

**Safely Reducing the Use of Deadly Force by Law Enforcement Officers:
An Analysis of Three Prominent Training Programs**

Seminar Paper by Gabriel Heck

Presented to Professor Patrick Solar, Ph.D.
and the Graduate Faculty of
The University of Wisconsin – Platteville

in Partial Fulfillment of the Requirements of the
Master of Science in Criminal Justice Degree Program

Completed August 5, 2017

Approval

SAFELY REDUCING THE USE OF DEADLY FORCE BY LAW ENFORCEMENT OFFICERS:
AN ANALYSIS OF THREE PROMINENT TRAINING PROGRAMS

(GABRIEL HECK, CANDIDATE, MASTER OF SCIENCE IN CRIMINAL JUSTICE)

Approved: Dr. Patrick Solar

Date: 8/15/2017

Professor Patrick Solar, Ph.D.

Abstract

Nearly 1000 citizens are killed each year by American police officers. The overwhelming majority of these homicides are legal, justified, and situationally necessary to address grave threats to public safety. However, each death is a tragedy with significant impacts. The present paper analyzes the existing empirical evidence regarding the effectiveness of three prominent police training programs in safely reducing the use of lethal force by law enforcement officers. The training programs analyzed are: (1) implicit bias awareness training, (2) mental health crisis intervention training, and (3) de-escalation training. Laboratory and real-world data are presented, and the conclusion is that: (1) implicit bias awareness training is unlikely to safely reduce citizen deaths by law enforcement officers, (2) mental health crisis intervention training is likely to safely reduce citizen deaths by law enforcement officers, and (3) de-escalation training is very likely to safely reduce citizen deaths by law enforcement officers.

Acknowledgements

The present seminar paper is my final academic product as a student in the Master of Science in Criminal Justice Degree Program at the University of Wisconsin—Platteville. I began my coursework in June of 2014 and completed the program in August of 2017. During this time I was a full-time police officer with the City of Madison Police Department, a position I have held with honor since May of 2010.

This project would not have been possible without the support of many people. I would like to express my gratitude to: my seminar paper research advisor at the University of Wisconsin—Platteville, Doctor of Philosophy Patrick Solar; my instructors at the University of Wisconsin —Platteville, Doctor of Philosophy Brian Johnson, Doctor of Philosophy Susan Hilal, Master of Public Administration Jerry Schuetz, Doctor of Philosophy Michael Klemp-North, Master of Science Janice Lawton, and Doctor of Philosophy Thomas Jonas; the Criminal Justice Program Coordinator at the University of Wisconsin —Platteville, Doctor of Philosophy Cheryl Banachowski-Fuller; the leaders of the City of Madison Police Department, Chief of Police Michael Koval and Acting Chief of Police Randall Gaber; and my editor and confidante, Doctor of Philosophy Larissa Albantakis.

Thank you, one and all.

Contents

Title

Approval

Abstract

Acknowledgements

Contents

Body:

Section I – Introduction

- A. Seminar Paper Purpose
- B. The Police Role
- C. Crime & Violence
- D. Antecedents to Police Use of Force
- E. Defining Police Use of Force
- F. The Prevalence of Police Use of Force
- G. Tracking Deadly Force
- H. The Legal Environment
- I. Risks Faced by Law Enforcement Officers
- J. Impacts Upon Law Enforcement Officers Who Use Deadly Force
- K. Impacts Upon Communities
- L. Public Perceptions of Police
- M. Public Scrutiny of Police
- N. Demographics & Perceptions of Police
- O. Demographics & Perceptions of Police Use of Force
- P. Holding Officers Accountable Who Use Excessive Force

Section II – Literature Review & Seminar Paper Organization

- A. Calls for Change in the Modern Era
- B. Activists & Social Justice Organizations
- C. Political Leaders
- D. News Media Outlets
- E. Police Professional Organizations
- F. Academic Scholars & Researchers
- G. Seminar Paper Organization

Section III – General Law Enforcement Training

- A. Historical Overview
- B. Decentralization & Local Control in American Law Enforcement
- C. Training Standards
- D. Police Academies
- E. Content of Basic Police Training Nationwide

