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Assessing the Implementation of Campus Safety Policies in Virginia Community Colleges: An  
Analysis of the Forces at Play in Higher Education Institutional-Level Policymaking

A dissertation submitted in partial fulfillment of the requirements for the degree of  
Doctor of Philosophy at Virginia Commonwealth University

by

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## Abstract

### ASSESSING THE IMPLEMENTATION OF CAMPUS SAFETY POLICIES IN VIRGINIA COMMUNITY COLLEGES: AN ANALYSIS OF THE FORCES AT PLAY IN HIGHER EDUCATION INSTITUTIONAL-LEVEL POLICYMAKING

By Steven T. Keener, M.S.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Public Policy and Administration at Virginia Commonwealth University.

Virginia Commonwealth University, 2017.

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The purpose of this study was to assess the extent to which community colleges have implemented major post-Virginia Tech campus safety recommendations. In addition to gaining a comprehensive overview of the safety policies and practices in place, this study assessed if campus safety policy implementation levels at the community colleges correlated with institutional characteristics, and the internal and external forces that helped drive the implementation of these policies. Focusing specifically upon the Virginia Community College System, data on the policies and practices in place at each of the 23 Virginia community colleges were collected from institutional websites and through follow-up telephone calls. Interviews were then conducted with a small group of administrators from various Virginia community colleges. Analysis of the data indicated that large variance exists across the community colleges, as some have implemented most of the major campus safety recommendations that currently exist, while other have only implemented far less. The results also revealed potential support for larger community colleges with more resources and more campuses implementing more campus safety recommendations. Interview data detailed that external mandates and internal college

leadership are the most important forces driving campus safety policy change among the community colleges. A number of policy implications arose regarding where community colleges need to improve their campus safety and how to best drive campus safety policy changes in the future.

## **Chapter One: Introduction**

### **Statement of the Problem**

College campuses have long been viewed as areas that are free of major violence, where students from varied background can pursue a higher education degree. Universities, however, have suffered from a history of violence long ignored by administrators and policymakers (Fisher & Sloan, 2007). The 1980s and 1990s brought a surge of attention to campus crime and the eventual passage of federal legislation dedicated to addressing this issue (Sloan & Fisher, 2010). The nature of policies aimed at improving the safety of college campuses began to shift in 2007, when the tragedy at Virginia Tech forever changed the face of campus safety.

Researchers have demonstrated how college campuses can be targets of violent acts. Specifically, colleges are vulnerable to devastating attacks as a result of their dense population, relatively low police presence, and open borders (Boynton, 2003). The basic design of campuses also produces risk for both traditional crime concerns and acts of mass violence as a result of campuses having multiple buildings, various entry and exit points, and fluctuating populations (Sulkowski & Lazarus, 2011). Colleges are also vulnerable to common crimes, like burglary and assault, because they allow for the convergence of likely offenders and suitable targets in the absence of capable guardians (Cohen & Felson, 1979; Henson & Stone, 1999). Potential offenders live in the surrounding community or within the student body, with a range of motivations to commit crime. Campuses contain suitable targets, with a wealth of people on site daily that often bring valuable commodities with them. Inadequate capable guardians can range from parents not being present, to campus police being inadequate, to even students themselves, who are notoriously weak guardians as they tend to leave their rooms unlocked, come and go at

all hours, and are generally inattentive to their surroundings (Henson & Stone, 1999; Volkwein, Szelest, & Lizotte, 1995). These college campus characteristics help facilitate both traditional crime and acts of mass violence; however, the tragedy at Virginia Tech in 2007 shifted much of the campus safety focus to fears of mass violence.

The Virginia Tech tragedy is a stark dividing line in the history of campus safety. Other school massacres preceded this event, such as the Kent State shootings in 1970 and Columbine High School in 1998, but Virginia Tech played a major role in refocusing administrators, policymakers, and society at large to the possibility that mass emergencies could occur on college campuses (Debrosse, 2013; Sloan & Fisher, 2007). This possibility became an integral factor in shaping the modern campus preparedness plan, despite the fact that the prevalence of these incidents are much less than traditional victimization concerns. For example, sexual assault has risen to the forefront of campus crime concerns as studies indicate that between 20-25% of college females will experience a completed and/or attempted sexual assault during their collegiate career (Sloan & Fisher, 2010; “The White House”, 2014). While binge drinking and drug overdoses account for about 1,500 collegiate deaths every school year, there is usually only approximately 10 to 20 murders on college campuses per year. Mass killings are much less rare, with incidents such as those at Virginia Tech and Columbine receiving a great deal of national attention, but not being the normal type of victimization concern (Fox & DeLateur, 2014; Fox & Levin, 2015). The chance of a mass shooting occurring on a college campus is rare; yet, these incidents are still considered as a possibility when creating safety policies.

Various state governments assembled taskforces and expert panels to address the issue of campus threats (i.e. Massachusetts Department of Education) following the Virginia Tech massacre. These groups were tasked with creating recommendations and establishing best

practices for campus safety policies (MDOE, 2008; VA Tech, 2007; VCCS, 2008). In Virginia, Governor Tim Kaine created the Virginia Tech Review Panel (Virginia Tech Review Panel [VA Tech], 2007). This panel reviewed the events that led up to the shooting, how the incident was handled by university administrators and public safety officials, and the services provided to families, survivors, and the campus community. The panel's report made recommendations of steps that colleges and universities could take to mitigate future incidents (VA Tech, 2007). Similar panels were assembled, both in the state, and around the country (e.g. the Virginia Community College System Taskforce [VCCS], 2008). Such groups produced reports containing recommendations, best practices, and in some instances mandates, for improving the ability for colleges and universities to mitigate potential emergencies. The Virginia Tech tragedy also sparked policy responses at federal, state, and institutional levels. Some of these responses were linked to the Virginia Tech report, while others were produced independent of review panel recommendations. The event captured enough attention to motivate some schools to proactively address campus safety policies and can thus be considered a 'focusing event'. Kingdon (1985) described a focusing event as an incident, such as a crisis or disaster, that becomes a powerful symbol used to create change. Focusing events are important when momentum is needed to attract policymaker attention toward a problem that demands solutions (p. 99-100). In establishing a multiple streams' model of policy formation, Kingdon (1985) highlighted the influence that focusing events can have in terms of focusing government officials' attention on one issue rather than another. The incident at Virginia Tech constitutes a focusing event that placed the focus of government officials on campus safety.

Scholars (i.e. DeLaTorre, 2011; Jackson, 2009; Seo, Torabi, & Blair, 2012) have argued that the range of reactions to the Virginia Tech tragedy created a need to study how colleges and

universities respond to new campus safety demands. DeLaTorre (2011) emphasized that the demands that accompany addressing traditional campus crime concerns (i.e. assault, theft) are different than the demands that accompany creating policies that address the concerns that arise from major events. Yet, the research addressing these differing demands still has many gaps that have yet to be addressed. DeLaTorre (2011) began to address these gaps and found that most four-year institutions studied (80%) had implemented a threat assessment team, the major post-Virginia Tech safety recommendation, while only one of 21 community colleges made this recommended change. At schools that had implemented a threat assessment team, many administrators did not believe that the mechanisms were in place for the team to operate effectively. Seo, Torabi, and Blair (2012) and Kerkhoff (2008) also found that many university administrators did not think the campus safety policies in place at their institution were effective at making their campus safer. These studies highlight a common disconnect between a college having campus safety policies in place and a belief that these policies are effective at making the college campus safer.

Another avenue of research that emerged following the Virginia Tech tragedy dealt with how governing bodies became involved in campus safety. Jackson (2009) in particular identified the unprecedented state involvement in campus safety following Virginia Tech as a development that demanded further attention. Historically, individual institutions were given a great deal of autonomy when deciding how to best approach campus safety. Jackson (2009) reaffirmed Berdahl, (1971), Hines (1988) and MacTaggart's (1998) arguments that state involvement in higher education institutions is often met with negative responses and represents a threat to their autonomy. Jackson (2009) found that among Ohio college and universities state-level initiatives had a "moderate to strong" influence on institutional implementation of campus safety policies.

Also, Jackson (2009) discovered a potential relationship between institutional characteristics and the implementation of campus safety policies and practices. Specifically, large and public institutions were more likely to have implemented these campus safety policies than small and private institutions. These relationships were not statistically significant and thus need further attention. Kerkhoff (2008) also found that schools waited for directives from the state following Virginia Tech. This is important because it displayed the possibility that institutions wait for external pressures in order to make policy changes, rather than making them proactively.

Most U.S. colleges and universities are likely to have implemented new, or revamped current, campus safety policies following the Virginia Tech tragedy. Despite the rarity of mass shootings at universities (Fox & DeLateur, 2014; Fox & Levin, 2015), studies have found that external pressures (i.e. state mandates, taskforce recommendations) often create institutional-level policy changes (DeLaTorre, 2011; Jackson, 2009; Kerkhoff, 2008). This dissertation builds upon a body of literature related to campus safety as a way to address gaps in the state of knowledge I articulate in the literature review. The study focuses specifically on community colleges, a group of higher education institutions that DeLaTorre (2011) discovered were less likely to have implemented prevalent post-Virginia Tech recommendations. The possibility that unique aspects of community colleges have impacted how they handle campus safety in the modern era has been neglected. The study also explores the internal (i.e. college leadership, motivations to protect students) and external (i.e. state-level taskforce recommendations, media pressure) factors that influence community college decision makers to implement campus safety policies at their institution. The study lastly gauges the most pressing safety concerns facing community colleges and the barriers that exist to addressing them.

### **Overview of the Study**

This study assessed the campus safety policies and practices in the Virginia Community College System (VCCS), while giving insight into the forces that influenced their implementation. The first goal of the study was to gain a comprehensive understanding of the campus safety policies and practices in place in the VCCS. This displayed how Virginia community colleges have implemented integral aspects of modern campus safety policies, as recognized in prior studies and taskforce reviews, such as threat assessment teams, early detection and prevention policies, campus security/police, emergency response and preparedness policies, and sexual assault policies (Champagne, 2007; DeLaTorre, 2011; MDOE, 2008; Schafer et al., 2010; VA Tech, 2007; VCCS, 2008). Assessments of this nature have been viewed as important for understanding the extent to which colleges and universities have implemented major campus safety policies and practices, whether they come in the form of review panel reports aimed at informing practitioners and policymakers (i.e. VA Tech, 2007; VCCS, 2008) or academic studies (i.e. DeLaTorre, 2011; Jackson, 2009). The second goal of the study was to understand if any associations between institutional factors and implementation of major campus safety recommendations exist. This analysis built upon future research recommendations by Jackson (2009), who found a potential relationship between institutional characteristics and policy implementation that needed further exploration. The third and final goal of the study was to provide context to these findings. I gained this context by inquiring about the forces that influence the creation and implementation of the campus safety policies at these community colleges. In order to meet these goals, I first delved into the campus safety literature and set the foundation that this study built upon.

In the literature review, I first reviewed the existing literature on policy drivers and/or levers in terms of how these entities influence policymaking in general and policymaking at



higher education institutions. I then gave a brief recount of the history of campus violence, before delving into studies that have focused upon general campus crime, meaning traditional crimes such as theft and assault. I then shifted my focus toward the post-Virginia Tech era and the new safety demands and concerns that came about after this tragedy occurred, as well as how colleges and universities responded to increased state involvement in campus safety policies. A major piece of the literature review is the matrix that I created, which embodies an adequate campus safety model. This matrix is a compilation of major recommendations produced following the Virginia Tech tragedy. Once put together, colleges' campus safety policies could be measured against this matrix in order to determine whether their policies are adequate or lacking.

I executed the study through the use of a sequential mixed methods design. A sequential mixed methods design allowed for the collection and analysis of quantitative and then interview data in two consecutive phases (Ivankova, Creswell, & Stick, 2006). I utilized a quantitative method, and specifically a cross-sectional approach, to garner an understanding about the extent to which Virginia community colleges have implemented current major campus safety recommendations. I also used this quantitative approach to determine if any associations exist between institutional characteristics, such as school size and location, and implementation levels. I collected the data on the campus safety policies in place at each Virginia community college from individual school websites. When a school's website was insufficient, I conducted follow-up phone calls to determine if the policies in question are present at that institution.

I then conducted case studies of six Virginia community colleges to gather the supplemental information regarding the forces that influence the implementation of campus safety policies at these community colleges. I collected the supplemental data through interviews

with campus safety officials at the six case study institutions. In these interviews, I also inquired about the perceived effectiveness of the safety policies in place, the safety concerns facing these colleges, and the barriers to addressing them. After analyzing the data collected from the schools' websites and searching for major themes across the interviews, I made conclusions regarding campus safety in the Virginia Community College system.

## **Chapter Two: Literature Review**

I now use prior literature to develop an understanding of the internal and external forces at play in higher education policy formation and implementation and establish what is considered a comprehensive safety program in modern college and universities. The goal of the literature review is to explore safety in the context of university environments and how it is currently practiced. I begin by discussing how state policymakers use the levers available to them to influence higher education policies, and the role that the university framework plays in dictating how these policies are implemented at the institutional-level.

I then focus primarily on campus safety and how these types of policies are formulated and implemented in higher education institutions. A brief history of campus safety provides context for the current prevalence of campus safety policy implementation and the driving forces behind policy change. I use the remainder of the literature review to focus on the changes that have occurred following the Virginia Tech tragedy in 2007. I first review the recommendations produced by post-Virginia Tech and post-Newtown review panels. The recommendations create a matrix against which colleges and universities can be measured to determine the extent to which they have implemented major campus safety policies. Recent empirical studies are reviewed to set the stage for what is known regarding the current extent of campus safety policy implementation and how these campus safety policies have been driven. These studies reveal the gap in the literature that needs to be addressed.

### **Policy Drivers/Levers Literature**

*The Role of the External Environment*

A number of policy levers help influence colleges and universities to make institutional-level policy changes. Callan et al. (2007) wrote about five major policy levers that transcend state borders and help influence the creation and implementation of higher education policies. Even the most promising programs and policies cannot achieve their intended impact without the help of these levers. The five policy levers identified include planning and leadership, finance, regulatory policies, accountability, and governance. Governance is a tool of last resort that should not have to be taken in the safety realm, as it is possible for necessary policies to be passed and funded within the current governing structure (Callan et al., 2007). A review of higher education policy levers provides insight into how campus safety policies are created and formed, as well as the forces at play during the creation and implementation stages.

The first identified lever, planning, and leadership, requires: clarity and consensus about overall goals, persistence in making substantive changes over an extended period of time, public reporting of progress in attaining objectives and the use of every opportunity to link actions and results to the agenda being pursued. Leadership can play a major role in forcing issues onto the table and keeping them there (Callan et al., 2007). Campus safety policy demands clarity and consensus about overall safety goals, change over time to adapt to new safety concerns and public updates about the progress in making campuses safer. Support for campus safety policy change grows across campuses when actions are linked to results.

Finance is the next recognized lever. It is the most important weapon in policy arsenals (Callan et al., 2007), and this lever can have major reverberations in safety. The most important aspect of finance within campus safety is state allocations, as state funding can have a large impact on the capabilities of a college to implement new policies, procedures, and technology. If

state funding is decreased, it may be easier to take finances away from safety in order to keep academic programs and other infrastructure entities afloat.

The next lever, regulatory policies, impacts the cost-effectiveness of an institution's operations. Policy audits are important in order to identify needed regulatory policies versus those that are unnecessary and inhibiting productivity enhancements (Callan et al., 2007). These regulatory policies can play a role in campus safety in numerous ways, especially if schools are still employing mandated safety techniques that are outdated and unnecessary.

The final lever recognized, accountability, is important in higher education policy. Transparent accountability reports clearly communicate priorities and address how the state and institutions are performing in a given area. Effective state accountability systems are best when integrated with other policy levers (Callan et al., 2007). Accountability reports can discover if institutions are complying with state-level mandates regarding their safety policies and practices. These reports can hold states accountable for not providing the necessary resources for schools to implement adequate safety protocols as well. Transparency is vital as it can encourage more collaboration and communication across schools.

### *The Role of the Internal Environment*

College and university internal infrastructures are vital in determining what externally driven policies are implemented, as well as how they are shaped. Institutions have unique frameworks that dictate how they handle issues, thus dedicating attention to the internal environment of colleges and universities is important. The following paragraphs detail how the makeup of colleges and universities helped identify campus crime as an issue, the role that accreditation and rankings play in the realm of campus safety, and how the university infrastructure has evolved to handle changing safety demands.

The nature and makeup of universities helped identify campus crime as an issue. Universities are largely composed of young adults from diverse backgrounds that are encouraged to express their views in order to foster a diverse culture. This gave rise to entities such as the college women's movement, which played a large role in identifying the prevalence of collegiate sexual victimizations across the country. While young people worked together to identify campus crime as an issue, their age played a role in causing the problem. This age group tends to have higher criminality rates than their counterparts (Fabio et al., 2011). The newly acquired freedoms that young people possess in college, in addition to the removal of *in loco parentis*, can lead to a rebellious nature among college students (Lee, 2011). Universities are also composed of faculty whose research helped identify campus safety as a problem. A dynamic situation is present on college campuses as administrators must maintain standards and attempt to keep campuses orderly without oppressing the individualism and freedom that colleges want to foster.

Accreditation standards are another feature of the modern university that impacts campus safety. Accreditation is a form of evaluation for colleges and universities that help increase institutional credibility. Many accrediting agencies now gauge a university's campus security during their evaluation process. The Southern Association of Colleges and Schools (SACS) evaluates if institutions take reasonable steps to provide a healthy, safe, and secure environment ("The Principles of Accreditation", 2012). Campus police departments seek accreditation as well, which is offered by the International Association of Campus Law Enforcement Administrators, Inc. (IACLEA) (Lipka, 2008). Some campus police forces also seek accreditation from the same accrediting bodies as local police agencies, such as the Commission on Accreditation for Law Enforcement Agencies (CALEA) ("Campus Safety Accreditation"). This force can be a major factor in driving needed safety changes within a campus.

Modern ranking systems are another force that influences colleges and universities. Many publications now rank U.S. colleges and universities, which can serve as a tool for parents and college prospects to use when deciding which institution to attend. It also serves as a marketing tool for schools that appear in the national ranking. In April 2014, 12 U.S. representatives wrote to *U.S. News & World Report* encouraging them to include safety and crime rates in their methodology for ranking schools. The representatives wrote that safety is a chief concern for parents (Speir et al., 2014). Legislators were attempting to extend their influence into sectors outside of their jurisdiction based on their interest in the campus crime problem.

The university infrastructure has changed in order to meet evolving campus safety demands. This change is best depicted by changes in campus police and security. The modern campus police or security department must fulfill their typical duties while also producing a security report, maintaining accurate reporting statistics, publishing safety policies and procedures, and providing victims with rights and services. This would not have been possible before the 1990s. Campus security officials were originally viewed as night watchmen that focused on protecting property. The unrest of the 1960s forced college administrators to move toward employing organized police departments (Fisher & Sloan, 2007). The 1980s saw campus police essentially mimicking the organizational and operational components of local police agencies to gain legitimacy. Campus police followed local police movement toward professionalization, and the same process occurred when local law enforcement has shifted toward Community Oriented Policing (Bromley, 2007; Fisher & Sloan, 2007; Sloan & Lanier, 2007). Campus police have become more capable of completing the aforementioned duties of the modern campus police department as a result of this evolution.

The literature on external policy levers and the internal university environment set a foundation regarding how colleges are influenced by their internal and external environments when making policy change. The remainder of the literature review focuses upon campus safety, beginning with a brief history of campus violence and the federal-level legislation produced.

### **History of Campus Violence**

Campus violence is not a new problem. There are reports of college students as early as the 17<sup>th</sup> century engaged in an array of illegal behavior when a “culture of deviance” became a trademark of college campuses (Sloan & Fisher, 2010). The 1960s was a time of turmoil on college campuses that was depicted by mass takeovers of campus buildings, bombings, protests to the Vietnam War, and a deadly clash with the National Guard at Kent State University (Sloan & Fisher, 2010). The 1960s saw an end to universities acting *in loco parentis* with their students (Lee, 2011). Journalists described campuses in the 1960s and 1970s as overcrowded, having relaxed sexual standards, having increased violence, and having high levels of cheating.

