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Faculty and Staff Perceptions About Concealed Carry Initiatives and Their Effect on Campus Safety: A Multi-State Examination

Heidi Marie Ahl-Quanbeck

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FACULTY AND STAFF PERCEPTIONS ABOUT CONCEALED CARRY INITIATIVES
AND THEIR EFFECT ON CAMPUS SAFETY:
A MULTI-STATE EXAMINATION

Submitted by

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A Dissertation

Submitted to the Graduate Faculty

of the

University of North Dakota

In partial fulfillment of the requirements


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Doctor of Philosophy

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This dissertation, submitted by Heidi M. Ahl-Quanbeck in partial fulfillment of the requirements for the Degree of Doctor of Philosophy from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.




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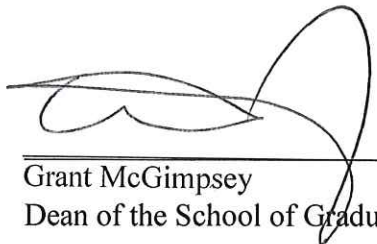


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Dean of the School of Graduate Studies



Date

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Department Teaching and Learning

Degree Doctor of Philosophy

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Heidi M. Ahl-Quanbeck
March 9, 2018

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ABSTRACT

Concealed carry on campus is a polarizing debate affecting higher education today. Concealed carry refers to the carrying of a weapon in public while concealed from view. Prompted by isolated instances of gun violence as well as the changing gun culture within our society, ten states now permit weapons on campus as a result of legislation or institutional policy. Yet, little is known about faculty and staff perspectives on concealed carry on campus initiatives or how weapons could affect perceptions about campus safety. The purpose of this study is to better understand faculty and staff perspectives on concealed carry, to identify factors that contribute to faculty and staff support for initiatives, and to ascertain differences in perceptions about individual protection, individual safety, and the negative effects associated with permitting weapons on campus.

Using quantitative research methods, faculty and staff at four public institutions located in the Midwest and Western region were sent an electronic request inviting them to participate in a study about concealed carry initiatives. Two hundred and forty-five participants completed the survey, a response rate of approximately 16%. The findings indicated that the majority of faculty and staff opposed permitting students to carry handguns on campus. Although, there was less opposition to permitting faculty and staff to carry concealed handguns with staff supporting carry at higher rates. Republicans, individuals with no political affiliation, and individuals that perceived guns as providing safety and protection were more likely to support faculty and staff carry. However, the majority of participants responded that colleges were already safe and that permitting weapons would make them feel less safe while on campus. These findings indicated

that support for concealed carry was not based on fear of victimization but rather individual protection. As very few studies have examined university faculty and staff perceptions independently, this research begins to fill the gaps in the emerging research. These findings further inform the institutional and national level debate on concealed carry initiatives by clearly identifying faculty and staff perspectives on the issue. The findings are also useful for the development and dissemination of policy related to safety on campus.

CHAPTER I

INTRODUCTION

A safe and secure learning environment has always been a goal at postsecondary institutions. Yet, the continued acts of gun violence on college campuses, in conjunction with the intense media focus, have brought the issue of safety and security at our nations' colleges to the forefront of educational concern (Barton, Jensen, & Kaufman, 2010; Rocque, 2012). In 2007, the nation was shocked by the tragic violence perpetrated at Virginia Polytechnical Institute and State University (Virginia Tech) when 32 students and faculty were fatally shot by a student gunman (Fallahi, Austad, Fallon, & Leishman, 2009; Newman and Fox, 2009). The following year, three students were shot at Louisiana Technical College, and, six days later, five individuals were shot at Northern Illinois University (Newman & Fox, 2009). The frequency at which these incidents occurred raised concern over the potential for violence at postsecondary institutions (Kaminski, Koons-Witt, Thompson, & Weiss, 2010). In response to such tragic incidents, interest in amending restrictive gun laws and overturning university weapons bans to allow for concealed handguns on campus has grown (Kingkade, 2015; Mulhere, 2015; National Conference of State Legislatures, 2017; Pew Research Center, 2014; Thompson, Price, Dake, & Temple, 2013b). This interest mirrors the national trend of easing gun rights for the purposes of individual protection and self-defense (Bouffard, Nobles, Wells, & Cavanaugh, 2012a).

State laws on carrying concealed handguns on campus generally fall into three categorical areas to include states that ban weapons, states that permit weapons, and states that invest authority in postsecondary institutions to establish policies (Bouffard et al., 2012a).

Today, ten states permit concealed carry on campus resulting from legislation or judicial litigation and a majority of states have debated amendments to weapon policies (National Conference of State Legislatures, 2017). At the center of this debate is whether postsecondary institutions are “fundamentally different than the larger society” (Cramer, 2014, p. 413). While many state’s legislatures continue to answer yes, momentum in support of concealed carry remains strong.

Concealed carry refers to a group of policies founded on Second Amendment Constitutional rights, *the right of the people to keep and bear arms*, which affords individuals the right to carry weapons in public places when they are concealed from view (LaPoint, 2010). Concealed carry on campus further delineates policy specific to the postsecondary level. The current attention encompassing concealed carry on campus initiatives is unprecedented.

A review of the literature indicates that there is very little direct research related to policy implications, faculty and staff opinions, or the perceived effect on the campus environment specific to safety. Concealed carry, as a response to rampage violence, is a relatively recent initiative in higher education; thus, only a handful of studies have been conducted to determine the perspectives of the higher education community. Of these studies, researchers have consistently found that the majority of faculty, staff, and students opposed concealed carry (Brinker, 2008; Rossner, 2011; Wells, Cavanaugh, Bouffard & Nobles, 2012), with faculty and students opposing at similar rates (Bennett, Kraft, & Grubb, 2012; Dahl, Bonham, & Redding, 2016; Thompson et al., 2013b). Yet, despite opposition, ten states now statutorily permit concealed carry on college campuses, nine of those states making changes within the last ten years. This indicates an emerging and controversial trend in higher education that is in direct

conflict with the philosophical underpinnings inherent in learning (Merriam, Caffarella, & Baumgartner, 2007).

Today higher education encompasses a culture where terms like “lockdown” and “active shooter” are a common part of the vernacular and faculty and staff must be concerned with the protection of themselves as well as the student population. When gun violence does occur, it creates anxiety in faculty as they learn about incidents and interact with difficult students (McMurtrie, 2015). The possibility of allowing handguns at postsecondary institutions causes even greater concern (Patten, Thomas, & Viotti, 2013; Price, Mrdjenovich, Thompson, & Dake, 2009; Price et al., 2014; Watts, 2015; Webster, 2016). Yet, it is uncertain what effect, if any, concealed carry would have on the campus environment in terms of perceptions about safety. It is also unclear what factors contribute to support given the relatively low crime rate on college campuses. Given the broad significance of this issue, in conjunction with the gaps in the literature, it is critical that further research is conducted to better understand the perspectives of faculty and staff that could be greatly affected by a statutory or policy change permitting handguns on campus.

The Concealed Carry Debate

The debate over concealed carry on campus is polarizing with isolated acts of violence serving as the catalyst for debate. Proponents for concealed carry primarily include Students for Concealed Carry (SCC), formed in response to the Virginia Tech tragedy, and the National Rifle Association (NRA) (Harnisch, 2008). Proponents advocate concealed carry as a means for self-protection and a right guaranteed by the United States (U.S.) Constitution under the Second and Fourteenth Amendments (Fennell, 2009; SCC, n.d.). They further assert that weapons act as a deterrent to crime and could be used to intervene if a situation would arise (Harnisch, 2008).

These groups have pushed for a litany of legislative amendments and technical clarifications to existing laws to ensure their respective agenda.

In opposition to concealed carry, several groups actively oppose handguns on campus to include Students Against Guns in Education (SAGE) and Keep Guns Off Campus (KGOC). However, the greatest opposition continues to come from higher education administrators and university boards (Weinberg, 2013). Opponents assert that guns increase the potential for violence and related accidents as students often engage in risky behavior (Patten, Thomas, & Wada, 2013; Thompson et al., 2013b). They argue that guns would delay police intervention by creating confusion during an active shooter situation (Wiseman, 2012). They further suggest that guns would affect the learning environment by hindering the ability to freely discuss sensitive issues (Students for Gun Free Schools, 2013). While there is little commonality between opposing arguments, both sides agree that the fundamental goal is to make campuses more safe (LaPoint, 2010).

Will implementing concealed carry policies based on the remote possibility of a campus shooting make faculty and staff feel safer? To understand this question it is important to determine the effect that weapons would have on faculty and staff perceptions about safety and the factors that contribute to individuals favoring concealed carry initiatives. There has been little consideration given to examining the perspectives of university faculty and staff even though they could be greatly impacted by a policy change. Furthermore, concealed carry as a response to campus shootings appears inconsistent with actual risk. Campus crime, in general, has decreased since 2006 and shootings are exceedingly rare (Robers, Kemp, Rathbun, Morgan, & Snyder, 2014). The notion that campuses are unsafe is simply unsubstantiated (Healy & Margolis, 2012). Campuses continue to be made safer through the implementation of prevention

techniques to mitigate the potential for violence (Levin & Madfis, 2009). While any act of violence has devastating consequences, the risk of being shot and killed on a college campus is less than one percent (Roberts et al., 2014). Given that risk is nominal, it is important to understand the fundamental rationale prompting changes at the national level.

Concealed Carry: An Emerging Trend in Higher Education

Today, ten states allow concealed carry as result of legislation or judicial litigation to include Arkansas, Colorado, Georgia, Idaho, Kansas, Mississippi, Oregon, Texas, Utah and Wisconsin (National Conference of State Legislatures, 2017). Utah was the first state to legalize concealed carry in 2004; however, policy implementation was delayed until 2006 pending the Supreme Court ruling on appeal (Rossner, 2011; Weinberg, 2013). Utah is also the only state where the legislature statutorily retains authority over weapon policies on campus. In other states, such as Colorado and Oregon, postsecondary institutions were ordered to comply with weapon policies after appellate courts ruled that university policies violated state established gun laws (Goral, 2012; Graves, 2012). In yet other states, such as Idaho, changes resulted partly in response to campus incidents. In the majority of these states, postsecondary institutions have simply lost legal battles over concealed carry and Second Amendment rights (Cramer, 2014).

Despite the rarity of rampage shootings, interest in concealed carry initiatives remains strong. In 2013, 19 states proposed legislative changes to amend or clarify gun laws on campus and in 2014, 14 states reviewed the issue (National Conference of State Legislatures, 2017). During the 2015 legislative session, 11 states proposed legislation including two of the largest, Texas and Florida. While Florida's Bill was defeated in the Senate (Urban & Turner, 2015), Texas passed legislation making it the eighth state to permit concealed carry (Luckerson, 2015). In 2016, Ohio lifted its ban on weapons allowing institutions to decide. In 2017, two more

states, Arkansas and Georgia, passed legislation to allow faculty and students to carry (National Conference of State Legislatures, 2017).

This recent trend of focusing on gun rights at postsecondary institutions mirrors the larger societal-level movement to ease gun rights to allow for personal use. At the national level, over the past twenty-five years, the vast majority of states have moved from “may issue” to “shall issue” gun policies because of right-to-carry initiatives (Bouffard et al, 2012a; Cramer, 2014). Under “may issue” policies, concealed weapon permits are discretionary and are only issued to individuals with proof of professional necessity. The move to “shall issue” policies eased gun rights as individuals can now obtain a concealed weapon permit for personal use (USACarry, n.d.). More recently, gun rights have encompassed an even broader perspective referred to as “open carry” or “constitutional carry.” Open carry allows for the right to carry a weapon without the requirement to conceal it from public view (Bishop, 2012). Texas’ concealed carry legislation extends from such a policy. Constitutional carry, or permitless carry, is believed to eventually replace right-to-carry laws (Weinstein, 2017). Given the evolving policy related to gun rights at the national level and the current gun culture within our society, it is anticipated that the focus on postsecondary campuses as public domains will likely continue.

Framing the Argument for Concealed Carry Initiatives

The framework that guides this research is routine activities theory (RAT) developed by Cohen and Felson in 1979. RAT is grounded in a group of criminological theories that focus on victimization perspectives and opportunity (Akers & Sellers, 2004; Cohen & Felson, 1979; Felson, 1994). RAT can be used to explain situational criminality and victimization. This theory works well with specialized populations and situational violence, such as campus environments, and proposes that victim’s actions can influence outcomes. As concealed carry initiatives are

grounded in self-protective behaviors, the motivation to carry encompasses an assumption related to the risk of criminal victimization as well as a deterrence perspective. While this theory has been widely used in criminal research, especially with regard to sexual assault, it has been used less frequently to explain motivation (Tewksbury & Mustaine, 2003).

RAT proposes that the opportunity for crime is dependent on three foreground elements, shown in Figure 1 (Cohen & Felson, 1979; Felson 1994). The first element is a motivated offender. The individual seeking to commit a crime must be motivated to do so. The second element is a suitable target. The offender must come in contact with the target they intended to victimize. Lastly, the motivated offender and a suitable target must converge in an environment that lacks a capable guardian, the third element (Cohen & Felson, 1979). The offender examines the area and intended victim(s) to make the determination of whether the target is suitable and unprotected. The likelihood of crime increases when the three elements converge in the same place (Guerette, 2010). Campus environments and student populations serve as suitable targets to a motivated offender. When applied to concealed carry, individuals use weapons to protect themselves thus increasing the number of capable guardians while decreasing target suitability. Concealed weapons further act to deter crime by reducing the opportunity for it.



Figure 1. Routine Activities Theory Model

RAT specifically addresses perceived risk in correlation to victim's behaviors and situational deterrence. Self-protective behaviors provide a comprehensive framework to help explain why weapons are viewed as necessary and are useful in explaining criminal outcomes (Guerette, 2010). Weapons, in this sense, increase the number of capable guardians, which then influences offender motivation. They also represent societies changing response to gun violence as a social problem using the concept of individual justice in relationship to safety. When applied to school shootings, RAT helps to explain how the three elements converge to increase crime from the offender's motivational perspective as well as the victim's protective actions. As school shootings occur in a matter of minutes, this theory focuses on prevention rather than response to crimes.

Rationale for Study

Despite legislative defeat and postsecondary resistance, the national debate over handguns on campus continues to gain momentum. Proponents of concealed carry argue that campuses are made safer by the presence of a gun because it acts as a deterrent to future crime and for purposes of intervention if an incident would arise. Conversely, opponents argue that handguns make campuses less safe because they increase the potential for a gun incident. While both sides posit conflicting positions, it is imperative that faculty and staff feel safe while on campus and when interacting with students in order to ensure a productive learning environment.

Yet, only a handful of studies has examined concealed carry from a faculty and staff perspective or has explored factors that contributed to pro-carry attitudes. Even fewer studies have specifically focused on faculty and staff residing in the upper-Midwest and Western region or have examined faculty and staff simultaneously. In addition, staff has rarely been studied even though they interact with students and faculty on a regular basis. This has resulted in a

significant gap in the literature. As research on concealed carry continues to emerge, it is important to understand the affect concealed handguns have on the campus environment based on perceptions about safety.

Concealed carry is an extremely important public policy debate that extends beyond political positioning. It affects a specialized population and creates tension with higher education policy. According to Bennett (2012), “a safe learning environment is a basic expectation of all students, staff, faculty, and community members” (p. 21). Meeting this expectation is the subject of debate from a concealed carry stance. States legislatures continue to debate the necessity of guns for intervention and deterrence purposes without empirical evidence. As Patten, Thomas, and Wada (2013) suggest, “While public policy should not be driven solely by public opinion, certainly public opinion, especially in regards to a special population like college campuses, should be considered when deciding issues as powerful as concealed guns on campus” (p. 566).

Statement of Purpose

The purpose of this study was to ascertain faculty and staff perspectives about concealed carry initiatives at postsecondary institutions. Specifically, this study was intended to describe and compare faculty and staff perceptions, opinions, and attitudes about permitting handguns on campus. This study further sought to identify factors that contributed to faculty and staff favoring initiatives and examine perceptions about safety and the negative effects associated with handguns. Using routine activities theory (RAT) as the lens to frame support for concealed carry, this study discussed the proposition that handguns could mitigate an offender’s motivation to commit a crime by decreasing target suitability and increasing the number of capable guardians.

Research Questions

Concealed carry is a complex institutional and societal level issue, which is frequently the subject of politicized debate. Using quantitative research methods, this study examined the following three research questions to better understand the perspectives of faculty and staff on concealed carry initiatives at postsecondary institutions:

1. What are the perceptions, opinions, and attitudes of faculty and staff concerning concealed carry at postsecondary institutions?
2. What factors contribute to faculty and staff favoring concealed carry initiatives at postsecondary institutions?
3. What is the difference in perceptions about individual protection, individual safety, and the negative effects of concealed carry between faculty and staff at postsecondary institutions?

Significance of the Study

Permitting concealed carry on campus in ten states, either through legislative amendment or judicial litigation, constitutes a significant change to higher education policy. The continued interest of lobbyist groups in overturning institutional gun bans, in conjunction with the easing of gun rights to allow for individual use, suggests this trend will continue. While violent crime on campus is relatively rare, the continuation of gun violence in higher education attracts significant media attention and serves as the catalyst for debate regarding the fundamental purpose of weapons. Gaining insight into faculty and staff perspectives on concealed carry initiatives, pro-gun attitudes, and the benefits and negative effects of permitting handguns is critical to influence legislative direction and inform institutional policy. A meaningful understanding of concealed

carry and its correlation to perceptions about safety promote better policy and a more informed educational community, thus fostering a safer environment.

College campuses encompass a special population and the opinions of that population should be considered when amending statute. The findings from this study benefit institutional policy by discussing suggestions to improve campus safety through targeted crime prevention and campus-wide programs. As research focused on identifying how safe and protected faculty and staff felt while on campus, there were implications for policy geared at alert and notification systems as well as the role of campus police. The research benefited faculty and staff by identifying how safe they would feel if handguns were permitted on campus. Faculty and staff should feel safe and free to enter into discussions with students without feeling implicitly threatened. It also informed the institutional and national debate on permitting concealed handguns on campuses by making faculty and staff preferences clear. Lastly, the research begins to fill the gaps in the literature on concealed carry initiatives, especially with regard to staff perspectives.

Operational Definitions

- *Active Shooter:* According to the Department of Homeland Security (n.d.), “an active shooter is an individual actively engaged in killing or attempting to kill people in a confined and populated area” (p. 1).
- *At-Risk Assumption:* The at-risk assumption asserts that as the number of legally carried weapons increase, there is a corresponding decrease in crime rates. Gun ownership affects crime through deterrence (Lott & Mustard, 1997).
- *Clery Act:* A federal law passed in 1990 to record and provide information on campus crime for purposes of disclosure and awareness. Originally called the Crime Awareness

and Campus Security Act, it was later renamed the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act after Jeanne Clery who was murdered on campus (Clery Act Policy, n.d.).

- *Concealed Carry*: Carrying a handgun in a public place when concealed from view. Permits to carry are issued by an agency of the state (Bishop, 2012).
- *Concealed Carry Initiatives*: Concealed carry initiatives refers to a group of policies grounded in Second Amendment constitutional rights, *the right of the people to keep and bear arms*, which affords individuals the right to carry a handgun in a public place when it is concealed from view (LaPoint, 2010).
- *Constitutional Carry*: The ability to carry a weapon, open or concealed, without a permit (Weinstein, 2017).
- *Faculty*: All full-time, part-time, and adjunct professors and instructors currently employed by the institution with a valid electronic address listed on the institution's public directory.
- *Lockdown*: A process whereby the school locks its doors and faculty, staff, and students are instructed to remain in their place. This process is used as a security measure during threat situations and is designed for the protection of everyone on campus (Piotrowki & Guyette, 2003).
- *May Issue*: A may issue policy refers to state jurisdiction over concealed weapon permits. Issuing a permit is at the discretion of local authorities and applicants must meet specified criteria. Authorities are not required to issue a permit (USACarry, n.d.).
- *Open Carry*: The ability to carry a handgun in a public place without having to conceal it from view (Bishop, 2012).