- F. Field Training
- G. Continuing Education
- H. Budgetary Limitations

Section IV – Implicit Bias Awareness Training

- A. Implicit Bias Defined
- B. The Implicit Association Test
- C. Implicit Bias Awareness Training for the Police
- D. Simulator Shooting Tests
- E. Research on Race-Based Disparities in Lethal Force
- F. The Usefulness of Implicit Bias Awareness Training
- G. Incorporating Implicit Bias Knowledge into Firearms Training
- H. Benefits of Implicit Bias Awareness Training

Section V – Mental Health Crisis Intervention Training

- A. The Scope of the Problem
- B. The Memphis Model
- C. Analysis of the Effectiveness of the Memphis Model CIT Program
- D. Alternative Mental Health Crisis Intervention Programs
- E. Budgetary Concerns
- F. The Usefulness of Mental Health Crisis Intervention Training

Section VI – De-Escalation Training

- A. Calls for Police Officers to Minimize the Use of Force through De-Escalation Training
- B. Disambiguation of De-Escalation Terminology
- C. The Current State of De-Escalation Training
- D. Analysis of De-Escalation Training Impacts
- E. Case Study: Miami-Dade Police Department, 1985
- F. Case Study: Portland Police Bureau, 2003
- G. Case Study: Las Vegas Metro Police Department, 2012
- H. Case Study: Salt Lake City Police Department, 2015
- I. Case Study: New York City Police Department, 1969 – Present
- J. What About Europe?
- K. The Spread of De-Escalation Training
- L. De-Escalation Training Assessment

Section VII – Conclusion

- A. Seminar Paper Approach
- B. Research Findings
- C. General Discussion

References

Section I – Introduction

A. Seminar Paper Purpose

Approximately 4% of all homicides and 1% of all violent deaths in the United States occur at the hands of on-duty law enforcement officers (Sikora & Mulvihill, 2002; CDC, 2005). The impacts these deaths have on communities, departments, and officers are profound, extensive, and costly (Miller et al., 2017; Loftin, Wiersema, McDowall, & Dobrin, 2003). The overwhelming majority of police-use-of-deadly-force incidents are legally justified, and result from law enforcement's duty to address immediate threats to the public and police personnel (Hickman, 2006; Ederheimer & Fridell, 2005). However, especially in light of high-profile police-involved shootings during the past few years, there are increasing calls for criminal justice professionals, law enforcement officers, and police administrators, to redouble efforts to minimize the use of deadly force by officers (DeGue, Fowler, & Calkins, 2016; PERF, 2012 & 2015). The purpose of the present seminar paper is to analyze the existing empirical evidence regarding the effectiveness of prominent police training programs in safely reducing the use of lethal force by law enforcement officers.

B. The Police Role

The role of police in modern society is complex and challenging. While upholding constitutional rights and respecting individual liberties, law enforcement officers are tasked with maintaining public order, preventing and detecting crimes, apprehending suspected criminals, resolving interpersonal disputes, facilitating the safe movement of people and vehicles, addressing neighborhood problems, and enhancing the quality of community life. Although each of these functions defines police work, none of them—with the arguable exception of apprehending suspected criminals—are unique to policing. What differentiates law enforcement officers from other members of society is that police are certified agents of the state, and are granted arrest powers and given permission to use reasonable force in the accomplishment of their lawful objectives. The amount of force officers need to apply to a given situation always varies according to unique circumstances, but can range from simple officer presence to deadly force. The everyday work of police officers is varied, challenging, and unpredictable. Officers are required to remain ever vigilant and prepared to respond to the most harrowing of threats, for their own safety and that of the public. Because police work also depends upon maintaining positive interpersonal relationships and employing excellent relational skills, officers are expected to remain congenial and approachable, and not come off as overly guarded or standoffish. Finding an appropriate balance between security and openness is a central challenge and defining characteristic of the police role.

