happily share any results with you once I finish. Please let me know if you have any questions.

Thank you in advance for your assistance.

Kristin D. Kremer

Thompson, Amy
To
Kristin Kremer
Mon 7/27/2020 1:24 PM

Sure! Good luck !

Sent from my iPhone

PEW American Trends Panel (ATP) Survey

From: Kristin Kremer
Sent: Sunday, July 26, 2020 1:17 PM
To: Pew Research Center
Subject: Request for Survey Instrument and Permission to Use It in My Research

Hello,

My name is Kristin Kremer and I am a doctoral candidate at Walden University. I read the study by Kim Parker, et al. *America's Complex Relationship With Guns* (June 22, 2017). I am currently studying the differences in attitudes between gun owners and non-gun owners in Virginia with regards to 2nd Amendment Sanctuary, recently implemented gun laws in Virginia, and message framing.

Ii would like to use some of the questions from the Pew Study in my research. Is it possible for you to provide me with a copy of the survey instrument used in your study and permission to use or modify some of the questions for use in my study? I will happily share any results with you once I finish. Please let me know if you have any questions.

Thank you in advance for your assistance.

Kristin D. Kremer

From: Pew Research Center
Sent: Monday, July 27, 2020 9:04 AM
To: Kristin Kremer
Subject: RE: Request for Survey Instrument and Permission to Use It in My Research

Hi Kristin,

Thank you for reaching out! Attached is the topline that details all of the questions we asked our respondents in the survey: https://www.pewsocialtrends.org/wp-content/uploads/sites/3/2017/06/W25-W26-combined-topline-chkd-for-release.pdf. Feel free to utilize this in your survey as it is free for public use. We ask that you do not change our question wording, but it can certainly be a basis for your own work. I hope this is helpful! Please let me know if you have any questions.

Best,
Julia O'Hanlon
Pew Research Center

Political Attitudes Questionnaire

Permissions: Test content may be reproduced and used for non-commercial research and educational purposes without seeking written permission. Distribution must be controlled, meaning only to the participants engaged in the research or enrolled in the educational activity. Any other type of reproduction or distribution of test content is not authorized without written permission from the author and publisher. Always include a credit line that contains the source citation and copyright owner when writing about or using any test.

Instrument Type: Inventory/Questionnaire Test Format: All 11 items on the Political Attitudes Questionnaire are in multiple choice formats. Six of the 11 issues have 3 or more answer options that progress from a more liberal to a more conservative stand and are therefore treated as continuous variables with higher numbers indicating greater conservatism. The remaining 5 issues have only 2 answer options and are analyzed with a logistic regression (0 = liberal position, 1 = conservative position).

PsycTESTS Citation: Koleva, S., Graham, J., Iyer, R., Ditto, P. H., & Haidt, J. (2012). Political Attitudes Questionnaire [Database record].