Administrators made minimal changes and policymakers remained largely complacent (Sloan & Fisher, 2010). The U.S. Department of Education and the U.S. General Accounting Office began expressing concerns about campus safety in the 1980s. The media described colleges as having a “rape culture”, large amounts of hazing, and students nearly drinking themselves to death (Sloan & Fisher, 2010). Several high-profile violent incidents occurred during this time as well.

#### *Major Campus Emergencies*

Several major incidents dominated the campus safety landscape beginning in the 1960s. In 1966, University of Texas student Charles Whitman murdered his wife and mother in their homes before proceeding to the Texas campus, where he opened fire on students crossing the campus from an observation deck. He killed 14 people in total (Stearns, 2008). A confrontation



between the National Guard and South Carolina State students occurred in 1968 and left over a dozen wounded and three dead (Goleman, 2013). The aforementioned clash between the Ohio National Guard and Kent State University students left four dead and wounded nine in 1970 (Debrosse, 2013). Lehigh University student Jeanne Clery was brutally murdered in her crime-ridden dorm room in 1986, which sparked a grassroots movement that garnered national attention and led to the passage of the *Clery Act* in 1990 (Carter, 2002; Carter & Bath, 2007). All of these incidents garnered national attention.

Campus safety forever changed in 2007 when Seung-Hui Cho, a student at Virginia Polytechnic Institute, engaged in a shooting spree that began in a dormitory and ended in a university classroom building. 32 students and professors were left dead (Jenson, 2007), 25 others were wounded, and Cho took his own life (Fallahi et al, 2009). This shooting was the deadliest peacetime shooting event by one gunman in U.S. history (Fallahi et al, 2009; Rasmussen & Johnson, 2008; Seo, Torabi, Sa & Blair, 2012). The following year saw former Northern Illinois University student Steven Kazmierczak open fire on a professor and students, killing five and wounding 21 before killing himself (Kaminski, Koons-Witt, Thompson, & Weiss, 2010). Several small incidents occurred since then, with two incidents occurring at community colleges. A student opened fire, wounding 2 women, at a satellite campus facility of New River Community College in 2013 (“CNN”, 2013). A gunman shot and killed one student on-campus at Wayne Community College in 2015 (“CBS News”, 2015). All of these incidents shaped and guided the evolution of this policy arena. This campus safety history produced a large amount of federal legislation that was pushed by various advocacy groups.

#### *The Work of Advocacy Groups*

Four advocacy groups capitalized on the growing unrest of college campuses and helped push it into the public spotlight. The biggest group was Security on Campus, Inc. (SOC), a nonprofit founded by the parents of Jeanne Clery. The Clery parents were dismayed when they discovered that their daughter's dormitory had suffered from numerous break-ins due to physical security issues, and university administrators had failed to notify students. SOC focused on lax security and lack of transparency in campus crime statistics and pushed for legislative action to address the issue (Keels, 2004). Campus feminists represented the second major group. They identified sexual victimization of female college students as their major issue of concern. Empirical studies indicating that 1 in 4 college women had been victims of a rape or an attempted rape began emerging in the 1980s and this helped legitimize claims made by this group. The third group, victims and their families, also latched onto lax security and lack of transparency in higher education. They used the courts as their avenue for change by filing lawsuits against colleges and universities. The fourth group was public health researchers that were concerned with binge drinking on college campuses and the negative externalities produced (Sloan & Fisher, 2010). Each of these groups pushed for separate issues within campus safety but collectively legitimized campus crime as a social problem that must be addressed.

#### *Specific Legislative Responses*

The legitimization of campus crime as a social problem spurred legislative responses at the federal and state levels. The most important piece of U.S. campus crime legislation was the *Student Right to Know and Campus Security Act of 1990*, which was later renamed the *Clery Act*. The *Act* requires all higher education institutions that participate in federal financial aid programs to distribute an annual security report that details their campus security policies and annual crime statistics. Campus police and security departments must maintain a public log of all

crimes that are reported within the past 60 days, administrators must notify the campus community of threats in a timely fashion, and institutions must provide basic rights to the both the accuser and accused in sexual assault cases. Violations could lead to loss of federal financial aid for the university, and the Department of Education monitors compliance (Carter & Bath, 2007). This major piece of federal legislation has been followed by a number of other federal laws aimed to improving the safety of college campuses.

Congress passed the *Campus Sexual Assault Victims' Bill of Rights* in 1992. It requires universities to give sexual assault victims and the accused basic rights in regards to their campus disciplinary hearings, give victims the ability to notify law enforcement, and help victims alter their living situation (Carter & Bath, 2007). Campus feminists pushed hard for this legislation, as they saw female sexual assault victims as being “revictimized” by administrators that did not properly handle investigations and discipline (Sloan & Fisher, 2010). Legislation continues to be implemented and considered as the rate of campus sexual victimizations and their investigation and adjudication process garners national attention.

Congress passed the *Campus Sex Crimes Prevention Act (CSCPA)* in 2000. This legislation helped colleges track and recognize convicted sex offenders on-campus that were students, faculty, staff, or volunteers. The CSPCA mandates registered sex offenders to notify institutions where they are a student, employee, or volunteer of their status as a sex offender. States are required to notify campus police departments of sex offenders among their student population (Carter & Bath, 2007).

Congress passed the *Higher Education Opportunity Act* in 2008, which added emergency response and notification provisions to the *Clery Act*. It expanded the authority of campus police, expanded the hate crimes to be reported under the *Clery Act*, assisted whistleblowers, and

mandated the ED annually report *Clery* compliance to Congress (“Policy Accomplishments”). Parts of this policy were a clear reaction to the 2007 Virginia Tech massacre (Fallahi, Lesik, & Gold 2009) and thus were passed soon after the incident occurred.

President Obama signed into law a bill that included the *Campus Sexual Violence Elimination Act* (Campus SaVE) in 2013, which amends the *Clery Act*. These amendments give additional rights to collegiate victims of sexual and/or dating violence, and stalking, and mandates that institutions include policies that seek to prevent domestic violence, dating violence, sexual assault, and stalking. It also mandates that universities take better care of victims of these crimes (“Policy Accomplishments”). The Obama White House took a proactive approach to addressing collegiate sexual violence throughout their tenure.

Other federal legislation, while not passed explicitly as campus safety policies, have campus safety ramifications. The first of these federal policies is *Title IX*, which was passed as a part of the Education Amendments of 1972. *Title IX* aimed to prevent discrimination on the basis of sex in federally funded institutions. It was extended into the realm of campus sexual violence and in 2011, the Office for Civil Rights wrote a “Dear Colleague Letter”, which helped continue to extend the importance of *Title IX*'s role in holding colleges and universities responsible for taking steps to prevent sexual assault. The letter continued to define the steps that colleges and universities must take to prevent sexual assaults and then properly handle those that occur in order to remain compliant with the *Title IX* (Ali, 2011). *Title IX* is now frequently viewed as campus safety legislation.

The Family Rights and Privacy Act (FERPA) was not a campus safety policy; yet, it has shaped through safety interpretations. FERPA protects the privacy of student educational records, preventing them from being obtained by families, friends, outside entities, etc. without

written permission (“Family Education Rights and Privacy Act”). The *Buckley Amendment* clarification of 1992 and the *Foley Amendment* of 1998 clarified that FERPA’s confidentiality does not apply to law enforcement and student disciplinary records. The *Foley Amendment* altered FERPA so that institutions could publically recognize the results of disciplinary proceedings of violent crime when the accused is found responsible. Victim and witness names must remain confidential unless they authorize its release (Carter & Bath, 2007), and FERPA privacy protections have become an important nuance in the campus safety discussion.

State legislatures began passing laws in the late 1980s and the early 1990s that heavily resembled the *Clery Act* and forced universities to be more transparent with their crime statistics. They continue to pass legislation aimed at various campus crime issues, such as campus sexual assaults (“Policy Accomplishments”). State legislatures may argue that they are better suited to legislate in this area because they work frequently with their state colleges and are in a position to tailor the legislation to fit state institutions (Weiser, 2001). These major events, the work of advocacy groups, and legislation passed to address campus safety give an overview of the history of campus violence and responses to it. The focus of the literature review will now shift to empirical studies that have focused upon general campus crime.

### **General Campus Crime Literature**

General campus crime is used to differentiate the literature that focuses upon traditional campus crime, such as theft and assault, and studies that focus primarily upon emergency preparedness. The latter focus upon colleges being prepared to prevent and handle mass emergencies. Early general campus crime research focused upon sexual aggression of college men and the sexual victimization of college females. This research was conducted by scholarly experts such as Kirkpatrick and Kanin (1957) and further developed by Kanin’s continued work

(1967, 1970, 1977). This string of research persisted into the 1980s and continues today, with reports discovering that between 20% and 25% of college women have been victims of rape or attempted rape during their collegiate career (“Not Alone”, 2014; Sloan & Fisher, 2010).

Empirical work on college sexual violence has become one of the primary focuses of current campus safety research.

The bulk of general campus crime studies can be divided into descriptive, explanatory, and evaluation studies. Fisher and Sloan (2007) predominantly divided this research area into those three tiers. Descriptive studies seek to describe the rate and type of on-campus victimization and the rate at which students perceive they may be victimized (Witt, 2011). Safety perception studies became popular following the incidents at Virginia Tech and Northern Illinois in order to gauge how safe student and faculty felt while on-campus (Beard, 2010; Boggs, 2012; Crawford, 2011; Fallahi et al., 2009; Hollis, 2010; Miller, 2011; Patton, 2010; Reeves, 2014; Steinmetz, 2012; Weeden, 2013; Witt, 2011; Woolfolk, 2013; Zuckerman, 2010). These perceptions were further studied in terms of how they affect behavior on-campus among faculty members and the student experience (Elkins, 2004; Reeves, 2014). They have also focused upon how faculty members perceive their campus safety role (Rollings, 2010), and perceptions and attitudes toward concealed carry firearm policies on-campus (Cobb, 2014; Hosking, 2014; Wright, 2014). Descriptive studies form a base understanding regarding victimization levels on college campuses and how they align with victimization fears.

Explanatory studies seek to describe the casual factors of campus crime. These studies also test hypotheses of why victimization occurs (Fisher & Sloan, 2007). Lifestyle and routine activities theories have been frequently used to guide these studies and quantitative analyses have helped improving understanding of why certain students are victims of particular crimes

(Dowdall, 2007; Fisher & Stewart, 2007; Mustaine & Tewksbury, 2007). Researchers have also analyzed correlates of campus crime (Bromley, 1995; Fernandez & Lizotte, 1995; Fox & Hellman, 1985; McPheters, 1978; Volkwein, Szelest, & Lizotte, 1995). For example, studies have investigated the relationship between community, student, and institutional characteristics and campus crime rates. These studies often found student and institutional characteristics to be the best predictors of campus crime (Bromley, 1995; Volkwein, Szelest, & Lizotte, 1995). Other explanatory studies focused upon how the design of residence halls impacts campus crimes (Miller, 1990), and whether places on-campus where women feel unsafe are correlated with sexual assault rates (Huffman, 1997). Explanatory studies provide a base of explanation regarding why campus crimes occur and potential correlates of campus crime rates.

Evaluation studies assess the outcomes of campus safety policies. These policies are geared toward reducing on-campus victimization, improving safety, and reducing perceptions of campus unrest among students (Fisher & Sloan, 2007). Macguire (2002) studied how colleges collect their crime data, disseminate it, and the accuracy of that data. Many studies have analyzed the implementation of the *Clery Act*, including its effectiveness (Sloan, Fisher, & Cullen, 1997), the level to which schools are complying with the tenants of the *Act*, perceptions of its effectiveness (Cohen, 2005; Kerr, 2001; Sloan et al., 1997), administrators' awareness of the *Act* (Colaner, 2006), and the extent to which *Clery* data is used by students and parents (Gehring & Callaways, 1997; Janosik & Gehring, 2003; Parkinson, 2001). Most of this research has not bode well for the *Clery Act* with findings that do not support its effectiveness.

These studies share a focus on traditional campus crime concerns. The Virginia Tech tragedy sparked a renewed focus upon campus safety that recognized both traditional and new concerns. The literature review will now shift toward the federal and state-level taskforces and

review panels that arose shortly after the Virginia Tech incident. The reports produced by these groups provided colleges and universities with recommendations about policies and procedures that institutions should implement in order to make their campus safer and better able to respond to potential violence. The recommendations establish the foundations of an adequate campus safety preparedness program.

### **Post-Virginia Tech Safety Demands and Concerns**

A slew of practical literature and government publications aimed at improving the safety and emergency preparedness of college campuses arose following the tragedy at Virginia Tech. A few key publications also appeared prior to this incident. It is important to note that practical literature refers to federal and state-level reports that seek to provide guidance about best practices and recommendations for a college or university's campus safety policies and practices. The National Association of College and University Attorneys produced campus safety guidance pamphlets in the 1990s that included important elements of a campus safety plan: education, compliance, prevention, review/modification, and crisis management (Burling, 2003; Jackson, 2009). Dahlem (1996), in *An Administrator's Guide for Responding to Campus Crime: From Prevention to Liability*, highlighted an informational, mechanical, and human methods approach to preventing campus crime. Champagne (2007) qualitatively studied campus safety plans around the U.S. shortly before the Virginia Tech tragedy occurred, finding that general themes of a comprehensive safety plan include: response, prevention, communication, education, and collaboration across departments. Prevention was a common theme during this time, as schools were primarily concerned with physical security (i.e. lockable doors) and feared liability if an incident occurred (Jackson, 2009). This literature displays that emergency preparedness was considered before the Virginia Tech tragedy occurred despite this incident amplifying its focus.



Numerous governmental reports following the Virginia Tech tragedy produced recommendations for how higher education institutions could prevent and respond to an incident of this magnitude. The U.S. Departments of Education (ED), Health and Human Services (HHS), and Justice (DOJ) produced *Report to the President on Issues Raised by the Virginia Tech Tragedy* in the summer of 2007. The report recommended that the ED and HHS develop guidance regarding how information could be legally shared according to privacy laws, which would help universities better handle potential issues through their threat assessment teams. The ED then produced *Balancing Student Privacy and School Safety: A Guide to the Family Educational Rights and Privacy Act for Colleges and Universities* and additional regulations to the law. The regulations created exceptions to FERPA, leaving more discretion in the hands of college administrators (Jackson, 2009; Lipka, 2008). The *Report to the President* also focused upon federal-level safety agencies. It focused specifically upon the U.S. Secret Service, FBI, ATF, and DOJ, and how they play a role in maintaining safety in higher education. The U.S. Secret Service and DOJ were called to research potential violence that could be targeted at colleges and universities, and assist colleges with their threat assessment teams. The FBI and ATF were called to focus on firearms, and in particular, to improve information sharing between state and federal agencies for firearm background checks (Jackson, 2009). All of these actions took place at the federal level.

The most prevalent campus safety steps were taken at the state level. The National Association of Attorney Generals (NAAG) encouraged states to address barriers in state privacy and mental health laws, make necessary adjustments regarding federal background checks for the purchase of a firearm, and it requested that states require schools to implement an emergency management plan and conduct emergency drills. NAAG also recommended the creation of

anonymous student reporting systems (Jackson, 2009; NAAG, 2007). State review panels and taskforces also helped shape the campus safety response shortly after the Virginia Tech tragedy.

#### *Virginia Tech Review Panel*

Virginia Governor Tim Kaine created the Virginia Tech Review Panel shortly after the Virginia Tech tragedy. The panel reviewed the events that led up to the shooting, how the incident was handled by university administrators, public safety officials and emergency service providers, and the services provided to families, survivors, and the campus community. The panel provided recommendations based on these findings. The panel presented its final version of the report to Governor Kaine, entitled *Mass Shootings at Virginia Tech: Addendum to the Report of the Review Panel* (Virginia Tech Review Panel [VA Tech], 2007) in December 2009.

The report was organized thematically with an array of recommendations in each thematic section. The thematic sections include the university setting and security, campus alerting, campus police, mental health, privacy laws, the murders at Virginia Tech, and future steps. Some recommendations include schools: forming a threat assessment team, updating and enhancing their Emergency Response Plan, being equipped to notify the campus community, training campus police to handle active shooters, training officials to report dangerous or threatening behavior to the threat assessment team, connecting troubled students to counseling, establishing a policy regarding weapons on-campus, having multiple, redundant technology communication systems, assuring that exterior doors cannot be chained shut, having victim advocates after an traumatic event, and working collaboratively with other Virginia colleges and universities. This report was one of the most important publications produced following the incident, but it was not the only one produced in Virginia.

#### *Report of the VCCS*

Virginia Community College System (VCCS) chancellor Glenn DuBois ordered a review of emergency preparedness policies across all 23 Virginia community colleges shortly after the Virginia Tech tragedy. A taskforce appointed by the chancellor made over forty recommendations for Virginia community colleges, and they were included in *Virginia's Community Colleges Focus on Emergency Preparation and Management: Report of the Chancellor's Emergency Preparedness Review Task Force* (Virginia Community College System [VCCS], 2008). These recommendations can be broken into the categories of physical security, emergency response and preparedness, mass notifications, campus police, and early detection and prevention. Some recommendations include community colleges: assuring that exterior entrances be lockable but cannot be chained shut, installing cameras throughout campuses, developing an active shooter response plan, implementing text messaging notification systems, considering adding a campus police force, and implementing a threat assessment team. Community colleges often rely on agreements with local safety resources (i.e. municipal police) because they do not possess the capabilities to handle certain incidents in-house.

#### *Best Practices for Massachusetts Higher Education*

Other states put together taskforces to evaluate the prevalence of campus safety policy implementation in the aftermath of the Virginia Tech tragedy. One state that took action was Massachusetts, whose Campus Safety and Violence Prevention Workgroup eventually produced *Campus Violence Prevention and Response: Best Practices for Massachusetts Higher Education* (Massachusetts Department of Education [MDOE], 2008). This report covered the scope of violence in Massachusetts and around the country, reviewed previous reports regarding campus safety, and assessed the extent of campus safety policy implementation in Massachusetts' higher education institutions by utilizing a survey that was sent to state colleges and universities. The

report was reviewed because it compiled best practices produced across the country and recommended how Massachusetts schools improve safety and security.

The report first produced a detailed set of best practices that had been produced by other review panels across the country. These best practices include: creating an all-hazards Emergency Response Plan, adopting an emergency mass notification and communication system, establishing a multi-disciplinary threat assessment team, reviewing and training personnel regarding privacy/information sharing laws and policies, having an memorandum of understanding (MOU) with local health agencies, practicing emergency plans and conducting training, educating the campus community regarding how to recognize and respond to potential threats, conducting risk and safety assessments, having an interoperable communication system with area responders, and ensuring that all responder agencies are trained in the National Incident Management System (NIMS) and the Incident Command System (ICS).

The report then included 27 specific recommendations regarding how Massachusetts colleges could improve their security and violence prevention. The recommendations were based on the results of the survey completed by college officials across the state and were made within the thematic categories of early detection and prevention, physical and electronic security, campus police, mass notifications, policies and procedures, and emergency response. Some highlights include: campus mental health services be easily accessible to students, schools install closed circuit cameras, sworn campus police officers be armed and trained in the use of personal or specialized firearms, faculty and staff be informed about the appropriate protocol in the event of a crisis, public safety be included as part of the orientation process, schools form MOUs with agencies in the community having necessary support resources, schools have multiple reporting systems and schools have a trained behavioral health Trauma Response Team.

## *Governor's School & Campus Safety Taskforce*

The tragedy at Newtown Elementary School on December 14, 2012 returned attention to school and campus safety despite it not occurring on a college campus. The tragedy, in which Adam Lanza killed 20 students and six teachers, focused federal and state attention upon how to prevent another school tragedy. Virginia Governor Bob McDonnell created a taskforce to provide recommendations for enhancing school and campus safety in the state of Virginia. The taskforce produced 61 formal recommendations that are detailed in *Governor's School & Campus Safety Taskforce Final Report* (Commonwealth of Virginia [VA], 2013). Most of these recommendations focused upon K-12 institutions, but important suggestions were made for colleges and universities as well. It was recommended that colleges and universities implement Community Emergency Response Teams (CERT), conduct lock-down drills, participate in a multi-disciplinary response to sexual assault, and community colleges determine what actions could be taken to fund adequate campus law enforcement or security services.