C. Crime & Violence

All societies are marked by some amount of conflict, strife, and violence. While these rates vary from community to community and over time, the unfortunate reality is that crime universally exists. Modern America is no exception. Crime is a real concern, and society expects that police

respond to and address it. According to the FBI (2017a), the S figures available show that in the U.S., on average, a violent crime occurs every 26.3 seconds. This figure including a murder every 33.5 minutes, a forcible rape every 4.2 minutes, a robbery every 1.6 minutes, and an aggravated assault every 41.3 seconds. A property crime occurs every 3.9 seconds. Included here is a burglary every 20.0 seconds, a general theft every 5.5 seconds, and a motor vehicle theft every 44.6 seconds. According to the United States Department of Justice's Bureau of Justice Statistics, the overall rates of victimization in the U.S. in 2015 were 18.6 per 1,000 people for violent crimes and 110.7 per 1,000 households for property crimes (Truman & Morgan, 2016). These victimization rates consider a range of crimes in two different crime categories. Violent crimes measured were sexual assault, general assault, and robbery; property crimes measured were motor vehicle theft, general theft, and household burglary. Not considered in the National Crime Victimization Survey (NCVS) are crime figures related to homicide, arson, and commercial offenses, which are measured separately by the government. While there is little debate about most crime rates, there is widespread disagreement concerning the root causes of crime. While an exploration of various criminological theories is beyond the scope of the present work, the pertinent point remains that crime always has and always will exist. Furthermore, there will always be a need in complex societies for police to fight crime.

D. Antecedents to Police Use Force

It is the nature of police work that officers frequently encounter physical threats that they must respond to. When such situations arise, officers must act immediately, with limited information and resources. This is when the importance of high-quality training is most evident, since an officer, faced with danger, will fall back upon his or her training and act accordingly (Oudejans, 2008). Good training will yield good outcomes, bad training will yield bad outcomes, and a lack of training will yield unpredictable outcomes. Research has shown that officers use force as a predictable and direct response to threatening actions by criminal suspects (Garner, Buchanan, Shade, & Hepburn, 1996; Adams, 1999; Terrill, 2003). Exactly what type of force officers employ, and when they employ it, depends upon the facts of individual circumstances, combined with the training those officers have received.

E. Defining Police Use of Force

What, exactly, constitutes *police use of force*? While many answers to this question exist, there is no firm consensus. One definition is “the use of physical restraint by a police officer when dealing with a member of the public” (Schmalleger, 2009, p. 291). However, this definition is unsatisfactory to many people who do not consider cooperative handcuffing of an arrested person to be a use of force. At the other end of the spectrum are those who consider simple verbal instructions issued by police officers to be a use of force. If force is merely threatened, should that count as a use of force? While at first blush the issue of defining police use of force seems simple, in fact, it is not. Clearly, an officer who shoots a firearm at a suspect has used force. What about pointing a gun at a suspect in a bank robbery? Has force been used? Is it a force usage for an officer on a traffic stop to place his or her hand on the grip of a holstered pistol when approaching an occupied car? Does it matter whether the driver sees this action?

When discussing the use of force by law enforcement, it is important to remember that comparisons and studies can be complicated by lack of agreement on the most basic of terms.

F. The Prevalence of Police Use of Force

What, then, do we know about police use of force rates in America? In short, police use force infrequently. This observation holds true whether the method of data collection is use of force reports by the officers involved, citizen complaints, victim surveys, or third-party observational methods (Adams, 1999). According to the Bureau of Justice Statistics, nearly 45 million citizens per year have face-to-face contact with the police. Of these people, some 500,000 experienced the use of force, *or its threat* (Adams, 1999), resulting in a rate of just over one percent; when handcuffing was included in the definition for use of force, another 700,000 people were on the receiving end of police force, making the overall rate just under three percent.

While it is true that police rarely use force as measured as a percent of all citizen contacts, about one in five arrests involves some use of force. The vast majority, approximately 80%, of this force is relatively minor and involves weaponless tactics, typically grabbing the suspect (Adams, 1999). It is important to point out that extreme cases of police use of force, whether justified or not, garner the lion's share of media and public attention. Police shootings, baton beatings, and chokehold deaths rightly captivate public concern, but are exceptional cases of police use of force.

There is no centralized mechanism for collecting police use of force data. Some departments devote limited resources to collecting such data, while others do not. There have been calls, especially in recent years (Apuzzo & Cohen, 2015), for all law enforcement agencies to collect detailed, extensive, and accurate data about every instance of use of force by officers. This may happen in the future, despite the significant costs, but, to date, no such system has been universally implemented. What complicates these matters is that each state has unique laws that govern the use of force, and each department has a unique set of policies and guidelines regarding the use of force, as detailed later in the present seminar paper.

