



Firearms Training & Self-Defense

Does the Quality and Frequency of Training Determine the Realistic Use of Firearms by Citizens for Self-Defense?

Facts and Evidence for Public Policy Considerations

Joseph J. Vince, Jr., MA • Timothy Wolfe, PH.D. • Layton Field, PH.D.



A Report Prepared for
the National Gun Victims Action Council
Chicago, Illinois



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EXECUTIVE SUMMARY

This study was tasked at making a determination as to what the quantity and quality of firearms training was required of citizens in the United States to safely carry and, if need be, use a firearm in a stressful situation for self-defense. In conducting such a study, we took a broad approach to make this determination by examining what the leading experts in law enforcement and the sport/hunting commercial industry recommended, examined a myriad of literature on the subject matter, as well as testing three categories of respondents with varying degrees of experience and training to the same scenarios in a controlled environment.



Under current constitutional authority, detailed by the United States Supreme Court, every citizen has the right to keep and bear arms in their residence, barring that they are not in a prohibited category such as convicted felon, etc. The right to carry a firearm, open or concealed, is regulated by jurisdictional authority of each state, local, or the federal government.

What we can say with certainty is that carrying a firearm in public has enormous implications and responsibilities for both citizens and police officers. Since a firearm has immense lethality, the act of carrying one cannot be taken lightly. It should be given to those who have demonstrated good judgment, as well as mastered the necessary skills to handle this awesome responsibility. Legislators need to strengthen the vetting process of persons who are authorized to carry a firearm outside a residence. A simple criminal record check is not sufficient. Preventing criminal or accidental tragedies with firearms begins by allowing only those who have been properly trained —

initially and ongoing— and are known to be non-violent law abiding citizens to carry in public. Likewise, no one who has anger, mental, or drug/alcohol issues should be permitted to carry a firearm. Certainly, an extensive law enforcement investigation of an applicant's background should be required to detect unsuitable candidates.

Our study found that in order for a citizen to safely carry, and if need be, use of a firearm in a stressful situation for self-defense, one must pass certified extensive initial training to include: classroom, firing range, and scenario education. **Safe and effective firearms usage requires mental preparation, legal knowledge, judgmental awareness, as well as firearm expertise, skill, and familiarity.** In order to maintain the basic fundamentals of safe carrying and possible use we recommend basic initial training to receive a permit and bi-annual recertification to maintain the permit. Training and recertification must consist of both judgmental aware-

ness that includes real-life scenarios, accuracy when firing in such an encounter as well firing range practice. Without this very minimum of training, both the person carrying as well as the public at large are placed at great risk. Law enforcement and pro-gun firearm experts concur with this assessment.

Legislators and public policy makers must stop denying the reality that carrying and possibly using a firearm is the same as riding a bike and that once you learn you are ready for the Tour de France or the Olympics. In fact, five states have passed laws that

eliminate any training as a requirement for carrying in public. Safe and proper usage of a firearm is an acquired skill, that unless one continues to train such skill will deteriorate over time. This fact of life may be difficult for some to hear, but that does not make it less true. Not accepting facts and evidence has resulted in the United States continuing to have unacceptably high levels of criminal and accidental deaths and injuries with firearms. As many politicians have said on both sides of this issue, "Insanity is doing the same thing over and over again and expecting a different results."

FOREWORD

The debate surrounding firearms is intense. Public opinion varies, politicians argue, advocacy groups fight for their policy prescriptions, and lives continue to be impacted by guns. The purpose of this study is to bring social science methods and an academic and dispassionate perspective to the question of how the quality and frequency of training and experience with firearms are related to the decision to use—or not use—a firearm under a stressful situation, and the realistic possibility of self-defense when confronted with such a situation. As more states are making it easier for citizens to conceal carry firearms, it is important to ask how such policies are likely to affect public safety. Will more guns on the streets of our towns and cities make life safer? Can we expect to see more gun-related accidents and crimes as more Americans are permitted to carry firearms as they shop, go to work, and conduct their daily lives? How much training and experience—and how often is it needed—to safely and competently carry and use firearms? These are obviously critical questions.

The authors wish to thank a number of people who made this study possible. Without their assistance and support, it would not have been possible to conduct this study. We are grateful to Elliot Fineman, President and Chief Executive of the National Victims Action Council who approached us to do this study and provided funding. We are grateful also to Chief Mark A. Magaw and the men and women of the Prince George's Police Department, Prince George's County, Maryland who allowed us to use their training facility and staff to carry out this project and are committed to finding the methods and techniques for reducing firearms-related violent crime. We must also thank the consulting wisdom of Crime Gun Solutions, LLC partners Gerald Nunizato and Ronald Schuman for their guidance and expertise. We owe a debt of gratitude to our students and colleagues who shared their insights, expertise, and support. We are especially thankful to the research participants who gave of their time so that we could collect data.

As you will see in the pages that follow, we designed and executed a detailed empirical study to see how gun training and the level of experience with firearms are related to the decision to shoot or not shoot in a (simulated) stressful and controlled situation. **Our findings indicate that the quality and frequency of training to maintain acquired skills is predictive of how someone with a firearm will react in a stressful situation and whether they can successfully defend themselves.**

The findings we uncovered and their implications are vital and should be used to inform conversations about gun policy in the United States. Our ultimate goal is to increase public safety and the quality of lives for our fellow citizens.

CHAPTER I: The Right of Citizens to Own and Carry Firearms

The authors of this study believe it is abundantly clear that citizens have the right to own and possess a firearm in their homes. We also believe the United States Supreme Court made a definitive point that each state, as well as the federal government, has the right to legislate limitations, prohibitions, and regulations with regard to the carrying and use of firearms outside the home. (See Appendix, page 46, for a detailed analysis by authors.)



It is with this same reasoning that we have undertaken a study to examine what factors should be considered and followed by policy-makers and legislators to determine the proper guidelines for citizens to carry firearms outside their homes. **Entrusting the right of citizens to carry a deadly weapon and employ lethal means should be a thoughtful process that is based on facts and evidence—not emotion—that identify what is in the best interest of everyone’s public safety.**

History has shown that policy decisions, as well as the creation of firearms laws, have not always been the result of thoughtful consideration based on concrete demonstrable evidence. With every right comes responsibility. It is up to legislatures to enact laws that detail what a citizen’s responsibility is, in this case the carrying, concealed or openly, of a firearm for self-defense. Legislatures need to make careful and prudent deliberations to both insure that the rights of all citizens are protected as well as the best interest of Public Safety. Guardianship of rights starts with the fundamental premise that citizens should be secure and safe whether in their homes or anywhere else in a free society.

This study provides public policy makers and legislators with concrete information they can draw upon when making such important and impactful decisions.

CHAPTER II: Law Enforcement Firearms Training and Use of Force

This chapter presents a descriptive analysis of the firearms and use of force training that law enforcement agencies at all levels (state, local and federal) require of their officers. Because these officers traditionally have been required to carry a firearm and have the authority of the government to employ this lethal weapon, it is natural to examine their training regiments and the reasoning behind the protocols.

Firearms training for law enforcement demands more than mastering the fundamentals of marksmanship. It also must include a clearly defined set of priorities to guide police officers in the use of firearms.

Below we have provided an example of the firearm training currently required by the New York State Police. We believe this training regimen is indicative of most police departments in the United States. In the New York State Police Firearms Training Program, the priorities are: Safety first, Accuracy second and Speed last¹. State Police Firearms Training is a continuing process that begins with a 90-hour course in the Basic School and continues throughout one's career with semi-annual, in-service Field Firearms Training sessions of five hours each. With guidance from trained firearms instructors, each trooper works to develop and maintain an appropriate level of "combat accuracy" under realistic time-constrained conditions; that is, the ability to perform quickly and efficiently without sacrificing safety.²

New York State Police Basic School Firearms Training covers not only qualification with pistol and shotgun, but also tactical firearms training, the use of deadly force, which includes training on FATS (Firearms Training System). FATS is a state of the art training system which stimulates real life situations in a controlled atmosphere. This tool was designed to aid in decision-making skills, judgmental use of force and marksmanship training.

Basic School qualification requires the recruit to score 84% or higher on each of three consecutive runs of the pistol qualification course. Pistol qualification requires a minimum proficiency score of 84%, at specified distances and within established time limits; shotgun qualification requires 80% proficiency. In addition, all Basic School trainees must pass a comprehensive written examination with a minimum score of 80%.

Emphasis also is placed on "tactical" training, in which recruits are confronted with realistic situations specifically designed to reflect actual deadly force incidents troopers have faced in the line of duty. This begins even before the three-in-a-row standard has been achieved on the static range; once it is achieved, the qualification course is not revisited until semi-annual, in-service training in the field.

In-service Field Firearms Training requires ongoing semi-annual qualification with pistol and shotgun. It also includes an array of ever-changing tactical courses. This training is decentralized and occurs locally in troops. All troopers must attend each training session. The State Police train its own firearms instructors in a state-certified 63-hour Firearms Instructor Development Course. The minimum marksmanship standards for this course are increased to 92% for the pistol and 90% for the shotgun and written exam. Instructors also must complete an additional Instructor Development Course for General Police Topics.³

There are volumes of training literature (and we examined numerous examples) regarding this subject from reputable sources, we also found the recently completed *An Assessment of Deadly Force in the Philadelphia Police Department*⁴ funded by the U.S. Department of Justice, Community Oriented Policing Services (COPS) to be both informative and timely toward examining appropriate procedures. In light of the current use of force by police, this assessment was undertaken to study—among other items—training as it relates to officers and public safety in deadly force situations.

It is well established in U.S. law, as well as common sense, that the use of deadly force to take a life by a law enforcement official or a citizen must be a last resort when defending oneself or property. The legal concept of “reasonable care”—the degree of caution and concern for the safety of the individual and others an ordinarily prudent and rational person would use in the circumstances—must be followed.⁵ This is a subjective test to determine if a person is negligent, meaning that individual did not exercise reasonable care. As was aptly stated by The Association of Prosecuting Attorneys, “Replacing the burden of proving reasonableness with a presumption of reasonableness eliminates the use of prosecutorial discretion. As upholders of justice and enforce-

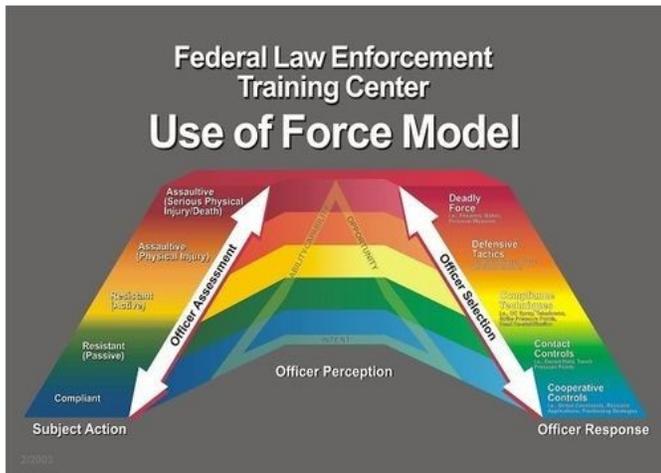
ers of the law, this is a key function of prosecutors that should not be taken away or diminished.”⁶ Every incident involving the use of “deadly force” (including those by law enforcement officers) requires close scrutiny of the specifics of the circumstances.

Law enforcement officers, who are authorized by law to use deadly force to protect others and themselves, must follow this same reasonable care before taking whatever steps necessary to end a physical threat or have a lawful command obeyed. Officers are trained in various techniques that provide alternative actions for

officers to administer. **The concept’s objective should always be to de-escalate a situation before the use of force. When that is unavoidable, only the minimum level of force necessary should be used to end the**

threat. Force must be terminated once compliance occurs. The suspect’s behavior and the level of the threat determine the amount of force applied.

The different levels of force used in particular situations, commonly referred to as the “Use of Force Continuum,” is based on an officer’s perception of a subject’s actions and the amount and type of force necessary to eliminate the danger. The last option is always deadly force. The following chart illustrates⁷ several levels of response, based on a subject’s actions that can be taken by law enforcement before the use of deadly force. An officer’s judgment of the suspect’s intentions must be based on the totality of the factors involved, such as the subject’s mental state, drug or alcohol impairment, and access to a weapon.



SOURCE: Federal Law Enforcement Training Center (FLETC)

When force is used, the subject's actions and the officer's response are carefully reviewed by the responding law enforcement agency, as well as the local or federal prosecutor's office. After a review, officials then determine whether the force applied was justified and appropriate under the circumstances. (See chart)

Before employment, law enforcement applicants are examined for psychological, critical thinking, or temperament issues that might hinder their ability to use reasonable care when applying force against citizens. The scrutiny of an officer's demeanor is extended into academy training, as well as a probationary period, which can be a year in many cases. Law enforcement officers also must meet extensive training requirements (from the onset of service and throughout employment) in the use of force with firearms. Most law enforcement agencies require officers to train and qualify with their service weapons under stressful situations several times a year. Use of a firearm to deliver deadly force consumes a vast amount of training time and expense and should during academy and in-service training. Although law enforcement officers have legal authority to use deadly force with a firearm when appropriate, they are still mandated to employ "reasonable care" and due diligence when it's employed.

Making an accurate assessment of each confrontational situation is critical in correctly judging when the use of force is needed, as well as the type and amount that should be employed. Law enforcement agencies have concluded that in-depth, regular and consistent training in deadly force judgment policies for their officers is required.⁸ In the same manner as retired athletes who stop training lose physical fitness, officers who do not maintain their firearms training face a deterioration of physical and decision-making skills. The Philadelphia Assessment recommends having:

"A Fourth Amendment standard whereby an officer's belief that they must protect themselves or others from death or serious bodily injury is compared and weighed against what a reasonable or rational officer would have believed under similar circumstances. This determination is made by reviewing all relevant facts and circumstances of each particular case, including, but not limited to, (1) the severity of the crime at issue, (2) whether the suspects poses an immediate threat to the safety of the officers or others, (3) whether the suspect is actively resisting arrest or attempting to evade arrest by flight."¹⁰

The primary objective for an officer when entering a confrontational situation is to reduce or de-escalate the condition so that no force is required. We have found that most officers receive training at their initial academies in verbal persuasion tactics and other de-escalation methods. We believe—and the DOJ assessment of the Philadelphia Police Department's use of force concurs—additional academy time is required in this area as well as repeating and enhancing such techniques during in-service training in subsequent years.¹⁰ In the same way use-of-force methods are practiced and grasped, de-escalation skills need the same amount of practice for individuals to become skilled in their use.