- *Rampage Shootings:* Rampage shootings are defined as involving multiple victims, a shooter who is a current or former student of the institution, and the shooting is general rather than specific (Rocque, 2012).
- *Routine Activities Theory:* A criminological theory developed to explain victimization in relationship to motivation and opportunity. The theory proposes that the likelihood of victimization increases when a motivated offender, a suitable target, and the lack of a capable guardian converge in time and space (Cohen & Felson, 1979; Felson, 1994).
- *Shall Issue:* A shall issue policy refers to state jurisdiction on issuing concealed weapon permits. If an applicant meets the state specified criteria then a permit will be issued. Permits are not considered discretionary (USACarry, n.d.).
- *Staff:* All staff members with a valid electronic address listed on the institution's public directory with the exception of the following duties and positions: grounds, maintenance, and service-related positions; athletic coaches and associated positions; mailroom staff; and media relations.
- *Victim of Crime:* Criminal victimization encompasses violent, personal, and property type crimes. Violent crime include assault, attack, and robbery. Personal crimes include stalking, harassment, threat, and intimidation. Property crimes include theft and vandalism.

Assumptions

1. Participants responded to the survey to the best of their ability and knowledge.
2. Participants responded to the survey in a truthful manner.
3. Participants completed the survey one time.

4. The survey instrument accurately measured the research questions and accomplished the purpose of the study.

Study Delimitations

1. The participants for this study were limited to faculty and staff at postsecondary institutions located in MN, MT, ND, and SD.
2. The participants for this study were limited to faculty and staff with a current electronic address listed on the respective institution's public website.
3. The study excluded staff associated with the following positions: grounds, maintenance, and service-related positions; athletic coaches and associated positions; mailroom staff; and media relations.
4. The sample population for this study included faculty and staff at four public postsecondary institutions.
5. Participants' perceptions, opinions, and attitudes were measured using a concealed carry on campus survey.
6. The survey was electronically distributed using Qualtrics.
7. The survey was set to "anonymize response" to ensure the confidentiality of the participants.

Summary

Chapter I provided a brief overview of the topic and the literature, introduced the motivation for gun-carrying behavior that guides this research, and identified the gaps in the emerging body of literature. The purpose of this paper was to gain a better understanding of faculty and staff perceptions, opinions, and beliefs about concealed carry initiatives, assess campus safety, and determine what factors contributed to support for concealed carry.

Furthermore, the purpose was to determine faculty and staff attitudes about how concealed carry initiatives, if passed, could affect campus safety. RAT provided the framework to better understand the motivation for carrying handguns in relationship to self-protective behaviors. Chapter two will provide a more comprehensive review of the literature relevant to gun violence at postsecondary institutions and concealed carry on campus initiatives.

CHAPTER II

LITERATURE REVIEW

In the wake of several high profile rampage shootings, there has been a push to amend state statutes to permit concealed carry on campus for the protection of faculty, staff, and students. With each incident of campus gun violence, opponents and proponents of concealed carry have fought for their respective agendas, using the incident as demonstrable proof of necessity. While researchers have cautioned against radical policy changes, such as amending gun laws in response to mass shootings (Kaminski et al., 2010), gun advocates have challenged existing laws arguing Second and Fourteenth Amendment Constitutional violations encompassing state authority and individual rights (SCC, n.d.). This is a controversial issue in higher education that could substantially influence the learning environment at postsecondary institutions. Yet, only a handful of studies have been conducted examining the effect of concealed carry initiatives on faculty and staff populations or their evolving perspectives on the issue. Little information is known about what factors contribute to pro-carry attitudes amongst faculty and staff or whether handguns, if allowed, would affect their perceptions about safety while on campus.

This literature review examined three major areas related to concealed carry initiatives. First, studies were examined that encompassed campus violence, the effect of violence, and safety at postsecondary institutions to provide background information on the issue. Second, arguments for and against concealed carry were outlined to better understand the fundamental rationalizations surrounding the debate. Faculty and staff perceptions about concealed carry

were also examined to determine existing views on initiatives. Lastly, judicial and legislative actions are reviewed to establish current justifications for changes.

Routine Activities Theory

The theoretical framework guiding this research was Cohen and Felson's (1979) routine activities theory (RAT) developed to explain predatory crime and patterns that influence victimization. This theory suggests that the convergences of three foreground factors affect criminal victimization. These foreground factors include a suitable target, a motivated offender, and the lack of a capable guardian (Cohen & Felson, 1979; Felson, 1994). This theory has been used to explain crime from an ecological viewpoint that influences victimization through life-style patterns and daily routines. It has also been used to explain concentrated hot spots for criminal activity. This theory suggests that informal social control and target hardening can affect victimization. It further asserts that the guardianship element extends beyond formal law enforcement agencies to include the public, friends, family, and strangers. These informal controls are often influential in preventing or deterring potential crime by protecting targets (Akers & Sellers, 2004). This theory is often referred to as a theory of criminal victimization rather than a theory about criminal motivation.

Research examining RAT has been plentiful and has consistently found support for the theory. Sherman, Gartin, and Buerger (1989) found support for RAT in their study examining hot spots for crime given the convergence of the three elements in concentrated areas. Similarly, Kennedy and Forde's (1990) research on property crime reported that individuals' daily routines influenced their likelihood of violent crime. In a study on college students, Mustaine & Tewksbury's (2003) found that students' life-styles such as attending parties, being out late, and not locking their doors increased their risk of victimization. While Marcum, Higgins, and

Rickels (2010) suggested that exposure to motivated offenders and individual behaviors influenced crime.

RAT has also been used as the framework that guides crime prevention and deterrence such as with situational crime prevention techniques and target hardening. These preventative techniques have mainly included environmental changes such as locking doors, not walking alone at night, and enhanced neighborhood organization. On campus, preventative techniques include access to programs and identification of risk factors particularly with regard to sexual assault (Azimi & Daigle, 2017). Although Guerette and Santana (2016) have suggested that while preventative techniques are important, opportunity for crime is a crucial factor that influences motivation and that without it, crime becomes less likely.

Violence at Postsecondary Institutions

Violence at postsecondary institutions has always been a concern, yet, more recently the focus has specifically encompassed gun violence. In response to concern over campus safety, Congress passed the Crime Awareness and Campus Security Act in 1990 (Bennett, 2012; Rossner, 2011). This landmark federal law required postsecondary institutions to report and disclose campus crime. In 1998, the law was officially renamed the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (*20 U.S.C. §1092(f)*), referred to as the Clery Act, after Jeanne Clery who was raped and murdered in her on-campus residence hall by a fellow student (Clery Center, n.d.). The Clery Act strives to make institutions accountable for the safety of their students by compelling them to improve security. Prior to this time, postsecondary institutions were not required to compile or disclose statistical crime data to the public. Instead, they independently recorded criminal acts that occurred on campus property and dealt with incidents privately (Bennett, 2012).

Today, the Clery Act federally mandates that institutions must comply with specific provisions by tying reporting and disclosure mandates to federal student aid participation (Clery Act Policy, n.d.). The Act directs institutions to establish policies and compile statistical data on criminal offenses. It also mandates that institutions disclose policies and statistics, as well as implement notification systems to alert students of serious threats (U.S. Department of Education, 2016). The intent of the Clery legislation is to provide a system of public disclosure and notification to inform students and prevent incidents (Bennett, 2012). The fundamental goal is to keep students safe and protect them from victimization. This legislation also puts pressure on institutions to maintain low crime rates in order to avoid negative press or impact enrollment, a fiscal consequence (Tomsich, Gover, & Jennings, 2011). Gun violence on campus is included under this Act.

College campuses have also been made safer by conducting threat assessments and enacting early notification procedures. Following the Virginia Tech tragedy, postsecondary institutions were pushed to create threat assessment teams, implement campus safety protocols to prevent violence, and address mental health needs (Nolan, Randazzo, & Deisinger, 2011). Specifically, the International Association of Campus Law Enforcement Administrators (IACLEA) issued a “blueprint” to colleges containing 20 safety recommendations (Thrower et al., 2009). These recommendations were considered priorities in order to mitigate future violence. More recently, Congress authorized the National Center for Campus Public Safety to improve resources and communication about safety on campus under the Campus Security Act (Grasgreen, 2013). According to Lake (2013), the Center will create and advance national safety standards as well as provide guidance for consistent implementation.

Rampage Violence Becomes a Concern

While incidents of mass violence on college campuses are fairly isolated, the frequency of recent cases involving gun violence has incited national concern and a renewed interest in concealed carry initiatives. In addition, the intense media focus on shootings at postsecondary institutions has contributed to the perception of a violence epidemic (Barton, Jensen, & Kaufman, 2010; Fox & Burstein, 2010). Research examining the effect of gun violence on a student's perception of fear and risk has primarily focused on environmental, contextual, and social perspectives (Greve, 1998). According to Cao, Zhang, and He (2008), "although gun violence in schools is rare, it has devastating consequences when it occurs. It undermines the quality of learning experiences, it reduces the positive activities of people associated with the campuses, and it attracts negative media coverage" (p. 155).

While faculty and students generally perceive higher education campuses as safe, violent acts can influence student's social behavior and alter their perceptions about fear and risk, resulting in exaggerated rates (Rutherford & DeVaney, 2008). Over the past ten years, there were several high profile cases involving rampage shootings as well as single target shootings on campus. Rampage shootings are defined as involving multiple victims, a shooter who is a current or former student of the institution, and the shooting is general rather than specific (Rocque, 2012).

The deadliest act of rampage violence in higher education history occurred at Virginia Polytechnical Institute and State University (Virginia Tech) in 2007 when a student, Seung-Hui Cho, fatally shot 32 students and faculty and injured 25 others before killing himself (Fallahi, Austad, Fallon, & Leishman, 2009; Newman & Fox, 2009). Cho, who was equipped with multiple semi-automatic weapons, killed individuals as he randomly fired rounds of ammunition

into classrooms and common areas. The following year, Latina Williams shot and killed two individuals before killing herself at Louisiana Technical College (LTC). Six days later, Steven Kazmierczak murdered five individuals, injured 18 others, and then shot himself at Northern Illinois University (NIU; Newman & Fox, 2009). These shootings became the catalyst for numerous changes at the postsecondary level geared at alert and notification systems.

Tragic events, like campus rampage shootings, are believed to negatively influence students' perceptions about risk. To test this effect, Kaminski et al. (2010) drew on Gerbner and Gross' (1976) media effect theory to examine perceptions about fear and risk after the Virginia Tech and NIU shootings. Gerbner and Gross' theory (1976) suggested that perceptions about frequency are influenced by the intensity of the media's coverage of an event. Kaminski et al. (2010) hypothesized that the intense media coverage of the two tragedies increased students' perceptions about risk and affected their behavior. Using pre- and post-survey data from 1,952 students, the researchers reported that fear was bound by time, increasing directly after each incidents and then decreasing over time. While the participants were not the direct victims of the tragedies, the events still altered their social interactions such as not walking alone at night and their level of awareness when in the classroom (Kaminski et al., 2010).

Similar to this study, Stephenson, Valentiner, Kumpula, and Orcutt (2009) examined the impact of campus shootings but focused on students' mental health. Their study differed in that the participants were enrolled at NIU at the time of the shooting. Using a cross-sectional and longitudinal design, they surveyed 691 students about their experiences. The researchers found that students exposed to violence were more likely to have mental health issues, high rates of anxiety, and post-traumatic stress symptoms that, in turn, affected their social interactions.

These and other studies suggest that campus violence impacts student's mental health and social behaviors. They also provide evidence that risk is correlated with perceptions about safety.

Campus shootings have raised questions about the safety and security at our nation's campuses. To better understand the criminal correlates and identify risk factors associated with rampage shooters, researchers have focused on high profile incidents. Given the rarity of incidents, this task has proven difficult. Newman and Fox (2009) conducted one of the first analysis of the backgrounds and killings of four rampage offenders at the postsecondary level to identify commonalities. They found that shooters were generally older, experienced social marginalization, had mental health issues, and suicidal idealization. Rampage shootings are different from targeted shootings that may involve a specific relationship in that they are generally considered a symbolic act against society. Shooters commit violence "to make a statement" against an institution or community (Newman, Fox, Harding, Mehta, & Roth, 2004). They are also different in that the majority of incidents occurred in relatively safe rural settings rather than in suburban settings (Rocque, 2012). However, the randomness of shootings resulted in the realization that violence could happen anywhere. It was not limited to inner-city or high crime areas, which changed perceptions about violence. Due to the limited research on rampage shooters at the postsecondary level, more studies are needed to develop a shooter profile and to better identify students in need of assistance.

While gun-related shootings have occurred consistently since 2007, the majority of incidents were targeted victims rather than rampage shootings involving multiple victims. This has led to media and political scrutiny of campus safety; yet, in reality, violent crime is exceedingly rare. According to the U.S. Department of Education (U.S. Department of Education, 2014), a total of 149 murders and 16 manslaughters occurred on college campuses

between 2007 and 2009, an average of 54 incidents per year. This timeframe includes victims from the Virginia Tech tragedy and two subsequent rampage incidents. In 2010 and 2011, there was an average of 15 murders per year (Roberts et al., 2014). This statistic is consistent with average murder rates preceding Virginia Tech, where an average of 15.2 murders occurred annually on campuses between 2001 and 2004 (Hummer, 2004). Given that there are thousands of colleges in the U.S., the chance of being murdered on campus is nearly zero percent.

While any act of violence is considered excessive, postsecondary institutions are safer than their surrounding communities (Sulkowski & Lazarus, 2011). Yet, gun groups and lobbyists continue to argue for concealed carry based on safety concerns even though concerns appear inconsistent with actual risk. To better understand the debate over concealed carry, it is important to examine the arguments both for and against permitting weapons on campus.

Shooting Incidents as the Catalyst for the Concealed Carry Debate

Campus shootings have resulted in a polarizing debate over whether concealed handguns should be permitted at postsecondary institutions with opponent and proponents staunchly divided on the issue. The dichotomy of the opposing positions has led to an on-going and often heated debate over Second Amendment rights at the state and national level. Based on the arguments and counterarguments of the two sides, there is little overlap. The only commonality amongst the groups is the fundamental desire to ensure a safe environment at postsecondary campuses.

The Growth of Student Interest

In the wake of the Virginia Tech tragedy, Chris Brown, a student at the University of North Texas, formed Students for Concealed Carry on Campus later renamed Students for Concealed Carry (SCC) (Wiseman, 2012). Students concerned about the potential for violence, began to organize themselves based on the common goal of promoting concealed carry. The

continuation of campus shootings drew interest in overturning gun bans as well as increased membership in the group. The organization gave students a platform to fight for the right to carry weapons to protect themselves against victimization and mass violence. The decision to start this group would become a pivotal turning point in the fight for weapons on campus.

SCC has grown significantly since its inception and now claims over 36,000 members nationwide with student members in every state (SCC, n.d.). The group eventually expanded beyond students to include faculty, staff, parents, and other interested parties. The organization supports lifting concealed carry on campus bans and promotes a pro-gun message as related to campus safety (Wiseman, 2012), asserting that guns make colleges safer (Fox, 2008). The rationale behind this assertion is that armed campuses are less attractive to individuals who want to commit violence because individuals are better able to guard against perpetrators (Patten, Thomas, & Wada, 2013).

The group is well-organized and is an integral force in challenging campus gun laws, successfully prompting statutory changes in several states. They regularly hold “empty-holster protests” to demonstrate their inability to protect themselves (SCC, n.d.). In addition, the group testifies at legislative hearings and have successfully filed several lawsuits challenging colleges and universities bans on weapons as being in direct violation of state law.

According to their website, SCC has two main functions:

The first function is to dispel the common myths and misconceptions about concealed carry on college campuses, by making the public aware of the facts. The second is to push state legislators and school administrators to grant concealed handgun license holders the same rights on college campuses that those licensees currently enjoy in most other unsecured locations (SCC, n.d.).

The arguments outlined by proponents in support of concealed carry have evolved since the inception of SCC. After the Virginia Tech shooting, gun lobbyists and student organizations argued that concealed carry could potentially decrease the number of casualties in the event of a rampage shooting (SCC, n.d.) as well as deter future violence (Bouffard et al., 2012a). While these arguments continue to be central in the debate, with time, the arguments for concealed carry broadened to include the fundamental right of self-defense against victimization as well as a constitutional right afforded by the Second Amendment, *the right to bear arms*. More recently, the National Rifle Association (NRA) made the controversial argument that weapons could also decrease rapes at postsecondary institutions (Kingkade, 2015). This set off a series of rebuttals with violence against women advocates arguing that permitting guns could actually increase rapes by giving perpetrators a weapon (Watts, 2015). This assertion continues to be debated.

Opposition Remains Steady

In opposition to concealed carry, there are several organizations and groups that actively oppose guns on campus to include Keep Guns Off Campus (KGOC) and Students Against Guns in Education (SAGE); although, the greatest opposition comes from higher education officials (Weinberg, 2013). Anti-concealed carry organizations suggest that gun reform has been affected by salacious cases without regard to rational thought. These groups and officials similarly assert that lifting gun bans would only exacerbate gun violence on campus by increasing the total number of weapons (Weinberg, 2013). Furthermore, they contend that guns increase the potential for accidental injuries, deaths, and suicides (Bouffard et al., 2012a). The American Association of State Colleges and Universities (AASCU) suggests that the inherent nature of the college student experience includes risky behaviors identifying that “college life (including drug

use, alcohol abuse, stress, and social obstacles) when combined with firearms have potentially lethal consequences for all people in the campus community” (Harnisch, 2008, p. 5).

The Brady Campaign, an anti-gun activist group, has consistently argued that there is no definitive evidence that supports the idea that arming students saves lives. Instead, they insist that it creates chaos during an active shooter situation and compounds the complexity of incidents when guns are involved (BCPGV, 2010). The group suggests that allowing concealed weapons on campus would only increase the number of guns, leading to future victimization.

Estimating the Effect

While proponents of concealed carry contend that guns deter crime, opponents argue that guns increase crime and related incidents. Yet, the causal relationship between legally carried guns and crime has been the subject of debate for decades. To examine this relationship, Lott and Mustard (1997) used time series cross-sectional data from Uniform Crime Reports over a 15-year period. The researchers reported that states with “right-to-carry laws” had a corresponding decrease in gun-related crime and that individuals purchased guns because they perceived a risk of victimization. These findings resulted in a “more guns, less crime” campaign advanced by pro-gun organizations (Lott, 2000). However, Lott and Mustard’s research became the subject of much contention. Researchers challenged the validity and reliability of their methods suggesting that their use of dichotomous variables led to “extreme sensitivity” (Black & Nagin, 1998) while replication indicated that guns may actually increase crime (Ayres & Donohue, 2003). Even though Lott and Mustard’s research remains the focus of much debate, their findings continue to be used as the foundation for concealed carry initiatives.

Conversely, Thompson et al. (2013a) contend that antidotal evidence suggests that the low crime rate on campus results from strict policies banning weapons. This idea is supported

by Kwon and Baack's (2005) research that found states with stricter gun control laws had fewer gun related crimes. In a study focusing on police chiefs, Thompson, Price, Mrdjenovich, and Khubchandani (2009) found that in response to campus shootings, public institution had implemented more comprehensive alert systems and active shooter strategies to better guard against firearm violence, which has had an effect. While the relationship between guns and crime remains largely debatable and speculative, researchers continue to examine the issue to influence gun laws and policies.

It is clear however, that passing concealed carry laws would result in handguns on campuses. Bouffard et al. (2012a) conducted one of the only studies to estimate prevalence if handguns were allowed. Using a quantitative research design, the researchers surveyed 1,396 students and found that while the overall number of handguns would increase, prevalence varied significantly by academic discipline. Their research found anywhere from 10% to 82% of classrooms would have at least one student in possession of a handgun. It is not clear, however, if this conclusion applies to students that would actually qualify to carry given age and background requirements. In a follow-up study to identify academic discipline variation and propensity to carry, Bouffard, Nobles, and Wells (2012b) found that 58% of criminal justice majors identified that they would carry a weapon whereas mathematic and physical science majors were less likely. This finding is not surprising given that criminal justice majors, more so than other disciplines, are preparing for future employment in law enforcement and probation occupations where firearms are often used. Jang, Kang, Dierenfeldt, and Lindsteadt (2015) further found that students most likely to carry were white, males, familiar with weapons, and had parents who carried a weapon.