The following table (Table 1) organizes the best practices and recommendations from the previously detailed reports into thematic categories. This table represents the foundations of an adequate campus safety model in the current era and it was used to assess the campus safety policies in place in Virginia community colleges. With this foundation established, the focus shifted toward empirical studies on campus safety following the Virginia Tech tragedy.

*Table 1. Foundation of Adequate Campus Safety Model*

Recommendations	Report
<b>Early Detection and Prevention</b>	
-Threat Assessment Team	President; VA Tech; VCCS ; MDOE; Newtown
-Conduct vulnerability assessments annually	MDOE
-Multiple anonymous reporting systems	MDOE, NAAG
-Suicide prevention	Newtown
-Bullying, cyberbullying prevention	Newtown
-Establish/publish mechanism for reporting threats of violence	VA Tech, MDOE
<b>Mental Health Services</b>	

-System that connects students to medical and counseling services	VA Tech
-Educate faculty, staff, and students about recognizing and responding to signs of mental illness	MDOE
-Establish a written MOU with local community services boards or behavioral health authority if campus does not have mental health services	Newtown
<b>Physical Security</b>	
-Lockable doors that cannot be chained shut	VA Tech; VCCS; MDOE
-Install cameras throughout out campus	VCCS; MDOE
-Equip classrooms with emergency notification capabilities	VCCS; MDOE
-Colleges consider alternative exits/entrances	VCCS
-Review lighting and potential weaknesses	VCCS
-Plan for electronic access during emergency	MDOE
<b>Drills and Training</b>	
-Conduct emergency drills annually	NAAG; MDOE; Newtown
-Students, faculty, and staff trained annually about responding to emergencies and notification systems	VA Tech
-Faculty and staff receive training in identifying at-risk students, managing difficult interactions and situations	MDOE
-Review and train personnel regarding privacy/information sharing laws	MDOE
<b>Campus Police/Security</b>	
-Implement campus police force and/or consider its feasibility	VCCS, Newtown
-Police/security head be a member of TAT	VA Tech
-Train for active shooters	VA Tech, MDOE
-Mission statement focus on law enforcement and crime prevention role	VA Tech
-Armed and trained in the use of personal or specialized firearms	MDOE
-Have the authority and capability to send an emergency message	VA Tech
- MOU with local law enforcement	Newtown
<b>General Campus Policies</b>	
-Establish policy on weapons on campus	VA Tech, VCCS, Newtown
-Operations plan include plans for cancelling classes or closing campus	VA Tech
-Include public safety as part of the orientation process	MDOE
-Comply with <i>Clery Act</i>	VA Tech
-Have a designated emergency manager	Newtown
-Participate in a multi-disciplinary response to sexual assault	Newtown
-All-hazard emergency management or response plan	NAAG, 2007; VA Tech; MDOE
-Ensure law enforcement and medical staff are designated school officials with an educational interest in school records	VA Tech
<b>Mass Notifications</b>	
-Adopt emergency and mass notification system potentially including:	MDOE
-Websites that can operate through emergencies	VCCS
-Electronic signs at entrances of campuses that display messages	VCCS
-Text messaging notifications	VCCS
-Sirens	VCCS
-Social network websites that notify of emergencies	VCCS
-Emergency call boxes	VCCS

-Educate and train students, faculty, and staff about mass notification systems and their roles and responsibilities in an emergency	MDOE; Newtown
-Have multiple, redundant technology communication systems	VA Tech
-Have an interoperable communication system with all area responders	MDOE
<b>Emergency Response</b>	
-Have MOUs for mutual aid responses to a crisis	Newtown
-Establish an Emergency Operations Center	VCCS
-Community Emergency Response Teams (CERT) to develop and implement response plan	Newtown
-Develop an active shooter response plan	VCCS
-Have a trained behavioral health trauma response team, either on campus or through a contract or formal agreement	MDOE
<b>Victim Services</b>	
-Short- and long-term counseling available to first responders, students, staff, faculty, and university leaders	VA Tech
-Create victim assistance capabilities	VA Tech
-Emergency management plans include a section on victim services that can handle the impact of homicide and disaster-causes deaths	VA Tech

**Key:**

President – *Report to the President on Issues Raised by the Virginia Tech Tragedy*

NAAG – *National Association of Attorney Generals*

VA Tech – *Mass Shootings at Virginia Tech: Addendum to the Report of the Review Panel*

VCCS – *Virginia’s Community Colleges Focus on Emergency Preparation and Management: Report of the Chancellor’s Emergency Preparedness Review Task Force*

MDOE - *Campus Violence Prevention and Response: Best Practices for Massachusetts*

Newtown - *Governor’s School & Campus Safety Taskforce*

*Empirical Studies on New Safety Concerns*

A small niche in the academic community conducted empirical studies on new safety concerns on college campuses following the incidents at Virginia Tech and Northern Illinois. These studies are not plentiful, but they are more closely related to the tenants of this study. I cover each study in detail and then address the gaps that need to be filled.

New campus safety empirical work first focused upon campus safety responses following the Virginia Tech tragedy, as well as the mental health issues facing colleges. Kerkhoff (2008) studied this by conducting open-ended interviews with nine administrators at Florida community colleges. The interviews revealed no definitive policy actions adopted across campuses, but mass notification technology and the employment of a security manager were the most common

actions taken. Schools often waited for directives from a state report before making adjustments to their campus safety framework. Kerkhoff (2008) discovered that a number of troubled students should have been referred to threat assessment teams but were not because faculty and staff were not properly trained on this issue. There were also discrepancies in administrators' knowledge regarding what to do with critical information, the breadth of student rights, and the process for referrals. The most pressing issue cited by administrators was a lack of theory and criteria for measuring the successes and failures of campus safety strategies.

Modern campus safety empirical work also sought to assess the critical incident preparedness and capacities of higher education institutions. Schafer et al. (2010) sent surveys to the head of campus safety departments at 600 randomly selected institutions, garnering a 33.8% response rate. The researchers analyzed survey responses quantitatively and reported that campuses that had experienced a critical event were more sensitive to the possibility of these events occurring in the future when compared to campuses that had not experienced a critical event. There was also a great deal of similarities between institutions that had experienced a critical incident within the past five years and those that had not, such as student body and campus size. Expanding communication technologies, engaging in planning, coordinating training, and creating threat assessment teams were the most common preparations taken by participating schools following the Virginia Tech incident. Most participants responded favorably to their institution's ability to respond to critical incidents.

Another campus safety study reviewed the implementation of threat assessment policies in Texas universities and community colleges. DeLaTorre (2011) used a mixed method exploratory research design to analyze threat assessment teams in place at 32 public Texas universities and community colleges (11 universities and 21 community colleges). DeLaTorre



(2011) first collected quantitative data from the websites of the 32 institutions to determine the extent to which these institutions had implemented post-Virginia Tech campus safety recommendations. DeLaTorre (2011) contacted individuals at the institutions via telephone to ask specific questions when websites were insufficient. The qualitative portion of the study involved case studies of two institutions in which data was collected through open-ended interviews with individuals that have a role in managing threats at these institutions. The quantitative analysis revealed large variance between public universities' and community colleges' implementation of threat assessment teams. Only 1 of the 21 community colleges studied had implemented a threat assessment team while nearly all (80%) had implemented this major post-Virginia Tech recommendation. It also revealed that most universities exhibited substantial compliance with major post-Virginia Tech recommendations in general, while many community colleges had failed to implement these recommendations. The case studies revealed that even those schools that had adopted recommended threat assessment models did not have the mechanisms in place (i.e. education and training for campus officials about their role in safety) for effective implementation. The interviewees revealed that campus communities were largely either unaware of threat assessment team policies or there was confusion about how to access those policies (DeLaTorre, 2011). A disconnect existed in terms of these policies being translated into effective programs and services.

Another modern campus safety approach involved reviewing an array of studies focused upon responses to violent attacks on college campuses. Sulkowski and Lazarus (2011) compiled and reviewed these studies and found little empirical support for effectiveness of popular responses, including efforts to increase public awareness of the crimes committed on college campuses (Janosik, 2001), enforce harsher disciplinary policies (Garcia, 2003), use criminal

profiling techniques (Reddy et al., 2001), and allow concealed weapons carriers on-campus (Branas et al., 2009; Harnisch, 2008). Threat assessment continued to be recommended as the most effective strategy for identifying potential threats, but students tend to underreport the threats that should be referred to the threat assessment team for evaluation (Cornell, 2008). Farrell (2008) revealed that student-counselor ratios are high on college campuses, which is especially troubling considering that about half of students with mental health issues experienced the onset of symptoms when in college (Storrie, Ahern, & Tuckett, 2010). The Sulkowski and Lazarus (2011) review revealed the need for members of the campus community to become stakeholders in recognizing and reporting threats, while maintaining an open, diverse campus.

Another study sought to assess the impact of the Virginia Tech tragedy on university-level emergency procedure formation. Seo, Torabi, and Blair (2012) randomly selected 392 colleges and universities for the study. General data was collected from the website of each of these institutions, and the dean of students or equivalent campus safety official was asked to complete a survey about their school's emergency procedures. Individuals from 161 of these 392 colleges and universities provided usable responses. Regression analysis results indicated that majority of colleges and universities had appropriate emergency procedures in place, but only 25% of the schools responded that their students understood the emergency procedures, and 25% of respondents believed that if a crisis occurred the campus community would be notified within five minutes. An interesting takeaway was the indication that many colleges do not understand the importance of emergency drills, and in turn do not conduct them regularly.

Another major avenue of modern research involves the climate of college campuses. Climate surveys have become a popular mechanism for assessing the safety climate of specific campuses (di Bartolo, 2013; Hensley, 2009; Price, 2007). This is becoming especially popular in

the realm of campus sexual assaults, as policymakers have highlighted the need to gather sexual assault victimization and offender data at all colleges. The White House Task Force to Protect Students from Sexual Assault recommended that schools conduct climate surveys in order to gather data from both victims and offenders in terms of their history and experiences with campus sexual assault. The taskforce created resources to help guide schools in creating and executing their respective campus climate survey (“White House Task Force”, 2014). It is anticipated these surveys may be federally mandated in the near future.

### **Institutional-Level Response to State Involvement in Campus Safety**

The recent empirical focus on campus safety issues have included only a small focus on the forces at play in the implementation of institutional-level safety policies. Jackson (2009) studied the wave of state involvement in campus safety planning and policymaking, and in particular, how Ohio colleges and universities responded to this involvement. I cover this study in detail and then highlight the gap in the research that needs to be addressed.

This study focused specifically upon how Ohio colleges and universities responded to external forces when implementing new campus safety policies. Jackson (2009) first created a survey instrument that measured institutional awareness of Ohio campus safety initiatives, institutional perceptions of recommendations made by an Ohio Task Force, and the rate of implementation of these recommendations. The Task Force on Ohio College Safety and Security was created shortly after the Virginia Tech massacre and it made recommendations regarding how Ohio colleges improve safety and emergency preparedness. Jackson (2009) surveyed the chief campus safety officers at Ohio campuses, and collected 87 responses. There was no statistically significant relationships between institutional characteristics and awareness of state-level initiatives; but, larger and public institutions were more likely to have implemented

recommended policies prior to the Virginia Tech tragedy. Schools with on-campus housing were less likely to have taken no action on initiatives and recommendations following the Virginia Tech tragedy. Correlational analysis revealed a statistically significant positive correlation between perceptions of state safety recommendations and awareness of state-level initiatives ( $r=.363, p<.001$ ). Descriptive statistical analysis revealed that respondents viewed state involvement in campus safety positively. The initiatives and proposals established at the state-level were largely viewed as comprehensive, helpful, and appropriate, and they had a “moderate to strong influence” on institutional-level implementation of campus safety policies. Jackson (2009) recommended continued state involvement in campus safety planning and policymaking. The study highlighted a shift from a reactive and insular approach to a proactive and collaborative approach to campus safety following Virginia Tech among state institutions.

This study set the stage for future research by providing specific recommendations. Jackson (2009) recommended that future researchers gauge the internal forces that helped shape institutional-level safety policy changes in addition to the external forces observed. This includes the relative strength of external and internal forces, as well as the potential that internal entities would have been sufficient to make the same safety changes that were pushed by state forces. Jackson (2009) recommended that future research include input from a diverse set of administrators, since this study only included information provided by chief security officers. Other administrative perspectives could have been important since security officers tend to be former law enforcement officers that may be more likely to seek state compliance, as compared to administrators that resist outside governmental influence that threatens university autonomy. This study established the research the gap that needed to be filled.

A comprehensive assessment of campus safety policies in place in community colleges and an analysis of the forces that helped lead to the implementation and creation of these policies is needed. Several studies (DeLaTorre, 2011; Schafer et al., 2010; Seo, Torabi, & Blair, 2012; Sulkowski & Lazarus, 2011) highlighted the need to assess institutional-level safety policies put in place in the post-Virginia Tech world. DeLaTorre (2011) in particular detailed that the demands of creating safety policies in response to major events, such as Virginia Tech, are different than the demands of creating safety policies to handle traditional crime concerns, such as assault and theft. DeLaTorre (2011) also discovered a large variance between community colleges and four-year institutions in implementing major post-Virginia Tech recommendations. DeLaTorre (2011) highlighted potential associations between policy implementation levels and institutional factors. I built upon this work by first assessing the level of compliance with major post-Virginia Tech and post-Newtown recommendations among Virginia community colleges, and then gauging if specific college characteristics are associated with implementation levels across colleges.

Few studies, with the exception of Jackson (2009), sought to go a step further and gauge why colleges and universities made major safety policy changes. Jackson (2009) took an innovative approach but fell short of understanding how internal forces played a role in institutional-level responses to campus safety demands, and was unable to gain insight from college employees other than security officers. I aimed to fill this gap by collecting interview data from an array of administrators at the colleges studied and then analyzed the role of both internal and external forces in the creation and implementation of the campus safety policies and practices present in the community colleges. I also sought to gauge the perceived effectiveness of these policies and practices, since previous researchers (DeLaTorre, 2011; Kerkhoff, 2008; Seo,

Torabi, & Blair, 2012) found a disconnect between implementation of safety policies and perceived effectiveness. I then aimed to progress the research forward by identifying safety concerns facing college administrators and what barriers exist to addressing them.

## **Chapter Three: Methodology**

### **Research Questions**

In this study, I focused specifically upon the Virginia Community College System to 1) gain a more comprehensive understanding of campus safety policies and procedures in place at community colleges, and 2) understand the influences at play when colleges and universities formulate and implement policies. Several specific research questions arose from these broad ideas. The specific research questions for this study were:

1. What is the prevalence of campus safety policy implementation across Virginia community colleges?
2. Are institutional characteristics associated with differences in the amount of campus safety policies and practices implemented across community colleges?
3. What factors influence decision makers as they implement campus safety policies?

### **Type of Study**

I utilized a mixed methods research design to execute this study. Research questions one and two were best addressed through a descriptive quantitative approach, while open-ended interviews provided the in-depth information necessary to address research question three. A mixed methods design is appropriate when the research questions dictate the need for multiple approaches in order to adequately answer them (Yin, 2014). I specifically utilized a sequential mixed methods design, which is composed of two data collection and analysis phases (Ivankova, Creswell, & Stick, 2006). I collected quantitative data during the first phase, which set the stage for the interview data that was collected and analyzed in the second phase. The quantitative data

revealed the prevalence of campus safety policy implementation in the community colleges and any associations between the colleges' institutional characteristics and their policy implementation levels. The interview data provided information about how these policies were created and implemented.

I executed a cross-sectional design for the quantitative method. Cross-sectional designs give a snapshot of the variables of interest at one point in time (Frankfort-Nachmias & Machmias, 2008). I used this design because research question one gauged the prevalence of campus safety implementation in the VCCS, and it was not concerned with trying to understand the cause and effect of these policies. Research question two recognizes the potential that colleges that share certain institutional characteristics may have implemented safety recommendations to a similar extent, but I did not attempt to argue that institutional characteristic caused the implementation of these policies and practices.

I utilized a case study approach to address research question three. A case study approach allows for an in-depth exploration of a program, event, activity, process, or individuals (Creswell, 2003). I conducted case studies on six of the 23 community colleges and specifically selected two institutions from each size tier, as measured by student enrollment (large, medium, small). I selected the two institutions within each tier strategically to represent schools that had implemented a large amount of major recommendations and schools that had implemented few recommendations based on the quantitative results. This selection approach aligns closely with previous studies that gave credence to the notion that size may impact how a college makes safety changes (Jackson, 2009; Kerkhoff, 2008). Six case studies of the 23 total community colleges (26.09%) also remains in line with the precedent set in previous studies of this nature, as DeLaTorre (2011) conducted case studies on 2 of the 32 (6.25%) total institutions that were



included in the quantitative portion of the study, and Kerkhoff (2008) interviewed administrators from 5 of 28 (17.86%) Florida community colleges.

The mixed-method design progressed the campus safety research arena forward, as most prior studies have stuck to either quantitative or qualitative analysis, with only one utilizing a mixed methods approach (DeLaTorre, 2011). DeLaTorre's (2011) analysis, however, focused primarily upon one aspect of the modern campus safety program (threat assessment), and it only utilized recommendations from the Virginia Tech Review Panel report. The interview data helped provide important depth to the quantitative findings about the forces that influenced the implementation of campus safety policies in place in the VCCS.

### **Population and Sampling**

I limited the population of interest to Virginia community colleges. I selected one college system for observation because it functions as one state agency, with 23 separate institutions operating within it. Directives come from the central office but each institution has the ability to implement and tailor policies and practices to best fit their institution. I expected that the community colleges would be influenced by similar external forces, but being independent institutions, there would be variance in how their resources are translated into policy.

The VCCS was established in 1966, and it is an interconnected state agency with 23 separate institutions that serves over 230,000 students and employs over 5,000 faculty and staff members (Page, 2009; Wong, 2012). The VCCS serves both suburban and urban areas, but a majority of institutions in the system serve rural areas (Landon, 2009). The colleges serve students in areas stretching from the Eastern Shore to southwest Virginia, and schools are located in varied areas such as the coastal region of the Hampton Roads, the Washington D.C. suburbs in Northern Virginia, the Richmond metropolitan area in central Virginia, and the rural Virginia

areas stretching from the Shenandoah Valley to the North Carolina, Tennessee, Kentucky, and West Virginia borders. Virginia community colleges are also diverse in their institutional characteristics, and this is especially embodied in the varied student population totals served. Northern Virginia Community College serves over 50,000 students, making it the largest educational institution in the state and the second largest community college in the country (“About NOVA”), while Eastern Shore Community College serves less than 800 students. Table 2 depicts the student population totals at all of the 23 community colleges in the fall semester of 2016.

*Table 2. Virginia Community College Enrollment Totals*

Institution Name	Student Population Total*
Blue Ridge Community College	4,131
Central Virginia Community College	4,125
Dabney S. Lancaster Community College	1,373
Danville Community College	3,405
Eastern Shore Community College	705
Germanna Community College	6,704
J. Sergeant Reynolds Community College	10,375
John Tyler Community College	10,021
Lord Fairfax Community College	6,868
Mountain Empire Community College	2,737
New River Community College	4,456
Northern Virginia Community College	50,835
Patrick Henry Community College	2,405
Paul D. Camp Community College	1,480
Piedmont Virginia Community College	5,550
Rappahannock Community College	3,463
Southside Community College	3,958
Southwest Virginia Community College	2,481
Thomas Nelson Community College	8,897
Tidewater Community College	23,945
Virginia Highlands Community College	2,491
Virginia Western Community College	7,719
Wytheville Community College	2,745

\*Data for “2016 Fall Headcount Enrollment” acquired from State Council of Higher Education for Virginia

I took a census approach in the quantitative portion of the study and gathered data from all 23 institutions. It was feasible to collect data on each school, so there was no need to take a sample and deal with generalizability issues. The census approach enhanced the internal reliability of the study and negated any generalizability issues of this study to Virginia community colleges that arise when trying to extrapolate the results of a study from the sample to the population.