Law enforcement agencies need to replicate real-world conditions that allow officers to hone their judgement and critical thinking skills, and sophisticated firearm training simulators have been added to the firearm training protocols to do just that. These computer-driven, virtual reality simulators provide a realism for officers that's critical in mimicking stressful situations they may encounter. Officers can realistically practice the situational levels of the use of force, from officer presence and verbal skills to less lethal force options and, as required, deadly force. Having an officer face virtual scenarios that mirror real-life combat conditions enable a smooth transferring of skills. Such training instruments might be initially expensive, but they are extremely cost effective in lieu of the expense of live ammunition and maintaining training facilities year round. One caveat: Although a firearm simulator provides a higher level of stress and realism than simply shooting a target, it does not equal the situational stress level of a potential life-and-death situation. Every officer involved in firearm training knows he or she must pass firearm qualifications in order to keep his or her job. But they also know they will walk away unharmed at the end of the training.

From our review, the law enforcement authorities we spoke with highly recommend extensive firearms and use-of-force training for of-

icers as critical to safe policing for officers and citizens. **Universally, authorities were concerned with the rising cost and loss of manpower adequate on the street training requires. Everyone, however, agreed the benefits overwhelmingly outweighed the cost.** Both psychomotor and critical thinking skills need to be taught to incoming recruits. Recruits also require intensive training time to become proficient in the various techniques in order to maintain a necessarily high level of proficiency. Veteran officers require practice of these techniques in order to maintain a high level of proficiency. Currently, the President's Task Force on Use of Force and law enforcement associations are examining revamping training protocols to determine the specifics of what and type and amount of police training is required to address 21st century needs in the United States. We will address this in more detail in the chapter regarding recommendations.

CHAPTER III: Law Enforcement's Performance

The Bureau of Justice Statistics reports there are approximately 18,000 law enforcement agencies in the United States, and local police departments employed about 477,000 full-time sworn personnel in 2013.¹¹ Fortunately, during the course of a career most officers will not be involved in a use of force encounter that requires discharging their firearms. This was prominently noted in a study conducted by the Rand Center on Quality Policing that found that “a New York City Police Officer is very unlikely to be involved in a shooting (0.26 annually).”¹² The Bureau of Justice also noted that “among persons who had contact with police in 2008, an estimated 1.4% had force used or threatened against them during their most recent contact, which was not statistically different from the percentages in 2002 (1.5 percent) and 2005 (1.6 percent).”¹³

Even with the immense level of screening and training described in Chapter II, police officers are still involved in incidents in which citizens or officers are injured and killed because of errors in judgment or the stress of the situations that affect shooting accuracy. For example:

“On a busy Friday morning in Manhattan, nine pedestrians suffered bullet or fragment wounds after police unleashed a hail of gunfire at a man wielding a .45 caliber pistol who had just killed a former co-worker. The officers unloaded 16 rounds in the shadow of the Empire State Building at a disgruntled former apparel designer, killing him after he engaged in a gun battle with police. Three passersby sustained direct gunshot wounds, while six others were hit by fragments, according to New York Police Commissioner Ray Kelly. All injuries were caused by police, he said Saturday. One officer shot nine rounds and another shot seven.”¹⁴

Both New York City Police Department (NYPD) officers involved in this incident were seasoned professionals, each with more than 15 years on the job each. They acted appropri-

ately to the threat they encountered and yet nine innocent civilians were inadvertently injured, and the officers and the department are being sued for gross negligence.

Our intention isn't to single out the NYPD; we found other police departments nationwide had similar or worse incidents. However, because NYPD is the largest department in the United States and has been examining the discharging of officers' firearms for decades, we found they had the most data on this subject.

Law enforcement has been keenly aware of the unintended consequences that can occur when an officer is required to use his or her weapon for self-protection or the protection of others. In the early 1970s, “the New York City Police Department adopted Department Order SOP 9 (s.69) and began to collect in-depth documentation of discharges during hostile encounters, for the stated purpose of [increasing] the safety potential of each member of the force. The policy quickly expanded beyond police-involved combat, however, and came to include the study of all firearms discharges by

police. Since that time, the NYPD has endeavored to record and evaluate every instance in which an officer discharges his or her weapon, whether the discharge occurs purposefully, accidentally, or, in rare instances, criminally.”¹⁵ NYPD’s yearly examination of the discharging of firearms by fully trained officers is a unique representation and close examination of the performance of officers utilizing firearms under stressful situations.

As the NYPD annual report states (and one of the authors experienced), “One of the most abrupt, dynamic, and potentially traumatic incidents that can happen in a police officer’s career is the line-of-duty discharge of his or her firearm.”¹⁶ In making their split-second judgments, officers are mandated to exercise only as much force as they believe to be *reasonably* necessary. This is not only proscribed by law but has been the deciding factor the U.S. Supreme Court has employed to decide whether an officer has appropriately used force.¹⁷ We examined how fully trained officers performed when using a firearm under the stressful circumstances and the legal guidelines that must be followed during these situations.

A study by the Police Policy Council found U.S. police officers were scoring exceptionally low at hitting targets. **For example, a review of NYPD officer-involved shootings for a decade (1990-2000) found that in instances when an officer encountered an armed suspect, the average hit probability was a shocking 15 percent.**¹⁸ The 2008 Rand Corporation Study examining NYPD gunfights between 1998 and 2006 came to a similar conclusion, with the average hit rate being approximately

18 percent.¹⁹ They also found that when suspects did not return fire, officers hit their targets 30 percent of the time.²⁰ We also found that other conditions, such as poor lighting, officer fatigue, and emotional factors, contributed to officers missing targets or even inappropriately discharging their firearms.

Experts’ recommendations for improving target accuracy in stressful situations all concerned better training based on what police experience in these encounters. The Rand study stated, “Based on these findings, the authors recommend increasing the recruits’ exposure to scenario-based training and evaluating and not passing them until they demonstrate skill mastery at an appropriate level. They also recommend investigating alternatives to the current semiannual firearm-qualification paradigm to provide enhanced firearm instruction that would focus on the officer’s proficiency, not just the score on static targets.”²¹ Additionally, decision-making was stressed as being as important as marksmanship.

Other shooting experts provided this analysis:

“The data show what any police officer who has ever been involved in a shooting can tell you—firing accurately in a stressful situation is extremely hard. In an article for TIME last year, Amanda Ripley looked what happens in the brain and body when shots are fired. The brain stem sends out signals that cause blood vessels to constrict and hormones to surge. Studies have shown that eyesight becomes narrower (literally tunnel vision) under such conditions. People who have been in gunfights describe hearing very little and perceive time slowing down. Amid this chaos, as police officers have to make difficult, split-second decisions, humans can lose motor skills as the body reverts to basic fight or flight instincts. Overcoming those natural reactions is the goal of rigorous training. Many police departments focus on decision-

making as much as marksmanship, helping officers to decide in an instant whether to fire their weapon. Instructors will show targets—both good and bad guys—for only a split second, then score officers on their choices as well as their accuracy. The goal is to inoculate officers against the stress, allowing them to experience what a chaotic situation will feel like before they face the real thing.”²²

Decision-making and the actual threat perceived by officers are an ongoing training concern

for police agencies. For decades, this has been especially true for plain-clothes, undercover and off-duty, out-of-uniform officer responding to a criminal or terrorist incident in which they need to take action and are only identified by the badge they’re wearing or holding. Recent shooter incidents in malls and other public places have accelerated these concerns from officers who fear they would be mistaken for a lawbreaker by responding, uniformed officers or even legally armed, law-abiding citizens.

The Kansas City Police Department (KCPD)—the International Association of Chiefs of Police (IACP) and other law enforcement agencies have been or are examining the same issue—reported that:

“In recent years there have also been a number of high profile incidents involving on-duty personnel shooting officers taking enforcement action while either off-duty or in plain clothes. The repercussions of an incident such as this are far reaching, potentially devastating, and can not only cause serious trust issues within an agency, but within a community as well.”²³

The study evolved after KCPD experienced a blue-on-blue shooting in 2010. A uniformed

officer carrying an AR-15 was mistaken for a suspect by a colleague with a shotgun as both responded in dim light to an armed-suspect call. The misidentified officer lost part of a thumb to a shotgun pellet. “Just making officers aware of the blue-on-blue risk can have very positive results, as this study shows,” says Dr. Bill Lewinski, executive director of the Force Science Institute. “Officers often fail to consider that they might confront another officer in civilian clothes and not recognize him as a friendly. Exposure to the problem in a memorable way can be valuable training with life-saving impact.”²⁴

In order to address the unintentional injuring of plain-clothes officers, the department “intended to leverage the collateral benefit of ensuring identification of a threatening target rather than shooting at whatever shape happened to turn toward the shooter. A vital component of this training was addressing poor performance, providing meaningful and accurate training, and holding students accountable.”²⁵ Having instituted this additional layer of training, improvement was significant, but did not produce 100 percent infallibility.

Recent, nationally publicized shooting incidents have caused communities to distrust police officers’ intentions as a “kill mentality” instead of being perceived as “protective actions.” The law enforcement community is feverishly seeking to alter and increase training regimens. Legislators at all levels are coming to the realization that proper and adequate training might be expensive, but it is far more cost effective than the consequences caused by inadequate officer preparation.

CHAPTER IV: **What Do the Experts Advise Concerning Citizens Using Firearms in Stressful Situations for Self-Defense?**

It sounds intuitive that an individual—either a law enforcement officer or a civilian—who wishes to carry a firearm should be well trained in its use. However, this has become a contentious argument in the United States as individual states legislate to allow citizens to carry firearms outside of their residence for self-defense. A number of states have passed legislation that have little or no requirement for any training for civilian gun carriers (see appendix). Of all the studies and firearm expert advice we examined regarding this, we found John M. Buol, Jr. of the Firearms User Network summed it up succinctly.

After reviewing the Rand Corporation Report (previously cited) regarding the NYPD assessment of Firearms Training, Buol stated:

"The info also may encourage responsible gun ownership by those who think that a gun is some sort of a magic wand that will keep them safe and ward off evil, by letting them know that guns are seldom used, and that without effective training, they will not be practical for use in their self-defense or for the defense of loved ones. What one sees happen in the movies or on TV, or reads about in fictional literature, is really not reality."²⁶

The firearms instructors who train law enforcement and the public contend that it requires regular and rigorous training to know when and how to

shoot. "It's easy to say you would rather be tried by 12 than carried by six, but taking a life is never easy," said Sgt. Jason Halifax, a Des Moines police spokesman and a law enforce-

ment firearms trainer. "There are mental aspects of it. It will change your life. Saying you can do it and doing it are two very different things."²⁷ Halifax doesn't discourage people from exercising their Second Amendment-protected right to bear arms. **However, he does encourage anyone who has a firearm for home defense to carefully consider what they are able to do and what they're willing to do according to their own values.** He also encourages people to seek more than the basic firearm safety instruction that's required by law to receive a carry permit.²⁸ "Shooting targets on a range is one thing," Halifax said. "You can put all your shots on a dot when you control the situation and can decide when to fire. But when your adrenaline is pumping and your heart is beating faster, you're not going to shoot the same way you do at the range — not without a lot of training."

"Real gun battles are not *Call of Duty*," says

Ryan Millbern, who responded to an active-shooter incident and an armed bank robbery among other calls during his decade as a police officer in Colorado. Millbern, a member of the National Rifle Association, believes there is value in trained citizens carrying weapons for defensive purposes. He understands what the NRA's Wayne LaPierre meant when he said, "The only thing that stops a bad guy with a gun is a good guy with a gun." **But he knows from experience that in a life-or-death encounter, a gun is only as good as its user's training.**²⁹

The leading proponents of citizens using firearms to protect themselves and reduce violent crime, as well as the largest lobbying group that advocates arming citizens, is the National Rifle Association (NRA), which also promotes the benefits of training and education in the use of firearms. The NRA website states:

"Since 1871, a major objective of the National Rifle Association has been to provide education and training in the safe and proper use of firearms."³⁰

As such, it offers a myriad of at-cost courses for citizens to increase their proficiency.³¹

The following is a list of some of the training courses offered by the NRA:

- ◆ Basic Pistol Shooting
- ◆ Personal Protection in the Home
- ◆ Personal Protection Outside the Home
- ◆ Basic Rifle Shooting
- ◆ Basic Shotgun Shooting
- ◆ Basic Muzzleloading Pistol
- ◆ Basic Muzzleloading Rifle
- ◆ Basic Muzzleloading Shotgun
- ◆ Home Firearm Safety

In these NRA courses (which, like curricula, is taught by myriad companies across the country), we found they were usually eight hours in duration and covered topics, such as the safe and efficient use of firearms for hunting, sport shooting, and self- and family protection. They also include information on an individual's right to self-defense. The actual shooting of the weapon usually was included with the amount of rounds being fired varying. We found critical thinking and judgment skill training only to be slightly covered and usually not in live or simulated firing exercises. Later in this chapter, we will cover specific training courses by a variety of individuals and companies that include these skills along with the basic safe handling training.

For example, the NRA describes a course for home protection to keep one safe as follows:

"Americans own firearms for a variety of reasons, but home defense is among the most common reasons for owning a handgun. To help handgun owners learn more about firearms and home defense, the NRA developed the Basics of Personal Protection in the Home Course. This course focuses on the safe and efficient use of a handgun for protection of self and family. Students can also learn about their right to self-defense as a law-abiding citizen.

"People who take this course realize the importance of protecting themselves and their families," said John Howard of the NRA's Training division. "The responsibility of protecting your home falls upon you. The homeowner is the first responder."³²

During the eight-hour course, an NRA Certified Instructor will teach students basic defensive shooting skills, how to respond to a violent confrontation, and strategies for home safety. Specific state firearms and home defense laws are taught by an individual certified in the state that the course is taught (such as an at-

torney or police officer). Not sure which gun is right for you and your home? You can learn how to choose a handgun for self-defense, along with continued opportunities to expand your skills.”