The Majority Sides with Opponents

While advocates on both sides of the debate argue their respective positions, the majority of faculty and students side with opponents. In one of the first studies after the Virginia Tech tragedy, Brinker (2008) examined student perspectives on proposed legislation to expand concealed carry initiatives in the state of Missouri. Using a quantitative survey, he asked students to indicate their support for carry laws. Of the 313 students who participated in the research, 24% responded that they would support legislation permitting students to carry handguns on campus. His research also found that a small percentage of students brought a weapon to school even though it was prohibited by institutional policy. Brinker's research began to assess students' perspectives in light of campus shootings; however, it did not identify the rationale for pro-carry attitudes or why students perceived weapons as necessary. This study was followed by a handful of research examining student's support for initiatives.

A study by Rossner (2011) similarly reported that 21% of undergraduate students favored concealed carry laws, while Wells, Cavanaugh, Bouffard, and Nobles (2012) found 10-23% supported concealed carry depending on the survey method. In a study of Texas and Washington students, researchers found that while students in both geographical regions were uncomfortable with guns on campus, students in Texas reported slightly higher acceptance rates (Cavanaugh, Bouffard, Wells, & Nobles, 2012).

In response to these studies, Thompson et al. (2013a) suggested that while they contributed to the growing knowledge on concealed carry, they lacked the ability to be generalized based on the small number of participants. To gain a broader perspective, the researchers conducted the largest study to date by gathering information from multiple institutions in 15 Midwestern states (Thompson et al., 2013a). They found slightly lower student

support for carry laws at 22%, but correlated weapon carrying to perceptions about threat or prior victimization. In contrast, Jang, Dierenfeldt, and Lee (2014) found that student support for legalizing weapons was dependent on political orientation and weapons socialization rather than fear or actual victimization.

Research examining faculty and staff perspectives has been less plentiful. Bennett, Kraft, and Grubb's (2012) assessed faculty attitudes on concealed carry and found that 76% of faculty opposed the expansion of legislation; however, opposition was mediated by political orientation and gun ownership. Similarly, Thompson et al. (2013b) found even greater faculty opposition, (94%), suggesting that in addition to political orientation and gun ownership, gender contributed to support. In a series of replications focusing on different groups, Thompson and her colleagues examined perceptions and practices relating to concealed carry. In a study of university presidents, Price et al. (2014) found that 95% were not supportive of firearms on campus. They also found that institutions needed to focus more on implementing preventative strategies to guard against potential gun violence. Consistent with prior studies, support for weapons was mediated by political orientation with Republicans indicating greater support. Although support was contingent on advanced firearm training and the implementation of higher standards for carrying. Price, Thompson, Payton, Johnson, and Brown (2016) followed this research with an examination of presidents at historically black colleges. The researchers reported slightly more opposition, 97.4%, and identified few benefits of permitting weapons on campus. Both of these studies found that policies were established to prevent violence such as early notification systems, active shooter plans, and services for students but more work was needed.

Even though faculty, staff, and students generally opposed concealed carry on campus, the relationship between guns and crime prevention continue to be debated. Given this, it is

important to gain a better understanding of the legal battle that universities encounter when developing institutional policies. A review of state changes provided further insight into why this trend continues.

Legislative and Judicial Purview

Gun laws fall under federal guidelines as established by the Second Amendment (Article II) of the United States Constitution (Fennel, 2009). They direct that each state's independent legislative body is granted the authority to enact state specific statute establishing and regulating concealed weapons in public places. This system is grounded in a Federalist jurisprudence perspective, which affords states independent purview over the matter (Hosking, 2014; Maltese, Pika, & Shively, 2013). Federal law, however, does not regulate or have discretionary power over states' option to issue concealed permits. Legal challenges encompassing self-defense arguments have prompted states to review weapon policies as they pertain to public property, which includes college campuses.

States Move to Ease Gun Restrictions

Over the past twenty-five years, state legislatures have trended toward less restrictive guns laws under right-to-carry initiatives and expanded the list of public places where weapons can be carried. A majority of states have amended their gun laws by moving away from "may issue" policies to "shall issue" guidelines (Cramer, 2014; Hosking, 2014). "May issue" concealed weapon policies are discretionary and permits are issued only to individuals meeting stringent qualifications. Individuals who apply for a permit are required to demonstrate professional necessity or requirement such as with law enforcement occupations. Applicants who cite personal protection as the necessity are denied as insufficient (Bouffard et al., 2012a; Hosking, 2014).

Beginning around the 1990s, states started shifting to more liberal practices called “shall issue” policies. “Shall issue” policies are less restrictive in that individuals who meet the state’s minimum requirements *shall be* issued a permit. The provision related to occupational requirement and proof of necessity was removed and replaced with more general restrictions to allow civilians the ability to carry weapons for personal use (Rossner, 2011). Under this change, individual states continue to proscribe minimum requirements for obtaining a permit, which frequently include criminal background checks, specified waiting periods, and minimum age requirements. The campus debate over permitting concealed handguns on campus extends from this national trend of easing gun restrictions and is consistent with the shift to “shall issue” policies (Bouffard et al., 2012a).

The Corresponding Effect on Postsecondary Institutions

Postsecondary institutions fall under the broad definition of public place as defined by individual state statutes for the purpose of establishing allowable domains. As states eased their gun right laws, debate grew over where weapons could be legally carried. In turn, the Court was forced to examine whether postsecondary institutions were “fundamentally different” than other public areas (Cramer, 2014). Currently, sixteen states have laws specifically banning weapons on campus (National Conference of State Legislatures, 2017). In twenty-three other states, the legislature has invested rule-making authority in institutions of higher education to establish rules and regulations as relevant to their respective campuses. Ten states statutorily permit concealed weapons on campus to include Arkansas, Colorado, Georgia, Idaho, Kansas, Mississippi, Oregon, Texas, Utah, and Wisconsin (National Conference of State Legislatures, 2017). The remaining state, Tennessee, allows only faculty with a concealed weapons permit to

carry; however, the law does not extend to other individuals. With the exception of Utah, all of these states made changes within the last ten years.

During the 2013 legislative session, nineteen states proposed bills to permit concealed carry on campus and two states, Kansas and Arkansas, passed laws. During that same year, five states proposed bills explicitly prohibiting concealed carry on campus. All five bills failed to pass (National Conference of State Legislatures, 2017). The following year, 2014, fourteen states proposed concealed carry initiatives with one state, Idaho, passing legislation. In 2015, eleven states considered bills to amend state statutes to allow concealed handguns including two of the largest states, Texas and Florida (Mulhere, 2015; National Conference of State Legislatures, 2017). Texas passed legislation making it the eighth state to permit guns. This was seen as a significant advancement for gun right advocates although SCC rejected this notion, stating that the amendments do not go far enough (Fernandez & Montgomery, 2015). In 2017, both Arkansas and Georgia passed legislation allowing faculty and students to carry concealed weapons on campus becoming the latest states to enact changes. This continued interest represents a changing philosophy and focus on weapons reflective of what is happening in our larger society today.

The Court Favors Concealed Carry

In 2004, Utah became the first state to permit concealed weapons on campus (Wiseman, 2012) as a result of legal challenges to existing statute rather than a traditional act of legislative amendment (Bouffard et al., 2012b). However, policy implementation was delayed until 2006 pending the ruling of Utah's Supreme Court based on an appeal. After the law was initially passed, the University of Utah took an autonomous position and enacted a policy specifically banning guns on campus. In response, a lawsuit was filed against the University alleging that the

ban was in direct violation of state established gun laws. The court ruled against the University. The University appealed, naming Shurtleff, Utah's Attorney General, as the defendant. The University argued that postsecondary institutions had absolute exemption from gun laws based on the definition of public place and overarching institutional authority (*University of Utah v. Shurtleff, 2006*).

In 2006, the Supreme Court ruled against the University finding that the institution did not have legal authority to ban handguns and overturned the policy. The ruling further directed the institution to comply with gun laws by allowing concealed weapons on campus (Bouffard et al., 2012a). As a result, all ten public institutions are required to permit concealed weapons and are statutorily prohibited from enacting weapons' bans. This is different from other state's carry laws in that Utah's state legislature statutorily retains authority over the issue, barring institutional oversight.

The victory in Utah paved the way for legal challenges in other states. In the State of Colorado, a lawsuit filed against the University of Colorado by SCC and University students alleged that University Regents misapplied the law by instituting bans (Goral, 2012). The Regents responded, arguing that they were in the best position to determine weapons policies on campus property. Similar to Utah, the University had a long-standing policy specifically banning weapons on campus. In 2010, the Colorado Court of Appeals ruled that institutional policy prohibiting weapons violated state statute on concealed carry (*Regents of the University of Colorado v. Students for Concealed Carry on Campus, 2010*). As a result, several institutions were forced to lift their bans. The University of Colorado continued to fight to retain its existing policies until 2012 when the Supreme Court affirmed the Appellate Courts decision (Grasgreen, 2012).

Changes in Oregon were a little different. A student who was suspended for carrying a concealed weapon on campus filed a lawsuit against the university system (Graves, 2011). At the time, the university had enacted a policy banning weapons on campus in direct opposition of state administrative rules. In 2011, the court ruled that the institution overreached its authority and authorized individuals with permits to carry weapons on campus grounds. Oddly enough, the Court also ruled that the University retained its authority to establish applicable weapons policies for designated campus areas. In 2012, the University system instituted a ban on weapons in specified areas to include buildings, dorms, and classrooms (Graves, 2012). This policy demonstrates a consistent oppositional position prevalent amongst colleges and universities on the issue. It is also representative of the legal battle facing institutions and the changing gun climate in our society.

These rulings led to further changes and creative ways around the issue. For instance, Wisconsin and Mississippi created exemption clauses to circumvent laws (National Conference of State Legislatures, 2017). In Mississippi, individuals who voluntarily completed enhanced gun safety courses cannot be prohibited from carrying with the exception of dorm rooms (Mississippi Legislature, 2011). Wisconsin *may* prohibit weapons in buildings but only if signs were clearly posted at each entrance (Mulhere, 2015). Moreover, in Kansas, statute explicitly directed that institutions cannot prohibit weapons on campus unless acceptable security measures were implemented to adequately protect students and faculty from violence (Bouffard et al, 2012a). The state legislature then granted public institutions a four-year exemption from carry laws in order to implement appropriate measures. In Arkansas, laws were amended making it is permissible for faculty to carry but, at the same time, allowed institutions to opt-out of the provision. To date, all Arkansas postsecondary institutions have executed this option (Mulhere,

2015). For all of these adaptation, it appears that states are moving forward cautiously by addressing concealed carry but then circumventing it by placing limits on institutions or carry parameters.

In 2014, Idaho passed Senate Bill (SB) 1254 making it the seventh state to pass laws permitting concealed weapons on campus (Zuckerman, 2014). During legislative hearings, lobbyist groups along with several teachers who experienced serious incidents of campus victimization, testified in support of concealed carry. Dr. Kimberly McAdam, a faculty member at one of the universities, testified in support of the Bill.

According to the legislative record, Dr. McAdam's indicated that she "had her life threatened by a former student who wanted to shoot her. Now she is worried that if the individual comes to her abnormal psychology class, which has only one door and no windows, there would be no way for her to escape with her life and the only way either her or her students would have a fighting chance is if she or one of her students could be armed and able to defend themselves...She asked the Committee to give her a fighting chance to save her life and the life of her students" (Idaho Senate State Affairs Committee, 2014, p. 4).

In opposition to the Bill, campus police organizations and university administrators provided testimony. Together they argued permitting concealed carry would increase the number of guns on campus and would lead to further incidents of gun violence. The Bill passed in both the House and the Senate and was signed into law (Idaho Senate State Affairs Committee, 2014).

More recently, after multiple attempts during consecutive sessions, Texas' legislature passed a bill to allow concealed carry on campus (Luckerson, 2015). Interestingly, the governor

made a symbolic gesture by signing the bill at a shooting range to demonstrate his support for the change. This bill extends from an “open carry” proposition, which allows handguns to be carried in plain sight. The state continues to establish the parameters for handguns on campus and formulate institutional policy. Arkansas and Georgia are the latest states to pass legislation allowing faculty and students to carry weapons on campus. These states are now reviewing changes. In all of these states, postsecondary institutions were mandated by law to amend policies despite opposition. In addition, it appears that the fight was more about gun rights rather than an analysis of actual risk. Rampage shootings will likely continue to occur on campuses; therefore, it is important to examine why it is happening and address prevention rather than just reacting to it.

Summary

Chapter two provided a comprehensive overview of concealed carry to include school violence, legislative and judicial factors, state specific information, and faculty and student perspectives. The research indicated that the majority of the higher education population opposed concealed carry with only 20-25% favoring initiatives. The research also demonstrated that faculty, staff, and students supported initiatives for different reasons. As concealed carry is a more recent trend in higher education, the literature continues to emerge. Yet, more research is needed to fill the gaps in the literature to identify the reasons for the continued interest in amending gun laws and the factors that contribute to support. The literature is also lacking in research specifically examining how the presence of handguns could affect the learning environment, if permitted on campus.

Concealed carry continue to be a contentious issue, with opponents and proponents arguing their respective agendas. Concealed carry is also a political and constitutional debate

lacking empirical research. The emergence of concealed carry initiatives in higher education has become more about the legality and consistency of statute and policy rather than the impact on learning. Based on the precedent established by lawsuits in concealed carry states, it is possible that even if a state's legislative body opposed weapons on campus institutions could be forced to permit handguns due to legal interpretation. In states where policy has conflicted with state gun laws, courts have applied strict interpretations of the law and permitted concealed weapons. While the momentum to change laws grew out of campus shootings, given the rarity of such occurrences it is unclear whether change is actually necessary. Even though the majority of faculty and students oppose campus carry initiatives, in the last ten years ten states passed laws to allow concealed weapons on campus. This represents an emerging and changing philosophy about protection, representative of society's view on gun violence. As violence continues to occur in schools, it appears that concealed carry initiatives will continue to be proposed. Given this, it is critical that further research is conducted to better understand the perspectives of the higher education community who would be directly impacted by legal and policy changes permitting handguns on campus.

CHAPTER III

METHODOLOGY

Concealed carry on campus is an important and controversial issue within higher education today. While colleges have implemented policies that enhance campus safety and security, gun activists are fighting hard to change statutes and institutional policies that ban weapons on campuses. Students for Concealed Carry (SCC), in particular, have been instrumental in challenging policies arguing that individuals have the right to self-protection. They further assert that guns make campuses safer based on a deterrence and intervention perspective (SCC, n.d.); even though research finds colleges are already safe (Healy & Margolis, 2012; Sulkowski & Lazarus, 2011). Since 2004, ten states have amended laws to allow for concealed carry on campus indicating a growing trend in higher education today.

With this study, the researcher sought to ascertain faculty and staff perspectives about concealed carry initiatives at postsecondary institutions. Specifically, the researcher intended to describe faculty and staff perspectives, identify factors that contributed to support, and analyze opinions about safety and the negative effects associated with permitting handguns on campuses. Using quantitative methods, the following descriptive research questions were examined:

1. What are the perceptions, opinions, and attitudes of faculty and staff concerning concealed carry at postsecondary institutions?
2. What factors contribute to faculty and staff favoring concealed carry initiatives at postsecondary institutions?

3. What is the difference in perceptions about individual protection, individual safety, and the negative effects of concealed carry between faculty and staff at postsecondary institutions?

This chapter describes the research methods and procedures used to conduct research on faculty and staff perceptions. It further identifies the research design, the sample population, the survey instrument, reliability and validity of the instrument, and data collection methods and analysis procedures.

Research Setting

This study included participants from four mid-sized state universities located in the Upper-Midwest and Western region. The institutions are identified using the following pseudonyms based on state location: Minnesota (MN) University, Montana (MT) University, North Dakota (ND) University, and South Dakota (SD) University. The universities are four-year public institutions and are located in small to moderately sized cities, surrounded by rural areas. The institutions vary in size from 3,100 to just over 5,000 students based on 2016-2017 enrollment statistics (National Center for Research Statistics, 2017). Minnesota University was the largest of the four institutions followed by Montana University, North Dakota University, and finally South Dakota University. All four institutions offered on-campus and online courses. These institutions were selected based on public accessibility to web-based faculty and staff directories. The four states were further selected to gain insight into a regional perspective within proximity of the researcher's home institution.

North Dakota is the only state where handguns are statutorily prohibited on campus with the exception of the lawful storage in vehicles (N.D.C.C. § 62.1-02-13). In MN, MT, and SD, the respective state's legislature invested authority in the university system to decide whether

weapons were permitted. In each of these states, the State's Board had established policies on weapons on campus to provide general guidance and then each university had institutional policy specific to their campus (Minnesota State Colleges and Universities, 2003; Montana Board of Regents, 1999; South Dakota Board of Regents, 2005). A review of weapon policies for the three institutions indicated that each had established general policies prohibiting faculty, staff, and students to carry weapons with the exception of licensed peace officers. Minnesota further allowed visitors with concealed permits to carry. Each institution had designated facilities where unloaded recreational weapons could be stored along with policies establishing criteria for use and eligibility. Policies for special requests, demonstrations and activities, and transporting weapons in vehicles were also addressed.

A policy review was conducted to determine safety practices and procedures currently in place at the four institutions. This review was conducted because institutional practices can influence perceptions about safety and security while on campus. The review indicated that all four institutions operate similarly. Each institution had established emergency guidelines or policies referencing active shooter training, lockdown procedures, and emergency notification systems. In terms of campus protection, there were differences between institutions. North Dakota University employed full-time security officers while Minnesota University had full-time security officers and a Director of Public Safety. Security officers are civilian trained staff with limited enforcement powers. Montana University had a university police department with sworn law enforcement officers licensed to carry a weapon. Whereas, South Dakota University contracted with the city police department to patrol campus and employed a night security guard. The differences in protection services were reflective of the city where the institution was located with Minnesota University in the largest city and South Dakota University in the smallest.

Participants

This study included a total of 1,557 full-time, part-time, and adjunct faculty and staff currently employed by one of the four institutions. Faculty and staff participants were identified by searching the institutions 2016-2017 academic year web-based public directory. During the Fall 2016 semester, the researcher developed four databases containing the electronic address of all qualifying faculty and staff listed on the institution's directory. The researcher reviewed each employee to determine whether they were eligible for inclusion in the study based on their title and description of their position. If an individual met the study parameters, their electronic mailing address was copied into a master database divided by institution.

Subject selection was based on previously established criteria. For faculty, all undergraduate faculty listed on the institution's website with an active electronic address were included in the study and their addresses were copied into the database. Faculty listed on the institution's webpage without an address were further reviewed. If an electronic address could not be located, the individual was not included in the study. For staff, positions aligning with the following duties were excluded from the sample: grounds, maintenance, and service-related positions; athletic coaches and associated positions; mailroom staff; and media relations. These positions were identified for exclusion as the focus of the study was on the academic setting and campus interactions. This resulted in a small number of exclusions per institution with the largest category being grounds, maintenance, and service-related positions.

After establishing an electronic address database for each institution, duplicate addresses were deleted to avoid multiple solicitations. The databases were then copied into Qualtrics for distribution. Qualtrics is an online survey tool used by the North Dakota University System (NDUS). In order to obtain a representative sample, the total qualifying population was sent an

electronic solicitation inviting them to participate in a study about concealed carry initiatives (see Appendix A for solicitation). The initial combined number of eligible participants included 1,577 faculty and staff employed by one of the four institutions. During distribution, twenty electronic responses were returned as undeliverable resulting in 1,557 actual requests. Initially, the researchers collected 274 surveys; however, 25 responses were disqualified, because the participants failed to acknowledge consent and four were removed because they only completed demographic information, leaving 245 viable responses. This was an overall response rate of 16%, which was considered low. The percentage of completed responses decreased to approximately 241 as participants progressed through the survey. Given the relatively small sample size, the researcher manually screened the data, reviewed missing responses, and identified any outliers to ensure reliability. The response rate by state is shown in Table 1.