I selected six of the 23 community colleges for the interview portion of the study. I utilized a mix of convenience, purposeful, and snowball sampling in order to select these six colleges and the interview participants at those institutions. Convenience sampling is a form of nonprobability sampling that dictates sample selection based on participants that are easily available and accessible (Salkind, 2010). Purposeful sampling is another form of nonprobability sampling that allows for the selection of cases that provide substantive information about the topic at hand (Patton, 2002). These sampling techniques allowed me to purposefully select six colleges that represent varied sizes, implementation levels, and locations around the state. In order to acquire this varied group of six community colleges, I first arranged all 23 colleges into three tiers based on the size of their student population (small, medium, large) The purposeful selection of colleges based on their size was guided by prior studies (Jackson, 2009; Seo, Torabi, & Blair, 2012) that determined size to be a potential influencing factor on campus safety policies implemented at colleges and universities. I then organized the colleges within each tier according to the quantitative results for research question one. I specifically ordered them from the colleges that have implemented the most recommendations to the colleges that have implemented the fewest recommendations. I then proceeded to select one institution within each tier that has implemented a large amount of recommendations and another institution within each tier that has

implemented few recommendations. I considered college location when selecting these six colleges in order to garner representation each major geographic region of Virginia (i.e. Hampton Roads, Northern Virginia, Southwest Virginia, etc.).

Once I selected these six colleges, I utilized snowball and purposeful sampling to identify potential interview participants from each of these institutions. Snowball sampling is a nonprobability sampling technique that relies upon participants in the sample to provide the researcher with other potential study participants (Everitt, 2002). I first searched the website of each college to identify individuals that are involved in campus safety at their college in order to purposefully select participants that would provide me with rich information about their college's campus safety policies. The campus safety roles of these college employees included involvement in the areas of *Title IX*, emergency management, campus police and security, threat assessment, and administrative leadership. Some individuals serve in a campus safety role in addition to other duties around campus, while some college employees are only assigned to one specific campus safety role. For example, some community college employees have roles in *Title IX*, threat assessment, and a general college administrative role, while others only work within emergency management. Once I compiled a list of all individuals that have a role in campus safety according to each college website, I contacted them and requested their participation in an interview regarding the campus safety their college. Some of these individuals recommended that I contact other individuals at their college that would be better suited to participate in these interviews. I then proceeded to contact these referred individuals in order to request their participation. A total of 24 individuals were contacted from these six colleges and 12 of these individuals agreed to participate in an interview. This combination of convenience, purposeful,

and snowball sampling helped me conduct interviews with an array of individuals involved in campus safety at six community colleges from across the state.

### **Procedures**

In the quantitative phase of the study, I followed the lead of DeLaTorre (2011) and searched the website of each community college in order to locate their campus safety policies and procedures. DeLaTorre (2011) argued that school websites are the most widely used tool to disseminate campus safety information. Schools are required by the *Clery Act* to publish an Annual Campus Security Report, which contains information on various aspects of their institution's campus safety policies and practices. These reports are published on school websites, so they were the first tool that I used to determine what safety policies and practices are in place. I searched the rest of the school's website to assure that all aspects of a college's campus safety program were reviewed. I contacted an official involved in the college's campus safety program when I was not able to acquire all the necessary information from the website. I acquired the telephone number for these individuals from school websites' online directories. I used the college websites, the 2016 VCCS Financial Report, the State Council of Higher Education for Virginia (SCHEV) website, and the Integrated Postsecondary Education Data System (IPEDS) to gather data on the various institutional factors that were used as independent variables in the analysis that answered research question two.

I executed the interview portion of the study after collecting and analyzing the quantitative data. I contacted officials that have a role in campus safety at each of the six case study schools and asked them to participate in an interview. When officials agreed to participate, we worked out a day and time when I could either conduct a face-to-face or telephone interview. I interviewed each individual independently and did not conduct focus group interviews. I had a

set of questions to guide the interview (see Appendix B), but alternative paths that arose during the conversation or as a result of probing were explored. I took notes throughout each interview, and I assured interviewees that their responses would not be linked to them and the case study institutions selected would not be identified in the write-up. Each interviewee was offered the opportunity to receive the study results.

### **Data Collection**

Research question one required the collection of data on the campus safety policies and processes in place at each Virginia community college. I collected the quantitative data needed to answer research question one from the website of each Virginia community college. For each recommendation included in the Campus Safety Model, I searched the school's website and utilized follow-up phone calls to determine if the college had implemented that recommendation or not.

Research question two built upon the work of previous studies that searched for any correlations between institutional characteristics and dependent variables such as the likelihood of implementing major Virginia Tech Review Panel recommendations and the perceived effectiveness of major campus safety responses (Jackson, 2009; Seo, Torabi, & Blair, 2012). DeLaTorre (2011) discovered variance between the implementation of major post-Virginia Tech recommendations between community colleges and four-year universities. DeLaTorre (2011) speculated that lack of student housing, the location of many community colleges in rural areas, and lower student enrollment totals may have accounted for this variance. Schafer et al. (2010) also focused upon various institutional characteristics variables as important for describing the universities in their sample, which included college type and location descriptive variables. Table 3 details the specific institutional characteristics that were utilized in these studies, all of which

were found to be associated with the dependent variable in one or multiple post-Virginia Tech campus safety studies.

*Table 3. Institutional Characteristics Used in Previous Campus Safety Studies*

Institutional Characteristic	Operationalization	Source(s)
Institutional Size	<i>Enrollment Tiers i.e.</i> <1,000-3,000 students 3,000-<10,000 students 10,000 or more students	Jackson, 2009 Seo, Torabi, & Blair, 2012
Location	<i>Urbanicity i.e.</i> City Suburb Town Rural	Jackson, 2009 Schafer et al., 2010
Location	<i>Region i.e.</i> South Northeast Midwest West	Schafer et al., 2010 Seo, Torabi, & Blair, 2012
Institutional Control	<i>Public vs. Private</i>	Jackson, 2009 Seo, Torabi, & Blair, 2012
Student Residency	<i>Provide on-campus housing vs. no on-campus housing provided</i>	Jackson, 2009

The previous literature and the unique nature of the community colleges studied guided the selection of variables to answer research question two. Institutional size and location were utilized because of their recognized importance in the literature. Resource and number of campuses variables were included in this analysis because they are institutional characteristics that help make community colleges unique. A resource variable was also important because community colleges often rely upon externally provided resources to implement recommended campus safety policies. The number of campuses variable was especially important for this study because community colleges often have multiple campuses and the need to make campuses safer in various locations may have an influence on the extent which colleges have implemented major safety recommendations. For example, a community college with one campus in an urban

area and another in a suburban area may approach campus safety differently than a community college with only one campus in a suburban or rural area. The institutional control and student residency variables present in the literature were not used in this analysis because they lack variance, as all Virginia community colleges are public institutions and none of these colleges provide on-campus housing.

Each of these variables was operationalized in order to fit the tenants of the study. I operationalized institutional size by using the indicator of number of students (full-time and part-time) enrolled at each community college at the beginning of the 2016-2017 academic year. I measured number of campuses by determining the amount of different campuses each community uses to conduct courses. Off-campus locations described as ‘sites’ or ‘centers’, which the college does not own, were not counted as an individual campus. I had to break resources into two different forms. The first of these forms was total operating revenue of each community college, and the second was the total amount of state and local grants provided to each community college. I gathered data for these resource variables from the 2016 VCCS Financial Report. I operationalized location by using the indicators urban and nonurban. The Integrated Postsecondary Education Data System (IPEDS) classifies colleges based on their urbanicity, which can be collapsed into urban and nonurban classifications. When the colleges had multiple campuses, I used the urbanicity classification of the campus identified as the ‘main’ or ‘primary’ campus. The dependent variable used in this analysis was the campus safety score of each college, which was represented by the count outcome of the number of the 51 recommendations implemented at each community college. Table 4 details the institutional variables, their operationalization, and their level of measurement.



*Table 4. Institutional Characteristics Operationalized to Answer RQ2*

Institutional Variable	Operationalized	Level of Measurement
Institutional Size	Number of full-time and part-time students	Ratio
Number of Campuses	Number of campuses at each college used to conducted courses	Ratio
State Provided Resources 1	Total operating revenue of each community college	Ratio
State Provided Resources 2	Amount of state and local grants provided to each community college.	Ratio
Location	Urban, Nonurban	Nominal

I collected the data for the institutional variables used to answer research question two from an array of sources. I specifically collected the institutional size data from the SCHEV website, the number of campus data from the website of each community college, the resource data from the 2016 VCCS Financial Report, and the location data from IPEDS.

I collected the supplemental data needed to answer research question three via the interviews with campus officials. I followed the precedent established by DeLaTorre (2011) and filled the research gap left by Jackson (2009), Schafer et al. (2010), and Seo, Torabi, & Blair, (2012) by interviewing various officials involved in campus safety at each college selected to be included as a case study. These previous studies left a need to gauge the perspective of varied campus safety officials since prior studies only gathered data from campus security officials. I used DeLaTorre's (2011) open-ended interview questions as a base because DeLaTorre (2011) collected information about the mechanisms in place for effective implementation of safety policies. I built upon this base with questions used by Jackson (2009) and Seo, Torabi, & Blair (2012) regarding the influential forces at play in the formation and implementation of campus safety policies. I modified these questions to create a base of questions that could gauge what influences community colleges to implemented recommended campus safety policies. The

interview base is included in Appendix B. I expanded upon this base during interviews when the discussions went down divergent paths or when probing questions were needed. I collected the interview data by taking notes during each interview. If the interviewee approved the use of recordings, I transcribed the recording after the conclusion of the interview and combined this with the notes that I took during the interview. I used the information contained in this document with a combination of the transcribed recordings and notes from the interviews to answer research question three.

## **Data Analysis**

### *Descriptive Quantitative Data Analysis*

I utilized various descriptive statistical techniques to analyze the quantitative data collected. In order to answer RQ1, I utilized several outcome variables. I began with 51 binary variables, which were the 51 recommendations contained in the ‘Campus Safety Model’. I searched each college’s website and conducted follow-up telephone calls to determine if the colleges had implemented each of these 51 recommendations. I coded each of these 51 variables as a ‘0’ when the college had not implemented the recommendation and a ‘1’ when the college had implemented the recommendation.

I next analyzed this data according to the nine thematic categories in which these 51 recommendations are organized. I summed the ‘1’s given to each recommendation for each school within the thematic categories. This produced nine composite variables for each school, which represented a count of the number of recommendations within each category that had been implemented. These nine composite variables will be referred to as ‘thematic safety scores’. I conducted descriptive analysis techniques to determine the proportion and average amount of

recommendations implemented within each category at all 23 colleges and the variance of these average recommendation levels within each category as well.

I lastly summed the number of all '1's for each school in order to create an aggregate outcome that depicts the total number of recommendations implemented at each of the community colleges. This total will be referred to as each school's 'campus safety score'. I then conducted descriptive analysis techniques to determine the average and variance of the campus safety scores for all 23 colleges. These varied descriptive analysis approaches helped answer RQ1 regarding the prevalence of campus safety policy implementation at Virginia community colleges.

Once I collected data for each of these institutional variables and I had tallied the campus safety scores for each college, I conducted two types of analyses in order to answer research question two. I first conducted a bivariate Pearson correlation analysis for those independent variables that met the underlying assumptions of this analysis technique (i.e. linear relationship between variables, no significant outliers, bivariate normality). I conducted this analysis for the independent variables institutional size, number of campuses and resources, and the dependent variable of campus safety scores. Since location was measured on a nominal scale and schools were placed into one of two categories (urban vs. nonurban), I conducted an independent-samples t-test to determine if there is a significant difference between urban and nonurban community colleges' average campus safety scores. These analyses helped answer whether institutional characteristics are associated with campus safety policy implementation across community colleges.

#### *Interview Data Analysis*

I analyzed the data collected from the notes and transcriptions of the open-ended interviews with community college campus safety officials in order to answer research question three. The number of interviews conducted (n=12) was small enough that I could analyze the interview data manually. I utilized a directed content analysis technique to code and analyze the interview data. A directed content analysis approach offers a number of advantages when the study at hand is helping build upon prior research that would benefit from deeper investigation (Hsieh & Shannon, 2005). Prior research helps guide the analysis by informing the researcher of potential variables of interest that arose in these previous studies. This prior research is also used to help formulate and operationally define the initial coding scheme (Hsieh & Shannon, 2005). A directed content analysis approach brings about a number of strengths and limitations to the study. This approach provides the opportunity for a developing research arena to continue to grow. It also operates from the assumption that researchers are not naïve in regards to the subject at hand, and prior work in this area is going to influence their perspectives. The many inherent biases present when analyzing data are acknowledged. These biases can also be viewed as limitation because researchers may seek information that confirms these biases rather than evidence that contradicts them. It is also possible that an extended focus on prior research can inhibit the researcher's ability to identify new themes emerging in the study that were not present in prior studies (Hsieh & Shannon, 2005). This directed content analysis approach guided the interview data analysis in a manner that recognized the potential influence of prior research as I searched for commonly identified influencing factors in campus safety that emerged across interviewees.

When analyzing the interview data, I specifically read through the notes and/or transcriptions from each of the 12 interviews. I began the analysis with various themes that I was

looking for in terms of whether they influenced the implementation of campus safety policies at Virginia community colleges or not. These themes were rooted in the prior research reviewed. I manually highlighted each influencing factor identified in the interviews and then coded them by first determining if they fit into a previously identified theme. If they did fit into any of the previously identified themes, I determined if they were a sub-category of a previously identified theme, or a new theme altogether that had not been highlighted in the literature. After conducting this analysis of all 12 interviews, I looked for the most commonly cited external and internal forces in terms of how they influenced the implementation of campus safety policies at the community colleges. The interviewees also provided context as to whether they perceive their campus safety policies as effective, the most pressing safety concerns they face, and the barriers that are preventing them from addressing those concerns.

I established an audit trail throughout the research process in order to establish trustworthiness of the study's findings (Hsieh & Shannon, 2005). The major aspects of this audit trail involved contextual documentation, methodological documentation, analytic documentation, and the personal response documentation. The contextual documentation included field notes that I took regarding the interviews conducted. These field notes included descriptions of the interview settings, the actions and behaviors of interviewees, and any occurrences during the interviews. The analytic documentation details the decisions that I made during the data analysis process in order to show the decision making paths I took when reading, comprehending, and analyzing the interview transcripts and notes. The personal response documentation reflects the critical nature of qualitative research in that my background knowledge and experience in this area, my approach to the study, and my responses to the data collected all contributed to the study findings that I described in the narrative. The response documentation details my self-

awareness of the inherent biases that I bring to this study and the steps I took to attempt to maintain a sense of neutrality throughout the process (Rodgers & Cowles, 1993). The interview data collected and analyzed provided important context to the quantitative results and helped supplement the study's core findings.

### **VCU IRB**

Before data collection commenced, I submitted the study to the Virginia Commonwealth University Institutional Review Board (IRB). This was a necessary step to assure the proper precautions were taken to protect the human subjects participating in the study. The study qualified for exemption and was approved by the VCU IRB (HM200009290). Interview participants were asked to provide their consent to participate in the study. The consent information is included in Appendix C.

## Chapter Four: Results

This chapter reports the results from the quantitative analysis of the data collected, as well as the major themes that emerged across the supplemental interviews. I answered the research questions involving the prevalence of campus safety policy implementation in the VCCS and if institutional variables are associated with policy implementation levels through analysis of the quantitative data collected from the website of each community college, follow-up phone calls, the State Council for Higher Education (SCHEV) website, the 2016 VCCS Financial Report, and the Integrated Postsecondary Data System (IPEDS). I used school websites, and primarily each college's Annual Security Report that is mandated by the *Clery Act* and published online, and follow-up calls to determine whether each community college had implemented each of the major post-Virginia Tech and post-Newtown campus safety recommendations. I then utilized the SCHEV website, IPEDS, the 2016 VCCS Financial Report, and each college's website to collect the institutional variable data needed to answer the second research question involving any associations between the amount of recommendations implemented at each college and institutional factors. After I collected the data, I analyzed it using SPSS technology and then used the results to select the colleges included in the interview portion of the study.

For the selection of the six case studies, I placed all 23 Virginia community colleges placed into three tiers (small, medium, large) based on their full-time enrollment (FTE) for the 2016-2017 academic year. I ordered the colleges within these tiers based on their campus safety score. For example, if a community college had implemented 31 of the 51 total recommendations, they received a score of '31' and were then ranked higher than a school within

their size tier that received a score of '29'. I then selected two colleges within each size tier, one with a high score and one with a low score. I also considered location of the six schools and I was able to select a college from each major geographic region of the state. These regions included Hampton Roads, Northern Virginia, Central Virginia, Southwest Virginia, and Southern Virginia.

After selecting the six institutions, I identified and contacted all individuals involved in campus safety at each of these selected colleges. These individuals work in various campus safety roles at their institution, including *Title IX*, threat assessment, emergency management, campus police/security, classroom and workplace safety, and administrative leadership. Some of these individuals only work within one realm of campus safety at their college, while others serve a number of campus safety roles at their institution. For example, a large community college may have individuals that only work within emergency management, while a small community college may have individuals that work within emergency management, threat assessment, and *Title IX*. I initially contacted 24 total individuals from these six colleges requesting participation in the interviews. Some individuals did not respond to my request, even after multiple follow-up contacts. Other individuals referred me to their superiors, while some directed me to individuals in other departments who they stated would be more informative in interviews of these nature.

A total of 12 of these 24 individuals across six community colleges agreed to participate in the interviews. Three individuals from the large community college with a high implementation score participated. One of these individuals works within emergency management, one is a campus police officer, and the third individual is the college's *Title IX* coordinator. Three individuals from the other large community college with a low



implementation score participated as well. Two of these individuals work within campus security, while the other individual focused upon classroom and workplace safety, as well as campus security. One individual from each of the mid-size community colleges agreed to participate in the interviews. The individual representing the high implementation mid-size institution is a campus police representative and also works within threat assessment. The individual from the low-implementation mid-size college is an interim Vice President, the Deputy *Title IX* coordinator, and head of the campus security department at that institution. Three individuals from the small size high-implementation community college participated in the interviews. One of these individuals is the threat assessment team coordinator, and the Deputy *Title IX* coordinator, and involved in the college's administrative leadership. Another individual is a Vice President at the college and also the emergency manager, while also serving a role in threat assessment. The third individual is the *Title IX* coordinator while also serving a role in the college's administrative leadership. The final institution, the low implementation small college, had one interview participant that represented the college's campus police force. I transcribed each interview and searched for major themes that emerged across these 12 interviews.

*RQ1: What is the prevalence of campus safety policy implementation across Virginia community colleges?*

I determined the prevalence of campus safety policy implementation in the VCCS by analyzing the extent to which the community colleges have implemented the 51 major post-Virginia Tech and post-Newtown recommendations identified in the 'Campus Safety Model'. Virginia community colleges on average have implemented 28.57 (56%) of the 51 total recommendations. The total recommendations implemented range from a high of 40 (78% of total recommendations implemented) at two institutions to a low of 11 (22% of total

recommendations implemented) at one institution, with a median and mode of 29 and a standard deviation of 7.44. Seven different institutions have implemented 30-39 total recommendations (59%-78% of total recommendations implemented), eleven different institutions have implemented 20-29 total recommendations (39%-59% of total recommendations implemented), and two institutions have implemented 12-19 total recommendations (24%-37% of total recommendations implemented). Majority of the institutions observed (18) have implemented over half of the total recommendations. Table 5 demonstrates these campus safety score results.

*Table 5. Campus Safety Scores in the VCCS (N=23)*

<b>Mean</b>	<b>Median</b>	<b>Standard Deviation</b>	<b>Min.</b>	<b>Max.</b>
28.57	29	7.44	40	11

*\*All measures are based on the campus safety scores in the 23 Virginia community colleges.*

In order to measure these campus safety scores, I first analyzed the results at the individual recommendation level in order to determine the extent to which the 23 Virginia community colleges have implemented each major recommendation. I present the results of each individual recommendation in Table 6. Some major takeaways emerged from this individual recommendation level analysis. All 23 colleges have implemented some of the major recommendations, including: establishing a threat assessment team, establishing and publishing mechanisms for reporting threats of violence, having an operations plan that includes plans for cancelling classes and closing campus, implementing an all-hazards emergency response plan, having text message notifications, and having multiple, redundant technology communication systems. On the other end of the spectrum, some recommendations have been implemented by less than 25% of the community colleges, including: having bullying and cyberbullying prevention programs (21.7%), having a plan for electronic access during an emergency (21.7%), implementing emergency notification sirens on-campus (17.4%), having short- and long-term

counseling available to first responders, students, faculty, and staff (13%), conducting a vulnerability assessment annually (8.7%), having a trained behavioral health trauma response team on-campus or in the community (8.7%), and ensuring that law enforcement/security officials and medical staff are designated school officials with an educational interest in school records (4.3%). Over half of the colleges currently include public safety in the orientation process (78.3%), have implemented emergency all boxes on-campus (78.3%), and employ a police force (65.2%). Less than half of the colleges train for active shooters (43.5%), have a community emergency response team (CERT) (39.1%), and include a victim services section in their emergency management plan (26.1%). These results display the range of implementation that has occurred in the VCCS between the various campus safety recommendations.