Even with its reported historical mission of providing education and training in the safe use of firearms, the NRA, through its legal arm, issued an alert, “More Unnecessary Regulation Being Proposed for the Right-to-Carry Bills” opposing mandatory firearm training legislative provisions. The alert, as reported by the Wisconsin Gun Owners Organization, stated:

“Key legislators who have supported past Right to Carry bills in Wisconsin have recently begun to demand that a mandatory training provision be a component of any Right-to-Carry bill introduced this year. The National Rifle Association (NRA) is the world’s largest firearms safety and proficiency training organization but it trusts citizens to assume this responsibility on their own. The government should not deem it necessary to micromanage the citizen exercise of essential rights. This is not the American way. The alert goes on to point out how those who stand to profit from mandatory training for concealed carry — firearms trainers — have already begun to lobby for mandatory training. More disappointingly, even some firearms instructors in the state are promoting a training mandate. These are people who should know better but they too choose to ignore the proven experience in all of these other states. While some are unfortunately motivated by what they see is the potential to profit handsomely, others are simply misinformed. They must understand that citizens are capable of deciding for themselves that attending firearms training is the responsible thing to do.”³³

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We found similar objections to mandatory firearms training by the NRA in news releases discussing the pending legislation in other states.

We looked at a plethora of at-cost training courses offered by firearms trainers throughout the United States. Firearms training courses advertised they were NRA Trainer Certified and many publicized being taught by former law enforcement officials skilled in the use of firearms for protection. A citizen could choose from meeting minimum state training standards to more advanced training. For example, we found classes at the following prices:

- ◆ \$40 for a two-and-half hour class
- ◆ \$65 for a concealed carry training class
- ◆ \$25 for range training consisting of an hour briefing and the firing of a box (20 rounds) of ammunition (plus a \$16 range fee and the price of the ammunition)
- ◆ \$115 for the NRA Basic Pistol Shooting Course, which consists of eight hours of classroom training and range time (plus \$16.00 range fee and the cost of a 20-round box of ammunition)

Objections to mandatory firearms training for citizens is not the consensus opinion of law enforcement and firearm experts.

We interviewed Acting Chief of Police Patrick Grossman, Frederick, Md., a 17-year veteran of the department with 10 years of service in the U.S. Marine Corp. Chief Grossman also is a certified NRA instructor who has taught firearms safety and use to citizens. He made the following observations:

“This is an interesting study. It covers many different realms as what is minimum and what is preferred with regards to safely handling a firearm. I know when I teach this, I’m a proponent of leaving the firearm stored secured and un-

loaded (for obvious reasons) but also the added time to unsecure and chamber a round are critical seconds that allow someone to gather their senses from a sound sleep. Also, storing a flashlight with the weapon and establishing a strong hold versus actively seeking out an intruder are interesting discussions. I think this also goes into discussion regarding weapon and round selection depending on someone's situation. I know some courses focus on safety to those that focus on both safety and tactics. The other concept of training is: Is it truly enough to pass a course or go through a limited "certification" course to show proficiency? If sustainment training is not conducted, safety practices as well as tactical principles will no doubt diminish and some create a false sense of ability because it is something they "went through before". That's why I believe legislation can only provide minimum requirements but there is no way to legislate true sustained proficiency. It's my opinion that proficiency can only be established through one's personal commitment to remain that way.³⁴

When law enforcement safety experts were asked how much training would be ideal for teachers or police officers, for that matter, assigned to schools, they offered different estimates. In Arizona, Alexis Artwohl, co-author of the book *Deadly Force Encounters* and a veteran police psychologist and trainer, recommended a weeklong program with "a lot of practice" and a requirement that participants meet minimum performance standards in order to graduate. In Ohio, Bill DeWeese, a veteran police officer and head of the National Ranger Training Institute, recommended two to three times that much training, and he pointed out that the best training includes much more than firing a gun. "I'm an avid firearms person and always have been," he says. "The one thing I've learned is that it's not about possessing firearms. It's about possessing the skills to read a situation—learning how to adapt and maneuver, to respond to an

unexpected, fluid situation."³⁵

Examination of broader-based and holistic firearms training courses found a 20-hour DVD curriculum offered specifically to citizens interested in carrying a firearm for private protection, Concealed Carry University (CCU). CCU was founded in 2014 and states that its sole purpose is to assist private citizens who choose to carry a concealed handgun to more effectively carry out their decision to go armed.³⁶ The training course developed by Patrick Kilcherman, who purports to be a conservative and passionate individual who studied and developed comprehension training for citizens wishing to carry a concealed firearm. CCU recommends that "Effective Self-Defense requires Balance—and this is something that we have always observed is utterly lacking in the vast majority of options the Armed American has for training. **Most training focuses solely on the physical side of training. Little attention is paid to Mindset or Gear, let alone the often overlooked aspects of physical training such as altercation Deterrence, Avoidance, De-Escalation and Escape.**"³⁷ CCU highlights why it is important to have broad-based training by highlighting various myths about firearm usage for self-defense. CCU claims that proper training is the only way to guarantee a person will be safe and successful using a firearm for protection. They state research completely justifies their approach as follows:

"The myths and mistakes involved with concealed carry go on and on:

- ◆ *The myth that “**Accuracy in Combat = Accuracy at the Range**”. Statistically 77 percent* of shots fired in self-defense situations will miss their targets, even when fired by trained gun-handlers. Why is this the case, and how do we adjust our practice so we build effective “combat accuracy”? (*Collected from NYPD deadly force incidents during the mid 2000s).*
- ◆ *The “**I’ll see him coming**” myth. Roughly 67 percent* of the time, the bad guy is the first one to use lethal force. They ambush us. This tells us that a gun-fight is not a clear-cut incident where a target pops up from behind a barricade. How should our thinking, awareness, and training change to give us the best chance of surviving this type of attack? (*Bureau of Justice)*
- ◆ *The “**I’ll have time to think and decide**” myth. The average violent attack is over in **3 seconds**. They are “**blitz**” **attacks**, designed to blindside and overwhelm us. We must be able to comprehend what’s happening, orient ourselves to that attack, draw, and begin fighting back within that 3 second window, or else there’s a very good chance we’ll be defeated before we have a chance to even draw our weapons.*
- ◆ *The myth of “**Fight or Flight**”. The reason criminals prefer these ‘blitz attack ambushes’ is because it forces our minds into a state of reflexive reaction. The problem is, our bodies don’t only choose between Fight and Flight, but instead between **Fight, Flight, and Freeze**. And without specific training, many (if not most) of us are prone to freezing for 3 or more seconds when confronted with a sudden, psychologically and physically overwhelming attack.”³⁸*

CCU concludes: “Essentially, we need an approach that helps us become ultra-effective

warriors while maintaining a clear, level head. We need training that will allow us to avoid violence whenever possible, but overcome, defeat, and survive violence when we can’t avoid it. See, most people who carry concealed are unknowingly unprepared to defend themselves because they’ve failed to look at concealed carry holistically.”³⁹

In its training, CCU instructs students that they need their total mindset broken into the following points to be successful:

- ◆ Have the mentality of a sheepdog not a sheep
- ◆ Best defense is to fight back
- ◆ Make sure you have your facts straight
- ◆ Acknowledge reality and be prepared for what is possible
- ◆ Just carrying a gun does not make you safe
- ◆ Confidence should be in your abilities not your gun
- ◆ Have to train your instinct to fight (not fright or freeze)
- ◆ Muscle memory is important (means practice)
- ◆ Biggest caliber is not always the best option
- ◆ To every action there is an equal and opposite reaction
- ◆ Get rid of the mindset: “Shoot to wound”
- ◆ Either it demands lethal force or it doesn’t
- ◆ The idea that it will be easy to pull the trigger is a myth
- ◆ Not a safe bet that just showing your gun will be enough
- ◆ You cannot be both afraid for your life and fire a warning shot
- ◆ Be aware of what it takes to carry concealed (type of gun, holster, position)

As we noted previously, law enforcement has been employing virtual reality simulators to enhance its firearms training, especially in the area of judgment and decision-making. With the advent of concealed carry laws, the same companies making simulators are offering their technology, as well as other interactive training tools (simulations using paintball guns), for civilian use. **Specific scenar-**

ios suited for civilian situations have been devised and offered as part of the training courses to provide realism and test decision-making capabilities and firearm proficiency. Ads state that,

although they do not employ live ammunition, the replica firearms used provide the same realism. With the training employing paintballs, the scenarios are against other armed opponents create a more reality-based training environment. With both options, citizens have a self-defense specialist guide them through the training and coach them on proper responses. Simulation training with an instructor costs on average more than \$100 an hour.

In our research, we found an at-home training technique that advocates the key to maintaining shooting skills requires the repetitive—and cost effective—practice of “dry-firing” a firearm. “Dry-firing” refers to practicing with an unloaded weapon. We also found this technique being promoted for law enforcement officers, too. A company called Tactical Firearm Training Secrets sells “a collection of more than 50 dry-fire training exercises and drills that cover firearms fundamentals, advance concepts, dry-fire exercise drills, dry-fire complex movement drills and low light drills.”⁴⁰ They state that their techniques don’t, “replace live training. ... [T]hey are a force multiplier that will allow you to create neural pathways

(muscle memory) and hardwire perfect form into subconscious mind faster (and cheaper) than is what is humanly possible with just live fire or traditional dry fire alone.”⁴¹ They also claim that the technique is also used by police departments across the country. We also found it of interest that Tactical Firearms Training Secrets make the factual statement that:

“If You Don’t Keep Practicing New Skills Learned, You’ll Lose 20% Of What You Learned Within 7-10 Days... And Up To 80% Within A Few Weeks!”

It is not the intent of this study to evaluate the pros or cons of the firearm training courses and techniques available to the public. However, we overwhelmingly found that law enforcement experts, firearms trainers, and military personnel recommended that citizens owning firearms—especially those carrying firearms in public—should have extensive and repetitive training. **One must be proficient and familiar in firing the weapon. This requires knowledge of how the firearm functions (loading, reloading, safety features, proper type of ammunition, etc.), as well as possessing the expert dexterity necessary to properly fire at an intended target with speed and accuracy.** Next, safe and successful carrying of a concealed weapon necessitates acquiring a fixed mental attitude or disposition that predetermines a person’s responses and inter-

pretations of situations. **Accompanying this mindset is knowledge of the law regarding self-defense and a keen perception of knowing the appropriate time and circumstance to draw and use a firearm.** Although it seems obvious that training is required to obtain these skills, it is also the strong recommendation of every firearm expert we consulted. Training is essential when one is handling a dangerous and lethal weapon.

In the same way that athletes train continually to acquire and hone their physical and mental skills, civilians must be willing to do the same to acquire and hone their firearm skills. These skills are learned behavior that will diminish without training over time. Even military and law enforcement personnel who have had extensive training with a firearm cannot maintain their firearm proficiency without continual training. **The lack of quality initial training and repeat training over time is potentially a disaster waiting to happen.**

CHAPTER V: Methodology and Findings

As the purpose of this study was to assess to what extent firearms training would impact the decision-making process and shooting skills under a stressful situation we undertook the examination of participants using firearms with a firearms training simulator (The Milo Range Simulator) on April 9 -10, 2015, at the Prince George's County Police Department in Maryland. In this chapter we discuss the methodology employed and the results that were obtained. The study includes both quantitative data (e.g., measuring the number and accuracy of shots fired in the simulations) and qualitative data (e.g., recording and analyzing the statements of research participants after they completed the three scenarios). In the sections that follow we spell out in some detail how we measured key variables, how we collected the data, how the data were analyzed, and what the resultant findings indicate. Before we discuss the design of the study and present our findings, we make clear some of the limitations we faced. We do this because it is important to keep some caveats in mind as you review the findings. More than anything else, we endeavor to be fully transparent so that readers and reviewers will have the proper context in which to judge our results.

Limitations

All of the findings below are conditioned by a number of limitations. First, virtually all statistical tests are sensitive to sample size. We had hoped to obtain a minimum of 35 participants per skill category. However, we failed to achieve that goal in every group. As such, many of the results that failed to achieve statistical significance would likely change if we were able to increase our sample size. Additionally, we chose to have each participant place the firearm at his or her side, pointed to the ground, at the beginning of each scenario. We felt this gave each participant the best chance to focus on the decision making process without having to fumble around for a holstered and concealed weapon. Changing the collection strategy so as to require participants to pull the firearm from a holstered and con-

cealed position would most likely alter the results.

There are also several limitations based on the technology we employed during data collection. The shooting system in use was not capable, at the time, of recording shot placement so as to determine the distance of each shot from the center mass of the appropriate target. Such measure would greatly improve our measure of accuracy as opposed to simply counting the number of hits relative to the number of shots. Similarly, the scenarios we used were originally developed for training in a law enforcement setting. As such, these scenarios were not designed with the civilian in mind. Future research ought to employ scenarios developed specifically for use in civilian training.

Finally, following data collection we were informed that many of the police officers included in the advanced skills category had previously trained with Scenario 3. However, in previous

training sessions the ending of the scenario was altered so that the suspect pulls a firearm from the box and fires on the officer. In our scenario, the suspect simply tosses the box and runs. Nonetheless, some officers may have acted on prior experience with the scenario and shot preemptively assuming the suspect would pull a weapon. By using mixed methods—that is, combining quantitative and qualitative approaches—we were able to gather evidence that is more revealing than if we just used one method or the other. Even with these limitations, we believe we have designed a study that allows us to draw reasonable conclusions.

Study Design

The purpose of this study was to assess to what extent firearms training would impact the decision making process and shooting skills under a stressful situation. As such, the study was designed to introduce three categories of respondents to the same scenarios in a controlled environment. This

section describes the recruitment process, data collection, a detailed description of the shooting scenarios, and the open-ended questions that were asked of each participant.