Table 1. Response Rate by State

State	Total Surveys Sent	Total Surveys Completed	Response Rate
Minnesota	484	67	13.8
Montana	423	61	14.4
North Dakota	375	75	20.0
South Dakota	275	42	15.3
Total	1557	245	15.7

To describe the sample population, descriptive statistics were calculated. Demographic and background characteristics of the sample are provided in Table 2. The sample number and valid percent are identified. The majorities of participants were White, female, and employed with their institution full-time. Almost half of the participants worked in higher education for less than ten years. Seven participants responded that they were of two or more races/ethnicities, with five identifying themselves as White and American Indian or Alaska Native and two identifying themselves as White and Asian.

Faculty and staff were fairly equally distributed, providing a good representation of each group. Faculty comprised 55.5% of the sample with three times as many professors as adjuncts and instructors. Staff comprised 44.5% of the sample with most working in student services and related areas and administration. In terms of geographical location, North Dakota had the most participants followed by Minnesota, Montana, and South Dakota.

Table 2. Demographic and Background Characteristics of the Sample (N=245)

	Overall Sample, N=Count	Valid %
Sex		
Male	89	36.7
Female	155	63.3
Hispanic or Latino		
Yes	5	2.0
No	240	98.0
Race/Ethnic Background		
American Indian/Alaska Native	9	3.2
Asian	2	.8
Black/African American	2	.8
Native Hawaiian/Pacific Islander	0	0.0
White	233	95.2
Faculty or Staff		
Faculty	136	55.5
Staff	109	44.5
Faculty (n=136)		
Adjunct/lecturer	15	11.9
Instructor	18	13.3
Assistant Professor	54	40.1
Associate Professor	11	8.1
Full Professor	36	26.7
Staff (n=109)		
Student Services & Related Area	29	26.8
Administration	19	17.0
Business/Registrars/Financial	13	11.6
Academic Department	17	15.2
Service Related	17	15.2
Other	15	14.3

Table 2. Continued

	Overall Sample, N=Count	Valid %
Years Working in Higher Education		
0-5	66	27.1
6-10	50	20.4
11-15	36	14.6
16-20	29	11.8
21-25	23	9.4
26+	41	16.7
Employment Status		
Full-time	217	88.6
Part-Time	16	6.5
Adjunct	12	4.9
Institution Type		
Two-Year Community College	2	1.2
Mid-Sized Regional University	238	97.2
Large Research University	4	1.6
State Where Institution is Located		
Minnesota	67	27.1
Montana	60	24.7
North Dakota	75	30.7
South Dakota	42	17.6

*Numbers may not add up to 100 due to missing responses

In terms of political affiliation, Democrats were the largest group in the study followed by no affiliation, Independents, Republicans, and Libertarians (Table 3). More faculty than staff identified themselves as Democrat and more staff than faculty identified as Republican. Slightly more staff than faculty reported that they were Independents or Libertarians. Twenty-three percent of faculty and staff responded that they were not affiliated with a political group.

Table 3. Political Affiliation of Overall Sample and by Group

	Overall Sample ^a		Faculty		Staff	
	N	Valid %	n	Valid %	n	Valid %
Democrat	103	42.1	68	50.0	35	31.8
Republican	40	16.3	17	12.3	23	20.9
Independent	41	16.7	22	16.7	19	17.3
Libertarian	6	2.4	3	2.2	3	2.7
No Affiliation	55	22.4	26	18.8	29	27.3

^aFaculty and Staff totals are summed under Overall Sample

Survey Instrument

The instrument used to conduct this research was a survey originally developed by Thompson et al. (2013a). Surveys are frequently used in quantitative studies as they allow the researcher to conduct probability sampling and accommodate large samples of the respective population for generalizability (Fowler, 1990). Thompson et al.'s (2013a) survey was developed for their research examining students' weapon perceptions and carry practices. This study included 19 researchers from six different Midwestern states. All of the researchers were associated with health departments at their respective universities. The researchers surveyed 1,800 students from 15 public universities to conduct their research. The survey was later used by some of the same researchers to examine faculty weapon perceptions and carry practices (Thompson et al., 2013b).

Instrument for the Current Study

The instrument for the current study was adapted from the survey developed by Thompson et al. (2013a) for their original research on student populations and later used for faculty participants (Thompson et al., 2013b). Several modifications were made to the survey to accommodate the change in study participants in order to include both faculty and staff. In July of 2015, the researcher contacted Dr. Thompson through electronic communication requesting permission to use and modify the survey instrument. While multiple researchers conducted the study, Dr. Thompson was identified as the contact for the article. Dr. Thompson granted the researcher permission to use the survey instrument (see Appendix B for copy of Dr. Thompson's approval). As modified, the instrument included 48 questions and five sections: demographic and background characteristics; gun ownership and gun ownership background; criminal victimization and campus safety; support and conditions for concealed carry; and safety

perceptions (see Appendix C for Qualtrics survey). A discussion of the changes is provided by section.

For the current study, participants were required to mark they were age 18 or older and acknowledge their electronic consent to participate in the survey. Electronic consent was acceptable as the study did not capture identifying information about participants individually. At the end of the study, participants were directed to seek employee assistance through their respective institution or contact their state's Department of Human Services for community health options if they experienced an adverse reaction. The estimated completion time for the study was 15 to 25 minutes.

The first section, demographic and background characteristics, described the demographic composition of the overall sample. Several minor modifications were made to this section based on the change in participants. This section originally included ten questions, of which, all but one question, sex, were modified or added. The changes were not substantive but rather included greater detail about the background of the participants such as employment status, years working in higher education, and state where their institution was located.

The second section, gun ownership and gun ownership background, included six questions that described the participants background with guns and weapon socialization. The researcher added one question that asked participants if they were a member of a firearm organization and deleted one question that asked participants how many guns they owned. The latter was deleted as it was determined to be unnecessary, private information. It was also believed that the question might make participants less inclined to complete the survey.

The third section, criminal victimization and campus safety, quantified participants experiences with crime both on- and off-campus and assessed perceptions about safety. In terms

of victimization, changes were made to the original survey to better identify crimes. The dichotomous “yes/no” responses were replaced with a selection of offense types. The offense types included a definition with a listing of crimes to ensure a consistent response. The participants were also able to select multiple responses to identify victimization.

Campus safety included seven questions intended to assess participants’ experiences with campus safety and security threats. One question was removed from the original survey that asked the participants if they had ever carried a concealed handgun on campus. This question was deleted as all of the institutions prohibit guns on campus and, therefore, the question would have resulted in a violation of university policy or state law.

The fourth section, support and conditions for concealed carry, gauged the participants’ support for permitting students, faculty, and staff to carry a concealed handgun on-campus. This section also assessed the likelihood participants would carry, how safe they would feel, and the conditions for carrying if handguns were permitted. Changes were made to this section to better understand support for carry by group. Specifically, Thompson et al.’s (2013b) survey asked participants how supportive they were of “student, faculty, and visitors carrying concealed handguns on campus” (p. 369). This question was divided into three questions to better measure support for faculty, staff, and student carry separately. Questions about safety were similarly divided to measure how safe faculty and staff would feel if students carried as well as the reverse. These changes allowed for a more direct analysis based on who carried. This section included multiple 4-point Likert-type scales, depending on the phrasing of the question.

The last section, safety perceptions, examined how protected and safe faculty and staff would feel if handguns were permitted on campus. This section further assessed faculty and staff perceptions about the negative effects associated with handguns on campus. Faculty and staff

responses were compared to identify differences between their perceptions. Three questions were added to this section to assess safety based on who carried and one question was added to measure the effect of handguns on the campus environment. This section used a 4-point Likert-type scale to examine agreement drawing on Thompson et al.'s, (2013b) faculty study. The questions were grouped into three level-two constructs to measure individual protection, individual safety, and the negative effects associated with permitting concealed handguns on campus. (See Appendix D for the survey-coding index.)

Reliability and Validity of the Instrument

According to Thompson et al. (2013a), “stability reliability of the questionnaire was calculated based on a convenience sample ($n=20$) of college students who completed the survey twice, 2 weeks apart. Mean percent agreement was computed for the responses and was found to be 78%” (p. 245). In Thompson et al.'s (2013b) research on faculty perceptions, post-study reliabilities of the advantages and disadvantages of concealed carry were calculated. The researchers reported Cronbach alphas of .78 and .83 for the two multiple-item constructs indicating that the two constructs were internally correlated. The reliability of the modified instrument was conducted post-study, discussed in Chapter IV.

To establish content validity, Thompson et al., (2013a) worked with six firearm and survey research experts. These experts guided the questions for consistency with weapons information. Face validity was established by formulating survey questions based on a thorough review of the literature (Thompson et al., 2013a).

Instrument Review

Given the modifications to the survey, the researcher asked six individuals with dissertation experience to review the survey in order to ensure content validity. The six

individuals were peers in the doctoral program at the University of North Dakota who had completed their coursework. All six reviewers were in faculty or staff positions at their respective institutions and were familiar with quantitative research methods. Four changes were made to the survey based on the recommendations of the reviewers. Two of the six reviewers did not make any suggestions.

Two reviewers suggested adding “instructor” as an option under academic rank and one suggested adding “adjunct” under employment status. The same two reviewers suggested expanding the responses under political affiliation to include “no affiliation” for participants who were undecided or did not affiliate with a specified party. Another suggestion was to include the phrase “in my opinion” to questions 30 and 31 to clarify that perceptions of how safe faculty, staff, or students felt about permitting concealed handguns on campus was their opinion. All of these suggestions resulted in changes.

Two suggestions made by reviewers did not result in changes. The first suggestion was to add language to questions 17 and 18 to clarify the questions were specific to their current institution when discussing victimization and campus safety. The researcher did not make this change as inclusion would have limited participant’s responses to only their current campus as opposed to their experience on any campus during their academic career. The second suggestion included changing the multiple 4-point Likert-type scales to 6-point scales and to use the same scale throughout the survey. This change was not made to ensure consistency with the original instrument.

Procedures

The procedures for this study included modifying Thompson et al.’s (2013a) original survey, having modifications to the current instrument reviewed, and distributing the survey to

participants. Since this research encompassed a multi-state approach, several approvals were required prior to starting the study. The researcher first sought Institutional Review Board (IRB) approval from the University of North Dakota (UND), the researcher's home institution. The researcher simultaneously contacted each university's IRB chair to determine their requirements for conducting research. For North Dakota University, the researcher sought and was granted IRB approval. For Minnesota University, South Dakota University, and Montana University, the researcher sent a letter to each institution requesting permission to survey. Each institution granted the researcher permission. Once UND received all authorizations, the researcher was approved to start the research.

At the beginning of the 2017 Spring Semester, a total of three electronic requests were sent to faculty and staff inviting them to participate in an anonymous survey about concealed carry initiatives (see Appendix A). The request provided a definition of concealed carry, the estimated completion time, the researcher's information, and a link to the survey in Qualtrics. The participants were informed that their responses were completely anonymous, that participation in the study was voluntary, and that they could stop at any time. No compensation was provided for participating in the study.

The first invitation to participate was sent at the end of January 2017 to all 1,557 participants in order to obtain a valid sample of the institutions faculty and staff population. The decision to start at this time was based on one of the University's procedures wherein researchers were assigned a survey date based on institutional priorities and availability. Two reminder emails were distributed to participants one and one-half weeks apart the following month. The researcher sent electronic requests to each institutions email group separately through Qualtrics to ensure receipt; however, responses were stored in the aggregate.

Given the political sensitivity of the study, Qualtrics was set to “anonymize response” to ensure that identifying information was not collected on the participants, including their computer’s internet protocol (IP) address. While this setting was not recommended because participants were not blocked from completing the survey multiple times, this was done to ensure the confidentiality and anonymity of the sample.

Data Analysis

The researcher used the Statistical Package for the Social Sciences (SPSS) to analyze the data for this study. Data analysis varied depending on the research question and associated variables. The first research question described faculty and staff perceptions, opinions, and attitudes about concealed carry on campus. The first three sections of the survey, after demographics, examined this question to include gun ownership and gun ownership background, criminal victimization and campus safety, and support and conditions for concealed carry. Descriptive statistics were calculated on the first two sections to identify the number and valid percent of the overall sample and each group (faculty and staff). For the third section, descriptive statistics were scaled for level of agreement, mean, and standard deviation based on varying 4-point Likert-type scales. Faculty and staff responses were calculated separately to identify differences in level of agreement and mean based on the questions.

The second research question identified factors that contributed to faculty and staff favoring concealed carry initiatives. To assess support for student, faculty, and staff carry separately, binomial logistic regression was conducted to build prediction models. To test variables and meet assumptions, the researcher re-coded questions 35 through 37 from a 4-point Likert-type scale to dichotomous responses. Specifically the outcome variable, support, was tested by recoding the “not very supportive at all” and “not very supportive” responses to zero

representing no support and the “supportive” and “very supportive” responses to one representing support. Next, Pearson’s correlation was conducted to determine the relationship between the outcome variable and the independent variables. Using findings from prior studies and the correlation coefficient, seven predictor variables were selected for the faculty and staff models and ten predictors were selected for the student model. Several predictor variables were included in all three models.

For student support the first predictor, position, was included as the focus of the study was on faculty and staff differences. Political orientation, a categorical variable, was included using “democrat” as the reference category. Three questions were used to establish weapon socialization to include whether the participant owned a gun, if they had a valid concealed handgun permit, and if they had a firearm in their home growing up. All three questions provided for “yes/no” dichotomous responses. The next predictor used question 24, “How concerned are you about being a victim of violence on campus?” This question was selected as a risk variable. As this question was measured on a 4-point Likert-type scale, it was recoded into a dichotomous response of “not concerned” or “concerned.” Two predictors drew on questions 45 and 47 referencing safety and protection when carrying a handgun from the protection subscale discussed later in this chapter. These questions were selected as they represent a fundamental philosophy that carrying a handgun increases individual’s feelings of safety and protection and would have an impact on support in general. Lastly, two questions from the negative effects subscale, discussed later, examining opinions about whether guns increased student suicides and homicides were used as an effect on students. Additional questions from the subscale constructs were not included to avoid issues with multicollinearity (Field, 2005).

For faculty and staff, the following seven predictors were used in the prediction model: political orientation, firearm ownership, concealed weapons permit, felt safer with gun, felt more protected with gun, believed that police can prevent violence, and concerned about violence. The question about police protection was added to the models to assess risk. The question was then recoded to “not confident” and “confident” with “not confident” serving as the reference category. The researcher used the Chi-square and Hosmer-Lemeshow goodness of fit tests with a confidence interval of 95% when conducting regression. In addition to binomial regression, independent samples *t*-tests were conducted to compare sex, position, and gun ownership with support to identify any significant differences.

The third research question measured the difference between faculty and staff perceptions about protection and the negative effects associated with permitting concealed handguns on campus. This question further examined the effect of permitting handguns on perceptions about campus safety. Section five of the survey, safety perception, included 13 questions divided into three level-two constructs: individual protection, individual safety, and negative effects. Eight of the questions were asked at the individual level. To answer this question, descriptive statistics were calculated to scale for percentage of agreement, mean, and standard deviation by group and for the overall sample. Similar to question two, independent samples *t*-tests were calculated to compare sex, position, and gun ownership with the subscale constructs to determine whether any significant differences existed.

Summary

This chapter described the methods used to examine and identify differences in faculty and staff perceptions related to concealed carry on campus initiatives. This study employed quantitative research methods to gain insight into a regional perspective by focusing on public

institutions located in MN, MT, ND, and SD. The instrument for this study was adapted from a previously designed survey by Thompson et al. (2013a) to study students, and later faculty (Thompson et al., 2013b), weapon perceptions and carrying practices on campus. Given the modifications, six individuals with dissertation experience reviewed the survey and minor, non-substantive, changes were made based on suggestions. The survey, as modified, included five sections as follows: demographic and background characteristics; gun ownership and gun ownership background; criminal victimization and campus safety; support and conditions for concealed carry; and safety perceptions.

In January of 2017, an electronic invitation was sent to 1,557 faculty and staff asking them to participate in a study about concealed carry on campus initiatives. Two-hundred and forty-five individuals participated in the survey, a response rate of 16%. The majorities of participants were female, White, Democrats, who were employed with their institution full-time. Faculty and staff ratios were closely distributed at 55.5% and 44.5%, respectively. Descriptive statistics, independent samples *t*-tests, and binomial logistic regression were used to answer the three research questions. The overall sample and faculty and staff responses were calculated separately. The results of this study are described and reported in Chapter IV.

CHAPTER IV

RESULTS

This study examined faculty and staff perspectives about concealed carry initiatives at postsecondary institutions and determined what factors contributed to pro-carry attitudes. This study further measured differences between faculty and staff perception about individual protection, individual safety, and the negative effects associated with permitting handguns on campus. Using quantitative research methods, the researcher surveyed participants from four mid-sized institutions located in MN, MT, ND, and SD. A total of 245 faculty and staff participated in the study. Preliminary analysis was conducted to identify the demographic and background composition of the sample, provided in Chapter III. This chapter summarizes the results from the data analysis used to answer the three research questions. Specifically, the analysis included calculating descriptive statistics to describe perceptions, binomial regression to identify support predictors, and independent samples *t*-tests to compare sex, position, and gun ownership with both support and the subscale constructs. The data was analyzed with a type I error rate of $p < .05$.

In general, the results indicated that faculty and staff felt safe on campus, were not concerned about being a victim of crime, and opposed permitting concealed handguns on campuses. The findings also revealed important differences between faculty and staff perceptions. Specifically, faculty were less confident than staff that the police could prevent violent crime on campus and staff was more supportive than faculty of permitting faculty and staff to carry concealed handguns. In addition, binomial regression analysis indicated that

Republicans, individuals with no political affiliation, and individuals that felt safer and more protected carrying a handgun were more likely to support carry – at least for faculty and staff.

Faculty and Staff Perceptions About Concealed Carry

Research Question 1: What are the perceptions, opinions, and attitudes of faculty and staff concerning concealed carry at postsecondary institutions?

The first research question described faculty and staff perceptions, opinions, and attitudes about concealed carry on campus. This question encompassed three sections of the survey to include gun ownership and gun ownership background, criminal victimization and campus safety, and support and conditions for concealed carry. To answer this question, descriptive statistics were calculated on the first two sections of the survey for the overall sample and by group (faculty and staff) to quantify section totals and aggregate percentages. For questions related to support and conditions for carry, descriptive statistics were calculated and scaled for percentage of agreement, mean, and standard deviation based on multiple 4-point Likert-type scales. The results from each section are described and shown in table format.

The first section, gun ownership and gun ownership background, included six questions intended to gain information about the gun background and weapon socialization of the sample. The results are presented in Table 4. The majority of participants grew up with a firearm in their home and less than half currently owned a gun, primarily for hunting. Twenty percent ($N=23$) identified personal safety as the basis for ownership although only 12.7% ($N=31$) had a valid permit to carry. Interestingly, a higher percentage of staff than faculty owned a gun for purposes of personal safety. Less than half of the participants had formal firearms training and very few were a member of a firearm organization.