G. Tracking Deadly Force

Because the present work is focused on “deadly force,” it is important to clarify that term. Defined as “the intentional use of a firearm or other instrument, the use of which would result in a high probability of death” (WI DOJ, 2014, p. 66), deadly force is the ultimate expression of police physical authority. The annual number of deadly force incidents involving the police is currently unknown, because of a lack of mandatory uniform reporting by the nation's 18,000 state and local law enforcement agencies (Reaves, 2011). The FBI tracks reported justifiable homicides by law enforcement officers, and learns of about 400 per year (2017b). The true number is surely higher, and the annual number of incidents in which deadly force is threatened is certainly higher yet. According to Schmallegger (2009), rough estimates have long existed that approximately 600 suspects are killed by police in America each year, an additional 1200 are shot and wounded, and 1800 more are shot at and missed. These rough estimates stem from work attributed to Geller (n.d.) from data drawn largely from the 1970s. The U.S. population in 1970 was about 205,000,000 people, but had grown to over 324,000,000 in 2016, a 58% increase (U.S.

Census Bureau, 2017). Extrapolating the rough estimate of 600 annual suspect deaths in 1970 to the increased U.S. population in 2016, corresponds to an expected figure of 948 deaths. The Washington Post, in 2015, began a Pulitzer Prize-winning project to document officer-involved deaths. This effort drew upon official and unofficial sources, and determined that in 2016 there were exactly 963 people shot and killed by police (2017). There is tremendous consonance between these two statistics, despite their differences in provenance, methods, and vintage.

H. The Legal Environment

During the performance of their duties, police are sometimes involved in situations that are lawfully resolved with the application of deadly force. The laws permitting the police to use deadly force vary from state to state, but are substantially similar to one another because all must conform to Supreme Court case law. In Wisconsin, the *self-defense and defense of others* law (Wisconsin State Legislature, 2014, §939.48), holds that any person may, without facing criminal liability, threaten or exercise force against another person when it is done to legitimately defend oneself or another person. This law states that deadly force can only be used to defend oneself or another person when doing so is reasonably believed to be necessary to prevent the imminent death or great bodily harm to the person being protected. Great bodily harm is defined as any injury that creates a substantial risk of death, serious permanent disfigurement, protracted impairment of any bodily organ, or other serious bodily injury. In other words, anyone, police included, may use deadly force to defend against reasonably-perceived imminent threats to the life or limb of any person.

An accepted way to assess whether a threat is imminent is to determine whether three specific criteria have been met. First, *intent* to cause death or great bodily harm must be demonstrated, such as by pointing a firearm at someone, stating an intention to kill you, or rushing at a person while holding a knife; second, a conventional or unconventional *weapon*, such as a gun, knife, or baseball bat, must be in the control of the threatening subject; and third, a delivery system, such as a line of sight unbroken by cover for a firearm or close proximity with a baseball bat, must be present (WI DOJ, 2014).

The United States Supreme Court, in its seminal use of force case *Graham v. Connor*, 490 U.S. 86 (1989), established that police are limited to taking measures that are “objectively reasonable in view of all the facts and circumstances of each particular case” (Terrill & Paoline, 2012, p. 39). This case found that use of force actions taken by officers are to be properly judged from the perspective of the officer on the scene, knowing that police work often requires split-second decisions regarding how much force to employ in a given situation (Schmallegger, 2009). Other Supreme Court cases inform police usage of force include *Tennessee v. Garner*, 471 U.S. 1 (1985) and *City of Canton, Ohio v. Harris*, 489 U.S. 378 (1989); the former case limited the use of deadly force to prevent the escape of arrestees and prisoners only in situations in which they pose an imminent threat to others, and the latter case held that police departments can be held responsible for not properly training officers in the proper execution of their duties (Gaines & Kappeler, 2008).

Because of America's locally-based law enforcement system (in contrast to many countries whose police forces are centralized), each individual law enforcement agency has wide latitude in determining its operating procedures. While police officers across the country receive

training on relevant federal and state case law, it is agency policies on the use of force that have the greatest impact on police actions. Use of force policies, by design, not only serve as benchmarks for assessing the performance of officers after the fact, but also instruct officers when to use different types of force.