The recruitment of subjects for this study utilized several stages. First, we circulated an email using an internal university system inviting any person interested in participating in the study to complete a short web-based survey. Initially, 171 respondents completed the online questionnaire. This screening survey collected basic demographic information such as age and sex, followed by several questions designed to assess the respondents experience with firearms and firearms training. We sought to recruit respondents from three categories defined as those with no shooting skills or training, respondents with some shooting skills and training, followed by respondents with advanced shooting skills and training. Thus, the screening survey asked four basic questions regarding firearms:

1. Have you ever fired a gun (i.e., shotgun, handgun, or rifle)?

- a. Yes
- b. No

2. Which following statement best describes your experience with firearm

- a. No experience (I have never handled a gun)
- b. Limited Experience (I have shot a gun a few times but I have not shot in years)
- c. Moderate Experience (I shoot several times per year, including hunting and concealed carry)
- d. Very Experienced (I shoot several times per month, this category may also include advanced firearms training such as law enforcement or military training)

3. Which following statement best describes your experiences with firearms training?

- a. None (I have never received any formal training)
- b. Some (I have taken basic firearms training, i.e., concealed carry or hunting certification courses)
- c. Advanced (I have military/law enforcement training, or advanced firearms training)

4. In your own words, describe your experience handling firearms and any related training or education. Be as detailed as possible.

Example: I have been shooting rifles and handguns for 15 years. About 7 years ago I completed the concealed carry course in the state of Pennsylvania. However, I no longer carry a weapon and I have not shot on a regular basis in the past 3 years.)

Table 1: Coding Scheme for Respondent Skill Level Based on Responses to Question 2 and Question 3 of the Screening Survey

Question 2 (horizontal)	None: Never handled a gun	Limited: Shot a few times but in past few years	Moderate: Several times per year	Very: Shoot monthly (includes law enforcement & enforcement &
Question 3 (vertical)				
None: No formal training	No Skill	No Skill	Some Skill	Some Skill
Some: Basic firearms training (hunting/ concealed carry course)	No Skill	Some Skill	Some Skill	Some Skill
Advanced: Military or law enforcement	No Skill	Some Skill	Advanced Skill	Advanced Skill

Questions 2 and 3 were then employed to generate the categories we were interested in (see Table 1).

For example, a person that respond that he or she had never handled a gun (Question 2), and had never received any formal training (Question 3) was coded as no skill. Table 1 displays how each combination of responses from these two questions was coded.

Question 4 of the screening survey was then used to verify the corresponding skill designation based on the participant’s response to Questions 2 and 3. We made the determination that shooting is a skill that, like many other skills, degrades over time. Therefore, in some situations a respondent’s skill level was adjusted by his or her response to Question 4. For example, one respondent answered that he or she was a very experienced shooter and had advanced firearms training. However, the same respondent included the following re-

sponse to Question 4:

“Was a police officer for 22 yrs. Also have fired black powder revolver and musket, 22 cal. rifle, 30 cal. rifle, and 12 gauge shotgun. Have not done any shooting regularly for about 20 yrs.”

Thus, based on the coding scheme described in Table 1 this respondent was initially coded as having advanced shooting skills. However, his or her response to Question 4 clearly indicates a lack of maintenance of that skillset and as a result we recoded this participant to the some skill category. We only encountered this problem with respect to the advanced skill category. In total, we reduced 11 participants’ skill level from advanced to some skill based on the disparity between their responses on Question 2, 3, and Question 4. Of the initial 171 respondents we ended up with 6 respondents with advanced firearms skills, 50 respondents with some firearms skills, and 97 respondents with

no firearms skills (58% of whom reported they have never fired a gun).

Thus, out of the original 171 respondents we had 153 respondents that provided sufficient contact information to continue with the study and only 45 participants that actually participated in the shooting scenarios. The pool of respondents fitting our description of advanced firearms skills was noticeably small. Therefore, we recruited 32 police officers from Prince George's County to participate in the study for a total of 77 respondents (25-No Skills, 18-Some Skill, 34 Advanced Skills). The goal was to obtain 35 participants in each category but we were only able to come close to that goal in the advanced skill category. In sum, our final sample was short of what we had hoped to achieve and our sample size certainly constrains our ability to achieve statistical significance when comparing outcomes across these three groups.

We scheduled participants for the data collection phase over a two day period. Civilian respondents were provided with \$25 in compensation for time and travel to the Prince George's County Police Training Facility. However, we were not permitted to compensate current police officers for participating. The data collection phase of the study was completed using the training facilities of Prince George's County Police Department including the Milo Range training system. The MILO Range system uses a life-size screen to project simulated scenarios with human subjects that respond to the training weapon in real time. This system allowed us to safely subject study participants to stressful situations and obtain objective information regarding the number of shots and the number of actual hits for each participant. We selected three scenarios from the onsite database that we felt were realistic situations that civilians might encounter. Each scenario is described in detail below. (Note: Videos of the shoot were taken and are available on request.)

Upon arriving at the training facility partici-

pants were led to a holding room at which point they were checked in and asked to complete a second short questionnaire including a question about the respondent's demographics as well as three questions regarding the respondent's opinion concerning various issues surrounding the right to carry a concealed weapon. Respondents were asked to respond to the three statements by indicating if they "Strongly Agree," "Agree," "Neither Agree nor Disagree," "Disagree," "Strongly Disagree," or "Don't Know."

The statements read as follows:

- 1. Law abiding citizens should have the right to carry a concealed weapon**
- 2. Current laws regulating concealed carry licenses make it too difficult to legally carry a weapon**
- 3. Laws regulating concealed carry licenses should require annual training.**

Also at this time, we instructed participants that they were not permitted to discuss any aspect of the study with any other participants until they have departed from the training facility.

Participants were then escorted individually into the training room equipped with the Milo Range system. Upon entering the room each participant was escorted to the center of the room between two padded barriers and received the exact same scripted instructions. The instructions informed participants that they were being provided with a semi-automatic pistol that was not loaded with live ammunition but did contain a CO2 that would allow the gun to function as if it were real. Participants were then told to place the gun at their side pointing to the ground and to only raise the weapon if they felt it was necessary to

defend themselves or others. Participants were asked to place themselves in each of the three scenarios as they viewed them on the screen in front of them and that any decision to shoot the weapon, or how many times to shoot the weapon, was entirely up to them.

Scenario 1: Car Jacking

In this scenario, the participant is told that he or she is exiting a store and walking to his or her car. The video then proceeds down a sidewalk, makes a turn toward the driver side of a parked car. Once at the door, the video angle quickly turns back to the sidewalk where a White male suspect is shouting at the participant to give up the keys to the car. The suspect's right hand is placed on an item in the waistband of his pants, which resembles the grip of pistol. As the scenarios progresses the suspects language becomes more violent including threats to "kill you" if the keys to the car are not provided. Finally, the suspect draws a pistol from his waistband and begins shooting. If the participant shoots and kills the suspect the scenario continues as a second man jumps in from the right side of the video frame pointing a cell phone at respondents and screaming about the shooting.

Scenario 2: Armed Robbery

In this scenario, the video begins in what appears to be a convenient store. The video displays 1 cashier behind the counter, 1 bystander immediately to the left of the counter, and at least 2 other bystanders wandering through the store. As the video progresses participants here a metallic sound resembling that of the receiver on a semi-automatic weapon being charged. Quickly, the video spins to the front door of the store at which point 2 masked suspects enter the store and move directly toward the cashier. The first suspect is carrying a semi-automatic high powered rifle and the second

suspect appears to have a semi-automatic pistol. This scenario has several different outcomes depending on whether or not the participant engages the suspects. First, if the participant does not fire, the cashier gives the suspects money from the register and the suspects immediately flee the store. Second, if the participant engages the suspect with the high power rifle and kills him, then the second suspect drops her weapon and shouts that "he made me do it." Third, if participants engage the second suspect with the semi-automatic pistol, the first suspect with the rifle immediately turns and begins firing on the participant.

Scenario 3: Suspected Larceny

Scenario 3 begins by walking through what looks like an industrial park with a variety of storage containers. As the video comes around the corner participants see a black male suspect walk into an open storage container. The video focuses on the entrance to that container for approximately one minute at which point the suspect walks out of the storage container with an open box in his hand. The suspect then says that this is his stuff and that he has identification. The suspect then moves toward the participant in the video with the box in hand saying his identification is in the box. As the suspect gets closer to the participant, he reaches into the box at which point he throws the entire box at the participant and runs off.

We played each scenario, in the same order for all participants, pausing briefly between each scenario to verify the number of shots fired and the number of targets hit. We counted a "hit" as a round that encountered any part of the suspected perpetrator's body. We also collected data on whether or not participants initially placed their finger on the trigger of the firearm, as well as whether or not the participant moved to cover during the scenario or shouted commands at any point during the

three scenarios. Upon completion of all three scenarios we asked participants to relinquish custody of the firearm to the training instructor. Then, we asked each participant the same five open-ended questions including what they thought of the overall experience, why they chose to shoot, or not to shoot, in each of three scenarios, and if they had any other comments. Participants' responses to these five questions were digitally recorded and later transcribed verbatim and analyzed. Finally, participants were checked out, civilian participants were provided \$25 in cash, and escorted to the lobby of the training facility. The complete process from the time the participant entered the shooting room to completion of all three scenarios and the follow-up questions took on average seven minutes per participant.

Variables

Dependent: We included several dependent variables in this study. First, we created a dichotomous variable indicating whether or not participants elected to shoot in each scenario. This variable represents the decision on the part of each participant to engage suspects in each scenario. We determined that the suspect in Scenario 1 represented a sufficient threat and the decision to shoot was the correct decision. Scenario 2 resulted in what we call a judgment situation. The decision to shoot or not to shoot could both be responsible courses of action depending on how the participant processed the scenario. The follow-up questions asked of each participant after completing all of the scenarios allowed us to identify the reasoning for the decision to shoot or not to shoot. Scenario 3, however, we determined represented a situation in which there is no imminent threat and therefore participants should not shoot. The second, dependent variable counts the number of shots fired in each scenario. Finally, based on our count of the number of shots and hits we were able to gen-

erate a measure of accuracy by dividing the number of hits by the total number of shots in each scenario. For example, if a participant fired the weapon four times but only hit the suspect twice then the participant would have an accuracy score of .50, or 50 percent.

Independent: The main independent variable in this study was the designation of firearms skill. As described above, we separated participants into three different categories based on their experience with firearms and firearms training: no skill, some skill, and advanced skill. Participants in the no skill category include people that have never fired a weapon as well as participants that have fired a weapon but not in several years. This participants also have, for the most part, never participated in any formal firearms training. Participants in the some skill category have experience handling firearms ranging from shooting periodically to shooting very frequently. However, their formal firearms training is limited to hunting safety courses and concealed carry license courses. Finally, participants in the advanced skill category include individuals that shoot regularly, ranging from several times per year to several times per month, and have received advanced firearms training. These participants virtually all came from law enforcement or military backgrounds. We also collected information on age, sex, race, and responses to the three opinion statements regarding carrying a concealed weapon. Descriptive statistics are reported in Table 2.

Analytical Strategy

This study integrates quantitative and qualitative strategies to process the data we collected. From a quantitative standpoint, we include basic descriptive statistics as well as numerous comparisons across groups using a series of t-tests corresponding to the three various skill levels. Additionally, we include two separate

statistical tests corresponding to two of the dependent variables described above. We estimated a logistic regression for the first dependent variable indicating the decision to shoot. This approach is required since the dependent variable is a dichotomous variable (Treiman 2009). Furthermore, logistic regression allows us to calculate odds ratios that provide a meaningful interpretation of the results. The second dependent variable (number of shots) is considered a count variable. Some researchers will apply an OLS regression model to a count variable. However, this approach is only appropriate if the count variable is independently and identically distributed (Long and Freese 2006). Therefore, having determined that the data for this variable adequately fits a Poisson distribution, we calculated a Poisson regression for participants that chose to fire in each scenario. This permits us to determine if skill level or any of the additional control variables are related to the number of times a participant decided to pull the trigger.

From a qualitative standpoint, we performed verbatim transcriptions for the responses provided by participants after they completed all three shooting scenarios. We carefully reviewed all of the transcripts and developed an initial coding scheme. For example, each participant was asked, “What did you think of this experience?” Participants’ responses varied from such comments as “It was a very interesting experience. I think it kind of puts you in the shoes of the officer and, uh, really helps you determine whether or not to make that split second decision” to “It was good. Wish my shot placement was a little better on that second scenario. But, overall, it was a good experience, good training.” Categories were developed and all responses were coded accordingly.

For question 1, “What did you think of this experience?” we identified five categories:

1. the experience was interesting

2. the experience was intense

3. the experience was educational and eye-opening

4. the experience was stressful

5. the experience was good training.

For questions 2, 3, and 4—“You shot (or you did not shoot) in scenario number ___. Why?” we identified four categories: (1) I felt I was in danger, (2) I felt I wasn’t in danger, (3) I ordered the suspect to drop the weapon and they ignored my command, and (4) the suspect was a danger to others. For question 5, “Any other comments?” we identified three categories: (1) No other comments, (2) I now know how hard it is to be a police officer, and (3) this was more intense and difficult than I imagined it would be. In the next section, we provide the results from our data collection efforts.

Results

The descriptive statistics for this analysis are displayed in Table 2 and Table 3. Table 2 summarizes general statistics for all participants for the study. Accordingly, 33 percent of participants were classified as having no shooting skills while 23 percent and 44 percent of participants were ranked as having some skills or advanced skills respectively. The average age of participants was approximately 31 years old and 35 percent of participants self-reported as female. Approximately 70 percent of the sample self-identified as non-Hispanic White, 17 percent as non-Hispanic Black, 4 percent as non-Hispanic Asian, 4 percent as Hispanic, and 5 percent listing some other race or selecting multiple races. Out of all 77 participants, 27 percent placed their finger on the trigger of

the weapon prior to the first scenario, only 36 percent shouted commands at some point during any of the three scenarios, and only 26 percent of participants chose to use the padded barriers on either side of the shooting room for cover. We noticed clear differences between the skill groups. Only skilled shooters used the barriers for cover (thereby giving themselves some protection), routinely exercised trigger discipline (that is, they did not place their fingers on the trigger until they were ready to shoot thereby reducing the chance of firing accidentally), issued commands to try to get the suspect to comply and thereby reduce the chances of a deadly outcome, and otherwise demonstrated a focus and situational control that was clearly lacking in the no skills group. To put this succinctly, more training gives shooters the confidence and skills they need to make sounder judgments. Without such training, basic skills like trigger discipline, taking protective cover, and attempting to resolve a situation before it gets to a deadly outcome are completely lacking.