Table 4. Gun Ownership and Gun Ownership Background

	Overall Sample ^a		Faculty		Staff	
	N	Valid %	n	Valid %	n	Valid %
Do you own a gun?	245		136		109	
Yes	113	46.1	53	38.4	60	55.0
No	132	53.9	85	61.6	49	45.0
What is the main reason you own a gun?	113		53		60	
Hunting/Sport	71	62.8	38	71.7	33	55.0
Personal Safety	23	20.4	8	15.1	15	25.0
Gift	7	6.2	1	1.9	6	10.0
Collect Firearm	6	5.3	2	3.8	4	6.7
Other	6	5.3	4	7.5	2	3.3
Are you a member of a firearm organization?	245		136		109	
Yes	14	5.7	11	8.1	3	2.8
No	231	94.3	125	91.9	106	97.2
Have you ever received formal firearms training for shooting a handgun?	245		136		109	
Yes	86	35.1	42	30.9	44	40.4
No	159	64.9	94	69.1	65	59.6
Do you have a valid permit to carry a concealed handgun?	244		136		108	
Yes	31	12.7	16	11.8	15	13.9
No	213	87.3	120	88.2	93	86.1
Did you have a firearm in your home growing up?	245		136		109	
Yes	171	69.8	92	67.6	79	72.5
No	74	30.2	44	32.4	30	27.5

*Numbers may not add up to 100 due to missing responses

^aFaculty and Staff totals are summed under Overall Sample

The next section examined criminal victimization and campus safety. First, participants' experiences with criminal victimization, both on- and off-campus, were examined to assess whether experiences contributed to opinions about concealed carry initiatives. The participants were asked three questions about criminal victimization experienced by themselves or someone close to them. Victimization was broken down into three offense types to include violent, personal, and property crimes. Each category listed an offense index to define type with violent

crime encompassing assault, attack and robbery; personal crime encompassing stalking, harassment, threat, and intimidation; and property crime being theft and vandalism. The survey allowed participants to select multiple responses. Descriptive statistics were calculated to delineate experiences on- and off-campus (Table 5).

The majority of participants reported they had not experienced criminal victimization on-campus. In total, fifteen participants (6.1%) were victims of a personal crime and 28 participants (11.4%) were victims of a property crime. Four participants experienced multiple offenses to include both personal and property crimes. No one reported being a victim of a violent crime. Victimization experiences similarly increased for faculty and staff when asked whether someone close to them was the victim of a crime on-campus with rates was twice as high as personal experiences. Criminal victimization was highest off-campus with faculty and staff similarly indicating that property crime was the most common offense followed by personal and violent crimes. Twenty-six participants had experienced more than one crime off-campus. Overall, faculty experienced more victimization or knew someone who had been a victim of crime than staff; however, the differences were small.

Table 5. Criminal Victimization Experiences

	<u>Overall Sample^a</u>		<u>Faculty</u>		<u>Staff</u>	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
Have you ever been a victim of crime on campus?	245		136		109	
Violent crime (Assault, Attack, Robbery)	0	0.0	0	0.00	0	0.00
Personal Crime (Stalking, Harassment, Threat, Intimidation)	11	4.5	9	6.6	2	1.8
Property Crime (Theft, Vandalism)	24	9.8	16	11.8	8	7.3
Personal and Property Crimes	4	1.6	1	0.7	3	2.8
No	206	84.1	110	80.9	96	88.1

Table 5. Continued

	Overall Sample ^a		Faculty		Staff	
	N	%	n	%	n	%
Has someone close to you been a victim of crime on campus?	244		135		109	
Violent crime (Assault, Attack, Robbery)	3	1.2	1	.7	2	1.8
Personal Crime (Stalking, Harassment, Threat, Intimidation)	16	6.6	10	7.4	6	5.5
Property Crime (Theft, Vandalism)	40	16.4	26	19.3	14	12.8
Violent and Personal	2	.8	2	1.5	0	0
Violent, Personal, and Property	5	2.0	2	1.5	3	2.8
Personal and Property	9	3.7	4	3.0	5	4.6
No	169	69.3	90	66.7	79	72.5
Have you ever been a victim of crime off-campus?	245		136		109	
Violent crime (Assault, Attack, Robbery)	11	4.5	7	5.1	4	3.7
Personal Crime (Stalking, Harassment, Threat, Intimidation)	10	4.1	6	4.5	4	3.7
Property Crime (Theft, Vandalism)	86	35.1	55	40.4	31	28.4
Violent and Personal	3	1.2	1	.7	2	1.8
Violent and Property	7	2.9	5	3.7	2	1.8
Violent, Personal, and Property	4	1.6	3	2.2	1	.9
Personal and Property	12	4.9	4	3.0	8	7.3
No	112	45.7	55	40.4	57	52.4

*Numbers exceed total participants due to multiple selections

^aFaculty and staff totals are summed under Overall Sample

Next, the survey focused on how safe participants felt on campus and if they had experienced a lockdown or security risk situation that might influence their responses. Descriptive statistics were calculated for both dichotomous responses and the Likert-type scale items (Table 6). The findings indicated that faculty and staff felt equally safe on campus; however, 37% ($N=91$) were not confident that the police could prevent violent crime on campus. Only twelve participants (5%) responded that their institution was placed in lockdown in the last year and one staff member responded that there was a crime on their campus involving a firearm. Given the disparity in the firearm response, it is possible this incident occurred at a different

institution. The analysis further revealed differences between faculty and staff responses in that staff were slightly more concerned about possible victimization on-campus and were close to three times more likely than faculty to avoid places around campus out of concern for their safety. Faculty, on the other hand, indicated less confidence than staff that the police could prevent violent crime on campus.

In terms of weapon policies, a majority of faculty and staff responded that their institution had a policy in place. Surprisingly, thirty-four percent ($N=83$) of faculty and staff were uncertain whether a policy existed and one participant (.4%, $N=1$) responded in the negative indicating their institution did not have a policy. Faculty and staff were equally unaware whether their institution had a policy. This signifies a lapse in the dissemination and communication of policy that is important to keeping campuses safe. If one-third of faculty and staff were unaware of a policy, most likely, students are not aware either.

Table 6. Faculty and Staff Perceptions about Safety on Campus

	<u>Overall Sample^a</u>		<u>Faculty</u>		<u>Staff</u>	
	<i>N</i>	Valid %	<i>n</i>	Valid %	<i>n</i>	Valid %
How safe do you feel on campus?	245		136		109	
Not Safe at All	1	.4	1	.7	0	
Not Very Safe	14	5.7	6	4.4	8	7.3
Safe	130	53.1	69	50.7	61	56.0
Very Safe	100	40.8	60	44.1	40	36.7
How concerned are you about being a victim on campus?	245		136		109	
Not Concerned at All	50	20.4	29	21.3	21	19.3
Not Very Concerned	151	61.6	84	61.8	67	61.5
Concerned	42	17.1	22	16.2	20	18.3
Very Concerned	2	.8	1	.7	1	.9
Do you avoid places on or around campus out of concern for your safety?	245		136		109	
Yes	27	11.1	8	5.9	19	17.4
No	218	89.0	128	94.1	90	82.6

Table 6. Continued

	Overall Sample ^a		Faculty		Staff	
	N	Valid %	n	Valid %	n	Valid %
In the last year, has there been a crime on your campus where the perpetrator used a firearm?	244		135		109	
Yes	1	.4	0		1	.9
No	243	99.6	135	100	108	99.1
In the last year, has your campus been placed in lockdown due to violence or the threat of violence?	242		133		109	
Yes	12	5.0	8	6.0	4	3.7
No	230	95.0	125	94.0	105	96.3
How confident are you that the police can prevent violent crime on campus?	243		134		109	
Not Confident at all	12	4.5	11	8.2	1	.9
Not Very Confident	79	32.5	43	32.1	36	33.0
Confident	119	49.0	60	44.8	59	54.1
Very Confident	33	13.6	20	14.9	13	11.9
Does your institution have a policy regarding firearms on campus?	244		136		108	
Yes	160	65.6	89	65.4	71	65.7
No	1	.4	0	0.00	1	.9
I don't know	83	34.0	47	34.6	36	33.3

*Numbers may not add up to 100 due to missing responses

^aFaculty and Staff totals are summed under Overall Sample

The last section relating to research question one assessed participants' support for concealed carry, perceptions about safety, and the conditions for carrying a concealed handgun. This section included ten questions with different 4-point Likert-type scales (Table 7). The scales are identified at the beginning of each question group. The scale for the last two questions was reversed-coded, as the responses were reversed, to identify agreement. To examine this section, descriptive statistics were calculated to identify mean, standard deviation, and scaled for the percentage of agreement.

Just over half of the participants supported concealed carry off-campus, with staff indicating greater support than faculty. In terms of concealed carry on-campus, as expected,

faculty and staff were not supportive of permitting students to carry handguns and believed that most faculty and staff would feel very unsafe if students carried. Faculty and staff indicated greater support for faculty and staff carry than student carry; but responses were still in the “not supportive” range. In response to a question about how safe students would feel if faculty and staff carried, just over one-third of the participants ($M=2.2$) responded that students would feel more safe.

However, there were important differences between faculty and staff responses that influenced total agreement. Staff was more supportive of permitting faculty (43.1%, $M=2.3$), and staff (41.3%, $M=2.3$) to carry a concealed handgun than faculty. By contrast, faculty reported only about half as much support for faculty (23.1%, $M=1.8$) and staff (23.7%, $M=1.7$) carry. Staff also indicated 15% higher agreement than faculty that students would feel safer if faculty and staff carried.

Given that staff supported carry at higher rates, it was not surprising that they were three times more likely to obtain a permit and around 15% more likely to carry a handgun than faculty, if permitted. While only 17.8% of the overall sample would likely carry a handgun, this would equate to approximately 14 faculty and 29 staff per 241 individuals potentially carrying a handgun on campus. Although, faculty and staff similarly agreed that before anyone can have a permit they should have to pass a firearms training course and periodically practice at a firing range to maintain their skills.

Table 7. Support for Concealed Carry, Safety Perceptions, Conditions for Carrying and Percentage of Some Form of Agreement and Mean and Standard Deviation

	Overall Sample ^a				Faculty				Staff			
	% Some Form of Agreement	N	M	SD	% Some Form of Agreement	n	M	SD	% Some Form of Agreement	n	M	SD
Not Supportive at all, Not Very Supportive, Supportive, Very Supportive												
34. How supportive are you of people with a permit carrying concealed handguns off campus?	54.1	244	2.6	1.1	48.1	135	2.4	1.0	61.5	109	2.8	1.1
35. How supportive are you of students carrying concealed handguns on campus?	21.3	244	1.7	1.0	16.3	135	1.5	0.9	27.5	109	1.9	1.0
36. How supportive are you of faculty carrying concealed handguns on campus?	32.1	243	2.0	1.1	23.1	134	1.8	1.0	43.1	109	2.3	1.2
37. How supportive are you of staff carrying concealed handguns on campus?	31.6	244	2.0	1.1	23.7	135	1.7	1.0	41.3	109	2.3	1.2
Not Likely at All, Not Very Likely, Likely, Very Likely												
38. How likely is it that you would obtain a permit if carrying a handgun on campus was legal?	24.9	241	2.0	1.4	7.4	135	1.7	1.3	22.6	106	2.3	1.4
39. How likely is it that you would carry a handgun on campus if it was legal?	17.8	242	1.7	1.0	10.5	133	1.5	0.9	26.6	109	1.9	1.1
Very Unsafe, Somewhat Unsafe, Slightly Safer, Much Safer												
40. In your opinion, how safe would most students feel if faculty and staff were permitted to carry concealed handguns on campus?	34.0	241	2.2	1.0	26.5	132	2.0	0.9	43.1	109	2.4	1.0
41. In your opinion, how safe would most faculty and staff feel if students were permitted to carry concealed handguns on campus?	14.9	242	1.6	0.9	11.3	133	1.5	0.8	19.3	109	1.8	1.0
Strongly Agree, Agree, Disagree, Strongly Disagree ^b												
42. Before anyone can have a concealed carry permit, they should have to pass a firearm training course.	94.7	244	3.3	0.7	94.8	135	3.2	0.6	94.5	109	3.3	0.8
43. To keep a concealed carry permit, individuals should have to periodically practice at a firing range to maintain their skills.	88.4	242	3.5	0.8	90.2	133	3.5	0.8	86.2	109	3.6	0.8

^aFaculty and Staff totals are summed under Overall Sample

^bResponses were reversed-coded

The research found that, in general, faculty and staff felt safe on campus, experienced little criminal violence, and were not supportive of permitting concealed handguns on campus.

Yet, close to 40% were not confident that the police could prevent violent crime on campus.

Important differences between faculty and staff responses were also revealed. Staff supported concealed carry at twice the rate of faculty even though they experienced less victimization.

Staff was also more likely to own a gun for personal protection.

Research Question 2: What factors contribute to faculty and staff favoring concealed carry initiatives at postsecondary institutions?

The second research question explored factors that contributed to faculty and staff support for permitting concealed handguns on campus. This question specifically examined support based on group to include faculty, staff, and student carry separately. To answer this question, binomial logistic regression analysis was conducted for three independent models using a 95% confidence interval. Chi-square, Hosmer-Lemeshow goodness-of-fit, and Cox and Snell R Square and Nagelkerke Square were used to assess model fit. In addition to regression, independent samples *t*-tests were conducted to compare sex, position (faculty and staff), and gun ownership with support to identify any significant differences in response.

For binomial regression, questions 35, 36, and 37 were used as the outcome variable, which asked participants about support for permitting students, faculty, and staff to carry a handgun on campus. The responses from these questions were recoded from a 4-point ordinal scale to a dichotomous response of “support” and “not support” by group. This clearly delineated support for or against concealed carry, which is consistent with how an individual would vote on the issue. After the researcher re-coded the outcome variables, Pearson’s correlation was conducted to determine the relationships between the variables.

To assess support for student carry, predictor variables were included based on correlation and previous research. For position, faculty were used as the reference category. Political orientation, a categorical variable, was included using Democrat as the reference category. Three questions from the gun ownership and gun ownership background section were

used to establish weapon socialization. These questions all had dichotomous yes/no responses with no being used as the reference category for each question. Next, the researcher used question 32 asking participants how confident they were that police could prevent violence on campus. Responses were recoded to “confident” and “not confident” based on the 4-point Likert-type scale. Two predictor variables were drawn from section five using the individual protection subscale, discussed later in this chapter, asking if handguns would make them feel safer and more protected. Disagree was used for the reference category for both. Two additional variables were included from the negative effects subscale, also discussed later, pertaining to guns increasing student suicides and homicides. The responses to these two scales were recoded into “agree” or “disagree” categories with agree serving as the reference category.

The model predicting support for student carry, presented in Table 8, indicated that of the ten variables only three predictors significantly added to the model. Participants most likely to favor student carry included faculty and staff who felt safer carrying a handgun and individuals who disagreed that guns would lead to higher suicide and homicide rates amongst student, essentially less costs to students. Specifically, faculty and staff who perceived that guns made them feel safer were 17 times more likely to support carry than those that disagreed ($B=2.83$, $Exp(B)=17.01$, $p=.001$). Participants who disagreed that guns would increase student suicides ($B=3.63$, $Exp(B)=37.56$, $p<.007$) and homicides ($B=3.91$, $Exp(B)=49.75$, $p=.001$) were significantly more likely to support student carry. The model demonstrated moderate strength (pseudo $R^2 .83$) and had a model prediction rate of 93.6%. Given that there was little support for student carry, it was not surprising that very few independent variables predicted support.

Table 8. Logistic Regression Model Predicting Support for Student Concealed Carry

	<i>B</i>	<i>SE(B)</i>	Wald	<i>p</i>	<i>Exp(B)</i>
Position					
Staff=1	1.09	.76	2.05	.15	2.96
Political Orientation					
Republican=1	.51	1.13	.21	.65	1.67
Independent=2	.31	.90	.11	.74	1.36
Libertarian=3	-1.77	1.10	2.57	.11	.17
No Affiliation=4	.11	1.43	.01	.94	1.12
Own Firearm					
Yes=1	-.78	.81	.93	.34	.46
Concealed Weapon Permit					
Yes=1	.93	1.07	.75	.39	2.52
Firearm Growing up					
Yes=1	1.15	.91	1.58	.21	3.14
Concerned about violence					
Concerned=1	-.24	.89	.07	.79	.79
Feel safer with gun					
Agree=1	2.83	.88	10.39	.001*	17.01
More protected with gun					
Agree=1	1.03	.99	1.07	.30	2.80
Increase student Suicides					
Disagree=1	3.63	1.34	7.39	.007*	37.56
Increase student homicide					
Disagree=1	3.91	1.21	10.51	.001*	49.75
Constant	-9.96	2.30	18.76	.000*	.000*

**p*<.05

**-2 Log likelihood

Logistic regression models predicting support for faculty and staff concealed carry are shown in Table 9. While models are separate, the same independent variables were used to predict support. For both models, political affiliation, feeling safer with a firearm, and feeling more protected with a firearm produced significant results. In addition, concern over violence was significant for staff only. Faculty and staff carry produced fairly similar results. The regression model was strong for faculty (pseudo $R^2=.78$) and for staff (pseudo $R^2=.78$). The model prediction rate for faculty was 91.3% and for staff was 90.4%.

In terms of political orientation, Republicans ($B=2.86$, $Exp(B)=17.37$, $p<.001$) and participants that did not associate with a specific party ($B=2.02$, $Exp(B)=7.53$, $p<.008$) had significantly higher odds of supporting faculty carry than Democrats. Staff carry produced similar results. Participants who believed that handguns made them feel safer were way more likely to support faculty ($B=3.54$, $Exp(B)=34.35$, $p<.001$) and staff ($B=3.46$, $Exp(B)=31.87$, $p<.001$) carry than those who not. Similarly, participants who felt more protected carrying a handgun were nine times more likely to support faculty ($B=2.22$, $Exp(B)=9.18$, $p<.001$) and staff ($B=2.21$, $Exp(B)=9.08$, $p<.001$) carry than those who disagreed. In contrast, concern over violence produced significant results for staff carry only in that participants who were concerned about violence were five times more likely to support staff carry than those who did not.

Table 9. Logistic Regression Models Predicting Support for Faculty and Staff Concealed Carry

	Model I Support for Faculty Concealed Carry					Model II Support for Staff Concealed Carry				
	<i>B</i>	<i>SE</i> (<i>B</i>)	Wald	<i>p</i>	<i>Exp</i> (<i>B</i>)	<i>B</i>	<i>SE</i> (<i>B</i>)	Wald	<i>p</i>	<i>Exp</i> (<i>B</i>)
Political Affiliation										
Republican=1	2.86	.81	12.45	.000*	17.37	2.96	.83	12.95	.000*	19.32
Independent=2	.23	.90	.07	.799	1.26	.74	.87	.72	.397	2.09
Libertarian=3	2.76	1.48	3.48	.062	15.86	2.96	1.48	3.99	.046*	19.31
No										
Affiliation=4	2.02	.76	7.11	.008*	7.53	1.87	.77	5.97	.015*	6.48
Firearm Ownership										
Yes=1	1.12	.56	3.83	.050	3.08	1.04	.57	3.34	.068	2.84
Concealed Weapon Permit										
Yes=1	1.24	.98	1.60	.206	3.46	1.22	.93	1.73	.188	3.39
Feel safer with gun										
Agree=1	3.54	.80	19.56	.000*	34.35	3.46	.80	18.67	.000*	31.87
Feel more protected with gun										
Agree=1	2.22	.57	15.28	.000*	9.18	2.21	.56	15.34	.000*	9.08
Believe police can prevent violence										
Agree=1	.26	.57	.211	.646	1.30	.37	.57	.43	.513	1.45
Concerned about violence										
Concerned=1	.98	.84	1.37	.241	2.67	1.62	.81	3.94	.047*	5.03
Constant	-4.98	.85	34.56	.000*	.01	-5.12	.86	35.17	.000*	.01

* $p<.05$

** -2 Log likelihood

In addition to binomial regression, independent samples *t*-tests were conducted to compare sex, position, and gun ownership with support for concealed carry. Levene’s test was used to determine whether the equality of the variance between groups was equal or unequal (Fields, 2009). Contrary to previous research, sex was statistically nonsignificant for student carry ($t(161)=1.04, p=.30$), faculty carry ($t(240)=.37, p=.71$), and staff carry ($t(241)=.25, p=.80$). There was no evidence to suggest there was a difference between males and females in terms of their support for carry.

The results comparing position with support for student, faculty, and staff carry are presented in Table 10. Levene’s test of equality of variance was non-significant for position and support for student support ($p=.07$), and significant for position and support for faculty ($p=.006$) and staff ($p=.005$) carry. Using equal variance assumed, staff were significantly more likely than faculty to support student carry ($t(240)=-3.03, p=.003, d=0.39$). Using equal variance not assumed, staff were also significantly more likely than faculty to support both faculty and staff carry. The difference between position and support for carry produced small to moderate effects. It was not surprising that faculty and staff carry produced similar results, as participants were likely to support or not support “employee” carry.