*Table 6. Implementation Rate of Campus Safety Recommendations by Virginia Community Colleges (N=23)*

<b>Recommendation</b>	<b>Number of Schools Implemented</b>	<b>Percentage of VCCS Implemented</b>
<b>Early Detection and Prevention</b>		
Publish mechanism for reporting threats of violence	23	100%
Threat Assessment Team	23	100%
Multiple anonymous reporting systems	14	60.9%
Suicide prevention	9	39.1%
Bullying, cyberbullying prevention	5	21.7%
Conduct vulnerability assessments annually	2	8.7%
<b>Mental Health Services</b>		
System connects students to medical and counseling services	15	65.2%
Establish MOU with local community services boards	10	43.5%
Educate to recognize/respond to mental illness	7	30.4%
<b>Physical Security</b>		
Colleges single exit consider alternative exit/entrance	23	100%
Lockable doors that cannot be chained shut	17	73.9%
Install cameras throughout out campus	14	60.9%
Review lighting and potential weaknesses	11	47.8%
Equip classrooms with emergency notification capabilities	10	43.5%
Plan for electronic access during emergency	5	21.7%
<b>Drills and Training</b>		
Conduct emergency drills annually	17	73.9%
Annual training about responding to emergencies	14	60.9%

Training identifying at-risk students	12	52.2%
Train personnel regarding privacy/information sharing laws	10	43.5%
<b>Campus Police/Security</b>		
Have authority/capability to send an emergency message	17	73.9%
Implement campus police force	15	65.2%
Police/security head be member of TAT	14	60.9%
Armed/trained in the use of personal or specialized firearms	12	52.2%
MOU with local law enforcement	11	47.8%
Train for active shooters	10	43.5%
Mission statement focus on crime prevention role	7	30.4%
<b>General Campus Policies</b>		
All-hazard emergency management or response plan	23	100%
Operations plan for cancelling classes or closing campus	23	100%
Participate in a multi-disciplinary response to sexual assault	22	95.7%
Comply with <i>Clery Act</i>	20	87%
Establish policy on weapons on campus	19	82.6%
Include public safety as part of the orientation process	18	78.3%
Have a designated emergency manager	12	52.2%
Ensure law enforcement/medical staff are designated school officials with an educational interest in school records	1	4.3%
<b>Mass Notifications</b>		
Adopt emergency and mass notification system:	-	-
-Text messaging notifications	23	100%
-Websites that can operate through emergencies	23	100%
-Emergency call boxes	18	78.3%
-Social network websites that notify of emergencies	13	56.5%
-Electronic signs at entrances of campuses	7	30.4%
-Sirens	4	17.4%
Multiple, redundant technology communication systems	23	100%
Interoperable communication system with all area responders	19	82.6%
Educate/train about mass notification systems and their roles and responsibilities in an emergency	14	60.9%
<b>Emergency Response</b>		
Develop an active shooter response plan	17	73.9%
MOUs for mutual aid responses to a crisis	13	56.5%
Community Emergency Response Teams (CERT)	9	39.1%
Establish an Emergency Operations Center	6	26.1%
Trained behavioral health trauma response team	2	8.7%
<b>Victim Services</b>		
Create victim assistance capabilities	16	69.6%
Emergency management plans include a section on victim services	6	26.1%
Short- and long-term counseling available to first responders, students, staff, faculty, and university leaders	3	13%

The extent of implementation of individual recommendations among the community colleges is put in better context when viewing the implementation rate of recommendations mandated by federal and/or state legislation. For example, state legislation mandates that all Virginia colleges and universities create and implement a threat assessment team at their institution. The results indicate that all Virginia community colleges currently comply with this mandate. In addition, all U.S. colleges and universities that receive federal financial aid are mandated to comply with all tenants of the *Clery Act*; however, I found three community colleges that currently do not comply with this federal mandate. This non-compliance resulted from any part of the *Clery Act* that these colleges were not following, such as not publishing their annual security and safety report in a form that is accessible for the campus community. While all or nearly all of the colleges have implemented mandated recommendations, there was large variance in the implementation of non-mandated recommendations. For example, recommendations, such as conducting a vulnerability assessment, have often been included in federal and state guidance for colleges and universities to improve their emergency preparedness; however, only two of the 23 community colleges (8.7%) conduct these assessments annually. On the other end of the spectrum, it is only recommended that colleges consider alternate exits and entrances to their campus in case of an emergency; however, all of the 23 community colleges have at least considered alternate entrances and exits if an emergency were to occur. This context helps display that while mandates may be the best predictor of high implementation levels among the community colleges, other factors are involved in determining if a recommendation becomes widely implemented or not.

I next broke the results for RQ1 down according to major thematic categories and determined each college's thematic safety scores. The categories of the highest proportion of

implemented recommendations are 'General Campus Policies' (Proportion of implementation = 75%), followed closely by 'Mass Notifications' (Proportion of implementation = 70%). The categories of the lowest proportion of recommendations implemented are 'Emergency Response' (Proportion of implementation = 41%) and 'Victim Services' (Proportion of implementation = 36%). Table 7 displays the results for each thematic category.

Table 7. Thematic Categories of Campus Safety Recommendations Implemented by Virginia Community Colleges (N=23)

Thematic Category of Recommendations	Proportion of Recommendations Implemented within Category	Average Thematic Safety Scores	Median	Std. Dev.	Min.	Max.
<b>Early Detection and Prevention Total Recommendations: 6</b>	55%	3.30	3	0.97	2	5
<b>Mental Health Services Total Recommendations: 3</b>	46%	1.39	1	0.89	0	3
<b>Physical Security Total Recommendations: 6</b>	41%	2.48	2	1.56	1	5
<b>Drills and Training Total Recommendations: 4</b>	58%	2.30	2	1.15	0	4
<b>Campus Police Total Recommendations: 7</b>	53%	3.70	4	2.57	0	7
<b>General Campus Policies Total Recommendations: 8</b>	75%	6.00	6	1.24	3	8
<b>Mass Notifications Total Recommendations: 9</b>	70%	6.26	6	1.57	4	9
<b>Emergency Response Total Recommendations: 5</b>	41%	2.04	2	1.19	0	4
<b>Victim Services Total Recommendations: 3</b>	36%	1.09	1	0.90	0	3
<b>Total Recommendations: 51</b>	56%	28.57	29	7.44	11	40

*\*This data represents the total amount of major campus safety recommendations implemented at all 23 Virginia community colleges.*

These results for RQ1 depict the extent of implementation of major campus safety recommendations among Virginia community colleges. The various modes in which these results

are displayed help describe the rate of implementation of each individual recommendation, the variance in implementation according to the thematic classifications of which these recommendations, the average rate of implementation of all recommendations among Virginia community colleges, and the variance in implementation rates across these colleges. The results for research question two help provide further context to these results as they display if these policy implementation levels are associated with institutional characteristics.

*RQ2: Are institutional characteristics associated with differences in the amount of campus safety policies and practices implemented across community colleges?*

I selected the institutional variables for this analysis based on guidance from prior literature and modified them to fit the current study and population of interest. The institutional variables selected were institutional size, number of campuses, resources, and location. The institutional variable data exhibits variance among Virginia community colleges (see Table 8). Institutional size data indicates that the smallest Virginia community college served 705 students in the 2016 fall semester, while the largest served 50,835 students, (Mean = 7,249, Std. Dev. = 10,636.15). The number of campuses data indicates that these community colleges have as few as one campus and as many as six (Mean = 1.87, Std. Dev. = 1.33). The first of two resource variables, state and local grants, indicates that community colleges received anywhere between \$5,981 and \$1,611,285 in state and local grant funding for the most recently reported funding year (Mean = \$230,720.09, Std. Dev. = \$365,821.42). The community colleges' total operating revenue for the most recently reported year ranges from \$1,836,417 to \$168,788,204 (Mean = \$20,537,709.43, Std. Dev. = \$34,724,888.10). The location data displayed that five Virginia community colleges serve urban areas and 18 serve nonurban areas. The only missing data was for the state and local grants variable, as the 2016 VCCS financial report did contain any data for



the amount of state and local grant funding at one of the community colleges. The institutional and campus safety score data was uploaded and statistical analysis techniques were executed in SPSS. Table 8 presents the independent variable data used to answer RQ2.

*Table 8. Virginia Community Colleges' Institutional Characteristic Data (N=23)*

<b>Variable</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min.</b>	<b>Max.</b>	<b>Sample Size</b>
Institutional Size	7,249	10,636.15	705	50,835	23
Number of Campuses	1.87	1.33	1	6	23
Resources – State and Local Grants	230,720.09	365,821.42	\$5,981	\$1,611,285	22
Resources – Total Operating Revenue	20,537,709.43	34,724,888.10	\$1,836,417	\$168,788,204	23

*\*Location – 18 nonurban campuses and 5 urban campuses*

In order to answer RQ2, I first conducted a bivariate Pearson correlation analysis to determine if any correlations exist between institutional size, resources, or number of campuses, and campus safety scores. The 2-tailed test yielded no statistically significant correlations at the 95% statistical significance level between institutional size and campus safety scores ( $r=.373$ ,  $n=23$ ,  $p=.080$ ), total operating revenue and campus safety scores ( $r=.377$ ,  $n=23$ ,  $p=.077$ ), state and local grants and campus safety scores ( $r=.409$ ,  $n=22$ ,  $p=.059$ ), or number of campuses and campus safety scores ( $r=.292$ ,  $n=23$ ,  $p=.177$ ). The correlations that approached statistical significance were those between institutional size ( $p=.080$ ), both resource ( $p=.077$ ,  $p=.059$ ) variables, and campus safety scores. They were statistically significant at the 90% level. These associations represented a relatively weak positive association when looking at their Pearson correlation coefficients ( $r=.377$ ,  $r=.377$ ,  $r=.409$ ). The 1-tailed test did yield statistically significant correlations at the 95% statistical significance level between institutional size and

campus safety scores ( $p=.040$ ), total operating revenue and campus safety scores ( $p=.038$ ), state and local grants and campus safety scores ( $p=.029$ ). This test also yielded a statistically significant association between number of campuses and campus safety scores at the 90% significance level ( $p=.088$ ). Table 9 presents these results.

*Table 9. Associations Between Institutional Characteristics and Campus Safety Recommendations Implemented (N=23)*

<b>Independent Variables</b>	<b>Pearson Correlation (r)</b>	<b>Sig. (2-tailed) (p)</b>	<b>Sig. (1-tailed) (p)</b>	<b>Sample Size (n)</b>
Institutional Size	.373	.080	.040	23
Resources (Total Operating Revenue)	.377	.077	.038	23
Resources (State and Local Grants)	.409	.059	.029	22
Number of Campuses	.292	.177	.088	23

*\*Dependent Variable – Campus Safety Score*

I next conducted an independent-samples t-test to assess the association between community colleges' location and their campus safety scores. The 'location' variable could not be analyzed using a bivariate Pearson correlation test because it is a nominal independent variable in which all schools were classified as either urban or nonurban. The independent-samples t-test compared the colleges' campus safety scores at colleges located in urban versus nonurban environments. There was not a statistically significant difference in the campus safety scores for urban community colleges ( $M=33.40$ ,  $SD=5.41$ ,  $n=5$ ) and nonurban community colleges ( $M=27.22$ ,  $SD=7.70$ ,  $n=18$ ;  $t(21)=1.67$ ,  $p=.110$ ). Table 10 presents the results from this analysis.

*Table 10. Association Between College Location and Campus Safety Recommendations Implemented (N=23)*

<b>Location</b>	<b>Mean (M)</b>	<b>Standard Deviation (SD)</b>	<b>t</b>	<b>df</b>	<b>Sig. (2-tailed)</b>	<b>Sample Size (n)</b>
Urban	33.40	5.41	1.67	21	.110	5
Nonurban	27.22	7.70				18

*\*Dependent Variable – Campus Safety Score*

These two statistical analysis techniques help answer RQ2 by revealing some support for correlations between institutional characteristics and the campus safety scores. There was support for larger community colleges, colleges with more campuses, and more resource plentiful institutions implementing slightly more major campus safety recommendations. Analyses of the quantitative data were largely descriptive in nature and preclude robust statistical analysis. The quantitative analyses, while largely descriptive, depict the prevalence of campus safety policy implementation in Virginia community colleges. The remaining research question required open-ended interviews.

*RQ3: What factors influence decision makers as they implement campus safety policies?*

I utilized the data collected from the open-ended interviews with individuals serving in various campus safety roles to address the remaining research question. Participants provided a wide range of perspectives as a result of their varied roles in campus safety, their time served in these roles, their prior work/training experience, and their employment at community colleges of varied sizes and locations throughout the state. Some participants were former law enforcement officers, some have a range of certifications in emergency preparedness, some are versed in the intricacies of new *Title IX* demands, and some have backgrounds in varied fields such as accounting and student services and are experiencing their first foray into campus safety. Some participants are tasked with one specific aspect of campus safety, while others handle a range of

campus safety tasks. For example, one participant may primarily focus upon the physical security aspect of their campus, while others handle *Title IX* issues, threat assessment, and arrange drills and training for the campus community, among a number of more typical higher education administrative duties. The participants also provided varied perspectives as a result of the location of their community college. The six case study colleges represent all major geographic regions in the state and they serve colleges ranging from densely populated urban areas to highly populated suburban locations and sparsely populated rural areas. These factors produced a diverse sample of college employees with varied perspectives.

I transcribed each interview and searched for the major themes that emerged across them. The low sample size (n=12) allowed me to read through, highlight, and manually analyze the interview responses. I used themes previously identified in the literature to guide the initial analysis. For example, when a respondent cited an external driver of change, I determined whether this driver of change had been previously identified and defined in the literature, if it was a sub-category of a previously identified theme, or if it was a new thematic category not previously identified. I then searched for new themes or any sub-categories of previously identified major themes that emerged across these 12 interviews.

Before inquiring about the factors that influence campus safety policy change, I wanted to build upon prior literature and see if the interviewees believed that the policies they have currently in place are effective at keeping their campus safe. Nearly all participants (n=10) responded 'Yes' that their policies and practices in place are effective. The reasons given for this confidence included improvements in response to new federal and state mandates, proactive leadership, collaboration and communication, a decline in officially reported campus crime statistics, successful handling of emergency drills, and proper handling of 'imminent' threats.

Half of these individuals provided qualifiers with their ‘Yes’ response. They tempered their confidence because of potential physical security failures during an emergency, the need to continually update emergency notifications, and the general unpredictable nature of emergencies. Two participants responded that they did not feel their policies and practices are effective, one of which came with qualifiers. These individuals lacked confidence because of training weaknesses, an increasing number of untrained adjunct instructors, and the discrepancy between passing an audit and actually making the campus safer. Table 11 details these results.

*Table 11. Perceived Effectiveness of Campus Safety Policies (n=12)*

Response	Yes	Yes with qualifiers	No	No with qualifiers
Number of Individuals	5	5	1	1
Number of Schools	3	5	1	1
Size Tiers Represented	Large (2) Medium (1)	Large (2) Medium (1) Small (2)	Small (1)	Small (1)
Campus Safety Department Represented	Administrative Leadership Emergency Management Safety/Security TAT Title IX	Administrative Leadership Campus Police Security/Safety	Administrative Leadership Title IX	Administrative Leadership Emergency Management Title IX

*\*Some individuals serve multiple roles, such as both Title IX and Administrative Leadership.*

*\*TAT = Threat Assessment Team Coordinator*

I then asked each interviewee about the factors that influence them and their institution in the creation and implementation of campus safety polices. Several common influencing factors outside of the college (external) and within the college (internal) emerged across responses. The major factors identified included federal and state mandates, college leadership, and internal safety/security committees. The following paragraphs detail responses regarding how these factors influence the campus safety policy creation and implementation process.

Federal and state mandates were the most frequently recognized external driver of change. All interview participants highlighted mandates as an important influencing factor in campus safety change and most recognized it as the biggest driver of change. The subcategories of “compliance with mandates”, when describing how their college can be fined if they do not comply with mandates, and “unfunded mandates”, when describing mandates from the state or federal government that are not accompanied with implementation funding, emerged as well. One large college participant stated, “If a change is not mandated, we do not do it. Taskforce and other recommendations are only best practices and not implemented unless mandated.” This sentiment was echoed throughout interviews, as participants noted that they want to make more changes but with the reality of limited resources, they only make mandated changes. A large college participant stated, “We are wasting precious resources to comply with federal and state mandates and regulations so we avoid being fined.” This individual went on to describe frustrations with federal legislation, “The growing *Clery Act* requirements are just an exercise and not actually helping prevent crime on-campus.” Another individual highlighted positive aspects of mandates, such as forcing campus security officers to attend trainings that would “not be sought if they were not mandated.” Another participant described that most laws and regulations are created for traditional four-year colleges with one campus. Mandates are a more important driver of change than leadership because both proactive and reactive leaders respond to them in order to avoid financial sanctions.

College leadership emerged as the most important internal factor as nearly all participants highlighted it. Four participating institutions experienced a recent leadership change, and participants credited their new president with being more proactive toward addressing safety needs. Respondents described campus safety as being “top down” in that leadership sets the tone

for whether safety is taken seriously at that college or not. A campus police official described leadership discrepancies, “My colleagues at other community colleges complain that their president does not take safety serious. They are constantly frustrated because their recommendations are rejected and it gets to the point where they give up on asking for changes.” Interviewees also highlighted the climate of when an administrator is trained - “Newer presidents and administrators tend to focus on safety more and take it more serious because their formative years took place after Virginia Tech. Old school administrators that had their formative years pre-Virginia Tech and during times of budget constraints often do not put as much value on safety. They run the college in a fiscally conservative way.” Another participant described how their new president proactively addresses safety, while the predecessor thought the “fairy tale” of no emergencies would continue, negating the need for a proactive approach.

The practical impact of the next most cited factor, internal safety/security committees, varied across participants. Administrative leaders shared positive views of these committees because they handle long-term security issues and prioritize security needs of the college based on recommendations of the campus community. Other participants, especially those in a campus police or security role, were more skeptical. They think that committees take too long to form, meet, make recommendations, and consider writing new policy. Participants were also frustrated that committee members often have little or no experience in safety. Internal committees play a role in safety changes; but, they may be just as successful at hindering change as driving it.

Several other minor influencing factors emerged across a handful of interviews as well. These factors included financial resources, collaboration with external agencies, major events, best practices and recommendations, overburdened staff lacking a background in safety, and college size. In regards to financial resources, participants indicated that state-provided resources

have been decreasing for years and many of the colleges are facing decreasing enrollment totals, which has further restricted state financial assistance. Safety needs are tabled in order to address more pressing educational needs in the absence of adequate funding. Collaboration with external agencies emerged as a new theme not present in the literature, and it appeared to be unique to community colleges because they often rely on community agencies to bridge gaps in their safety needs that they cannot address internally due to limited resources. Major events were a prevalent cited theme commonly cited in the literature; however, only a handful of interviewees described them as an influencer of change in the community colleges. These participants specifically cited Virginia Tech and an active shooter in the VCCS as the major events driving change at their institution. The interviewees rarely mentioned best practices and a recommendation despite their frequent citation in the literature because the budget largely dictates if a college goes beyond implementing mandated changes. The individuals that highlighted the issue of overburdened staff lacking a background in safety made a direct connection to a lack of financial resources. As one small college participant stated, “We have people doing safety and security roles with no previous experience in that area. The administrator handling emergency preparedness has a background in accounting. I have a background in student services and affairs. Trainings help us learn what we need to know but we cannot attend all the trainings we would like because we can’t afford them.” College size was the final influencing factor highlighted across a handful of interviews. Small college representatives cited positive aspects of their size including being “more nimble” and “quicker” in terms of making policy changes and having a direct line to administration, but they also recognized limitations, such as having a small budget and fewer safety personnel. Large college representatives argued that their size is important because they have separate divisions dedicated to physical security, emergency management, and *Title IX*.