We observed, for example, that participants in the no skills group often waited until the suspects started firing at them before they returned fire. The MILO system did not capture this dynamic, but we observed this repeatedly. Also, the qualitative data bolster this observation. As one participant in the no skills group reported:

“Well you know, I saw that the guy had something there, I couldn’t really see what it was. And then he pulled

Table 2: Descriptive Statistics for all Participants (N=77)

	Mean	Std. Dev.	Range
Scenario 1			
Shoot (%)	.94 ^{ab}		0-1
# of Shots	2.81 ^{ab}	1.73	1-11
Accuracy	.76 ^{ab}	.31	0-1
Scenario 2			
Shoot (%)	.68 ^{ac}		0-1
# of Shots	5.46 ^{ac}	3.12	1-15
Accuracy	.47 ^{ad}	.31	0-1
Scenario 3			
Shoot (%)	.23 ^{bc}		0-1
# of Shots	1.78 ^{bc}	1.06	1-5
Accuracy	.31 ^{bd}	.41	0-1
Skill Level (%)			
No Skill	.33		0-1
Some Skill	.23		0-1
Advanced Skill	.44		0-1
Age (years)	30.9	12.38	18.3-66.8
Female (%)	.35		0-1
Race (%)			
NH-White	.70		0-1
NH-Black	.17		0-1
NH-Asian	.04		0-1
Hispanic	.04		0-1
Other	.05		0-1
Finger on Trigger (%)	.27		0-1
Shout Commands (%)	.36		0-1
Move to Cover (%)	.26		0-1

^a Difference between Scenario 1 & Scenario 2 is statistically significant (p<.05)

^b Difference between Scenario 1 & Scenario 3 is statistically significant (p<.05)

^c Difference between Scenario 2 & Scenario 3 is statistically significant (p<.05)

^d Difference between Scenario 2 & Scenario 3 is statistically significant (p<.1)

Table 3: Select Descriptive Statistics by Skill Level & Shooting Scenario

	No Skill (N=25)			Some Skill (N=18)			Advanced Skill (N=34)		
	Mean	Std. Dev.	Range	Mean	Std. Dev.	Range	Mean	Std. Dev.	Range
Scenario 1									
Shoot (%)	.88		0-1	.94		0-1	.97		0-1
# of Shots	1.90 ^a	1.23	1-6	2.53 ^b	.87	1-4	3.58 ^{ab}	2.08	1-11
Accuracy	.72	.33	0-1	.70	.37	0-1	.83	.26	0-1
Scenario 2									
Shoot (%)	.52 ^a		0-1	.55 ^b		0-1	.85 ^{ab}		0-1
# of Shots	5.23	4.40	1-15	5.2	2.82	2-10	5.65	2.62	1-12
Accuracy	.41	.36	0-1	.46	.29	0-1	.51	.30	0-1
Scenario 3									
Shoot (%)	.16		0-1	.33		0-1	.23		0-1
# of Shots	2.0	1.15	1-3	1.67	.52	1-2	1.75	1.38	1-5
Accuracy	.33	.47	0-1	.33	.41	0-1	.28	.45	0-1
Finger on Trigger (%)	.60 ^a		0-1	.33 ^b		0-1	0.0 ^{ab}		0-1
Shout Commands (%)	0.0 ^a		0-1	0.0 ^b		0-1	.82 ^{ab}		0-1
Move to Cover (%)	0.0 ^a		0-1	0.0 ^b		0-1	.59 ^{ab}		0-1

^a Difference between no skill & advanced skill is statistically significant (p<.05)

^b Difference between some skill & advanced skill is statistically significant (p<.05)

it out, and obviously after he pulled it out I saw that it was a gun. So once he pulled it I was ready to fire because I saw he had something, he was threatening. I didn't want to shoot him before he pulled out, just in case, that was I don't know a wallet, a phone. Maybe he didn't really have anything threatening, so that's when I shot."

Another participant in the no skills group reported:

"I felt when he drew the weapon that I was in danger. I felt in danger through the beginning, when I could clearly see the weapon, but since it was not drawn on me I didn't fire until he reached."

Such statements reflect the indecision that we observed among those in the no skills group. Contrasting that kind of decision making with participants in the advanced skills group shows how important training is. We found, for example, that those in the advanced skills group were able to articulate the importance of making an appropriate and timely decision to shoot or not. As one participant in the advanced skills group told us:

"The subject had a gun in the waistband. Gave a lot of verbal commands to drop the weapon, drop the weapon. Close proximity to the suspect. There was a lot of cars for position to cover. But, obviously the way this scenario was I wasn't behind cover or anything like that. So, obviously I had no choice but to, as soon as he motioned for the gun, no choice but to shot to defend myself or anyone else who was around in the scenario."

.....

We believe these statements reflect the different thinking and behavior that training provides.

Additionally, the descriptive statistics reveal some very interesting differences between all three scenarios. **In general, the proportion of participants choosing to fire the weapon declined significantly from Scenario 1 (94%), to Scenario 2 (68%), to Scenario 3 (23%).** These differences were statistically significant.

Similarly, the accuracy for all 77 participants decreased from one scenario to the next falling from .76 in the first scenario to .47 and .31 in the last two scenarios, respectively. These differences were also statistically significant as indicated in Table 2. However, the difference

in accuracy between Scenario 2 and Scenario 3 was only moderately significant ($p < .1$).

Finally, the number of shots fired in each scenario increased significantly from Scenario 1 (2.81) to Scenario 2 (5.46), but declined from in Scenario 3 (1.78).

Additionally, Scenario 2 recorded the largest range of shots with participants choosing to fire the weapon between 1 and 15 times. It is not surprising that more shots were fired in Scenario 2 considering there were 2 armed suspects in that scenario as opposed to only 1 suspect in each of the other scenarios.

Finally, a total of 7 participants accidentally shot the bystander in Scenario 1 that jumps into the scene at the very end of the scenario. Of those 7 participants, 2 were classified as some skills (11% of the category) and 5 were classified as advanced skills (15% of the category). We observed, though the MILO system could not record, that those in the advanced skills group had tighter shot groupings compared to the other two groups.

More interestingly, the differences between all three skill levels across each of the scenarios are reported in Table 3. In Scenario 1, 88 percent of no skill participants chose to fire the weapon, compared to 94 percent of some skill participants, and 97 percent of advanced skill participants though these differences were not statistically significant. The accuracy in Scenario 1 also did not differ significantly across groups with no skill shooters registering an accuracy of 72 percent, 70 percent for those with some skills, and 83 percent for shooters with advanced skills.

Though statistical significance was not reached (due to small sample size), it

was apparent that those in the advanced skills group were better and more accurate shooters compared to the other participants.

The average number of shots fired did differ significantly across skill levels in the first scenario with no skill shooters on average firing the fewest shots at 1.90, and some skill and advanced skill participants firing the higher number of rounds at an average of 2.53 and 3.58, respectively. Interestingly, advanced skill shooters also reported the largest range with members of this group firing between 1 and 11 shots compared to a maximum of 6 shots and 4 shots in the other two skill categories. This is more evidence of the importance of training, as more training and experience increase the number of shots fired to neutralize a threat. Put a bit differently, participants with no skills were not only slow to fire, but did not fire enough shots to effectively neutralize the threat they faced.

In Scenario 2, the percentage of no skill shooters that elected to pull the trigger fell to 52 percent, while the percentage of some skill shooters also declined to 55 percent, and advanced skill participants fell to 85 percent. In other words, the percentage of participants in the first two categories choosing to fire the weapon fell from Scenario 1 to Scenario 2 by approximately 41 percent. However, the percentage of advanced skill participants only fell from Scenario 1 to Scenario 2 by around 11 percent. Furthermore, the average number of shots did not differ significantly across skill categories. However, the largest number of shots (15) was recorded in the no skill category. Finally, the accuracy across all three skill categories dropped dramatically in Scenario 2 to 41 percent for no skill shooters, 46 percent for some

skill shooters, and only 51 percent for advanced skill shooters.

Many of the patterns in Scenario 1 and Scenario 2 were also observed in the final scenario. The percentage of participants in each category firing the weapon in Scenario 3 continued to decline to 16 percent of no skill participants, 33 percent of some skill participants, and 23 percent of advanced skill participants. Similarly, the average number of shots also declined with an average high of 2 shots among no skill shooters, 1.67 for some skill shooters, and 1.75 for advanced skill shooters. Additionally, accuracy also fell in the last scenario to .33 for those with no skills and some skills, and .28 for advanced skills shooters. However, it is important to note once more that many of these differences failed to achieve statistical significance as displayed in Table 3. Nonetheless, the majority of the patterns observed occurred precisely as we expected.

Finally, the last three variables revealed some very interesting trends. First, the percentage of participants that placed their finger on the trigger immediately after receiving the weapon differed significantly across all three groups. For example, 60 percent of participants classified as having no skills placed their finger on the trigger compared to 33 percent of some skill participants, and zero percent of advanced skill participants. Second, none of the participants in the first two skill categories ever shouted commands during any of the three scenarios, while 82 percent of participants with advanced skills did shout commands. Finally, only 59 percent of participants in the advanced skills category moved to cover at some point during the scenarios, while all participants in the other two categories failed to move to cover.

Table 4: Odds Ratios for Decision to Shoot by Scenario (Standard Errors)

	Scenario 1		Scenario 2		Scenario 3	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
No Skill (Ref: Advanced)	.216 (.26)	.252 (.40)	.224* (.13)	.179* (.15)	.642 (.44)	.426 (.39)
Some Skill	.471 (.68)	.800 (1.3)	.296 [†] (.20)	.245 [†] (.20)	1.84 (1.2)	1.26 (.99)
Age		.955 (.04)		.945* (.02)		.956 (.03)
Female		.083 [†] (.12)		.460 (.31)		2.46 (1.9)
Finger on Trigger		14.63 [†] (22.76)		1.52 (1.1)		.390 (.34)
Constant	34.0* (34.5)	259.29* (482.4)	4.83* (2.17)	38.22* (39.27)	.296* (.12)	1.22 (1.35)
Pseudo R²	.05	.25	.08	.16	.03	.08
LRX²	1.98	9.11	7.35	15.36	2.06	6.67
Log Likelihood	-17.52	-13.95	-44.86	-40.85	-40.84	-38.54

*p<.05

[†]p<.10

Table 4 reports the odds ratios and standard errors from our logistic regression analysis. We ran the same two models for each of the three scenarios. Model 1 only includes the skill categories codes as dichotomous variables with advanced skills serving as the reference group. Model 2 incorporates the remaining variables of interest including age, sex, and whether or not the participant placed his or her finger on the trigger of the weapon. We will discuss each scenario individually.

First, there was no significant relationship between skill category and the deci-

sion to shoot in Scenario 1. In other words, the decision to pull the trigger for participants in the no skills category and some skills category was not statistically significantly different from participants in the advanced skills category. However, the coefficients associated with sex and whether or not the participant’s finger was on the trigger was moderately significant. In fact, the probability of shooting the weapon in Scenario 1 decreases for women by 17 percent. Moreover, participants that placed their finger on the trigger after receiving the weapon were 14.63

times more likely to shoot in Scenario 1 than participants that did not place their finger on the trigger.

Second, there was a significant relationship between skill categories and the decision to shoot in Model 1 of Scenario 2. For example, participants with no skills were 78 percent less likely to shoot in Scenario 2 compared to advanced skills participants. Similarly, participants with some skills were approximately 70 percent less likely to pull the trigger compared to their advanced skills counterparts, though this comparison is only moderately significant. The same pattern emerges when we add the additional control variables in Model 2. Participants with no skills were 82 percent less likely to shoot and participants with some skills were 76 percent less likely to shoot than partici-

pants with advanced skills holding all other variables constant. Finally, in Scenario 2 the coefficient associated with age was significant suggesting that holding all else equal, every additional year of age decrease the probability of shooting by 5.5 percent.

Third, many of the same patterns persisted in Scenario 3 as described in the previous two scenarios. However, none of the variables of interest achieved statistical significance in the third scenario. This is not surprising considering the small minority of participants that chose to fire in the third scenario (23% of all 77 participants).

The incidence rate ratios we generated using Poisson Regression are displayed in Table 5. Incidence rate ratios are very similar to the

Table 5: Incidence Rate Ratios for Number of Shots by Scenario (Standard Errors)

	Scenario 1		Scenario 2		Scenario 3	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
No Skill (Ref: Advanced)	.490* (.09)	.614* (.15)	.580* (.08)	.532* (.11)	.799 (.35)	.634 (.37)
Some Skill	.703* (.12)	.800 (1.6)	.653* (.10)	.610* (.20)	1.47 (.61)	1.12 (.55)
Age		.955 (.01)		.971* (.08)		.958 [†] (.02)
Female		.674 [†] (.14)		.422* (.08)		1.26 (.57)
Finger on Trigger		.952 (.22)		1.81* (.35)		.664 (.36)
Constant	3.43* (.31)	4.13* (1.01)	4.68* (.37)	12.4* (2.88)	.40* (.11)	1.58 (1.21)
Pseudo R²	.06	.08	.04	.13	.01	.05

*p<.05

[†]p<.10

odds ratios we reported in Table 4 and may be interpreted in a similar way. Therefore, based on our data for Scenario 1, the results in Model 1 suggest that the total expected number of shots by participants with no skills decrease by 51 percent relative to participants categorized as advanced skills. Furthermore, possessing some skills compared to advanced skills decreases the expected number of shots in Scenario 1 by nearly 30 percent. In Model 2, we still found a significant decrease in the number of shots among participants with no skills compared to participants with advanced skills controlling for all other factors. However, the comparison between some skills and advanced skills was no longer significant. Finally, the coefficient associated with sex in Model 2 of the first scenario was marginally significant ($p=.062$) suggesting that being a woman decreases the number of expected shots by around 33 percent, holding all else equal.