Table 10. Independent Samples *t*-tests Producing Significant Differences for Position and Support for Student, Faculty, and Staff Concealed Carry.

Support	Faculty		Staff		Mean Difference	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Q36. Student Carry	1.54	0.9	1.92	1.04	-.38	-3.03	240	.003*	0.39
Q37. Faculty Carry	1.78	1.0	2.23	1.18	-.50	-3.47	213	.001*	0.41
Q38. Staff Carry	1.78	1.0	2.27	1.19	-.51	-3.57	211	.000*	0.44

* $p<.05$, 2-tailed

The results comparing gun ownership with support for student, faculty, and staff carry are shown in Table 11. Levene’s test of equality of variance was significant for gun ownership and

support for carry for all three groups ($p > .001$). Gun owners were significantly more likely than non-gun owners to support student, faculty, and staff carry. These differences produced moderate to large effect sizes.

Table 11. Independent Samples *t*-tests Producing Significant Differences in Gun Ownership and Support for Student, Faculty, and Staff Concealed Carry.

Support	Gun Owners		Non Gun Owners		Mean Difference	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Q36. Student Carry	2.04	1.1	1.42	0.8	.62	5.00	198	.000*	0.66
Q37. Faculty Carry	2.40	1.2	1.60	0.9	.78	5.60	204	.000*	0.75
Q38. Staff Carry	2.42	1.2	1.61	0.9	.81	5.84	201	.000*	0.76

* $p < .05$, 2-tailed

In general, the results indicated that Republicans, participants with no political affiliation, and participants who believed that carrying a weapon made them feel safer and more protected were likely to support carry- at least for faculty and staff. The participants most likely to support student carry were similarly those who felt more protected carry a handgun along those who believed that student suicides and homicides would not increase. Overall, staff and gun owners were more likely to support concealed carry than faculty and participants who did not own a gun.

Research Question 3: What is the difference in perceptions about individual protection, individual safety, and the negative effects of concealed carry between faculty and staff at postsecondary institutions?

The third research question described faculty and staff perceptions about safety and the negative effects associated with permitting handguns on campus. This question further measured differences between faculty and staff responses. Using a 4-point Likert-type scale (*strongly disagree to strongly agree*) to gauge level of agreement, the participants were asked 13 questions encompassing three level-two constructs to include individual protection, individual safety, and

negative effects. Eight of the 13 questions were asked at the individual level to determine how faculty and staff believed handguns would affect them personally. To answer this question, descriptive statistics were calculated scaling for level of agreement, mean, and standard deviation for the overall sample as well as each group. Next, independent samples *t*-tests were conducted to compare sex, position, and gun ownership with individual protection, individual safety, and negative effects to identify any significant differences that existed.

The three level-two constructs, corresponding questions, and results are provided in Table 12. The first construct, individual protection, included three questions to assess whether participants felt *more protected* if they carried a handgun. The findings indicated that faculty and staff generally disagreed that carrying a handgun would make them feel safer, more protected, or that people would be less likely to bother them. The findings also revealed important differences between faculty and staff responses. Specifically, forty-six percent of staff ($M=2.3$) reported that they would feel more protected if they carried a handgun while faculty indicated only 28.8% agreement ($M=1.9$). Similarly, staff (30.6%, $M=2.0$) were almost twice more likely to feel safer carrying a handgun than faculty (17.2%, $M=1.7$).

The second construct, individual safety, included three statements that measured how safe faculty and staff would feel if students, faculty, and staff carried a concealed handgun. The questions were asked in the negative meaning *less safe*. The findings revealed faculty and staff would feel less safe if students, faculty, and staff carried a concealed handgun. Although, similar to individual protection, there were important differences between faculty and staff responses in terms of level of agreement and mean relating to safety. Specifically, faculty reported they would feel 20% less safe than staff if faculty and staff carried. Overall, faculty and staff

disagreed that permitting handguns on campus would make them feel more protected and agreed that they would feel less safe.

The negative effects subscale, construct three, included seven questions that measured the disadvantages of handguns on individuals, students, and the institution. In general, faculty and staff believed that the greatest negative effect included being mistakenly shot, shooting the wrong person, and accidental discharge. In terms of the negative effects on students, levels of agreement were consistently distributed. While only about half ($M=2.6$) of the participants agreed that handguns would increase suicides, 59% ($M=2.8$) believed that handguns would likely result in a higher rate of homicides on campus, indicating moderate responses. Again, there were important differences between faculty and staff responses. Faculty, in general, indicated 10% to 15% greater agreement regarding the negative effects associated with permitting handguns on campus than did staff. The largest difference in level of agreement and mean resulted in response to question 56, which asked participants if handguns would negatively impact the educational environment on campus. While faculty indicated 75.5% ($M=3.1$) agreement, staff reported much less at only 56.5% ($M=2.7$) agreement. This was not surprising given that staff indicated they would feel more protected than faculty and disagreed that guns would make them feel less safe while on campus.

Table 12. Individual Protection, Individual Safety, and Negative Effects of Concealed Handguns on Campus and Percentage of Some Form of Agreement (*strongly disagree*, *disagree*, *agree*, *strongly agree*) and Mean and Standard Deviation

	Overall Sample ^a			Faculty			Staff		
	% Some Form of Agreement	<i>M</i>	<i>SD</i>	% Some Form of Agreement	<i>M</i>	<i>SD</i>	% Some Form of Agreement	<i>M</i>	<i>SD</i>
Individual Protection									
45. I would feel safer carrying a concealed handgun on campus.	23.1	1.8	1.0	17.2	1.7	0.9	30.6	2.0	1.0
46. People would be less likely to bother me if I carried a concealed handgun on campus.	9.1	1.6	0.7	5.3	1.4	0.7	13.9	1.8	0.7

Table 12. Continued

	Overall Sample ^a			Faculty			Staff		
	% Some Form of Agreement	<i>M</i>	<i>SD</i>	% Some Form of Agreement	<i>M</i>	<i>SD</i>	% Some Form of Agreement	<i>M</i>	<i>SD</i>
47. I would feel able to protect myself if I carried a concealed handgun on campus.	36.7	2.1	1.0	28.8	1.9	1.0	46.3	2.3	1.0
Individual Safety									
51. I would feel less safe if students carried concealed handguns on campus.	79.5	3.3	0.9	81.2	3.4	0.9	77.4	3.2	0.9
52. I would feel less safe if faculty carried concealed handguns on my campus.	65.6	3.0	1.0	75.2	3.2	1.0	53.7	2.7	1.1
53. I would feel less safe if staff carried concealed handguns on my campus.	64.3	3.0	1.0	75.2	3.2	0.9	50.9	2.7	1.1
Negative Effects									
48. If I was trying to defend myself on campus with a gun and another person with a gun showed up, they might mistakenly shoot me.	80.8	3.0	0.8	87.9	3.2	0.7	72.2	2.9	0.8
49. If I carried a concealed handgun on campus and had to shoot at a criminal with my gun, I might easily miss and hit another person.	68.1	2.9	0.9	73.8	3.0	0.9	61.1	2.7	1.0
50. If a state law was passed permitting concealed handguns on campus, some handguns might accidentally discharge and injure someone.	71.7	3.0	0.9	78.0	3.1	0.9	63.9	2.8	1.0
54. If a state law as passed permitting students to carry concealed handguns on campus, it would likely result in a higher rate of fatal suicides by students.	49.6	2.6	1.0	55.3	2.7	1.0	42.6	2.4	0.9
55. If a state law was passed permitting students to carry concealed handguns on campus, it would likely result in a higher rate of fatal homicides on campus.	58.9	2.8	0.9	64.7	2.9	1.0	51.9	2.5	0.9
56. If a state law was passed permitting concealed handguns on campus, it would negatively impact the educational environment on campus.	66.8	2.9	1.1	75.2	3.1	1.0	56.5	2.7	1.0
57. If a state law was passed permitting concealed handguns on campus, it would divert scarce resources away from academic needs to greater security spending on campus.	59.8	2.8	1.1	64.4	2.9	1.1	54.2	2.6	1.0

In addition to descriptive statistics, independent samples *t*-tests were calculated to further compare sex, position, and gun ownership with individual protection, individual safety, and negative effects. Similar to support, sex was found to be statistically non-significant for individual protection ($t(239)=1.79, p=.07$), individual safety ($t(238)=-.92, p=.36$), and negative effects ($t(239)=-.68, p=.50$). Therefore, there was no evidence to suggest there was a difference between males and females and the three subscale constructs.

For position and the subscale constructs, all three comparisons produced statistically significant results with small to moderate effect sizes (Table 13). Levene’s test was non-significant for individual protection ($p=.12$), individual safety ($p=.29$), and negative effects ($p=.47$); therefore, equal variance across samples was used. Faculty reported higher agreement that handguns on campus made them feel less safe and resulted in greater negative effects. Conversely, staff reported higher agreement that handguns made them feel more protected on campus ($t(238)=-3.39, p=.001, d=0.38$). This indicates that position does influence perceptions about safety and protection in relationship to handguns.

Table 13. Independent Samples *t*-tests Producing Significant Differences Between Position and Subscale Constructs (*equal variances assumed*)

Subscale Constructs	Faculty		Staff		Mean Difference	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Individual Protection	1.7	.76	2.0	0.8	.34	-3.39	238	.001*	0.38
Individual Safety	3.2	.88	2.9	0.9	.34	2.84	237	.005*	0.33
Negative Effect	3.0	.79	2.7	0.8	.31	3.04	238	.003*	0.37

* $p<.05$, 2-tailed

Independent samples *t*-tests were also conducted comparing gun owners with non-gun owners and the three constructs (Table 14). Levene’s test was significant for individual protection ($p=.005$), individual safety ($p=.000$), and negative effects ($p=.001$); therefore, equal

variances not assumed was used. The tests indicated significantly higher scores for non-gun owners than gun owners when compared to individual safety ($t(196)=-5.852, p<.001, d=0.80$). The relationship was negative in that non-gun owners indicated that guns would make them feel less safe than gun owners. Similarly, the mean agreement for the negative effect subscale were significantly lower for gun owners than non-gun owners ($t(214)=-6.457, p<.001, d=0.79$). Gun owners perceived fewer negative effects resulting from permitting handguns. The effect sizes for all three subscales were moderate to large. Overall, participants that owned a gun felt more protected than non-gun owners while non-gun owners felt less safe and believed that the negative effects of carrying a handgun would be greater than did gun owners.

Table 14: Independent Samples *t*-test Producing Significant Differences Between Gun Ownership and Subscale Constructs (*equal variances not assumed*)

Subscale Constructs	Gun Owners		Non Gun Owners		Mean Difference	<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
Individual Protection	2.5	0.6	1.9	0.8	.61	6.373	211	.000*	0.82
Individual Safety	2.7	1.0	3.4	0.7	-.68	-5.852	196	.000*	0.80
Negative Effect	2.5	0.8	3.1	0.7	-.63	-6.457	214	.000*	0.79

* $p<.05$, 2-tailed

To ensure internal consistency within each construct, Pearson’s correlation Coefficient, 2-tailed, and Cronbach alpha coefficients were calculated. The individual protection subscale consisted of three items ($\alpha=.827$), individual safety consisted of three items ($\alpha=.940$), and negative effects consisted of seven items ($\alpha=.937$). Cronbach Alpha’s for each of the constructs were over .8 indicating good reliability (Warner, 2013). The results are provided in Table 15.

Table 15. Correlation of Subscale Constructs and Measures of Internal Consistency

Construct	Subscale Construct	C1. Individual Protection	C2. Individual Safety	<i>a</i>
C1.	Individual Protection (Q45,Q46,Q47)			.827
C2.	Individual Safety (Q51,Q52,Q53)	-.793*		.940
C3.	Negative Effects (Q48,Q49,Q50,Q54,Q55,Q56,Q57)	-.719*	.855*	.937

* $p < .05$, 2-tailed

The strongest correlation was between individual safety and negative effects (C2 and C3), ($r = .855$, $p < .001$). Individual protection was moderately correlated with both individual safety and negative effects (C1 and C2, C1 and C3). The individual safety construct contained negative language asking participants if they felt less safe. Individual protection and negative effects were negatively correlated in that the majority of participants disagreed that carrying a concealed handgun would make them feel more protected yet agreed that concealed carry had more negative effects. Similarly, individual safety was negatively correlated with individual protection in that participants disagreed that they would feel more protected and agreed they would feel less safe. In terms of individual safety and negative effects, participants agreed that they would feel less safe and that there were more negative effects.

Summary

This study examined three research questions that described faculty, staff perceptions about permitting concealed handguns on campus, and identified differences based on position. The research further analyzed the effect on campus safety if handguns were permitted. The findings revealed that faculty and staff perceived college campuses were safe and that very few instances of victimization actually occurred. The majority of faculty and staff were not supportive of permitting students, faculty, or staff to carry a concealed handgun on campus;

although, staff supported carry at much higher rates than faculty. Republicans, individuals with no political affiliation, and individuals who perceived guns as providing safety and protection were more likely to favor initiatives. Contrary to prior research, there was no evidence to suggest a difference between males and females and support for concealed carry.

Overall, faculty and staff did not believe that carrying a concealed handgun would make them feel safer or more protected while on campus. Faculty and staff further identified that handguns would result in negative consequences to individuals, students, and institutions. Permitting concealed handguns on campus would actually make faculty and staff feel less safe, which is contrary to its intended purpose. The study also revealed important differences between faculty and staff perspectives. Staff was more likely to perceive guns as increasing individual protection and less likely to believe that guns jeopardized safety. Staff was also more likely to support concealed carry in general and believed there was less risk. In contrast, faculty were less likely to support concealed carry and experienced more victimization, although differences were not significant. The results indicated that faculty and staff perceive the issue of concealed carry on campus somewhat differently. This is a significant finding given the lack of research focusing on staff perspectives in comparison with faculty perspectives on concealed carry initiatives.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Even though college campuses have proven to be relatively safe (Healy & Margolis, 2012; Sulkowski & Lazarus, 2011), the number of states passing legislation to allow for concealed carry continues to grow, expanding the purview of constitutional and institutional oversight. Yet, little research has been conducted to ascertain faculty and staff support for change or the effect on campus environment based on perceptions about safety. While public opinion should not exclusively influence political agenda (Patten, Thomas, & Wada, 2013); legislative bodies should be cognizant of the impact on institutions if considering such a major change.

This chapter summarizes the study and describes the conclusions. It concludes with a discussion of the implications and study limitations, and then provides recommendations for future research.

Summary

This study used quantitative research methods to describe and compare university faculty and staffs' perceptions, opinions, and attitudes encompassing concealed carry on campus initiatives. This study further identified factors that contributed to faculty and staff favoring concealed carry as well as examined perceptions about safety and the negative effects associated with permitting handguns on campus.

The data for this study was collected during the 2017 Spring semester from 245 faculty and staff located at four institutions in a multi-state region. Using a concealed carry survey

adapted from Thompson et al. (2013a), the current instrument included forty-six questions divided into five sections: demographic and background characteristics; gun ownership and gun ownership background; criminal victimization; support and conditions for concealed carry; and safety perceptions. In addition, three level-two constructs were analyzed to compare the impact of initiatives on protection and safety from an individual-level perspective. Descriptive statistics, independent samples *t*-tests, and binomial regression were used to analyze the data. The participants for this study were fairly equally distributed at 55.5% faculty and 44.5% staff, providing an adequate representation of both groups.

While the existing literature on concealed carry provided the foundation for the current study, there continue to be gaps in the research especially with regard to university staff. The following three research questions guided this study to better understand the perspectives of faculty and staff and to identify differences based on individual safety, individual protection, and the negative effects associated with permitting handguns on campus:

- 1) What are the perceptions, opinions, and attitudes of faculty and staff concerning concealed carry at postsecondary institutions?
- 2) What factors contribute to faculty and staff favoring concealed carry initiatives at postsecondary institutions?
- 3) What is the difference in perceptions about individual protection, individual safety, and the negative effects of concealed carry between faculty and staff at postsecondary institutions?

Cohen and Felson's (1979) routine activities theory (RAT) was used as the lens to frame support for concealed carry initiatives and to examine perspectives at both the individual and group levels. As discussed in Chapter I, this theory proposes that when a motivated offender and

a suitable target converge in an area that lacks a capable guardian, the likelihood of crime increases (Cohen & Felson, 1979; Felson, 1994). RAT is rooted in opportunity theories and predicated on self-protective behaviors. According to Guerette and Santana (2010), “opportunity theories hold criminal motivations as constant and argue that it is the distribution of opportunities that largely determines the occurrence of crimes” (p. 203). Furthermore, “without opportunity to carry out a crime event, an offender- regardless of motivation level- will not commit crime” (Guerette & Santana, 2010, p. 203).

When applied to concealed carry, guns alter the environment by increasing the number of capable guardians while simultaneously decreasing target suitability. This then affects the motivation of the offender to commit the crime. As postsecondary institutions are public places often covering large areas, they are more susceptible to the guardianship element. Thus, carrying a weapon serves a fundamental purpose by providing protection, deterrence, and safety rather than simply affording a constitutional right. Guns acquisition also establishes an inherent presumption of risk that necessitates protection.

Research Questions: Review and Conclusions

Gun Ownership, Campus Safety, and Support

The first research question assessed faculty and staff perceptions about concealed carry on campus by describing participants’ weapons background, victimization experiences, campus safety, and support for initiatives. This question was multifaceted because it was necessary to consider many background characteristics and experiences that may influence support. Gun ownership is briefly discussed as a behavior shown to influence support.

Gun Ownership. The findings from this study demonstrated that close to half of the overall sample owned a gun, primarily for hunting, and that the majority grew up with a gun in

their home. Only 20.4% of the sample owned a gun for personal safety and even less held a concealed weapon permit. Previous studies have found lower rates of gun ownership in faculty samples along with fewer actual permits (Bennett, Kraft, & Grubb, 2012; Thompson et al., 2013b). However, the inclusion of staff in this study produced significantly higher gun ownership and socialization rates as more staff than faculty owned a gun resulting in disproportionate ratios. Given that the states included in the study encompassed rural hunting communities, it was not surprising that gun ownership and socialization was higher than prior research located in other geographical areas. These findings further support a regional perspective, which is a contribution of the study. Regional institutions, such as the institutions included in this study, commonly employ faculty and staff from their surrounding areas. The difference in ratios on ownership represents this level. Therefore, the findings may not be reflective of large research institutions in the same region.

Research examining gun acquisition has consistently found that one of the biggest predictors of ownership was parental history (Wilson & Clayton, 2001; Wright et al., 1983). Individuals that grew up with guns in their home were more likely to own and be comfortable with guns as adults. Other explanations encompassing gun ownership have suggested that fear of crime and past victimization; increases use (Woolnough, 2009). Kleck and Gertz (1998) found that, in particular, victims of violent crime had increased gun-carrying tendencies; even though, “there is no evidence that gun acquisition reduces fear” (Hauser & Kleck, 2013, p. 286). Unraveling the reasons why individuals carry handguns, whether reactive or proactive, is an important consideration as perceptions contribute to how guns are viewed and whether they make an environment feel safer.

Campus Safety. The second part of research question one examined campus safety. The study found that participants overwhelmingly perceived postsecondary institutions as safe, few participants experienced criminal victimization on-campus, and only a handful of campuses were placed in lockdown over the past year. While faculty and staff felt equally safe, faculty reported slightly higher rates of victimization than staff. Faculty and staff indicated similar concern over the possibility of future violence; yet, faculty were slightly less confident that the police could actually prevent an incident. Thompson et al.'s (2013b) examination of faculty found slightly less confidence that the police could prevent violence. However, it is possible that this difference is more reflective of the local police department or campus security rather than actual risk.