Each of these factors plays a unique role in influencing community colleges' campus safety policies. Some have stronger influence than others, while some rely on an interaction between various factors in order to effectively impact any changes that occur. Tables 12 and 13 detail the individuals that cited each of these driving factors.

*Table 12. External Drivers of Campus Safety Change in Virginia Community Colleges (n=12)*

External Factors	Mandates	Financial Resources	Collaboration with External Agencies/Stakeholders
Number of Individuals	12	5	5
Number of Schools	6	4	3
Size Tiers Represented	Large (2) Medium (2) Small (2)	Large (1) Medium (1) Small (2)	Large (1) Medium (1) Small (1)
Campus Safety Department Represented	Title IX Campus Security Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership	Title IX Campus Security Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership	Title IX Campus Security Campus Police Administrative Leadership

*Table 13. Internal Drivers of Campus Safety Change in Virginia Community Colleges (n=12)*

Internal Factors	Leadership	Safety/Security Committee
Number of Individuals	11	10
Number of Schools	6	5
Size Tiers Represented	Large (2) Medium (2) Small (2)	Large (2) Medium (2) Small (1)
Campus Safety Department Represented	Title IX Security and Safety Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership	Title IX Security and Safety Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership

I concluded each interview by asking participants about the current safety concerns facing their college and barriers to addressing these concerns. The two most commonly cited concerns, lack of training and unfunded mandates, were frequently addressed earlier in the interviews when participants described factors that influence campus safety policy change. Individuals that highlighted a lack of training want to have more trainings with faculty and students, but they recognized the difficulties of disseminating information to a transient student body across a number of campuses. Individuals that cited unfunded mandates as a concern believe they are having a more adverse impact on community colleges than four-year institutions. This is due to resource discrepancies and the fact that most laws and regulations are written for four-year institutions that have one campus with a definable boundary. Small colleges are particularly burdened by unfunded mandates as they have administrators serving traditional roles, while also handling nearly campus safety demands. For example, one small college administrator serves as the Director of Human Resources and the *Title IX* Coordinator, while another individual serves as a Vice President and the school's Emergency Manager. A new concern that emerged across responses was a lack of police force to handle internal issues and investigations. A few individuals also discussed concerns involving the unique nature of community colleges. One individual encapsulated this concern when stating, "Balancing the open nature of a college and safety is difficult, and this is especially true for community colleges, which have students and people from the community often on-campus. The need to potentially lock the campus down is one of the biggest challenges." Participants also worried that they do not have control of off-campus centers because they do not own the buildings.

The barriers that participants cited were each directly related to the factors that influence policy change. These barriers were a lack of resources, lack of personnel/safety divisions, and

lack of support from leadership. Most participants recognized lack of resources as the barrier to addressing their safety concerns. A large college representative bluntly stated, “It all comes down to resources,” and a lack of it prevents them from hiring personnel, installing new security technology, engaging in state trainings, and so on. An individual stated, “If we asked the president for more money to hire an Emergency Manager and it happened, we know this would result in money being taken from somewhere else and someone losing their job. Jobs are on the line and these are peoples’ lives you are dealing with.” Participants then connected a lack of personnel and safety divisions directly to financial restrictions. In regards to lack of leadership support, participants referred to both school and system leadership. One individual stated, “All 23 community colleges are doing different things and there is limited or no direction from the system office. It is left up to the colleges to run the show.” Tables 14 and 15 detail these safety concerns and barrier responses.

*Table 14. Most Pressing Concerns for Virginia Community Colleges (n=12)*

Most Pressing Concerns	Lack of Training	Unfunded Mandates	No Police Force
Number of Individuals	6	5	4
Number of Schools	4	2	3
Size Tiers Represented	Large (2) Medium (0) Small (2)	Large (1) Medium (0) Small (1)	Large (1) Medium (1) Small (1)
Campus Safety Department Represented	Title IX Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership	Title IX Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership	Title IX Security and Safety Administrative Leadership

*Table 15. Barriers Preventing Community Colleges from Addressing Campus Safety Concerns (n=12)*

Barriers	Lack of Resources	Lack of Personnel/Safety Divisions	Lack of Support from Leadership
Number of Individuals	10	6	5
Number of Schools	6	3	4
Size Tiers Represented	Large (2) Medium (2) Small (2)	Large (2) Medium (0) Small (1)	Large (2) Medium (0) Small (2)
Campus Safety Department Represented	Title IX Security and Safety Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership	Title IX Security and Safety Campus Police Threat Assessment Coordinator Emergency Management Administrative Leadership	Title IX Security and Safety Campus Police Administrative Leadership

### Summary

The quantitative data analysis and the supplemental information collected from the interviews answered the proposed research questions. Basic descriptive statistical analysis indicated that on average, Virginia community colleges have implemented over half (28.57) of the major post-Virginia Tech and post-Newtown campus safety recommendations. Recommendations that can be described as ‘General Campus Policies’ and ‘Mass Notifications’ were the most frequently implemented, while ‘Victim Services’, ‘Physical Security’, and ‘Emergency Response’ recommendations were the least implemented. Basic quantitative analyses indicated a weak positive statistically significant association between college size and their financial resources and campus safety scores.

The interview data collected answered the final research question, but it largely serves as confirmatory of, and an additional layer of context to, the quantitative results. I conducted open-

ended interviews with college officials that have a role in campus safety at six community colleges of varied sizes and implementation scores from all major geographic regions of Virginia. The interviews indicated that nearly all participants perceive their campus safety policies as effective. The interviews also indicated that the most important external factors driving the creation and implementation of these campus safety policies are federal and state mandates, while the most important internal factors are leadership and internal committees. Participants highlighted an interconnection between external and internal factors that work together, and sometimes against each other, to produce institutional-level campus safety policy change. The interviews also revealed that the most pressing concerns facing community colleges are a lack of training, unfunded mandates, and a lack of a campus police force; however, a lack of resources, properly equipped personnel, and support from leadership are preventing these concerns from being addressed. The quantitative data and interview responses give insight into the campus safety policies in place in Virginia community colleges and the forces that helped lead to their implementation.

## Chapter Five: Discussion

This study assessed the prevalence of campus safety policy implementation in Virginia community colleges, determined if variation in implementation of major campus safety recommendations were associated with institutional factors, and highlighted the factors that influence the creation and implementation of campus safety policies in community colleges. The results also provided detail about college officials' perceived effectiveness of their policies and the safety concerns facing community colleges, as well as the barriers that exist to addressing them. I gathered data on the campus safety policies and practices in Virginia community colleges from each college's website and follow-up phone calls to school officials. I obtained institutional variable data from the State Council of Higher Education for Virginia (SCHEV) website, the Integrated Postsecondary Education Data System (IPEDS), the 2016 VCCS Financial Report, and individual college websites. I used open-ended interviews to assess the factors that influence campus safety policy formation and implementation, perceived effectiveness of the policies, and concerns that exist but are not being addressed due to various barriers.

I measured the prevalence of campus safety policy implementation in Virginia community colleges by collecting data on the extent to which they have implemented major post-Virginia Tech and post-Newtown recommendations that are contained in national and state-level reports. I gave each college a 'campus safety score' that indicated how many of the 51 total major recommendations they had implemented, which I analyzed using basic descriptive statistical techniques. This was the first study build and use this campus safety model to determine the prevalence of campus safety implementation among community colleges. I then used these scores and the data collected on each college's size, number of campuses, resource

level, and location to determine if colleges' institutional characteristics were correlated with their safety scores. I analyzed this data using a bivariate Pearson correlation and independent samples t-test.

I analyzed the interview responses in search of major themes that emerged across interviewees in regards to the factors that influence the implementation of campus safety policies in Virginia community colleges. The interviews revealed the external and internal factors that influence campus safety policy creation and implementation, how many participants perceive their safety policies as effective, and the safety concerns/barriers present at community colleges. This chapter summarizes the descriptive quantitative and interview results, explains how the findings reflect on prior literature, delves into the policy implications, addresses the study's limitations, and identifies the next steps for future researchers.

### *Analysis of Findings*

The results of this study provide a comprehensive picture of the prevalence of campus safety policy implementation in Virginia community colleges. The quantitative portion of the study was built upon the work of previous researchers (DeLaTorre, 2011; Schafer et al., 2010; Seo, Torabi, & Blair, 2012; Sulkowski & Lazarus, 2011) that emphasized the importance of assessing institutional-level campus safety responses in the post-Virginia Tech world. The quantitative analysis also expounded upon DeLaTorre's (2011) speculation of associations between major post-Virginia Tech recommendation implementation levels and institutional characteristics. The interview results provided context to the quantitative findings in terms of what factors drove the implementation of these policies, the perceived effectiveness of the policies, and safety concerns and barriers that currently exist in the community colleges.

### *Quantitative Findings*

The quantitative results indicate that, on average, Virginia community colleges have implemented slightly over half of the 51 major post-Virginia Tech and post-Newton campus safety recommendations detailed in the ‘Campus Safety Model’. This is the first study to use this model which makes it difficult to determine how the amount of recommendations implemented by Virginia community colleges stacks up against colleges and universities across the country. DeLaTorre (2011) found that Texas community colleges had fallen short in implementing major recommendations detailed in the post-Virginia Tech report, *Mass Shootings at Virginia Tech: Addendum to the Report of the Review Panel*, when compared to four-year colleges and universities. DeLaTorre (2011) only utilized a handful of recommendations from one report so this study’s findings should not be compared to DeLaTorre’s (2011) results.

Several outcomes helped answer the first research question regarding the prevalence of campus safety policy implementation among Virginia community colleges. One of these outcome variables was the campus safety score given to each college, which displayed the aggregate count of the 51 campus safety recommendations that have been implemented at each college. These campus safety scores displayed a large gap between community colleges with the most and least amount of recommendations implemented, ranging from a low campus safety score of 11 at one college to a high campus safety score of 40 at two other colleges. Some Virginia community colleges are operating under a campus safety model that has yet to evolve along with emerging best practices, while others have progressed more extensively.

The next outcome used to answer research question one was the 51 binary variables, which indicated whether each community college had implemented each of the 51 campus safety recommendations or not. Several recommendations have been implemented at all 23 Virginia community colleges. These recommendations include the implementation of a threat assessment



team, publishing reporting options for threats of violence, having a plan to cancel classes and close campus, and having text message campus alert notifications. Several recommendations have also been implemented by only a handful of community colleges. These recommendations include having bullying and cyberbullying prevention mechanisms, having short and long term counseling available to campus and community individuals, conducting vulnerability assessments annually, and having a trained behavioral health trauma response team.

The final outcome used to answer research question one was the thematic safety scores. These scores were nine thematic nine composite variables for each college, which displayed the extent to which they have implemented the recommendations within major thematic categories. This outcome provided important detail about how community colleges have approached campus safety post-Virginia Tech in a restrictive budgetary environment. Community colleges have most frequently implemented ‘General campus safety policy’ recommendations (i.e. establishing a weapons policy), followed closely by ‘Mass notifications’ recommendations. These results are not surprising since many of the general policy recommendations are now mandated by federal or state law (i.e. comply with the *Clery Act*) and mass notification technology is a tangible safety improvement that has appeared in nearly all post-Virginia Tech literature and best practices published. Recommendations currently mandated by federal and/or state level had high implementation levels (i.e. threat assessment teams); however, there were some community colleges non-compliant with mandates (i.e. complying with the *Clery Act*) despite the financial penalties that could arise from an audit that discovers the non-compliance.

The most surprising result within the thematic safety scores was that ‘Physical security’ recommendations were one of the least frequently implemented among the community colleges. Physical security improvements have frequently been prioritized by four-year institutions

because of their tangible nature and the fact that an incident like Virginia Tech unveiled physical security weaknesses that could be immediately addressed. Emergency response and victim service recommendations have also been implemented at low levels among the community college. This result was expected because many community colleges do not have an emergency management division, so they assign responsibilities to individuals that have other administrative duties. Community colleges also often request that these emergency management and victim service demands be handled by community providers due to a lack of resources and expertise in-house.

The quantitative results provide potential support for DeLaTorre's (2011) speculation that campus safety implementation differences are correlated with institutional factors. I used prior literature as a guide for selecting which institutional variables to test (Jackson, 2009; Schafer et al., 2010; Seo, Torabi, & Blair, 2012), and then executed a bivariate Pearson correlation and independent-samples t-test analysis. I analyzed the relationship between institutional size, number of campuses, resource level, and location and the total amount of recommendations implemented at each college. The institutional size and resource level variables were significant at the 90% level in the 2-tailed test and the 95% level in the 1-tailed test. Number of campuses was also significant at the 90% level in the 1-tailed test. All of the correlation coefficients were small and positive. The results indicate that bigger community colleges are slightly more likely to have implemented more of the major campus safety recommendations, which Jackson (2009) also found but without statistical significance. Results also indicate that community colleges with more resources and more campuses are slightly more likely to have implemented more of these recommendations.

#### *Interview Findings*

The interviews provided context and depth to the quantitative findings. The fact that these interviews were conducted with community college officials that serve a variety of roles in their institution's campus safety program (i.e. Title IX, Emergency Management, Administrative Leadership) addressed a gap identified by Jackson (2009), who only garnered insight from chief security officers, and did not include other college safety officials' perspectives. The interview results provided context and depth to the quantitative findings by providing insight into the factors that influenced community colleges to implement major post-Virginia Tech and post-Newton recommend policies and practices.

The interview responses regarding the perceived effectiveness of the policies in place built upon the work of researchers (DeLaTorre, 2011; Kerkhoff, 2008; Seo, Torabi, & Blair, 2012) that have often found college administrators do not view their safety policies as effective. Nearly all interview participants in this study felt confident in their policies' effectiveness. Their reasoning for this positive outlook included mandated improvements and a decrease in officially reported campus crimes. Participants that either did not view their policies as effective or had reservations about their effectiveness cited concerns such as difficulties in training a transient campus community and the unpredictable nature of emergencies. These results contrast previous studies that found a disconnect between policy implementation and perceived effectiveness.

The interviews also revealed external and internal factors that influence community colleges to implement recommended campus safety policies. These findings continued Jackson's (2009) work, who studied the impact that state-level factors in Ohio had on the implementation of campus safety policy recommendations among state colleges. The inclusion of internal factors in the analysis filled a gap in the research, as Jackson (2009) recommended that future researchers gauge the role that a college's internal factors play in the campus safety policy

implementation process. Interviewees indicated that the most important factor influencing campus safety policy change in Virginia community colleges is federal and state mandates. Jackson (2009) found that Ohio colleges took a proactive approach to making campus safety changes; however, Virginia community colleges seem to be more reactive to external mandates. In fact, participants stated that they must reserve limited resources for mandated policy changes to assure that their college is in compliance if an audit were to occur. The most important internal factor driving policy change is college leadership. Specifically, participants from colleges with a new president described leadership that is proactive in making needed safety changes, while other participants described leadership that only encourages policy change when its mandated. Other factors driving change include internal committees, financial resources, major events, overburdened staff, and college size. A handful of participants indicated that best practices and recommendations have a small amount of influence but only when the college has adequate resources. This mildly contradicts Jackson's (2009) finding that taskforce recommendations had a "moderate to strong influence" on campus safety policy change among Ohio colleges.

The interview results gave important context to how these external and internal factors influence the formation and implementation of campus safety policies. They made it evident that these factors intertwine and no single external or internal factor is responsible for creating all change. For example, colleges have to consider factors like financial resources and their size when determining how they will implement mandated changes. A small college participant described this process when explaining how they heap mandated demands on the desks of overburdened administrators with no background in safety because they lack the resources to hire new personnel. These factors do not work in isolation, rather they work together to drive and shape new campus safety policies.

The interview results lastly described the most pressing safety concerns facing community colleges and the barriers that exist to addressing them. Shared concerns among interview participants included a lack of training, unfunded mandates, lack of a campus police force, no direct line to leadership, and the unique nature of community colleges. A lack of resources was nearly universally recognized as the main barrier that colleges face when trying to address safety concerns. The other major barriers identified were a lack of personnel with a background in safety, inadequate divisions dedicated to various the various safety entities, and a lack of support from leadership.

### *Policy Implications*

The study findings suggest a number of policy implications. The first set of implications arose from the analysis of which individual recommendations have been implemented extensively across the community colleges and where the community colleges are lacking. Since this was the first study to conduct an analysis of this nature among community colleges, some of the most important implications are rooted in this individual level analysis. It is important to note that community college officials may feel that they do not have the capabilities to implement some of these recommendations. These officials may thus argue that their resources and time are better spent toward refining and perfecting those policies they have in place, rather than implementing more recommended policies. Community colleges officials may also argue that some of these recommendations are not necessary at community colleges. Despite these potential drawbacks, there are clear areas where community colleges should focus upon improving their campus safety policies and I will highlight them within their overarching thematic categorization.

The most evident early detection and prevention recommendations that should be a central focus going forward are suicide and bullying and cyberbullying prevention work. Vulnerability assessments should also be a central focus of community colleges going forward, as it would help the colleges identify their safety and security weaknesses and address them annually. The mental health recommendations are difficult for community colleges to address since they rarely possess these capabilities on their campuses; however, it is important that the colleges continue to try to establish formal partnerships with their community agencies and educate the campus community about how to recognize and respond to mental health issues.

There are a number of specific ways that the community colleges could improve their physical security. Most importantly the colleges should remain up to date on current best practices and work to determine which demand the resource allocation in order to implement. Community college officials that lack a police force should also continue to assess whether implementing a force at their institution will make their campus safer, and if so, the resources they would need in order to assure the agency is operating effectively. For those colleges that have a police force, they should continue to assure that their officers are properly trained to handle the array of emergencies that could occur on a college campus, focus on their crime prevention role, and determine if seeking external accreditations would help improve their agency operations. Emergency drills and training should also extend beyond campus police and security to the entire campus community. It is vital that students, faculty, and staff members are aware of their role in an emergency and how to respond to an emergency. The most glaring weakness that emerged from the general campus policy findings was that some colleges are not complying with *Clery Act* requirements and that not all colleges include safety in the orientation process. The community colleges must assure that they are complying with mandated

requirements or they face potential financial sanctions that could further inhibit resource allocations toward campus safety. Also, all community colleges should implement a campus safety section in their student, faculty, and staff orientations to help educate the campus community on the campus safety policies in place at their institution, their role in an emergency, and any other pertinent safety information.

The findings for the final three categories, mass notifications, emergency response, and victim services also had important takeaways. The community colleges have all implemented various mass notification systems at their institutions. It is important that the colleges continue to stay abreast of the best mass notification systems for alerting the campus community and continually educating the campus community about the notification systems in place. Within emergency response, the community colleges are currently lacking in a number of ways. A community college could face an array of emergencies, and it is vital that they have the policies in place that will help them properly respond. Many colleges are also lacking in their victim service capabilities. The community colleges may be lacking in their emergency response and victim service capabilities due to resource restrictions and strained capabilities on their campus. This is when community resources become vital to assure that a campus emergency can be properly responded to and victims, whether from emergencies or general campus crimes, receive the services they need. These individual level policy implications are important to assure that community colleges focus upon areas where they are lacking and continually work to improve their campus safety capabilities.

The next major implication involves the difference between mandates and recommendations. The quantitative findings indicate that most community colleges have implemented about half of all major safety recommendations, and there is a large discrepancy

between the colleges with the most and least amount of recommendations implemented.

Interview responses provided context to this finding when participants indicated that most policy changes are a result of mandates and recommended changes only take place when adequate funding exists. These findings may tempt policymakers to simply mandate major recommendations in legislation; however, this produces a number of unintended externalities.