The results for Scenario 2 are very interesting. Both skill categories in Model 1 were statistically significant suggesting that belonging to the no skills and some skills categories compared to the advanced skills category decreased the expected number of shots by 42 percent and 35 percent, respectively. These patterns persisted even after controlling for the remaining factors. The expected decrease in the number of shots for no skills participants increased to 47 percent and the expected decrease in the number of shots for some skills participants increased to 39 percent. Moreover, all of the control variables were also significant. For example, the incidence rate ratio for “Age” was .971 suggesting that, holding all else equal, every one year increase in age decreased the expected number of shots by about 3 percent. Similarly, being a woman decreased the expected number of shots by nearly 58 percent, controlling for all other factors. Finally, having your finger on the trigger when receiving the weapon, compared to placing the finger off the trigger, increased the expected number

of shots by 81 percent.

Finally, the results for Scenario 3 were very similar to what was reported above in the section on logistic regression. None of the variables were significant in the Model 1. Only “Age” was significant in Model 2 corresponding to previous patterns such that for every 1 year increase in age the expected number of shots decreases by about 4 percent, holding all else equal.

The qualitative analysis of participants’ comments provided interesting results. The transcripts were carefully read and analyzed for patterns. Table 6 provides a summary of participants’ answers to five open-ended questions.

Additional Comments on the Qualitative Analysis

Our qualitative analysis of the responses to our open-ended questions showed us that at all levels of skill, but especially for those participants who no skill or some skill, the scenarios were perceived as intense and often led to feelings of stress. Common responses for those with no or only some skill were statements like “I was nervous,” and “I’m having some ethical conflicts here,” and “I thought that it’s kind of hard to obviously decide when it’s necessary to shoot,” and “It seemed like it would be hard to make the decision when it was occurring. Like in the first instance, I thought for sure the guy wasn’t going to do anything, but then he did so.” The participants in the advanced skill level never made these kinds of statements. Instead, the advanced shooters typically made statements like, “This is fairly accurate to what officers go through,” and “It was a good experience, because it’s real life,” and “It’s realistic. The system has gotten much better.” In fact, the most common response from those with advanced skill was that the experience was

Table 6: Responses to Open-Ended Questions by Participants’ Skill Level
(% who gave that response)*

Question 1: “What did you think of this experience?”	No Skill (N = 25)	Some Skill (N = 18)	Advanced Skill (N = 34)
Some version of “It was interesting”	60%	56%	18%
Some version of “It was intense”	12%	11%	3%
Some version of “It was eye-opening”	12%	22%	18%
Some version of “It was stressful”	40%	17%	3%
Some version of “It was good training”	0%	0%	62%
Question 2: “You did you shoot (or you did not shoot) in scenario 1. Why?”	No Skill	Some Skill	Advanced Skill
Some version of “I felt I was in danger”	84%	89%	100%
Some version of “I felt I wasn’t in danger”	4%	0%	0%
Some version of “I ordered the suspect to drop weapon and they ignored me”	0%	0%	32%
Some version of “I felt the suspect was a danger to others”	4%	0%	3%
Question 3: “You did you shoot (or you did not shoot) in scenario 2. Why?”	No Skill	Some Skill	Advanced Skill
Some version of “I felt I was in danger”	12%	22%	56%
Some version of “I felt I wasn’t in danger”	40%	39%	18%
Some version of “I ordered the suspect to drop weapon and they ignored me”	0%	0%	9%
Some version of “I felt the suspect was a danger to others”	48%	56%	71%
Question 4: “You did you shoot (or you did not shoot) in scenario 3. Why?”	No Skill	Some Skill	Advanced Skill
Some version of “I felt I was in danger”	8%	33%	21%
Some version of “I felt I wasn’t in danger”	88%	61%	79%
Some version of “I ordered the suspect to drop weapon and they ignored me”	0%	0%	3%
Some version of “I felt the suspect was a danger to others”	0%	0%	0%
Question 5: “Any other comments?”	No Skill	Some Skill	Advanced Skill
Some version of “No other comments”	92%	72%	100%
Some version of “I now know how hard it is to be a police officer”	8%	12%	0%
Some version of “This was much more intense than I imagined it would be”	0%	16%	0%
*Column Percentages may exceed 100% due to rounding and because participants could give more than one answer			

“good training.” One officer put it very poignantly when he said to us:

“I think it was good. I think it shows you, know, the stress level we deal with on a daily basis and the quick reaction, the split-second reaction we have to come up with. We have to perceive the deadly threat as opposed to a non-threat simply by looking at what we just saw. It really can make you a hero or make you a prisoner. So, I think it was great.”

.....

The police officers were able to describe their experiences in almost clinical terms. None of the people in the no skill group ever offered any response like that. We also observed and found in our analysis of post-shooting statements that those in the advanced skills group took into consideration the safety of bystanders, whereas those in the lower skills groups tended to focus just on their own safety. This is an important finding because those without sufficient training and experience may create a more dangerous situation by firing indiscriminately and thereby exposing others to danger. The advanced shooters made clear in their comments that awareness of the situation and surroundings was key in making a decision as to shooting or not. Our best interpretation of these qualitative results is this: Advanced training and experience reduce the stress and

strain associated with judgment shooting. That is, those with little or no training and experience are much more likely to feel intense anxiety. They question themselves and they express emotional upset after the experience (even though it was only simulated). As experience and training increase, shooters are better equipped to face and manage the stress that is inherent in a dangerous confrontation. This suggests that training is not only about increasing skill level, but also about giving people the mindset and confidence they need to make sound judgments under duress.

We also believe that the qualitative data show differences between skill level groups in terms of what constitutes a reasonable threat and what would be an appropriate response. Some participants in the no skill group, for example, spoke about firing warning shots or shooting at a limb to take a suspect out without killing them. One such participant said to us, “All of the shooting I would have done not with the intent to kill, just like at maybe their foot or something.” Such responses are naïve at best, and they suggest that appropriate skill and experience are needed to render sound judgments when faced with a potentially deadly encounter. Those participants with less training and experience lack a realistic sense of what can and should be done in these stressful scenarios.

CHAPTER VI: Conclusion and Recommendations

As stated in Chapter I, the U.S. Supreme Court has ruled that citizens have a constitutional right to keep and bear arms in their homes.⁴² The court also declared, quite clearly, that there are exceptions, asserting, “Like most rights, the right secured by the Second Amendment is not unlimited. From Blackstone through the 19th-century cases, commentators and courts routinely explained that the right was not a right to keep and carry any weapon whatsoever in any manner whatsoever and for whatever purpose.”⁴³ This study illustrates the enormous public safety dangers when untrained individuals carry firearms.

We also agree with the Supreme Court that government (state, local and federal) has a duty and an interest in keeping certain categories of people from possessing firearms. This duty and interest lies both in its responsibility to maintain public safety and order as well as the economic cost of firearm-related violent crime.

Thwarting criminals, terrorists, and others who pose a danger to citizens and the country from acquiring firearms should be a paramount objective for government and law-abiding citizens shouldn't object. As

much as members of society expect law enforcement to identify and arrest individuals who use firearms to commit crimes, they also have an expectation that concrete efforts should be made to deter people prohibited from possessing firearms.

Applicant Suitability

Permitting citizens to carry firearms outside their residences should be closely inspected to

determine the suitability of individuals. Although Federal gun laws identify people prohibited to possess firearms⁴⁴ (convicted felons, fugitives, drug addicts, undocumented immigrants, etc.), a closer examination of a person's suitability is required. It seems obvious that people with anger issues but no felony convictions should not be permitted to carry a firearm—concealed or open—in public. A California study found that “persons convicted of misdemeanor crimes who legally purchase handguns are at high risk for committing new gun and/or violent crimes. Male handgun purchasers with one prior conviction for a violent misdemeanor, compared with those with no prior criminal history, are more than eight times as likely to be charged later with gun and/or violent crimes; among those with multiple such convictions, risk is increased more than 10-fold.”⁴⁵ **There's no justification to allow individuals who routinely are involved in bar fights, road rage incidents, or public arguments that require law enforcement intervention to carry a firearm in public.**

It was alarming to us that a very recent study found that roughly 22 million Americans—8.9 percent of the adult population—have impulsive anger issues and easy access to guns, 3.7 million of these angry gun owners routinely carry their guns in public, and very few of them are subject to current mental health-based gun ownership restrictions.⁴⁶ A lead researcher of the study stated, "To have gun violence you need two things: a gun and a dangerous person," Swanson says. "We can't broadly limit legal access to guns, so we have to focus on the dangerous people."⁴⁷ **In ad-**

dition to the startling findings about the share of the overall population with both gun access and serious anger issues, the researchers also found that people with lots of guns—six or more—are more likely to carry their guns in public and to have a history of anger is-

sues. And people with more than 11 were significantly more likely to say that they lose their temper and get into fights than members of any other gun ownership group. It's important to note here that gun owners as a whole aren't any more likely to suffer anger issues than non-gun owners. And the vast majority of these people never have, and never will commit a gun crime. So you can't simply ask someone if they have anger issues and take their guns away if they say "yes." But there are other things policymakers can do to limit gun access among the most high-risk members of this population.

Federal law already limits gun access for individuals convicted of a felony, and for people

with misdemeanor domestic violence convictions. Swanson and his colleagues suggest taking that one step further and placing additional misdemeanors on the restriction list: assault, brandishing a weapon or making open threats, and especially DUI, given the well-documented nexus between problematic alcohol use and gun violence.⁴⁸

Because good judgment is needed to properly use a firearm in defense, individuals should not be impaired by drugs or alcohol. The Violence Prevention Research Program at the University of California at Davis found that "acute and chronic alcohol misuse is positively associated with firearm ownership, risk behavior involving firearms, and risk for perpetrating both interpersonal and self-directed firearm violence."⁴⁹ It added, "in effect, drunken shooting among men is as lethal a problem as drunken driving."⁵⁰ There is no federal law stopping individuals who abuse alcohol from owning or acquiring firearms. Some states do deny firearm ownership to those who have been convicted of alcohol-related crimes. We believe all states should enact such restrictions, as well as making it illegal to consume any amount of alcohol while carrying a firearm.

Proper Vetting of Permit Holders

This brings us to the important part of vetting of potential concealed or open carry applicants. It is obviously in a state's best interest to carefully examine candidates wishing to receive a permit to carry a firearm. As we have shown, a simple criminal records check is insufficient to determine if a person has a tendency toward violence or would consume alcohol while carrying a firearm. We recommend allowing local or state law enforcement to conduct a thorough background investigation applicant. In this regard, evidence of criminal encounters that did not result in felony convictions, drug or alcohol abuse, or mental instability that may demonstrate a potential risk of

future violent behavior with a firearm can be uncovered. Our study shows this would be a significant deterrent and would reduce intentional and accidental firearm mishaps.

It is important to note that after the enactment of the National Firearms Act in 1934 and for decades after, persons could apply for a permit to purchase and possess fully automatic weapons and other weapons considered out of the realm of sporting or legitimate self-defense categories. In order to be granted such a permit a total background investigation, including criminal record check, examination of local records and interviews with local law enforcement, and a character evaluation (neighborhood, acquaintances, work interviews, and personal interviews) were conducted. Over this vast period of time, it is significant that few of the persons receiving such permits and the firearms registered with the government were ever involved in criminal acts. Obviously, extensive background investigations having proven to be effective.

Government Has Economic Interest

As we mentioned earlier, government has an economic interest in reducing firearms-related violent crime. The cost in civilian lives and public money because of U.S. firearm deaths and injuries is substantial. A recent study by the Centers for Disease Control, the government's health protection agency, discovered that the discharge of firearms is the most common cause of deaths in 11 states.⁵¹ In those states—Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Montana, South Carolina, South Dakota, Tennessee, West Virginia, and Wyoming—the death rates by the discharging of firearms is at least twice the national average. The study does not cover all forms of firearm deaths or accidental deaths attributed to firearms. If those incidents were included, the

number of deaths would be much higher. The economic damage firearm-related violence causes also has reached ruinous proportions. The cost of hospital treatment for firearms-related injuries exceeds \$2 billion annually, with one out of three patients who are hospitalized being uninsured, according to a 2013 study by the American Public Health Association (APHA).⁵² Obviously, this places an enormous burden on the nation's healthcare system, as well as the taxpayers who bear treatment costs at the time of the incident and for years to come. The summary of the results of this study are as follows:

Summary of Results

Firearm injuries in 2003-2010 in the US led to:

- ◆ 252,181 hospitalizations
- ◆ 80% adolescents and young adults, 1/2 in 18-30 years
- ◆ 89% males
- ◆ 48% Blacks
- ◆ 1/3 uninsured
- ◆ 61% assault
- ◆ 31% handgun, 7% shotgun, 2% hunting rifle, 60% other and unspecified
- ◆ 7.1 days in hospital on average—1.8 million days total
- ◆ \$75,884 mean charges—\$18.9 billion over 8 years
- ◆ 8.1% in-hospital mortality = 20,355 deaths over 8 years

Source: APHA

Deterrence of Crime

Advocates of the “more guns equal less crime and injuries” theory have tried to make a plausible argument that firearm possession has deterred lawbreaking in the United States. The available scientific facts, however, do not support that claim. Our examination of the literature—pro and con—came to the same conclu-

sion as noted researcher, author, and Professor of Health Policy at the Harvard School of Public Health at Harvard University, David Hemenway:

*"No credible evidence exists for a general deterrent effect of firearms. Gun use in self-defense is no more likely to reduce the chance of being injured during a crime than various other forms of protective action."*⁵³

The Harvard Injury Control Center examination of *Gun Threats and Self-Defense*⁵⁴ identified the extent firearms play in self-defense and home protection. **The study debunked the popular myth that firearm by citizens for protection was a common occurrence. In fact, few criminals were shot by homeowners. They found that guns in homes were commonly used to intimidate the occupants, including spouses and other family members.** Fur-

thermore, adolescents were more likely to be threatened with a firearm than to use one for self-defense. Instead of thwarting criminal assaults, research by the Harvard Injury Control Center determined that most self-defense gun uses involved the escalation of arguments, which isn't something a civilized society wants to promote. Even well-known pro-gun researcher, Dr. Gary Kleck, who has been an advocate for Second Amendment rights stated: "There is little or no need for a gun for self-protection [for most Americans] because there's so little risk of crime. People don't believe it, but its true. You just can't convince most Americans they're not at serious risk."⁵⁵