Overall, the findings from this study are consistent with the existing literature. Perceptual studies have found that faculty, staff, and students felt safe on campus (Bennet, Kraft, & Grubb, 2012; Hahl, Bonham, & Reddington, 2016; Spratt, 2015; Thompson et al., 2013b) and experienced very little criminal victimization (Baker & Boland, 2011; Spratt, 2015; Thompson et al., 2013b). Perceptual studies, while influenced by experiences, are supported by statistical campus crime data. Although crime does occur on campus, especially for students, crime rates have remained low and steady over time (Healy & Margolis, 2012; U.S. Department of Education, 2014). In an examination of campus crime rates, Healy and Margolis (2012) found that the notion that colleges were unsafe was a “myth.” Instead, they revealed that the over-reporting of isolated shootings by the media had resulted in an exaggerated perception about the amount of crime that occurs on campus, which was contradicted by official statistics.

Feelings about campus safety can be influenced by many variables and experiences. Victimization, surrounding community, and whether campus security or police service the

institution have all been shown to influence perceptions (Jang et al., 2015). The current study included institutions located in smaller cities with relatively low crime rates. It is likely that if these institutions had experienced an active shooter situation that participant responses would have been different. This idea is supported by Kaminski et al.'s (2010) research on institutions with shooting incidents wherein the researchers reported that fear of crime increased directly after a shooting event significantly altering perceptions about safety.

Although, this research found that participants felt safe on campus and that incidence of victimization were low, 18% of the participants were still concerned about being a victim and 37% were not confident that the police could prevent violent crime. Given that crime is a part of campus life and our changing society, it is important that campus police and security continue to promote education and awareness to ensure a safe environment.

Support for Concealed Carry by Group. This section of the first research question examined support for permitting faculty, staff, and students to carry a concealed handgun on campus and the likelihood of carrying, if permitted. Changes were made to the original survey to better delineate perceptions based on group. Consistent with prior research (Baker & Boland, 2011; Brinker, 2008; Rossner, 2011; Thompson et al., 2013b; Wells et al., 2012), the study found very little support for permitting students to carry concealed handguns on campus. Furthermore, if students carried, faculty and staff would feel less safe, thus negatively affecting the campus environment. By comparison, a recent study examining student perspectives about faculty and staff carry found higher acceptance rates in that close to 60% of students reported they would feel safer if faculty and staff carried weapons (Spratt, 2015).

In terms of permitting faculty and staff to carry a concealed handgun, participants indicated markedly higher support than prior research (Bennett, Kraft, & Grubb, 2012; Dahl,

Bonham, & Reddington, 2016; Thompson et al., 2013b). In contrast with faculty, staff indicated almost two times greater support for concealed carry for both faculty and staff carry. For staff, these findings suggest a high level of weapons acceptance along with a possible self-protective motivation as the basis for support, consistent with Guenette and Santana (2010). Interestingly, more staff than faculty possessed a gun for personal safety and staff were more likely to carry a weapon if permitted; yet, experienced fewer instances of criminal victimization both on- and off-campus. These findings support the idea that crime and the actual risk of it are not equal (Jang et al., 2015).

These findings should be interpreted with caution. Comparative studies have mainly focused on only faculty or staff in specified occupations rather than total staff. While there was an increase in support compared to prior studies, it results from the difference in the samples population. For instance, Price et al.'s (2014) research on college presidents found that 95% opposed weapons on campus. Similarly, a study of campus police chiefs found that the majority felt that permitting students to carry a weapon would not prevent a violent incident (Thompson et al., 2009). Only one study was located that reported faculty and staff ratios separately. De Angelis Benz, and Gillham (2017) similarly reported that staff generally supported weapons on campus at a higher rate than faculty.

Faculty and student populations, in particular, have been the focus of emerging literature on concealed carry initiatives. Yet, the perspectives of staff, in general, are virtually unknown even though they are a significant population on campuses. The current study makes an important contribution to the research on concealed carry by beginning to fill the gaps in the literature by providing a more complete analysis regarding the perspectives of the majority of individuals employed with institutions. It is important that staff perspectives, as a part of the

campus community are included, as states that have permitted concealed weapons at postsecondary institutions have rarely restricted application according to job duty or responsibility (National Conference of State Legislatures, 2017). As the purpose of this study was not to examine staff support by job responsibility, one possible explanation for the disparity is that certain occupations or departments were overrepresented in the results based on their duties. Further research is necessary to ensure a larger sample as well as a cross-representation of staff from various departments.

Factors Contributing to Support for Concealed Carry

The second research question explored factors that contributed to faculty and staff support for permitting concealed handguns on campus. Three separate binomial regression models were developed to examine the correlation between support for faculty, staff, and student carry and the independent predictors. In addition, independent samples *t*-tests were conducted with a type I error rate of $p < .05$ to determine whether there were significant differences in support based on sex, position, and gun ownership.

This study found that political orientation continues to be highly predictive of support. Yet, additionally, concern over violence and the belief that guns provide protection and safety were positively correlated-- at least for faculty and staff carry. However, as discussed in the previous section, concern over violence was not directly correlated with fear resulting from actual victimization but rather the possibility of crime, which is proven to be low.

By comparison, few factors were positively associated with support for student carry. Given that, the overall support for student carry was low and that participants indicated they would feel less safe if students carried this finding was not unexpected. Support for student

carry was dependent on perceptions that guns provided safety and that handguns would not increase student suicide and homicide rates.

To further understand support, independent samples *t*-tests were used to compare sex, position, and gun ownership with support. Sex was statistically nonsignificant in that there were no differences in support between males and females. Gun ownership and position produced statistically significant differences with gun owners and staff being more likely to support initiatives. Overall, Republicans, individuals with no political affiliation, and individuals who viewed guns as providing safety were more likely to support carry. Gun owners were also more likely to carry. These predictors also help to explain why staff was more likely to support carry as staff reported higher agreement in all of these areas.

The present study both supports and contradicts the literature. According to Jang, Dierenfeldt, and Lee (2014), support for concealed carry is less dependent on risk assessment, victimization, or fear but rather political orientation and weapons socialization. In contrast, De Angelis, Benz, and Gillham (2017) assert that support is more than just political orientation it is fear of violence and distrust in the police that shape support. Given the complexity of initiatives, it is not surprising that studies find different predictors correlated with support.

Proponents of concealed carry argue that campuses are made safer by permitting weapons because individuals would be able to protect themselves (Fox, 2008; SCC, n. d.; Wiseman, 2012). Opponents argue that increasing the number of guns on campus would make campuses less safe and have a negative effect on students (Bouffard et al., 2012a; Weinberg 2013). While gun ownership and political orientation continue to be major predictors of support, concern about violence and the need for self-protection were also important (Bennett, Kraft, & Grubbs, 2011). Hites et al. (2013) suggests the reason for this is that safety and perceptions about risk are not

synonymous. Society continues to fear the possibility of violence due to its randomness. This study highlights the underlying complexities encompassing concealed carry and adds to the existing literature by further identifying why faculty and staff populations are likely to support initiatives even when they feel safe.

Contrary to prior research, sex did not predict support. This finding was surprising as research has consistently found that males support concealed carry at higher rates and are more likely to carry a weapon (Bennett, Kraft, & Grubb, 2012; Patton et al., 2013; Spratt, 2015; Thompson et al., 2012b). According to research conducted by Patton et al. (2013), women strongly opposed weapons on campus and, if permitted, would feel less safe. Women perceived weapons as decreasing their chances of escape by affecting their ability to fend off an attacker if a situation would arise. At the same time, females continue to report higher rates of fear and risk than males in terms of possible victimization (Fisher & May, 2009; Fox, Nobles, & Piquero, 2009). Separating fear and risk has proven challenging. One possible explanation for this finding is that the locations of the institutions posed little threat because they were situated in smaller cities. When examining perceptions, it is important that future studies include varying geographical areas and large samples for representation. Even though gender differences were outside the scope of this study, gender and the impact of initiatives on women is an important consideration when reviewing concealed carry.

Differences in Perceptions about Protection, Safety, and the Negative Effects of Weapons

The third research question explored differences between faculty and staff perceptions about individual protection, individual safety, and the negative effects if handguns were permitted on campus. While research question two examined support for concealed carry by group, this question analyzed initiatives from an individual-level perspective. The original

instrument by Thompson et al., (2013b) asked participants if they “would feel less safe if students, faculty, or visitors” carried (p. 370). The current study decoupled the selection to better identify safety based on who carried- faculty, staff, or students.

In general, the majority of participants did not believe that carrying a handgun would make them feel safer or more protected while on campus. Nor did they believe that people would be less likely to bother them. The majority indicated that they would not feel safe if students carried weapons; however, only around 65% would feel less safe if faculty or staff carried. In terms of the negative effects of handguns on campus, only about half agreed that student suicides would increase although close to 60% thought that homicides would increase. In general, the research found that participants believed that the negative effects associated with permitting weapons would be moderate.

Similar to research question two, perceptions were mitigated by position as faculty and staff reported statistically significant differences in response to all three subscale constructs. Staff was more supportive of concealed carry for both faculty and staff. Therefore, it was not surprising that close to half of all staff responded that they would feel more protected, just over 30% would feel safer, and only half believed that institutions would suffer negative effects. Conversely, faculty were far less supportive, would feel significantly less safe, and agreed that guns would result in serious negative effects. The possibility of being mistakenly shot, accidental discharge, and missing and hitting another person were identified as the biggest disadvantage of permitting handguns. Again, sex was statistically nonsignificant in that there were no differences between males and females.

Again, the findings both support and contradict the literature. In general, the study confirmed findings similar to research conducted by both Thompson et al. (2013b) and Spratt

(2015), in that the disadvantages of concealed carry far outweighed any potential benefits.

However, the ratios were markedly lower. This again can be explained by the inclusion of staff, as they were more supportive of weapons.

Faculty and staff clearly have different perspectives in terms of carry. This study adds to the literature on concealed carry by identifying how faculty and staff would feel and the effect on the institution, if handguns were permitted. These findings are significant as they begin to fill the gaps in the literature by comparing faculty and staff perspectives. Groups and organizations continue to debate whether arming individuals would subsequently decrease or increase the opportunity for violence (Bouffard et al., 2012a; Wiseman 2012). Webster et al. (2016) warns that “increasing gun availability in campus environments could make far more common acts of aggression, recklessness, or self-harm more deadly and, thus, have a deleterious impact on the safety of students, faculty, and staff” (p. 3). Adding weapons to an already stressed environment seems counter-intuitive, especially for students (Thompson et al., 2013b). Arguably, the actual effect of permitting handguns on campus requires further research as weapons would influence the campus environment by making individuals feel less safe but possibly a little more protected.

Given that faculty and staff felt equally safe on campus, it is questionable whether greater protection is actually necessary. The postsecondary community does not support arming faculty, staff, or students for the remote possibility of violence. Any change to existing laws concerning firearms at postsecondary institutions should be based on empirical evidence rather than speculation. As evidenced by this study, there continues to be concern about the possibility of violence even though the actual risk is nominal. Guns make individuals feel less safe, which seems contradictory to the purpose of the initiatives. Guns also negatively affect the environment by changing the dynamic of the learning environment to one that possesses an

implicit and hidden threat. While this study specifically examined concealed carry, moving forward it will be interesting to see how the weapons debate changes as states begin to consider open and constitutional carry policies.

Theoretical Support

Routine activities theory (RAT) is predicated on the convergence of three foreground elements (motivated offender, suitable target, lack of guardian) to explain how the daily routines of victims influence the likelihood of crime (Cohen & Felson, 1979). RAT specifically explains direct-contact predatory crimes, often involving multiple intended victims, based on opportunities for offenders (Felson, 1994). Rampage and target shootings on campus are violent predatory crimes.

Postsecondary institutions include all three of Cohen and Felson's foreground elements (Levin & Madfis, 2009). A motivated offender is an individual who is driven to commit a crime. Offenders' exhibit bounded rationality in that their situations, circumstances, and experiences influence their perceptions about reality (Gialopses & Carter, 2015). In the case of rampage shootings, predatory offenders "want to make a statement" or "send a message" for the perceived injustice they experienced (Levin & Madfis, 2009; Newman & Fox, 2009; Newman et al., 2004). Therefore, victim selection is a rational rather than random process. It is because of this selection process that individuals believe they can influence the outcome. Suitable targets on campus include faculty, staff, and students that the offender intends to violate. Targets on campus are plentiful for a motivated offender as they are often accessible, vulnerable, and unsuspecting (Gialopses & Carter, 2015). Target suitability is also based on a number of factors including the area surrounding the victim. Guardianship of these areas and targets includes the campus community, in conjunction with security agents. When a lack of guardianship exists, the

area becomes more accessible to an offender. It is because of this that institutions often engage in target hardening to make target less suitable, such as putting up barriers or locks on classroom doors so that faculty can barricade themselves in during an active shooter emergency (Gialopses & Carter, 2015).

RAT does a good job of explaining the connection between gun acquisition, support for initiatives, and risk from the context of protection and deterrence. This theoretical framework lends well to application of postsecondary institutions given the structure of the campus environment. Campus routines and class schedules are well known and predictable. Research has found that these routines influence an individual's decision to carry a weapon (Giblin, 2008; Terksbury & Mustaine, 2003). In fact, Tewksbury and Mustaine (2003) reported that student's routines, specifically with regard to their lifestyles, was more important in their decision to carry than was actual fear.

The current study revealed a positive relationship between support and the perception that handguns provided protection and safety. Weapons were perceived as increasing the number of capable guardians by protecting the target as well as decreasing target suitability through self-protective behaviors. Essentially, weapons act as a deterrent to crime by decreasing the motivation of the offender. Support for concealed carry and the desire to carry also becomes a protective behavior intended to manage risk and decrease the offender's motivation, as victimization is more costly. It also explains differences in support by faculty and staff in that staff perceived guns as providing greater protection. Weapons, in this sense, serve as a form of social control in the campus community. This perspective is consistent with the "more guns-less crime" at-risk assumption advanced by Lott and Mustard (1997) in that guns decrease crime by acting as a deterrent against victimization. This assumption mirrors the research in this respect.

Using the lens of RAT, weapons also address individual and collective security on campus. Research has consistently found an inverse relationship between collective security and gun ownership (Fetzer, 2011; Jang et al., 2015). The findings from the current study revealed that 37% of the participants were concerned that the police could not prevent violent crime on campus. When areas are perceived as having insufficient security, individuals are more likely to engage in self-protective behaviors, such as gun ownership, in an attempt to decrease possible crime. Fetzer (2011) confirmed this relationship in his research on workplace violence, victimization, and gun acquisition. The idea that guns increase collective security is also a position taken by gun advocates over the years (Harnisch, 2008).

The relationship between guns and collective security should not be misconstrued to imply that security agents cannot appropriately deter or combat violence on campus. Instead, it is the randomness of shooting incidents that has led to the perception that violence can occur anywhere (Kaminski et al., 2010). Jang et al. (2015) supports this notion as their research revealed that fear and the possibility of crime drives gun acquisition whether real or perceived.

Even though RAT does a good job of explaining support for concealed weapons; it does not mean that increasing weapons is synonymous with crime prevention. Rampage shootings occur quickly, causing chaos and confusion during an event (Vossekuil et al., 2004). Levin and Madfis (2009) suggest that during a shooting, “reactive measures (such as resource officers, emergency plans, and even armed faculty members) can ultimately accomplish little” (p.1241). Just because individuals support concealed carry to deter crime does not mean they actually have the training to use weapons defensively in an active shooter situation. Weapons in the hands of untrained individual can create a more dangerous situation and make response more difficult for security agents to manage (Harnisch, 2008; Thompson et al., 2009). While RAT explains

support for concealed carry, it is equally important to note that a handgun could also end up in the hands of a motivated offender thus increasing the likelihood of crime.

Study Limitations

This study has several limitations. The first limitation results from the small response rate as less than 16% of participants completed the survey. Given this, the findings should be interpreted with caution. The findings represent the perspectives of the 16% who took the survey; however, it is uncertain whether those perspectives were representative of the larger population. The opinions of the remaining 84% are unknown, leading to nonresponse bias, which limits the representativeness of the sample and affects reliability. The current adversarial political climate and the polarizing nature of the debate may have made faculty and staff less willing to participate in the survey. It is also possible that the 16% of individuals who completed the survey had stronger opinions on the issue. A second limitation results from the concentrated geographical area included in the study. This study included only four institutions located in the Upper-Midwest and Western region situated in small- to moderately-sized cities with low crime rates. This limitation affects the generalizability of the findings to larger, more diverse populations and areas.

A third limitation of this study is the threat to internal and external validity. In terms of internal validity, it is possible that participants failed to respond in a truthful manner thus skewing the results. This is a common threat in survey-based research (Fowler, 1990). As this study encompassed a politically sensitive topic, the researcher set the “anonymize response” function in Qualtrics. This decision was made to ensure the anonymity of participants and to minimize risk by not capturing information, including IP addresses. At the same time, this limited the researcher’s ability to restrict participant’s access to the survey multiple times. As for

external validity, the study was limited as it focused exclusively on faculty and staff from public postsecondary institutions. Faculty, in particular, are known to be disproportionately liberal and thus, less generalizable (Rothman, Lichter, & Nevitte, 2005). This limitation was minimized by the inclusion of university staff as a comparative group to provide a more politically diverse population.

The final limitation was researcher bias. To ensure that researcher bias did not influence the research, the study focused on multiple states and did not actively take a position on the debate. In addition, all eligible faculty and staff were included in the sample population to gain a broader perspective. The researcher was not associated with any of the institutions in the study.

Recommendations for Future Research

As concealed carry on campus is an emerging area of research, it is vital that studies continue to examine the impact of policy changes on institutions. In addition to the current study, several areas should be further explored. First, additional studies should be conducted specifically focusing on university staff. Staff are rarely included in research even though legislative and policy changes frequently do not differentiate them from faculty carry. Faculty and staff carry often occurs simultaneously and generally are not exclusionary. Furthermore, it is important to understand the perspectives of staff working in certain departments such as those directly involved in student services, financial management, and human resources where student and faculty interaction is more frequent and, at times, adversarial. Similarly, research should be conducted focusing on campus security staff to determine their perspective on initiatives, how they think weapons would affect their duties, and to identify any associated issues.

Second, research should be commenced examining states and institutions that currently permit concealed carry to assess post-implementation perceptions about safety, crime, and the

prevalence of handguns. Studies have only estimated the increase in weapons on campus; yet, there has been no recent study examining the actual amount. Similarly, a comparative study should be conducted examining states that allow concealed carry and those that prohibit it to determine differences in faculty and staff perspectives based on safety and protection. Areas of research should include the effect on the learning environment, students, crime rates, and staffing levels.

Third, research should be expanded to focus on institutions with more diverse populations. The research to date has predominately focused on homogenous areas creating a gap in the literature as well as an incomplete picture. Research would benefit from a better understanding of postsecondary institutions with greater heterogeneous populations focusing on racial and ethnic diversity, sexual orientation, and socio-economic status.

The final suggestion for research is to estimate the effect of permitting handguns on general campus crimes. While rampage violence has been cited as the catalyst for change, studies have failed to estimate the impact on crimes that regularly occur on campus. Barton, Jensen, and Kaufman (2010) suggest that guns could actually increase opportunities for more routine crimes on campus due to the social structure of campuses.

Conclusions

Carrying a weapon as a self-protective behavior appears to be an unwanted solution to the possibility of violence (Woolnough, 2009) that would make faculty and staff feel less safe. According to Patten, Thomas, and Viotti, (2013) “the inherent trust and respect promoted and nurtured on college campuses may be marginalized if students or faculty were scared, i.e., the purpose of a college campus could be jeopardized with concealed guns on campus” (p. 12). Yet, the continued interest in amending legislation to permit concealed carry along with the

broadening definitions to include open carry and constitutional carry, suggests that this topic is not going away. This also means that the topic should not simply be ignored. The debate over how to combat campus crime, by permitting or prohibiting handguns, is an important discussion that should include the campus community. As the number of states loosening their carry laws continues to grow, institutions should proactively establish policies to effectively handle and regulate the issue. This may include consideration of targeting handgun availability to select trained individuals rather than taking an absolute position.