The most evident externality produced by legislative mandates is that they are extremely burdensome, and often counterproductive, for community colleges. Both small community colleges with few resources and large community colleges with full police forces and emergency management departments are struggling to comply with many mandates. Campus safety mandates continue to emerge in state and federal legislation; however, they are rarely accompanied with the funding needed for proper implementation. For example, one participant stated that they are complying with the Virginia mandate that all colleges must have a threat assessment team; however, their team is not operating at full capacity because they cannot afford to send their team members, who have no background in safety, to state trainings. Unfunded mandates were thus the number one reason many interview participants explained that they had not implemented important, but un-mandated, recommendations. In fact, respondents indicated that their campus safety program would continue to lag behind national and state recommendations until adequate state funding is provided.

The issue of unfunded mandates also exists within the context of the rarity of major campus safety events. Major events, such as the tragedy at Virginia Tech in 2007, are extremely rare; however, they often produce legislative mandates and state and federal recommendations regarding emergency preparedness and management policies and practices that should be in place at colleges and universities. For example, the 51 major recommendations contained in this



study's 'Campus Safety Model' were all derived from state and federal reports produced in response to the rare, but seminal events at Virginia Tech and Sandy Hook Elementary. Traditional crimes, such as sexual assault and theft, occur at much higher rates on college campuses, but they do not always drive policy change in the same way as much rarer events. Kingdon (1984) wrote about how focusing events can garner attention to an issue and help cement its place on the policymaking agenda. This seemed to play out following the Virginia Tech tragedy, as there was unprecedented government involvement in campus safety (Jackson, 2009). The more frequently occurring traditional campus crimes can drive change as well, but it appears that major events have the ability to cause change quickly. It is vital that when policymakers consider implementing new state and federal mandates in response to major events that they understand the rare and unpredictable nature of these incidents. This must also be weighed against the fact that the mandates could take away resources needed to mitigate other more frequently occurring campus crimes, such as sexual assault. Policymakers must thus determine if implementing new mandates is worth any negative externalities that come from a reaction to major campus safety events.

The simple answer for handling the issue of unfunded mandates and their hindrance to implementation of major recommendations would be for state-level policymakers to increase community college funding. This type of approach, however, is only a temporary fix and does not address the source of the issue. Participants indicated that many mandates are both burdensome and ineffective. For example, a campus police official described that the annual report mandated by *Clery Act* takes a great deal of agency time but does not make their campus community more prepared or safer. More state funding to help complete the report would not improve campus safety; whereas, putting those police agency resources toward another national

or federal recommendation could actually improve safety. The focus then shifts away from simply providing more money with mandates to how to best utilize the limited resources available.

The best way to help community colleges put their limited resources toward recommendations that make campuses safer is to first encourage policymakers to reevaluate current campus safety mandates. They could determine which mandates are necessary, including those that need funding in order for them to be properly executed, which mandates are ineffective, and which should be tailored differently for various types of higher education institutions. For example, policymakers should recognize that community colleges have safety concerns similar to four-year institutions but must be approached differently. As a participant noted, most mandates are geared toward traditional four-year universities with on-campus housing and one campus with a definable border. Community colleges are expected to comply with these mandates despite their lack of housing, multiple campuses, off-campus centers, fewer resources, and properly trained employees in safety. This reevaluation of current mandates could alleviate many burdens currently upon community colleges, which could incentivize them to implement major recommendations that will help improve their safety but were previously unfeasible. This would address current policy issues and then put focus upon future policy considerations.

Building off this notion that community colleges are unique, policymakers should consider the impact that future campus safety legislation has on all types of colleges and universities. When campus safety legislation is passed, agencies such as the U.S. Department of Education, Virginia Department of Criminal Justice Services, and the State Council of Higher Education in Virginia should create guidance that helps all colleges determine how to handle

new demands in a way that is both compliant and effective. The VCCS system office could be an asset in helping community colleges properly implement new safety policies by providing guidance and assistance to colleges yearning for it, while still giving other colleges the ability to tailor their policies to meet their unique needs.

Policymakers could improve their understanding of the impact that legislation will have on all types of colleges and universities by including community college officials in state and federal policy discussions. These officials would strengthen the discussion regarding what type of legislation is important, the unintended consequences it will have on community colleges, and the type of assistance community colleges need in order to implement new demands effectively. A small community college participant expressed this desire to be included in national and state campus safety discussion because he/she felt that community colleges could bring a unique perspective to the table that could benefit all parties. Handling campus safety through legislation is difficult but having a voice in the room that represents all types of colleges increases the chances of better policymaking.

These policy implications work together to incentivize community colleges to implement major recommendations at a higher rate. Community colleges could use the freed resources produced by the removal of current burdensome and counterproductive mandates to either implement more major recommendations, or improve their campus safety policies in place. Internal factors, and in particular college leadership, would become essential in determining if the colleges use their freed resources to implement new, or improve upon current, campus safety policies. Given that leadership was the most important internal factor identified in the findings, the focus then becomes finding ways to encourage leadership to be more aggressive at addressing campus safety. Accreditation can play a role since safety has become a metric used in

accreditation evaluations; however, these standards could become pseudo-mandates since colleges fear losing their accreditation status. This ground-level focus on encouraging leaders to proactively address safety may be difficult, but it is more productive than forcing changes through state and federal-level legislation. Interviewees held a clear disdain for those ineffective mandates placed upon them by the state or federal government; however, they were proud of the proactive changes they had made and believed were effective. Thus, putting more control into the hands of the institutions to implement policies tailored to their unique needs and concerns could result in campus safety changes that colleges are proud of and put more effort toward for effective implementation.

The study findings painted a comprehensive picture of campus safety in Virginia community colleges and provided important context about the factors that influence community colleges to implement campus safety policies. The study's findings create important insights that policymakers at all levels can learn from. Despite these important findings, the study had limitations that should be improved upon in future research.

### *Limitations*

I aimed for the study's implications to stretch beyond one set of institutions; however, the results must be delimited to the population studied. Virginia community colleges are dynamic, especially in terms of their size, location, etc., so the results can be a useful resource for other community colleges and even 4-year institutions around the country. Yet, the VCCS may not be representative of other state community college systems so the quantitative results cannot be generalized beyond the VCCS. I also did not randomly select the six case studies, so the interview results cannot be generalized beyond the interview participants. Despite these generalizability hindrances, the descriptive quantitative results are representative of the entire

VCCS. I focused on the VCCS in order to give a full and in-depth picture of campus safety in this system. Given the amount of variation that exists in community colleges across different states, I wanted to focus specifically on the intricacies and nuances of this state system and give a complete picture with results that are indicative of this entire system of community colleges before broadening the scope to other states in the future.

The quantitative portion of the study suffered from limitations beyond its lack of generalizability. Much of these limitations stem from the school websites, self-report issues, the type of data collected, definitional issues, and omitted variable bias. A bulk of the data collection relied upon school websites but it is possible that these websites were not up-to-date or contained inadequate information. The follow-up phone calls were a method for avoiding these website limitations, but the calls relied upon administrators and other school officials accurately reporting what policies and procedures are in place. The nature of the data limited statistical analysis options to primarily descriptive statistical analysis techniques as well. The definitional issues within the campus safety model are a result of some of the post-Virginia Tech and post-Newtown recommendations not being precisely defined at the outset of the study. Lastly, there is the potential that omitted variable bias hindered the analysis used to answer research question two involving correlations between institutional characteristics and policy implementation levels. Variables may exist, but were absent in the analysis, that are highly correlated to the independent and dependent variables used in the analysis.

The interview portion of the study also suffered from limitations centered upon potential self-report issues and the limitations of each interviewee's current role and background. Interviewees were told that their name or institution's name would not be used in the write-up of the results and their responses would remain confidential. Despite this assurance of

confidentiality, participants may have not been completely honest and/or forthcoming during their interview in fear that it would put themselves or their institution in a negative light. They also could have feared criticizing their superiors when asked about policy effectiveness and leadership at their college. Interview responses were also limited by interviewees' limited perspectives. For example, campus police officials see campus safety in a different way than *Title IX* officials, and vice versa.

Another limitation arose from my personal biases that I held prior to beginning the study. These personal biases influenced my interpretation of the interview responses and the findings derived from these responses. The literature that I reviewed for the study gave me an informed perspective about the topic; however, it dictated what themes I searched for in the interview responses and how I searched for them as well. Actively searching for previously identified themes in the literature prevented me from approaching the interview responses with an open perspective and allowing the responses to solely guide the analysis. I did my best to search for new themes in the responses that were not present in the literature as well and interpret the responses and findings in a way that was minimally influenced by my personal biases; however, they were present throughout the study.

The interview portion of the study was also limited by the lack of full participation by all individuals involved in campus safety at each of these six community colleges. Half (12 of 24) of the individuals that I initially contacted agreed to participate in the interviews and some colleges had larger participation than others. For example, both of the large community colleges and one of the small community colleges had three interview participants, while the other three colleges only had one participant each agree to participate in the interviews. The results were more influenced by both of the large and one of the small community colleges than the other three

participating colleges. The interview results were thus hindered by disproportionate participation across a few colleges and a general lack of participation of all campus safety individuals across each of the six community colleges.

The interview portion of the study had two final limitations that need to be addressed. The first limitation was that the results garnered were not substantial. These responses are best viewed as supplemental to the quantitative results. They provide context about the forces that influence community college decision makers to make campus safety policy changes, but they cannot stand alone without the quantitative findings. Also, similar to prior studies (i.e. Jackson, 2009), the responses provided further insight into the external factors that influence the implementation of campus safety policies but only began to scratch the surface of the role of internal forces that influence policy change. Interviewees described the importance of college leadership and internal safety/security committees when colleges decide which policies to implement. Future studies can focus on these internal factors and provide important context about their role in influencing campus safety policy change. This large focus on external factors was not limited to the interview portion of the study. The quantitative analysis used to answer research question one relied upon external recommendations from state and federal reports to determine which major campus safety recommendations currently exist. The determination on the adequacy of the colleges' campus safety program was then determined by analyzing their level of compliance with these external recommendations.

The last major limitation was that I did not test a theory in this study. I used Open Systems Theory (Bertalanffy, 1968) to guide the study but I did not go far enough to test the theory's tenants within the realm of campus safety. Despite these delimitations and limitations, the results contribute to the larger literature on campus safety and higher education

policymaking. There are a number of ways in which future researchers can improve upon these limitations, fill the gaps left by this study, and build upon its foundation.

### *Directions for Future Research*

Future research should first expand the scope of the quantitative portion of the study. One of this study's strengths lies in its focus on an often overlooked set of higher education institutions, but this also limited its generalizability. Future researchers should expand the study to community colleges beyond Virginia and consider including other types of higher education institutions in the sample. Expanding the scope will help display how Virginia community colleges stack up against other colleges and universities in terms of their policy implementation rate. Future researchers should also continue to expand the campus safety model as new recommendations and best practices arise.

Researchers should also expand upon the interview portion of the study. The interview results were largely confirmatory of, and supplemental to, the quantitative results. Future researchers can conduct an in-depth qualitative focus upon the forces that influence colleges and universities to make campus safety policy changes. The interview results present in this study can be used as a starting point for researchers that want to gain a deeper understanding of how these forces influence decision makers to make campus safety changes. If future researchers conduct a qualitative analysis of this topic, they can continue to conduct interviews with campus safety officials. This qualitative data must continue to be collected until the results reach the point of theoretical saturation, where no new themes are emerging from the data analysis (Morse, 2004). Qualitative studies of this nature can also continue to focus upon internal factors and their role in influencing policy change given the disproportionate attention that has been previously been placed upon the role of external factors. The interview results from this study can best serve



as a starting point for future researchers that take a qualitative approach in order to analyze the influencing forces in campus safety policy implementation.

Future studies could also seek to better integrate theory into a study of this nature. I used Open Systems Theory to guide this study; however, the study did not test the theory. Researchers can use campus safety policymaking to test Open System Theory's core tenants that open systems depend upon their external environment for survival (Bertalanffy, 1968). Colleges, as open systems, constantly interact with their environment and they receive human, financial, physical, and information resources from their external environment. Administrators then engage in a transformation process where they combine and coordinate these resources to help meet school goals. Outputs are then produced and positive or negative feedback is provided (Bastedo, 2004; Lunenburg, 2010). Future studies can use campus safety policymaking to test this theory based on the notion that colleges are open systems that rely upon their external environment for survival and change.

Future researchers should lastly fill the gap I left regarding how individuals' roles and backgrounds affect their perception of campus safety issues. I highlighted how individuals that serve in differing roles had varied interview responses, but I did not adequately determine if these variations were a byproduct of their role and the limited purview created by it. I also did not actively inquire about participants' background and seek to understand the role that it played in the various topics covered in the interviews. Participants often highlighted their background voluntarily but a more centralized focus on participant background experiences would benefit the research arena. This study established a base of campus safety knowledge surrounding a particular set of institutions, and this foundation can be expanded upon and progressed forward in a number of important ways.

## *Conclusion*

Colleges and universities of all shapes, sizes, and locations want to provide a safe campus in which a learning environment can flourish. Community colleges are unique from traditional four-year colleges and universities in number of ways. They do not house students, they offer an array of educational and technical training, they span across a number of campuses and counties, and so on. Campus safety research has historically focused upon traditional four-year colleges and universities when identifying their population of interest, but community colleges face a number of similar and unique safety concerns that deserve attention. This issue is heightened when considering that prior studies that have utilized community colleges in their samples found that they respond to campus safety demands in unique ways.

In this study, I focused upon campus safety in the Virginia Community College System (VCCS). I sought to expand upon prior studies and assess the level to which Virginia community colleges have implemented major post-Virginia Tech and post-Newtown campus safety recommendations. I then filled the gap left by prior researchers by determining if variation in the implementation of major recommendations can be explained by institutional differences. I lastly provided context to these results by asking campus safety officials about the factors that influence them when they decide to create and implement new campus safety policies, as well as if they perceive their policies as effective, their most pressing safety concerns, and barriers that prevent them from addressing these concerns.

The results paint a comprehensive picture of the prevalence of campus safety policy implementation in Virginia community colleges. Virginia community colleges on average have implemented about half of the major post-Virginia Tech and post-Newtown recommendations, but a large discrepancy exists between community colleges that have implemented the most and

least amount of these recommendations. There is support for an association between institutional characteristics and campus safety implementation levels, as colleges with more students, campuses, and resource levels implemented higher rates of the major campus safety recommendations on average. Interviews with community college representatives revealed that most perceive their campus safety policies as effective, both external (i.e. mandates, financial resources) and internal factors (i.e. college leadership, security and safety committees) influence the formation and implementation of these policies, and they are not able to address concerns (i.e. lack of training) because of a lack of resources.

The results have a number of policy implications. Individual recommendations that have been scarcely implemented at the community colleges should be a focus of attention. Community college officials should work to determine if these recommendations would improve their campus safety and is appropriate for community colleges. Also, campus safety mandates unaccompanied by funding are straining community colleges. These mandates are often written for traditional four-year universities with one campus but community colleges must remain in compliance while dealing with limited and declining resources. Community colleges place mandated burdens upon the shoulders of overworked administrators with limited to no background in safety. The colleges are unable to make proactive safety changes as they focus primarily upon maintaining compliance. Policymakers at the federal and state level must reevaluate the campus safety legislation with all types of colleges and universities in mind to determine which mandates are necessary, which are unnecessary, where additional funding could and needs to happen, and ways to incentivize best practices and recommendations without placing unnecessary burdens upon colleges. Community college representatives want to and should be included in campus safety legislative discussions. These colleges want to and need to

have safe environments; however, there is a fine line between when to mandate safety standards and when to help colleges but allow them to implement policies in a way that meets their unique needs. Researchers, policymakers, college administrators, and others should work together to find ways for community colleges to be safe environments with the resources and circumstances that make them unique. Effective campus safety policies and practices should be available to all colleges and universities, not just traditional four-year institutions with plentiful resources.

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## Appendix A

### Definition of Terms

*Campus security/police:* Refers to the official entity designated to handle crime or other emergencies on-campus. It is important to note that community colleges will exhibit a range of security, from fully trained, equipped, and accredited police forces, to small in-house security or possibly a night watchman (Patton, 2010; VCCS, 2008).

*Clery Act:* Formally called the *Student Right to Know and Campus Security Act of 1990*, this act requires all higher education institutions that participate in federal financial aid programs to distribute an annual security report that details their campus security policies, as well as documents their annual crime statistics. Violations could lead to loss of federal funding, and the Department of Education (ED) monitors compliance (Carter & Bath, 2007).

*Critical Incident:* A mass emergency, such as the mass shootings at Virginia Tech, which have the ability to harm large amounts of individuals (Schafer et al., 2010). This study will use this term in reference to campus-based critical incidents, such as those that occurred at Virginia Tech in 2007 and Northern Illinois University in 2008.

*Early Detection and Prevention:* Refers to the set of policies a college has in place to detect students that could pose a potential threat to an individual or the campus community at-large. These policies are designed so that if an issue arises, the problem can be reported to proper channels and/or organizations that are trained to deal with the given issue, and determine if further action is needed in order to protect the campus community (DeLaTorre, 2011; Sulkowski & Lazarus, 2011; Patton, 2010; MDOE, 2008).

*Emergency Response and Preparedness:* Refers to recommendations from panel reports related to policies and procedures that best prepare a campus for emergencies (MDOE, 2008).

*FERPA:* Stands for the Family Educational Rights and Privacy Act, which is a federal law that protects the privacy of students' educational records. If the student is over the age of 18, schools must have written permission from the student before records can be released. One of the caveats within the law is that the school can disclose student records, without consent, to appropriate officials in case of health or safety emergencies ("Family Educational Rights and Privacy Act").

*HIPAA:* Stands for the Health Insurance Portability and Accountability Act of 1996. This law protects the privacy of individually identifiable health information. It applies to the safety realm when dealing with students that have mental, emotional, social, or some other type of health-related issue that could possibly lead to safety issues ("Health Information Policy").

*Policy Implementation:* The process by which policies enacted by government are put into effect by the relevant agencies (Birkland, 2011).

*Masengill report:* The report produced by the work of the Virginia Tech Review Panel following the mass shootings at Virginia Tech in 2007. This report made recommendations about steps that colleges and universities could take to mitigate these incidents in the future (VA Tech, 2007). This report will be referred to as both the Virginia Tech Report and the Masengill Report.

*Mass Notifications:* Mechanisms that communicate an emergency situation or imminent danger to the entire campus community (Seo, Torabi, Sa & Blair, 2011).

*Physical Security:* Refers to the physical aspects of a campus that are designed to prevent or mitigate emergencies. Examples include doors that are lockable and cannot be chained (MDOE, 2008; VA. Tech, 2007; VCCS, 2008), adequate lighting around campus (VCCS, 2008), and emergency call boxes (MDOE, 2008; VCCS, 2008).



*Threat Assessment Team:* A group of individuals compiled from various positions and disciplines within a particular college that evaluate reports of potential issues reported by students, faculty members, or staff. Each college has their own threat assessment team that evaluates issues within their respective campus community and determines the best course of action to take, such as whether they need to bring in an expert or organization from outside the campus community. These teams usually contain experts in mental health and law enforcement, in addition to individuals from around the campus (DeLaTorre, 2011; Sulkowski & Lazarus, 2011; Patton, 2010; VCCS, 2008).

*Title IX:* Refers to Title IX of the Education Amendments of 1972, which prohibits discrimination on the basis of sex in education programs operated by Federal financial aid assistance. Sexual harassment of students, such as sexual violence, is a form of sex discrimination prohibited by Title IX, and thus, this policy plays a large role in how colleges structure their campus safety policies and delegate responsibilities within these policies (Ali, 2011).

## Appendix B

### Interview Question Base

1. Do you think that the safety policies and practices in place at your college are effective at making the campus safer and being prepared to mitigate potential emergencies?
2. What were some of the biggest external factors that influenced campus safety policymaking and implementation following the Virginia Tech tragedy?
  - a. What was the role of information resources (e.g. Taskforce best practices, recommendations, etc.) in this policymaking and implementation process?
  - b. What was the role of financial resources provided by the federal and state government to improve safety at your institution?
  - c. What was the role of human resources provided by outside entities?
  - d. What was the role of physical resources provided by outside entities?
  - e. Does the inclusion of safety measures in accreditation have a role in changes made to your institution's safety policies or practices?
3. What were some of the biggest internal factors that influenced campus safety policymaking and implementation following the Virginia Tech tragedy?
  - a. What is the role of leadership at your college in terms of making campus safety changes?
  - b. How often does your institution make proactive campus safety changes that has not been recommended or mandated from the state?
  - c. Do you believe that your campus safety policies and practices would have been different today if the wave of state-level influence following the Virginia Tech tragedy never occurred?