The latest published study concerning the deterrence of newly enacted Stand Your Ground (SYG) laws outside an individual's residence has shown advocates were dead wrong on their assumptions. Texas A&M University professors Cheng and Hoekstra report: "Results indicate the (SYG) laws do not deter burglary, robbery, or aggravated assault.⁵⁶ Specifically examining rates of homicide in the states that enacted SYG, the Texas A&M study found just the opposite had occurred. The study also stated:

*"In contrast, they (SYG) lead to a statistically significant 8 percent increase in the number of reported murders and non-negligent manslaughters."*⁵⁷

We could not find any studies that were conducted before the passage of SYG that indicate any credible statistical data that expansion of the "Castle Doctrine" would lead to a decrease in crime or a drop in homicide rates. The possibility of an average citizen using a firearm against a criminal attack is an extremely rare event. It is far more likely that an ordinary citizen with a firearm for self-defense and who is not trained in conflict resolution or alternative methods of force will use the firearm inappropriately. As Dr. Hemenway found in his research:

*"... from an objective public health perspective, false positive "self-defense" gun uses by people who believe they are "decent, law-abiding citizens" may outnumber the legitimate and socially beneficial uses of guns."*⁵⁸

We also believe, based on the various criminal cases, academic studies, and media reports, possessing and carrying a firearm has shown to alter an individual's behavior and embolden aggressive conduct. This was certainly the case in the Florida shooting of Travon Martin by George Zimmerman, which bought national

attention to SYG. Other recent incidences involving personal confrontations have shown that because individuals had firearms they chose immediately and unwisely to use deadly force instead of taking alternate actions, such as simply leaving the scene or contacting law enforcement to defuse the situation. Another Florida shooting involved a retired police officer who fatally shot an individual over being annoyed by the victim texting in a theater.⁵⁹ Also in Florida, a software engineer fired nine shots at three teens, killing one, over loud music.⁶⁰ Not only does the carrying of a firearm embolden certain individuals—especially those not continuously trained in how to act with a firearm in stressful situations—it encourages the possessor to immediately use deadly force instead of substituting more appropriate choices.

A 2013 study on firearm violence in the United States by the United States Department of Justice, Bureau of Statistics found that the majority of firearm violence is reported to police compared to non-firearm violence.⁶¹ Regarding the use of a firearm for self-defense, the study found that from 2007-2011 there were 235,700 victimizations where the victim used a firearm to threaten or attack an offender. This amounted to approximately 1% of all nonfatal violent victimizations in the five year period. The percentage of non-fatal violent victimizations involving firearm use in self-defense remained stable at under 2% from 1993 to 2011. In 2007-11, about 44% of victims of nonfatal violent crime offered no resistance, 1% attacked or threatened the offender with another type of weapon, 22% attacked or threatened without a weapon (e.g., hit or kicked), and 26% used non-confrontational methods (e.g., yelling, running hiding or arguing).⁶² This study distinctly shows that firearm use for self-defense is used in only a very small amount of attacks.

In studies that purport to show hundreds of

times when a firearm was used to thwart criminal attacks, we found it very troubling that incidents in these reports were not reported to law enforcement authorities. Honest law abiding citizens contact law enforcement to report crimes and work with them to insure that offenders are apprehended and convicted so that they cannot attack others. The persons who normally do not want law enforcement intervention into their activities are drug dealers who use firearms during an illegal narcotics and gang members who feud with one another over turf and others of this ilk. We do not believe such uses of firearms are in the meaning of citizen self-defense. Therefore, uses of firearms that are not reported either did not exist, were not incidences when it would be appropriate to draw or use a firearm, or were performed during an illegal act.

Identification of Criminals and Law-abiding Citizens

Law enforcement officials also are concerned officers will not be able to distinguish between criminals and law-abiding individuals who are observed with a firearm. Likewise, armed civilians might have trouble identifying police officers in plain clothes. Indeed, as Dr. Jerry Radcliffe testified during a SYG public hearing, “I worry that this is carte blanche for people to say that they are approached by somebody who wasn't in uniform, shoot first and then maybe have to apologize for it later if they deem to do so. I worry as a former police officer about the safety of police officers. Encouraging untrained individuals to take aggressive deadly force action can lead to more social harm, not less.” For these reasons, both prosecuting attorneys and law enforcement officials raised strong opposition to enacting the Stand Your Ground law in Florida and other jurisdictions.

Training is Paramount

We have found, like other researchers that self-defense gun use is a nebulous concept. Although protection and self-defense are the main justifications for a heavily armed citizenry, there is little evidence of any net public health benefit is derived from guns. A gun used in self-defense is rare, and it appears that using a gun in self-defense is no more likely to reduce the chance of being injured during a crime than other forms of protective action.⁶³ Studies have shown that crime victims are more likely to be killed or seriously injured if the criminal uses firearms than any other weapon.⁶⁴ In addition, in communities with more guns, there are significantly more gun homicides, total homicides and suicides.⁶⁵ This very well may be because criminals target citizens and pick and choose their victims. Thus, criminal attacks usually have the advantage of surprise requiring the startled victim to perform a hurried response. **Because of sudden fear responses, it is neither rare nor unusual for persons possessing a firearm to have mistaken non-threatening actions of family members, neighbors, and others and have regretted causing serious injury or death.** As we have detailed, even firearm experts that support citizens carrying firearms state this is the case unless the individuals are highly trained and participate in regular and repetitive firearms training.

Based on the quantitative results of our self-defense practical involving a firearm simulator

(as presented above) we can reasonably make the following conclusions. First, the majority of participants shot in the first scenario (carjacking). The number of participants choosing to fire the weapon decreased in the following scenario with only 23 percent of all participants firing in the last scenario. Second, accuracy across all groups was highest in the first scenario and fell precipitously during the following two scenarios. Third, the decision to shoot the weapon only differed significantly in Scenario 2 (armed robbery), wherein the participants with advanced skills were far more likely to pull the trigger. Fourth, accuracy did not differ significantly across the three skill levels, though our measure of accuracy is very broad (i.e., hit target or not). Fifth, participants in the advanced skills category were more likely to pull the trigger in most scenarios and on average fired the most number of shots compared to participants in the other two skill categories.

Based on the qualitative results of participants' use of a firearm with a firearm training simulator as presented above we can reasonably make the following conclusions. Our findings point to the importance of experience and skill level as they relate to how stressful and difficult the encounters are perceived. Those with more training and experience are better able to remain focused and to later describe the encounter in less emotional and more clinical terms. Put a bit differently, those with less training and experience are less able to remain focused and will later describe the encounter as stressful. Dangerous encounters are inherently stressful, to be sure, so it stands to reason that to effectively cope with these stressful situations regular training is needed. Law enforcement and the military have been aware of this for a long time. Citizens with little or no training are foolish to think that they will have the focus and presence of mind to respond calmly and appropriately when under duress. To the extent that this is accurate, training and

practice are of great importance to give those who carry firearms the ability to make sound judgments. We can also conclude that more training increases the probability that one will take protective cover, will issue commands and attempt to de-escalate the situation before it becomes deadly, exercise trigger discipline which reduces the chance of accidentally firing and potentially harming bystanders. To put it plainly, our findings make clear that training and experience are absolutely needed to increase proficiency, decrease the chance that innocent persons (bystanders, law enforcement officers, and those authorized to carry a firearm) could be killed or seriously injured, and is certainly in the best interest of overall public safety.

Recommended Model Standard for Conceal or Open Carry Authorization

We do believe, as the United States Department of Justice, Office of Community Orientated Policing (COPS) has suggested law enforcement officers are in need of increased periodic training with a firearm; but, also continually emphasizes correct use of force judgment. We regard to citizens permitted by government to carry a firearm outside the home for self-defense, we highly recommend that every state enact a model standard for vetting, certification, training, and re-certification as follows:

Application Background Investigation

An in-depth background investigation should be conducted on all applicants for concealed or open carrying of a firearm for self-defense in public. This background investigation should consist of a criminal and record and reputation examination that includes interviewing the applicant, local police, and acquaintances. In or-

der to defray the cost of such investigations, state governments can either impose a fee on the applicant and/or place a tax on the sale of ammunition or firearms.

Initial Certification Training Course

Each applicant who passes a background investigation must be required to complete and pass a state approved initial training course. The course would be taught by an instructor who has been certified by state law enforcement authorities. This course should consist of the following:

8 hours of classroom instruction covering—

Firearm Knowledge and Safe Handling⁶⁶

- ◆ Firearm nomenclature demonstration and exercise
- ◆ Operation of the Firearm
- ◆ Rules for Safe Handling
- ◆ Safe Storage of Firearms
- ◆ Ammunition Knowledge
- ◆ Misfires and How to Unload Properly
- ◆ Causes of Accidental Discharges
- ◆ Practical Exercises of Gun Handling and Operation

Essentials of Shooting

- ◆ Aiming
- ◆ Hold and Trigger Control
- ◆ Demonstrations and Practical Exercises

Knowledge of All Applicable Laws and Regulations

- ◆ Meaning of Self-Defense and Firearm Use
- ◆ Safety of Bystanders
- ◆ Obeying Law Enforcement Commands
- ◆ Liability
- ◆ Practical Exercises and Testing

8 hours of Range Instruction and Qualifications

Range Safety Rules and Overall Firearms Safety Reiterated

- ◆ Firearm Instruction
- ◆ Demonstrations of Proper Techniques
- ◆ Live Fire Exercises
- ◆ Evaluation of Shooting Practices
- ◆ A Total of 500 Rounds of Ammunition Fired with Firearm to be Carried
- ◆ Successful Passage of Live Fire Test

8 hours of classroom and practical judgment shooting

- ◆ Understanding When Firearm Should be Drawn and When to Shoot
- ◆ Safety of Bystanders
- ◆ Identification to Law Enforcement
- ◆ Simulation Exercises with Firearms Training Simulator or Human Actors and with Firearms that Record Round Placement.
- ◆ Passing a Judgement Test Involving 5 Scenarios

BI-Annual Recertification

After applicants have secured a permit to carry a firearm, concealed or open, and passed the required initial training, they will be required to be recertified twice-a year as follows:

4 hours of classroom, live fire range, and judgment shooting

- ◆ Permit Holders will be refreshed with firearms laws and judgment shooting requirements.
- ◆ They will need to fire 100 hundred round of practice ammunition and pass a live fire proficiency test.
- ◆ They will need to pass a judgement test involving a firearms training simulator or human actors and with firearms that record round placement.

We are sure that some will try to make a case that the requirements we suggest are too onerous for the av-

erage citizen. If you place what we are recommending in the proper prospective, these qualifications and requirements pale in comparison to what is required to use other weapons that are potentially dangerous to the public. In the State of Maryland it takes over 300 hours of instruction and practice to legally drive an automobile and recertification is continuous during a life time with an object most people use every day. Even persons who cut hair or nails have stricter requirements than what we are recommending. Based on the facts and evidence we presented, we believe it is logical and warranted, especially if reducing firearms-related violent crime is an objective.

We believe that facts we have presented answers the question sought, that the quality and frequency of training truly determines the realistic use of firearms by citizens for self-defense. In the same manner that we trust law enforcement officers to carry firearms and use

deadly with force with them; **citizens who seek to carry a firearm, open or concealed, should be a person of sound character and have a minimum skill with the use of a firearm in a stressful situation of self-defense.** If law

makers do not take reasonable action, than just as in the Old West when citizens openly carried firearms, store employees and patrons will be bullied with firearms as they shop, teenagers will be shot for being loud, and arguments in theaters and restaurants will result in deaths and serious injuries. Unfortunately, those incidents are happening now with persons legally carrying firearms without being properly vetted or being certified to carry a firearm.

APPENDIX

The basis of a United States citizen's right to own firearms is found within the framework of the nation's Constitution. The U.S. Constitution, ratified in 1789, contains the fundamental principles by which we are governed in a free and democratic society. It's the rule book that delineates the rights and freedoms citizens possess, as well as the powers and limitations of the government's authority to rule the populace. Although specific interpretation of its terms, definitions, and meanings have been debated since its inception, the Founding Fathers who drafted this remarkable document knew that such disputes would arise and empowered the U.S. Supreme Court to settle them.

The rights of citizens to possess firearms was one of the first amendments added to the Constitution, and it states: "A well-regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed."⁶⁷ A brief historical overview of this amendment and current interpretation is as follows:

"During the debates on the adoption of the Constitution, its opponents repeatedly charged that the Constitution as drafted would open the way to tyranny by the central government. Fresh in their minds was the memory of the British violation of civil rights before and during the Revolution. They demanded a 'bill of rights' that would spell out the immunities of individual citizens. Several state conventions in their formal ratification of the Constitution asked for such amendments; others ratified the Constitution with the understanding that the amendments would be offered."

.....

The exact interpretation of this Amendment has been intensely debated and the subject of federal court cases. In 2009, the U.S. Supreme Court, in *Heller v. District of Columbia*,⁶⁸ gave a distinct explanation of the amendment's meaning. In a 5-4 ruling, the Court said, "[T]he Second Amendment protects an individual right to possess a firearm unconnected with service in a militia, and to use that arm for traditionally lawful purposes, such as self-defense within the home."⁶⁹

With this case, the Court clarified the limitations of the amendment and the power of government to provide caveats to it. We believe it is extremely relevant to this study to detail exactly what the Court stated in their ruling concerning firearm possession in *Heller v. District of Columbia*:

"There seems to us no doubt, on the basis of both text and history, that the Second Amendment conferred an individual right to keep and bear arms. Of course the right was not unlimited, just as the First Amendment's right of free speech was not, see, e.g., United States v. Williams, 553 U. S. 285 (2008). Thus, we do not read the Second Amendment to protect the right of citizens to carry arms for any sort of confrontation, just as we do not read the First Amendment to protect the right of citizens to speak for any purpose. Before turning to limitations upon the individual right, however, we must determine whether the prefatory clause of the Second Amendment comports with our interpretation of the operative clause."