At the same time, broadly permitting faculty and staff to carry a concealed handgun does not, in any way, equate to individuals having the skills or experience necessary to intervene in an actual active shooter situation. Faculty and staff were hired to teach and work in higher education and it is presumptive to suggest that the scope of their responsibilities now entail security simply because they own a handgun. Concealed carry negatively effects perceptions about campus safety by making faculty and staff feel less safe, which is counterproductive to the intended purpose. While the debate over the effect of weapons will likely continue, the majority of research supports the argument that more guns do not equal less gun violence or less fear. This study finds that concealed carry on campus is less about victimization and risk assessment and presumably more about perceptions that guns provide safety and protection.

Implications for Practice

There are several implications for practice based on the findings from the current study. The study found that 34% of the participants were unsure whether their institution had a weapons policy. This is an important finding as it demonstrated the lack of awareness about institutional policy. The implication from this finding is that administrative personnel need to better educate faculty and staff on the policies at their institution so that employees are aware of their

responsibilities. This responsibility includes the reporting of weapon violations on campus. It is also the responsibility of faculty and staff as an employee of the institution to ensure that they read, understand, and follow policy. This lack of awareness about weapons policy could compromise safety as well as the response to security related issues.

While faculty and staff felt equally safe on campus, many were still concerned about the possibility of violence and a small percentage actually avoided areas on campus. To ensure safety and security throughout campus, security agents should conduct geographical safety and threat assessments to determine security lapses. Geographical assessments map criminal activity to identify areas with high concentrations of crime (Hites et al., 2013). This allows security agents to increase patrols in those areas. In addition, threat assessments are used to evaluate potential risks and establish standards for response. Many postsecondary institutions have developed threat assessment and management teams to identify and manage risk as well as communicate threats (Nolan, Radnazzo, & Deisinger, 2011). According to McCellan, Jablonski, Zdziarski, Amber, and Barnett-Terr (2008), education and awareness goes a long way in making people feel protected and safe, which then reduces fear. Higher education administrators and security agents need to work towards greater awareness about their environment to improve safety.

In terms of faculty and staff carry, the research identified disparity in support. University staff was twice as likely to support concealed carry and, if permitted, was more likely to carry a handgun on campus. As staff work in many different areas on campus, their geographical relationship to crime can be functionally different. Administrative personnel and security agents should be aware of the differences between faculty and staff to effectively address and understand the concerns. It is possible that concerns are linked to job duties or location. Once

concerns are understood a possible solution can be examined such as a campus-wide security assessment or increased security based on location.

Finally, as the focus of this study encompassed concealed carry on campus initiatives, there are implications for the weapons debate at both the institutional and national level. The majority of individuals employed at postsecondary institutions continue to oppose student carry. Moreover, even though there appears to be a slight increase in support for faculty and staff carry, opposition remains. Guns do not make people feel safer. This is an important implication for the concealed carry debate, as initiatives are not achieving their intended purpose. However, there may be implications for a more modified response to enhance collective security such as increasing the number of individuals trained to intervene should an incident arise. Legislative bodies and postsecondary administrators need to take this into consideration if debating such policies.

While the topic of concealed carry on campus is politically sensitive, it is important for faculty and staff to discuss initiatives to ensure an educated and unified response to any proposed legislation and change. This is not a fleeting issue and, in fact, proposals continue to gain interest. Faculty, in particular, works closely with students and need to be able to freely discuss sensitive topics without feeling “uncharacteristically threatened” (Dahl, Bonham, & Reddington, 2016). Administrators should keep faculty and staff informed about pending legislation and communicate a clear position taken by the institution or larger university system. Faculty and staff need to be able to advocate their position and take an active role in educating themselves to thoroughly understand the advantages and disadvantages of concealed handguns. This is also a workplace issue. Permitting weapons in the workplace and expecting faculty and staff to act as security agents goes well beyond the scope of their duties and creates liability.

APPENDICES

Appendix A

Electronic Request to Participants

Dear Faculty and Staff,

I am a doctoral student in the Department of Teaching and Learning at the University of North Dakota conducting my dissertation on concealed carry on college campuses. “Concealed carry” refers to carrying a weapon in a public place when concealed from view. Concealed carry on college campuses has become a debated issue in recent years due to mass shootings on college campuses.

The purpose of this survey is to assess faculty and staff perspectives concerning concealed carry on campuses at postsecondary institution. The survey has five sections and will take approximately 15-25 minutes to complete. Your responses will be kept confidential by not collecting information that will identify you personally and the survey is password protected. There is no compensation for participation in the study. Please note that the survey does not contain identifying information and is not intended to take a position on the issue. If you decide to participate, you will be asked to read an electronic informed consent agreement and provide your consent prior to being given access to the survey. Completion of the informed consent and completing the online survey indicate your voluntary consent to participate in this study.

Thank you for your time and contribution to this study. If you have any question please feel free to contact me by phone at _____ or by email at Heidi.ahlquanbeck@und.edu

To access the survey, please following the link or copy and paste it into your browser:

Heidi Ahl-Quanbeck
Doctoral Candidate
Teaching and Learning Doctoral Program- Higher Education Emphasis
University of North Dakota

Appendix B

Permission to Use Instrument

Re: Request to use survey instrument

Page 1 of 2

Re: Request to use survey instrument



Ahl Quanbeck, Heidi

To: Thompson, Amy

Reply all |

Wed 8/5/2015 9:46 AM

Dr. Thompsom,

Thank you so much for agreeing to share and for the quick response. I appreciate it.
Have a great day!

Heidi Ahl-Quanbeck

From: Thompson, Amy
Sent: Friday, July 31, 2015 2:17 PM
To: Ahl Quanbeck, Heidi
Subject: Re: Request to use survey instrument

I'm happy to share it with you .

On Jul 31, 2015, at 2:58 PM, Ahl Quanbeck, Heidi wrote:

Dr. Thompson,

I am writing to you as I am a doctoral student in Teaching and Learning from the University of North Dakota. For my dissertation, I am conducting research on concealed carry on campus initiatives and legislation to allow for campus carry that was proposed during the 2015 legislative session on student and faculty perspectives.

In exploring the literature, I reviewed your and your colleagues study on "Student perceptions and Practices Regarding Carrying Concealed Handguns on University Campuses" published in the Journal of American College Health. This was a really significant study. The article noted that for further information to contact you. The purpose of my email is to request your written permission to use and modify your 2013 survey instrument from that article for the purposes of my dissertation research.

If you do grant permission, I am also wondering if you would be willing to share the reliability statistics with me.

Please let me know if you have any questions. I look forward to hearing from you and I greatly appreciate your time in reviewing this request.

Thank you and have a nice day.

Sincerely,

Heidi M. Ahl-Quanbeck

Appendix C

Concealed Carry Faculty and Staff Survey Instrument in Qualtrics

Qualtrics Survey Software

Page 1 of 7

Concealed Weapons on Campus

Default Question Block

Are you 18 years of age or older?

Yes

No

THE UNIVERSITY OF NORTH DAKOTA CONSENT TO PARTICIPATE IN RESEARCH

TITLE: *Faculty and Staff Perceptions of Concealed Carry Initiatives and the Effect on Campus Environment: A Multi-State Study*

PROJECT DIRECTOR: *Heidi Ahl-Quanbeck*

PHONE #: [REDACTED]

DEPARTMENT: *Teaching and Learning*

STATEMENT OF RESEARCH

A person who is to participate in the research must give his or her informed consent to such participation. This consent must be based on an understanding of the nature and risks of the research. This document provides information that is important for this understanding. Research projects include only subjects who choose to take part. Please take your time in making your decision as to whether to participate.

WHAT IS THE PURPOSE OF THIS STUDY?

You are invited to be in a research study about your perceptions on concealed carry initiatives on college campuses. The researcher will use this information for her dissertation. The purpose of this study is to assess faculty and staff perspectives about concealed carry initiatives at postsecondary institutions.

HOW MANY PEOPLE WILL PARTICIPATE?

A total of approximately 1,577 participants will be emailed asking them to participate in the research from four institutions to include [REDACTED] University in Minnesota, [REDACTED] University in South Dakota, [REDACTED] University in North Dakota, and [REDACTED] University in Montana.

HOW LONG WILL I BE IN THIS STUDY?

This survey is expected to take you approximately fifteen (15) to twenty-five (25) minutes to complete.

WHAT WILL HAPPEN DURING THIS STUDY?

If you decide to participate in this study, you will be asked to answer forty-eight (48) survey questions pertaining to concealed carry on campus.

ARE THERE ANY RISKS?

You can anticipate no more than minimal risks. There is a risk of you becoming emotionally upset when answering questions, especially if you have experienced campus or gun violence.

WHAT ARE THE BENEFITS OF THIS STUDY?

No direct benefit is guaranteed to you from participating in this study. Your participation in this research, however, may benefit society as a whole, University Systems, and State Legislatures by having a better understanding of faculty and staffs' opinions on concealed carry on campus.

WILL I BE PAID FOR PARTICIPATING IN THE STUDY?

You will not receive pay for taking part in the study.

WILL IT COST ME ANYTHING TO BE IN THIS STUDY?

You will not have any costs for being in this research study.

WHO IS FUNDING THE STUDY?

The University of North Dakota and the researcher are receiving no payments from other agencies, organizations, or companies to conduct this research study.

CONFIDENTIALITY

The records of this study will be kept private to the extent permitted by law. In any report about this study that might be published, you will not be identified. The study may be reviewed by Government agencies, the UND Research Development and Compliance office, and the University of North Dakota Institutional Review.

Any information that is obtained in this study will remain confidential and no identifying information or data will be collected.

If I write a report or article about this study, I will describe the study results in a summarized manner.

IS THIS STUDY VOLUNTARY?

Your participation is voluntary. You may choose not to participate or you may discontinue your participation at any time prior to the completion of the survey without penalty or loss of benefits to which you are otherwise entitled. Your decision whether or not to participate will not affect your current or future relations with the University of North Dakota.

CONTACTS AND QUESTIONS?

The researcher conducting this study is Heidi M. Ahl-Quanbeck. If you have questions, concerns, or complaints about the research please contact Heidi M. Ahl-Quanbeck at 701-426-6740, or my advisor Dr. Casey Ozaki at 701-777-4256.

If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at (701) 777-4279.

You may also call this number about any problems, complaints, or concerns you have about this research study. You may also call this number if you cannot reach research staff, or you wish to talk with someone who is independent of the research team. General information about being a research subject can be found by clicking "Information for Research Participants" on the web site: <http://und.edu/research/resources/human-subjects/research-participants.cfm>

- Yes, I have reviewed the consent and agree to participate in to this research
- No, I do not agree to participate in this research

Section One: Demographic and Background Information

Sex

Male
Female
Intersex

Hispanic or Latino

yes
No

Which of these best describes your background? (Choose one or more)

American Indian or Alaska
Native
Asian
Black or African American
Native Hawaiian or Other
Pacific Islander
White

Faculty or Staff

Faculty
Staff

Academic Rank

Adjunct/Lecturer
Instructor
Assistant Professor
Associate Professor
Full Professor

Department/Office

Student Services and Related areas	Administration	Business/Registrars/Financial	Academic Department	Service Related	Other
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Political Affiliation

Democrat	Republican	Independent	Libertarian	No Affiliation
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How many years have you worked in higher education?

0-5	6-10	11-15	16-20	21-25	26+
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is your employment status?

Full-time	Part-time	Adjunct
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Which best describes your institution?

Two-Year Community College	Mid-Sized Regional University	Large Research University
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In which state is your institution located?

Minnesota	Montana	North Dakota	South Dakota
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section Two: Gun Ownership and Background

Do you own a firearm?

Yes	No
<input type="radio"/>	<input type="radio"/>

What is the main reason you own a firearm?

Hunting/Sport	Personal Safety	Gift	Collect Firearms	Other
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are you a member of a firearm organization?

Yes	No
<input type="radio"/>	<input type="radio"/>

Have you ever received formal firearms training for shooting a handgun?

Yes	No
<input type="radio"/>	<input type="radio"/>

Do you have a valid permit to carry a concealed handgun?

Yes

No

Did you have a firearm in your home growing up?

Yes

No

Section Three: Campus Violence and Victimization

How safe do you feel on campus?

Not safe at all

Not very safe

Safe

Very safe

How concerned are you about being a victim of violence on campus?

Not concerned at all

Not very concerned

Concerned

Very concerned

Do you avoid places on or around campus out of concern for your safety?

Yes

No

Have you ever been a victim of crime on campus? (check all that apply)

Violent Crime (Assault, Attack, Robbery)

Personal Crime (Stalking, Harassment, Threat, Intimidation)

Property Crime (Theft, Vandalism)

No

Has someone close to you been a victim of crime on campus? (check all that apply)

Violent Crime (Assault, Attack, Robbery)

Personal Crime (Stalking, Harassment, Threat, Intimidation)

Property Crime (Theft, Vandalism)

No

Have you even been a victim of crime off-campus? (check all that apply)

Violent Crime (Assault, Attack, Robbery)

Personal Crime (Stalking, Harassment, Threat, Intimidation)

Property Crime (Theft, Vandalism)

No

In the last year, has there been a crime on your campus where the perpetrator used a firearm?

Yes

No

In the last year, has your campus been placed in lockdown due to violence or the threat of violence?

Yes

No



Does your institution have a policy regarding firearms on campus?

Yes



No



I don't know



How confident are you that the police can prevent violent crime on campus?

Very confident



Confident



Not very confident



Not confident at all



Section Four: Support and Conditions for Concealed Carry

How supportive are you of people with a permit carrying concealed handguns off campus?

Not supportive at all



Not very supportive



Supportive



Very supportive



How supportive are you of students carrying concealed handguns on campus?

Not supportive at all



Not very supportive



Supportive



Very supportive



How supportive are you of faculty carrying concealed handguns on campus?

Not supportive at all



Not very supportive



Supportive



Very supportive



How supportive are you of staff carrying concealed handguns on campus?

Not supportive at all



Not very supportive



Supportive



Very supportive



How likely is it that you would obtain a permit if carrying a handgun on campus was legal?

Not likely at all



Not very likely



Likely



Very likely



I already have one



How likely is it that you would carry a concealed handgun on campus, if it was legal?

Not likely at all



Not very likely



Likely



Very likely



In your opinion, how safe would most students feel if faculty and staff were permitted to carry concealed handguns on campus?

Very unsafe



Somewhat unsafe



Slightly safer



Much safer



In your opinion, how safe would most faculty and staff feel if students were permitted to carry concealed handguns on campus?

Very unsafe

Somewhat unsafe

Slightly safer

Much safer

Before anyone can have a concealed carry permit, they should have to pass a firearm training course.

Strongly agree Agree Disagree Strongly Disagree

To keep a concealed carry permit, individuals should have to periodically practice at a firing range to maintain their skills.

Strongly Agree Agree Disagree Strongly Disagree

Section Five: Safety Perceptions

I would feel safer carrying a concealed handgun on campus.

Strongly Disagree Disagree Agree Strongly Agree

People would be less likely to bother me if I carried a concealed handgun on campus.

Strongly Disagree Disagree Agree Strongly Agree

I would feel able to protect myself if I carried a concealed handgun on campus.

Strongly Disagree Disagree Agree Strongly Agree

If I was trying to defend myself on campus with a gun and another person with a gun showed up, they might mistakenly shoot me.

Strongly Disagree Disagree Agree Strongly Agree

If I carried a concealed handgun on campus and had to shoot at a criminal with my gun, I might easily miss and hit another person.

Strongly Disagree Disagree Agree Strongly Agree

If a state law was passed permitting concealed handguns on campus, some handguns might accidentally discharge and injure someone.

Strongly Disagree Disagree Agree Strongly Agree

I would feel less safe if students carried concealed handguns on my campus.

Strongly Disagree Disagree Agree Strongly Agree

I would feel less safe if faculty carried concealed handguns on my campus.

Strongly Disagree Disagree Agree Strongly Agree

I would feel less safe if staff carried concealed handguns on my campus.

Strongly disagree Disagree Agree Strongly agree

If a state law was passed permitting students to carry concealed handguns on campus, it would likely result in a higher rate of fatal suicides by students.

Strongly Disagree Disagree Agree Strongly Agree

If a state law was passed permitting students to carry concealed handguns on campus, it would likely result in a higher rate of fatal homicides on campus.

Strongly Disagree Disagree Agree Strongly Agree

If a state law was passed permitting concealed handguns on campus, it would negatively impact the education environment on campus.

Strongly Disagree Disagree Agree Strongly Agree

If a state law was passed permitting concealed handguns on campus, it would divert scarce resources away from academic needs to greater security spending on campus.

Strongly Disagree Disagree Agree Strongly Agree

If you feel that you have experienced any discomfort from participating in this survey, please contact your institutions employee assistance program or counseling center or the public health center in your area.

Appendix D

Survey Coding Index

Demographic & Background Information	
Sex	(1) Male (2) Female (3) Intersex
Hispanic or Latino	(1) Yes (2) No
Background (multiple)	(1) American Indian or Alaska Native (2) Asian (3) Black or African American (4) Native Hawaiian or Other Pacific Islander (6) White
Position	(1) Faculty (2) Staff
Academic Rank- Faculty	(1) Adjunct/Lecturer (2) Instructor (3) Assistant Professor (4) Associate Professor (5) Full Professor
Department/Office Staff	(1) Student Services & Related Area (2) Administration (3) Business/Registrars/Financial (4) Academic Department (5) Service Related (6) Other
Political Affiliation	(1) Democrat (2) Republic (3) Independent (4) Libertarian (5) No Affiliation
Years in HE	(1) 0-5 (2) 6-10 (3) 11-15 (4) 16-20 (5) 21-25 (6) 26+
Employment Status	(1) Full-time (2) Part-time (3) Adjunct
Institution Type	(1) Two-Year Community College (2) Mid-Sized Regional University (3) Large Research University
Location- State	(1) MN (2) MT (3) ND (4) SD
Gun Ownership & Background	
Own Firearm	(1) Yes (2) No
Reason Own	(1) Hunting/Sport (2) Personal Safety (3) Gift (4) Collect (5) Other
Firearm Organization	(1) Yes (2) No
Firearms Training	(1) Yes (2) No
Carry Permit	(1) Yes (2) No
Firearm Growing Up	(1) Yes (2) No
Campus Violence & Victimization	
How Safe Feel	(1) Not Safe at all (2) Not Very Safe (3) Safe (4) Very Safe
Concerned About Violence	(1) Not concerned at all (2) Not very concerned (3) Concerned (4) Very concerned
Avoid Places	(1) Yes (2) No
Victim on Campus (multiple)	(1) Violent (2) Personal (3) Property (4) No
Someone Close Been Victim (multiple)	(1) Violent (2) Personal (3) Property (4) No
Victim Off-Campus (multiple)	(1) Violent (2) Personal (3) Property (4) No
Firearm on Campus	(1) Yes (2) No
Campus Lockdown	(1) Yes (2) No
Firearms Policy	(1) Yes (2) No (3) Don't Know
Confidence in Police	(1) Very Confident (2) Confident (3) Not Very Confident (4) Not Confident at all

Support & Conditions	
Support people with permit off campus	(1) Not Supportive at all (2) Not Very Supportive (3) Supportive (4) Very Supportive
Support student carry on campus	
Support faculty carry on campus	
Support staff carry on campus	
Likelihood of obtaining permit if permitted	
Likelihood would carry if permitted	(1) Not Likely at all (2) Not Very Likely (3) Likely (4) Very Likely (5) I already have one
How safe student feel if faculty and staff carry	(1) Not Likely at all (2) Not Very Likely (3) Likely (4) Very Likely
How safe faculty/staff feel if students carry	(1) Very Unsafe (2) Somewhat Unsafe (3) Slightly Safer (4) Much Safer
Must have firearms training	(1) Strongly Agree (2) Agree (3) Disagree (4) Strongly Disagree
Periodically practice firing	
Safety Perceptions (with weapons)	
Feel safer	(1) Strongly Agree (2) Agree (3) Disagree (4) Strongly Disagree
Less likely to be bothered	
Feel more protected	
Might mistakenly shoot me	
Might miss and hit another person	
Might accidentally discharge and injure someone	
Feel less safe if students carried	
Feel less safe if faculty carried	
Feel less safe if staff carried	
Higher rate of student suicides	
Higher rate of homicides	
Impact environment	
Divert scarce resources	

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