- d. How would you describe the level of autonomy, or lack thereof, that you have in regards to shaping your campus safety policies and practices?
  - e. How does your safety infrastructure (i.e. campus police, administrators dedicated to safety) determine the level of changes that you make to your campus safety policies and practices?
4. How do you think these external and internal forces work together to influence campus safety changes?
  5. How do you think these external and internal forces work against each other to influence campus safety changes?
  6. What are your biggest concerns in regards to campus safety?
  7. What barriers exist to addressing these safety concerns?

## Appendix C

### RESEARCH SUBJECT INFORMATION AND CONSENT FORM

TITLE: Assessing the Implementation of Campus Safety Policies at Community Colleges  
VCU IRB NO.: HM20009290

If any information contained in this consent form is not clear, please contact the study staff to explain any information that you do not fully understand.

#### PURPOSE

The purpose of this study is to assess the campus safety policies and procedures currently in place in Virginia community colleges, and the forces that help lead to the creation and implementation of these policies. Given your expertise regarding your school's campus safety policies, we are asking you to respond with information about these policies at your respective institution.

#### DESCRIPTION OF THE STUDY AND YOUR INVOLVEMENT

If you decide to be in this research study, you will be asked to agree to this consent form after you have had all your questions answered and understand what will happen to you.

Completing this interview will take approximately 60 minutes. You will be asked about the safety policies that you have in place at your school, the forces that helped influence the implementation of these policies, the perceived effectiveness of these policies, and any other relevant questions.

#### RISKS AND DISCOMFORTS

Participation in this survey will incur minimal risk. The topic of this survey may potentially be upsetting. There are no costs for participating in this study, other than the time you will spend completing the survey.

#### CONFIDENTIALITY

The results are confidential. We have no way to connect your survey results with your name or college. Results of the study will, however, be published in academic journals.

#### BENEFITS TO YOU AND OTHERS

Your participation will help inform community colleges around the country about the current state of these policies, and it will also inform policy studies regarding the process of institutional-level policymaking and implementation in higher education.

#### VOLUNTARY PARTICIPATION AND WITHDRAWAL

You do not have to participate in this study. If you choose to participate, you may stop at any time without penalty. You may also choose not to answer particular questions that are asked in the study.

## QUESTIONS

If you have any questions, complaints, or concerns about your participation in this research, contact:

Steven Keener

Doctoral Researcher

keenerst@vcu.edu; 540-958-1023

Virginia Commonwealth University

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Scherer Hall

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Richmond, VA 23284-2020

The researcher named above is the best person to call for questions about your participation in this study.

If you have any general questions about your rights as a participant in this or any other research, you may contact:

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800 East Leigh Street, Suite 3000

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Richmond, VA 23298

Telephone: (804) 827-2157

Contact this number for general questions, concerns or complaints about research. You may also call this number if you cannot reach the research team or if you wish to talk with someone else. General information about participation in research studies can also be found at <http://www.research.vcu.edu/irb/volunteers.htm>.

## CONSENT

I have been given the chance to read this consent form. I understand the information about this study. Questions that I wanted to ask about the study have been answered. My continuation says that I am willing to participate in this study.

Vita

## **STEVEN T. KEENER**

Born: Clifton Forge, Virginia; 1989

L. Douglas Wilder School of Government and Public Affairs  
Scherer Hall  
923 W. Franklin St.  
Richmond, VA 23284  
(540) 958-1023  
keenerst@vcu.edu

### **EDUCATION**

**Doctor of Philosophy (Ph.D.), Public Policy and Administration, Virginia Commonwealth University, Richmond, Virginia (2013-2017)**

- Dissertation Title: *Assessing the Implementation of Campus Safety Policies in Virginia Community Colleges: An Analysis of the Forces at Play in Higher Education Institutional-Level Policymaking*
- Dissertation Chair: William Pelfrey, Ph.D.; Committee Members: Charol Shakeshaft, Ph.D., Nancy Morris, Ph.D., Natalie Baker, Ph.D.

**Master of Science (M.S.), Criminal Justice, Virginia Commonwealth University, Richmond, Virginia (2012-2013)**

- Specialization: School and Campus Safety

**Bachelor of Arts (B.A.), Political Science, Minor in Philosophy and Religious Studies, Christopher Newport University, Newport News, Virginia (2008-2012)**

### **Research Employment**

2016–Current Project Coordinator, Community Based Research Project, *Testing the General Deterrent Impact of Adolescent Sex Offender Registration Policies.*

*Duties and Responsibilities:* Hired by Dr. Hayley Cleary of the Criminal Justice program at VCU to coordinate all phases of a research project funded by the VCU President Research Quest Fund (PERQ). Tasks include completing the IRB submission, constructing the survey instrument, recruiting participants, administering the survey, data collection and analysis, and helping write articles based on study findings.

2015-Current Research Analyst for the Virginia Department of Criminal Justice Services

*Duties and Responsibilities:* I have served an array of roles at DCJS, the first of which included analyzing data and writing a state report for the Virginia Center for School and Campus Safety, as well as designing a qualitative research proposal for the analysis of threat assessment teams in Virginia schools. I am currently conducting research for the Community Corrections, Juvenile Services, and Victim Services components of the agency.

2013-2015 Graduate Teaching and Research Assistantship for Dr. Charol Shakeshaft, School of Education, Virginia Commonwealth University

*Duties and Responsibilities:* I assisted Dr. Shakeshaft in conducting an array of studies focused upon the prevention of educator sexual misconduct in K-12 institutions. In conducting these projects, I gained experience writing successful IRB submissions, writing literature reviews, helping collect and analyze data, and helping write both academic and technical reports. I also gained valuable experience in helping write a grant proposal for funding from the National Institute of Justice's Comprehensive School Safety Initiative. This assistantship was funded by a \$5.2 million grant from the Department of Education's Project ALL.

## PUBLICATIONS

### Academic Publications

Keener, S. T. (2017). The reporting issues surrounding college sexual assaults: A deeper look at the reporting, investigation, and adjudication processes available to collegiate sexual assault victims. *Sexual Assault Report*.

Pelfrey, W. V., Keener, S. T., & Perkins, M. (2016). Examining the use of race in campus crime alerts – Implications and recommendations. *Race and Justice*, 7(1).

Pelfrey, W. V. & Keener, S. T. (2016). Police body worn cameras: A mixed method approach assessing perceptions of efficacy. *Policing: An International Journal of Police Strategies & Management*, 39(3), pp. 491-506.

Keener, S. T. (2016). Searching for a comprehensive understanding of collegiate sexual assault rates: Assessing cross-campus variance of sexual assault rates according to community, institutional, and student characteristics. *Georgetown Public Policy Review*, 21(1), pp. 1-30.

Keener, S. T., & Michaud, G. (2016). The role of geographic location on college campus sexual victimization rates in the U.S.: A new methodological approach. *New Visions for Public Affairs*, 8(2), pp. 38-49.

Keener, S. T. (2016). Should colleges inquire about applicants' criminal past? An analysis of higher education's role in development. *Evans School Review*, 6(1), pp.62-77.

Keener, S. T. (2015). Illuminating the dark side of the ivory tower: A policy analysis of the Campus Accountability and Safety Act. *Virginia Policy Review*, 3(3), pp. 146-165.

### State-level Publications

- 2016 Wrote the *2015 Virginia School Safety Audit Survey Results* in the position as research analyst at the Virginia Department of Criminal Justice Services.
- 2013 Assisted Dr. William V. Pelfrey, Jr. in assembling the *Governor's School & Campus Safety Taskforce Final Report*. Presented to the Governor of Virginia in October 2013.

### Encyclopedia Entries

- 2017 Conservatism. In F. M. Moghaddam (Eds.), *The Sage Encyclopedia of Political Behavior*. Thousand Oaks, CA: Sage Publications.
- In press Cyberbullying. In K. L. Nadal, M. A. Lorena, & D. P. Rivera (Eds.), *The SAGE Encyclopedia of Psychology and Gender*. Thousand Oaks, CA: Sage Publications.
- In press Cyberbullying. In R. D. Morgan (Eds.), *The Sage Encyclopedia of Criminal Psychology*. Thousand Oaks, CA: Sage Publications.
- In press Sexual Assault Laws. In F. P. Bernat & K. Frailing (Eds.), *The Wiley-Blackwell Encyclopedia of Women and Crime*. Hoboken, NJ: Wiley-Blackwell Publications.
- In press Title IX. In K. L. Nadal, M. A. Lorena, & D. P. Rivera (Eds.), *The SAGE Encyclopedia of Psychology and Gender*. Thousand Oaks, CA: Sage Publications.

### Manuscripts In Preparation

- Pelfrey, W. V. & Keener, S. T. Talking to the judge: A mixed method pretest posttest of body worn cameras and officer perceptions.
- Keener, S. T. Collegiate sexual assaults: The issues, complexities, and policy implications in Missouri. Will be submitted to *Missouri Policy Journal*.
- Keener, S. T. Combating Campus Victimization Through Legislation: An Analysis of State-Level Legislative Proposals.
- Keener, S. T. Examining campus crime: An assessment of the predictive impact of community, student, and institutional characteristics on campus crime rates.



Keener, S. T., & Smith, R. The effectiveness of child abuse prevention training programs: An evaluation of KidSafe's train the professional seminars. Submitted to *Child Abuse and Neglect*.

Shakeshaft, C., Keener, S. T., Shakeshaft, E., & Smith, R. Standard of care for protecting students from educator sexual misconduct.

## TEACHING EXPERIENCE

### Courses taught as Instructor of Record

#### Virginia Union University, Department of Criminology and Criminal Justice

2016, Spring            *Social Science Statistics, CCJ 335*

2015, Fall              *Social Science Statistics, CCJ 335*  
*Research Methods in Criminal Justice, CCJ 340*

2015, Spring          *Social Science Statistics, CCJ 335*

#### Virginia Commonwealth University, Department of Criminal Justice

2016, Summer        *Special Topics: School and Campus Safety, CRJS 491*

2015, Summer        *Economic Offenses & Organized Crime, CRJS 468*

### Teaching Assistant

#### Virginia Commonwealth University, Richmond, VA

2013, Fall              Assisted Dr. Shakeshaft with creation of policy and SPSS lessons in ADMS 701, *Education in Policy Research*.

### Professional Development

2014, Fall              Course structuring, teaching strategies, work/life balance, grant searching, job searching strategies, GRAD 601, *The Academic Profession*

### Other

2014, Fall              Case Study Lesson on the *Clery Act*, in PPAD 780, *Public Policy and Administration Synthesizing Seminar*

2014, Spring          Test Proctor, Wilder School Undergraduate Advising

## RESEARCH AND TEACHING INTERESTS

School and Campus Safety; Emergency Preparedness Policies in Higher Education; Sexual Abuse and Educator Misconduct in K-12 institutions; Sexual Assault/Violence against Women on College Campuses; Criminological Theories; Campus Police; Random Acts of Mass Violence in Schools; Research Methods; Qualitative Methodology; Statistical Analysis in the Social Sciences

## GRANTS, AWARDS AND HONORS

### Research Awards

2014 L. Douglas Wilder School of Government and Public Affairs at Virginia Commonwealth University Research Grant. Funding awarded for: Pelfrey, W. V., Morris, N., and Keener, S. T. *An Exploratory Study of Campus Violence Prevention and Emergency Preparedness at Community Colleges in Virginia*. Amount funded: \$5,000

### Travel Awards

Fall 2016 Graduate Travel Award Virginia Commonwealth University Graduate School

Fall 2016 Graduate Travel Award, L. Douglas Wilder School of Government and Public Affairs, Virginia Commonwealth University

Spring 2016 Graduate Travel Award Virginia Commonwealth University Graduate School

Spring 2016 Graduate Travel Award L. Douglas Wilder School of Government and Public Affairs. Virginia Commonwealth University

Spring 2015 Graduate Travel Award L. Douglas Wilder School of Government and Public Affairs. Virginia Commonwealth University

Fall 2014 Graduate Travel Award, L. Douglas Wilder School of Government and Public Affairs. Virginia Commonwealth University

Spring 2014 Graduate Travel Award, L. Douglas Wilder School of Government and Public Affairs. Virginia Commonwealth University

### Scholarships/Honors

2015 Recipient of the Excellence in Virginia Government Award Scholarship for the 2015 - 2016 academic year

- 2015 Member of Virginia Commonwealth University's Wilder School of Government and Public Affairs Chapter of Pi Alpha Alpha, the National Honor Society for Public Affairs and Administration
- 2015 Member of Virginia Commonwealth University's Chapter of Alpha Phi Sigma, the National Honor Society for Criminal Justice Students
- 2011 NCAA Division III U.S.A. South Conference All-Academic Team

### **Grant Proposals**

- 2015 Assisted Dr. Charol Shakeshaft, and a research team, in formulating a grant proposal for the 2015 Comprehensive School Safety Initiative at the National Institute of Justice. The title of this proposal was *Testing Prevention of Trusted Other Sexual Abuse Training Programs in Virginia Schools*. Submitted to the National Institutional of Justice's (NIJ) Comprehensive School Safety Initiative. Total Amount requested: \$4,999,684.

## **SCHOLARLY PRESENTATIONS**

### **Paper Presentations**

- 2017 *Assessing the Implementation of Campus Safety Policies in Virginia Community Colleges: An Analysis of the Forces at Play in Higher Education Institutional-Level Policymaking*. Presented at the Academy of Criminal Justice Sciences Annual Meeting, Kansas City, MO. March 21-25.
- 2016 *Combating Campus Victimization Through Legislation: An Analysis of State-Level Legislative Proposals*. Presented at the American Society of Criminology Annual Meeting in New Orleans, LA, November 16-19.
- 2016 *Establishing a Comprehensive Roadmap of the Reporting Process for Collegiate Sexual Assault Victims*. Presented at the Academy of Criminal Justice Sciences Annual Meeting, Denver, CO, March 29-April 2
- 2015 *Assessing the Predictive Impact of Community, Institutional and Student Characteristics on Universities' Officially Reported Sexual Offenses*. Presented at the American Society of Criminology Annual Meeting in Washington, D.C., November 18-21
- 2015 *Attempting to Understand School Shooters Through the Use of Adverse Childhood Experiences' Conceptual Framework*. Presented at the Academy of Criminal Justice Sciences Annual Meeting, Orlando, FL, March 3-7

- 2014 *A Current Snapshot of Campus Crime*. Presented at the American Society of Criminology Annual Meeting, San Francisco, CA, November 19-22
- 2014 *Standard of Care for Protecting Students from Educator Sexual Misconduct*. Presented at the International Family Violence and Child Victimization Research Conference, Portsmouth, NH, July 13-15
- 2014 *Assessing the Implementation of Campus Safety Policies at Community Colleges*. Presented at the Academy of Criminal Justice Sciences Annual Meeting, Philadelphia, PA, February 18-22

### **Roundtable Presentation**

- 2014 *Safety on College Campuses: Some Hard Lessons Learned*. Academy of Criminal Justice Sciences Annual Meeting, Philadelphia, PA, February 18-22

## **SERVICE**

### **Profession**

- 2017 Book Reviewer, *Criminal Justice Review and International Criminal Justice Review*
- 2017 Peer Reviewer, *Criminal Justice Review*
- 2017 Peer Reviewer, *Policing: An International Journal of Police Strategies & Management*
- 2016 Peer Reviewer, *Criminal Justice Review*
- 2015 Peer Reviewer, *Violence Against Women*

### **Virginia Commonwealth University**

- 2017 Reviewer, Wilder School Committee to select the recipient of the faculty award of "Excellence in Mentoring"
- 2016 Reviewer, Wilder School Committee to select the recipient of the faculty award of "Excellence in Mentoring"
- 2016 Mentor, Assisted current first-year Ph.D. student regarding how to prepare and succeed in submitting a successful research proposal to the Internal Review Board at Virginia Commonwealth University
- 2016 Mentor, Incoming Ph.D. student in Public Policy and Administration

- 2016 Member, Wilder School Website focus group for review of the upcoming Wilder School website before its official launch
- 2015 Member, Wilder School Promotion and Tenure Committee for review of an application for the promotion of a tenured faculty member from associate professor to full professor (Promotion Awarded, 2016).
- 2015-2016 Mentor, Ph.D. Student in Public Policy and Administration First-Year Cohort
- 2014-2015 Mentor, Ph.D. Student in Public Policy and Administration First-Year Cohort

### **Virginia Union University**

- 2016-2017 Recommendations, Wrote letters of recommendation for two former students to assist in their admission to graduate school at Virginia Commonwealth University
- 2015 Recommendation, Wrote a letter of recommendation for a student in CCJ 335, Social Science Statistics, to help her gain admission into the Virginia Union University Honor Society

### **Community**

- 2013-2015 Volunteer, the *Community Kitchen*, Richmond, Virginia
- 2008 Volunteer, Election Polls at Local Precinct, Clifton Forge, Virginia
- 2008 President, the *Key Club*, student affiliate of the *Kiwanis Club*, Covington, Virginia

### **Academic and Professional EXPERIENCE**

- 2016-Current Project Coordinator for a grant funded study entitled *Testing the General Deterrent Impact of Adolescent Sex Offender Registration Policies*. Hired by Dr. Hayley Cleary of the Criminal Justice program at VCU to coordinate all phases of a research project funded by the VCU President Research Quest Fund (PERQ). This project is a three-wave prospective longitudinal study seeking to examine the relationships among adolescent awareness of sex offender registration policies, their engagement in sexual behaviors that could result in registration, and the potential moderating influences of criminological and developmental factors. Tasks include constructing the online survey used to collect the data, recruiting participants for the study, administering the survey, data collection and analysis, and helping write articles based on the study's findings.
- 2016-Current Research analyst for the Virginia Department of Criminal Justice Services (DCJS). Hired to provide research and analysis to the programs and services

offered at DCJS, including community corrections and victim services. Specific tasks include creating and implementing a community corrections funding formula, creating performance outcome measures for the mental health pilot project being funded in 6 jails across the state by the Virginia General Assembly, as well as overseeing the data collection, analysis, and report evaluating this program, helping increase the use of evidence based practices, evaluating the performance of localities across Virginia in terms of their community corrections programs and victim services, and institutionalizing the use of empirical analysis to guide decision making in the agency.

- 2015-2016 Research analyst for the Virginia Department of Criminal Justice Services (DCJS). Hired to assist the research center at DCJS in assessing the threat assessment teams in Virginia K-12 public schools. This position is funded by a federal grant from the National Institute of Justice's Comprehensive School Safety Initiative (CSSI). The research group that won this grant includes researchers and practitioners at DCJS, the Virginia Center for School Safety (VCSS), and scholars at the University of Virginia.
- 2015-Current Consultant for Dr. Charol Shakeshaft. Hired as a consultant to assist Dr. Shakeshaft in preparing for civil litigation cases in which her services have been retained as an expert in school policies, practices, and leadership related to the prevention of educator sexual misconduct.
- 2014-2016 Consultant for *KidSafe Foundation*, Florida. Hired as research specialist to help evaluate the effectiveness of their current programs and write reports based on statistical analysis of data from pre and posttests. The mission of *KidSafe* is to educate parents, teachers, professionals, and students about how to recognize and prevent child abuse and bullying.
- 2013 Undergraduate Academic Advisor, L. Douglas Wilder School of Government and Public Affairs, Virginia Commonwealth University, Richmond, Virginia
- 2012 Intern, Delegate Ron Villanueva in the Virginia General Assembly, Richmond, Virginia
- 2011 Intern, *Law Office of Karla Keener* (no relation), Yorktown, Virginia

### **PROFESSIONAL and STUDENT AFFILIATIONS**

Academy of Criminal Justice Sciences  
Alpha Phi Sigma, the National Honor Society for Criminal Justice  
American Society of Criminology  
American Society for Public Administration  
American Society for Public Administration Central Virginia Chapter  
Association for Public Policy Analysis and Management  
Criminal Justice Student Association at Virginia Commonwealth University

Pi Alpha Alpha, the National Honor Society for Public Affairs and Administration  
Wilder School Public Administration Student Association