"Like most rights, the right secured by the Second Amendment is not unlimited. From Blackstone through the 19th-century cases, commentators and courts routinely explained that the right was not a right to keep and carry any

weapon whatsoever in any manner whatsoever and for whatever purpose. See, e.g., *Sheldon*, in 5 Blume 346; *Rawle* 123; *Pomeroy* 152–153; *Abbott* 333. For example, the majority of the 19th-century courts to consider the question held that prohibitions on carrying concealed weapons were lawful under the Second Amendment or state analogues. See, e.g., *State v. Chandler*, 5 La. Ann., at 489–490; *Nunn v. State*, 1 Ga., at 251; see generally 2 Kent *340, n. 2; *The American Students' Blackstone* 84, n. 11 (G. Chase ed. 1884). Although we do not undertake an exhaustive historical analysis today of the full scope of the Second Amendment, nothing in our opinion should be taken to cast doubt on longstanding prohibitions on the possession of firearms by felons and the mentally ill, or laws forbidding the carrying of firearms in sensitive places such as schools and government buildings, or laws imposing conditions and qualifications on the commercial sale of arms.

"We also recognize another important limitation on the right to keep and carry arms. *Miller* said, as we have explained, that the sorts of weapons protected were those "in common use at the time." 307 U. S., at 179. We think that limitation is fairly supported by the historical tradition of prohibiting the carrying of "dangerous and unusual weapons." See 4 *Blackstone* 148–149 (1769); 3 B. *Wilson, Works of the Honorable James Wilson* 79 (1804); *J. Dunlap, The New-York Justice* 8 (1815); C. *Humphreys, A Compendium of the Common Law in Force in Kentucky* 482 (1822); 1 W. *Russell, A Treatise on Crimes and Indictable Misdemeanors* 271–272 (1831); H. *Stephen, Summary of the Criminal Law* 48 (1840); E. *Lewis, An Abridgment of the Criminal Law of the United States* 64 (1847); F. *Wharton, A Treatise on the Criminal Law of the United States* 726 (1852). See also *State v. Langford*, 10 N. C. 381, 383–384 (1824); *O'Neill v. State*, 16 Ala. 65, 67 (1849); *English v. State*, 35 Tex. 473, 476 (1871); *State v. Lanier*, 71 N. C. 288, 289 (1874).

"We are aware of the problem of handgun violence in this country, and we take seriously the concerns raised by the many amici who believe that prohibition of handgun ownership is a solution. The Constitution leaves the District of Columbia a variety of tools for combating that problem, including some measures regulating handguns, see *supra*, at 54–55, and n. 26. But the enshrinement of constitutional rights necessarily takes certain policy choices off the table. These include the absolute prohibition of handguns held and used for self-defense in the home. Undoubtedly some think that the Second Amendment is outmoded in a society where our standing army is the pride of our Nation, where well-trained police forces provide personal security, and where gun violence is a serious problem. That is perhaps debatable, but what is not debatable is that it is not the role of this Court to pronounce the Second Amendment extinct."⁷⁰

.....

The U.S. Constitution famously begins by stating, "**We the People** of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America."⁷¹ We believe this refers to the role government (state, local and federal) has in providing for the welfare and protection of the general public and is at the heart of what we mean by the term "public safety."⁷² We also believe public safety hinges on three significant elements: prevention, intervention and protection.

Public policy is the method the branches of government (executive, legislative, and judicial) pursue actions in the best interest of its citizens. Such actions must respect Constitutional parameters and maintain the public good and order. In the United States public

policy is applied through executive directives, judicial rulings, and legislative enactments and ordinances. For example, cities institute safety and environmental provisions in the form of building codes, water treatment practices, fire protection standards and other mandates that citizens must follow in order to protect them and their property. Such requirements might cost citizens money or alter their property, but it's done in the best interest of overall public health and safety.

In order for these policies to be effective, they

must be grounded in facts and evidence when they're created. While most agree with this in theory, it is not always followed through in practice. Corrupt or misinformed officials have used public policies to better the financial interest of individuals and corporations at the expense of the general public.

The following is a listing of each states varying requirements for carrying a firearm outside the home. It should be noted that at the time of the preparation of this report, some states were considering the carrying of firearms without any regulations.

States Laws Regarding Carrying Firearms

Open Carrying of Long Guns:

Six states—California, Florida, Illinois, Massachusetts, Minnesota and New Jersey, as well as the District of Columbia—generally ban the open carrying of long guns (rifles and shotguns). In the 44 remaining states, openly carrying a long gun is legal. However, in three of those states—Iowa, Tennessee and Utah—the long gun must be unloaded. In addition, Virginia and Pennsylvania limit the ability to openly carry long guns in certain cities. In the

majority of states, it is legal for an individual to openly carry a loaded firearm in public without a permit.

Open Carrying of Handguns

Only five states—California, Florida, Illinois, New York and South Carolina, as well as the District of Columbia—prohibit the open carrying of handguns in public places.

NOTE: Texas allowed open carrying of firearms without a permit in 2015. The following map is from 2012.

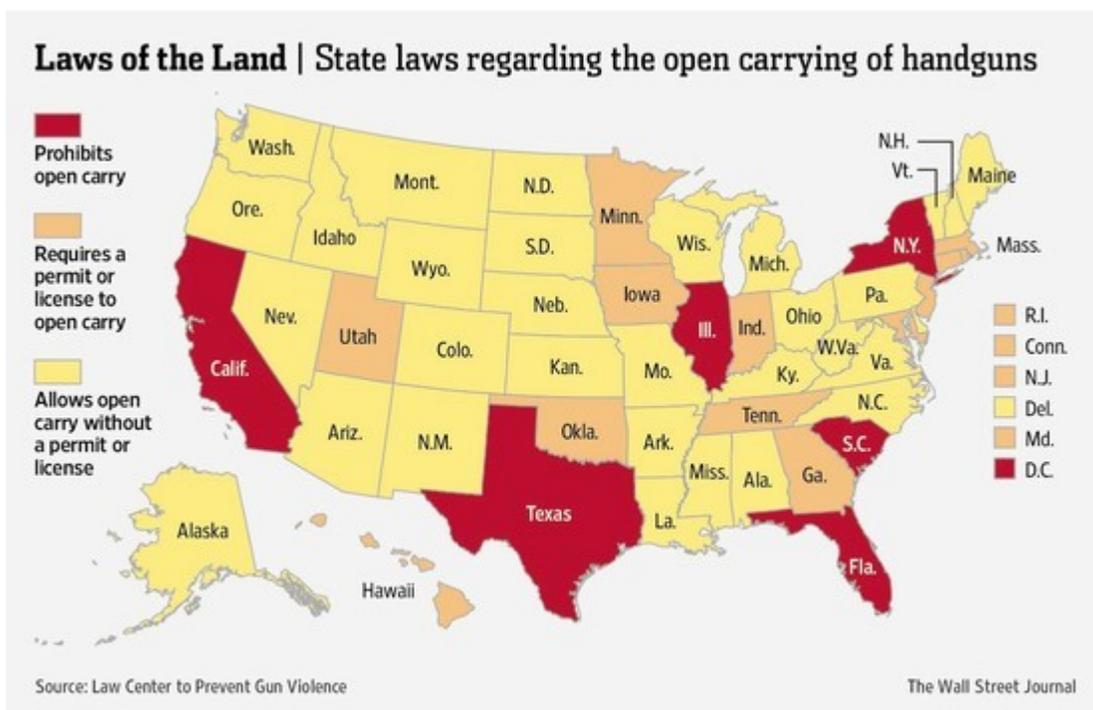


Table 3: Case Study States' Training Requirements to Qualify for a Concealed Carry Permit

State	Training requirement	Live fire required	Hours of instruction required	Proficiency requirement (written or shooting)	Specific topics as prescribed by state regulations/laws covered
Tennessee	Yes	Yes: 48 rounds (12 rounds each at 3, 7, and 15 yards, as well as a distance between 2 and 25 yards specified by the instructor)	8 (4 hours of classroom and 4 hours of firing range.)	70% on both written and shooting exams	Handgun Nomenclature, function, and operation; handgun Safety, cleaning, and storage; legal liabilities of carrying a handgun
Texas	Yes	Yes	Between 10 and 15	70% on both written and shooting exams	Use of deadly force; Handgun use, proficiency, and safety; nonviolent dispute resolution; proper storage practices with an emphasis on child access prevention
Arizona ^a	Yes	Not specified ^b	No	No	Not specified ^b
California	Yes	Not specified ^b	Up to 16 hours	75% on both written and shooting exams	Firearm safety; and permissible use of a firearm laws
Florida ^a	Yes	Yes	Not specified ^b	Yes	Not specified ^b
Louisiana ^a	Yes	Not specified ^b	Not specified ^b	No	Child access prevention
Virginia ^a	Yes	Not specified ^b	Not specified ^b	No	Not specified ^b
Georgia	No	Not applicable	Not applicable	Not applicable	Not applicable
Maryland ^c	No	Not applicable	Not applicable	Not applicable	Not applicable

SOURCE: GAO analysis of state information.

^aApplicants in these states can fulfill their training requirement by taking a state-approved National Rifle Association, law enforcement, or other firearms safety-training course, or by presenting evidence of experience with a firearm through participation in current military service or proof of an honorable discharge from any branch of the armed services. In Florida, an applicant may also demonstrate firearm proficiency by presenting evidence of equivalent experience with a firearm through participation in organized shooting competition. Fla. Stat. Ann. § 790.06(2)(h)5.

^bFor certain states, the amount of training and the specific topics are not specified in their state laws.

^cMaryland does not require training for applicants wishing to obtain a permit for personal protection. However, other applicants (e.g., security guards) have to show evidence of training completion to qualify for a permit.

Safety Training for Firearms

Firearms Training Requirements

As Suggested by the U.S. Government Accountability Office

An applicant shall demonstrate competence with a firearm through any of the following:

- ◆ 1. Completion of any firearms safety or training course or class that is available to the general public; that is offered by a law enforcement agency, a junior college, a college or a private or public institution, academy, organization or firearms training school; and that is approved by the Department of Public Safety or that uses instructors who are certified by the National Rifle Association.
- ◆ 2. Completion of any hunter education or hunter safety course approved by the Arizona game and fish department or a similar agency of another state.
- ◆ 3. Completion of any National Rifle Association firearms safety or training course.
- ◆ 4. Completion of any law enforcement firearms safety or training course or class that is offered for security guards, investigators, special deputies, or other

divisions or subdivisions of law enforcement or security enforcement and that is approved by the Department of Public Safety.

- ◆ 5. Evidence of current military service or proof of honorable discharge or general discharge under honorable conditions from the United States armed forces.
- ◆ 6. A valid current or expired concealed weapon, firearm, or handgun permit or license that is issued by another state or

a political subdivision of another state and that has a training or testing requirement for initial issuance.

- ◆ 7. Completion of any governmental police agency firearms training course and qualification to carry a firearm in the course of normal police duties.
- ◆ 8. Completion of any other firearms safety or training course or class that is conducted by a Department of Public Safety-approved or National Rifle Association-certified firearms instructor.

Video of the Study

Video of the study's practicum shoot on April 9 and 10, 2015, at the Prince George's Police Department, Prince George's County, Maryland, can be viewed at <https://youtu.be/CIPWPbI5WGo>.

FOOTNOTES

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Vince currently serves as the Criminal Justice Program Director at Mount St. Mary's University where he has taught since 2002.

Vince is also the President of Crime Gun Solutions LLC, a private company dedicated to assisting and training law enforcement and other groups. Previous to this he had a law enforcement career that spanned more than 30 years, both with the Bureau of Alcohol, Tobacco and Firearms and as a Deputy Sheriff.

He is a nationally and internationally known crime-gun/law enforcement expert, being quoted in several publications, including The New York Times, Wall Street Journal, Washington Post, Washington Times, USA Today and other national and international publications. He also has appeared on *60 Minutes*, CNN, ABC, CBS, FOX and PBS

Vince served on the Board of the American Hunters and Shooters Association. He is currently a member of the International Association of Chiefs of Police (IACP) and sits on the Firearms Committee. In June 2013, he became a member of the American Bar Association's Task Force studying Stand Your Ground laws.



Timothy W. Wolfe, Ph.D.

Wolfe has been a professor of Sociology and Criminal Justice at Mount St. Mary's University since 1997. He currently directs the Human Services undergraduate degree completion program at Mount St. Mary's satellite campus in Frederick, MD. He received his B.A. in Sociology from Roanoke College, and his M.S. and Ph.D. in Sociology from Virginia Tech. His areas of expertise include race and the criminal and juvenile justice systems, as well as the sociology of Black music.

Before joining the faculty at Mount St. Mary's, he worked as a child protective services worker and a juvenile detention center counselor. His research and writing has appeared in such journals as the American Journal of Criminal Justice and The International Law Enforcement Educators and Trainers Association (ILEETA) Journal.

His most recent work on race and the death penalty has been featured in an award winning edited volume *Where Justice and Mercy Meet: Catholic Opposition to the Death Penalty* (edited by Schieber, Conway, and McCarthy and published by the Liturgical Press, 2013). The second edition of his co-authored book on delinquency and juvenile justice, *Juvenile Justice: A Reference Handbook* (Shoemaker and Wolfe, published by ABC-CLIO), is forthcoming.

His teaching and advocacy for racial justice have been acknowledged and honored by teaching and community leadership awards.

He lives in Maryland with his wife and sons.



**Layton M. Fields,
Ph.D.**

Field is currently an assistant professor of Sociology at Mount St. Mary's University. He completed his M.S. and Ph.D. in Sociology at Texas A&M University in 2014. Dr. Field specializes in social demography, demographic methods, and quantitative research methods.

His current research examines declines in fertility rates across the globe as a consequence of several factors including changes in contraceptive prevalence. Dr. Field's research interests include other demographic phenomenon such as natural decrease and population aging as well as sociological interests including criminology, marriage and family, and religion.

Dr. Field has published in the journal of Violence and Victims and has presented at national and international conferences.

He lives in Pennsylvania with his wife and three children.