In general, the same laws that govern the use of deadly force for civilians also apply to police. Law enforcement officers are not granted special “licenses to kill.” However, police work does require that officers confront and arrest suspected criminals, many of whom are armed, and some of whom pose imminent threats to the lives of responding officers, crime victims, and innocent bystanders. In states without *stand your ground* laws, citizens are generally required to attempt to retreat from attacks against one's person, as opposed to employing reasonable force to counter the threat. In such states, in contrast, law enforcement officers are typically not required to retreat. Furthermore, police who act in “good faith” in the performance of their duties are shielded from liability for their actions (WI DOJ, 2014). The same is not true for non-police citizens, as they are not trained and sworn law enforcement officers with arrest powers.

I. Risks Faced by Law Enforcement Officers

Law enforcement is a uniquely dangerous profession, considering the gatekeeping task assigned to police officers: keeping chaos and danger separate from order and security. According to the Bureau of Labor Statistics (2014), work-related injury and illness rates for police officers are among the highest of all occupations. Law enforcement officers often suffer physical injuries caused by conflicts with criminals, crashes from motor-vehicle pursuits, exposure to communicable diseases, and many other high-risk situations. Furthermore, police work is often physically and mentally demanding, and requires officers to be vigilant and prepared for sudden problems during long shifts. Police officers regularly encounter death and suffering and attend to gruesome injuries at crash and crime scenes.

During the ten years from 2004 through 2013, a total of 1627 police officers were killed in the line of duty from all causes (ODMP, 2014). While many of these deaths were the result of vehicle crashes, fires, and drownings, 511, or about 31%, were homicides (FBI, 2014). In other words, over the ten years reviewed, an average of 51 officers per year were murdered while doing their jobs. These deaths occurred in all regions of the country, at all times of day, and in a wide variety of circumstances. Of special relevance to the current discussion on deadly force is that 6% of these officers were disarmed by assailants and killed with their own weapons (FBI, 2014).

In addition to the risk of being murdered, law enforcement officers also face the constant threat of being assaulted by suspected criminals. According to the FBI (2014), each year 11% of all police officers are victimized in non-fatal violence, with 80% of these attacks being unarmed assaults, 4% involving gunfire, 2% using edged weapons, and the remaining 14% utilizing miscellaneous dangerous objects, including bottles and clubs. The number of criminal attacks on law enforcement is staggering, considering that 1 in 9 officers are assaulted annually, and there are approximately 765,000 full-time sworn police officers in the United States (Reaves, 2011).

Critics of the claim that policing is a dangerous profession often cite statistics indicating that other professions, including logging, fishing, and several others, have a higher death rate.

According to the Bureau of Labor Statistics (2013), the American industry with the highest annual per capita fatality rate is logging, with 127 deaths per 100,000 full time workers. The comparable figure for the aggregate of all industries is 3.2 deaths per 100,000 full time workers. As for workplace homicides, there were 463 in 2012, which accounts for all professions, including police (BLS, 2013). Another way of expressing these figures is as follows: police officers are seven times as likely to die in work-related incidents than the average American worker, while loggers are six times as likely as police to die at work; nevertheless, law enforcement officers are 15 times as likely to be murdered on the job than the average worker, presumably including loggers.

J. Impacts Upon Law Enforcement Officers Who Use Deadly Force

According to a psychological ranking of stressors, police consistently rank “killing someone in the line of duty” as their greatest concern (Gaines & Kappeler, 2008). This indicates that police are more troubled by the thought of killing a suspect than they are of a fellow officer being killed, physically attacked, involved in a patrol car accident, and over 60 other known law enforcement dangers. According to Miller (2006), commonly cited estimates hold that between 70% and 95% of law enforcement officers who kill suspects in the line of duty leave the profession with five years.

K. Impacts Upon Communities

In a single recent year, 2012, the estimated total lifetime medical costs for those injured or killed by law enforcement action totaled \$231 million (Miller et al., 2017). Often, police-community relationships suffer when police-use-of-deadly-force incidents occur.

L. Public Perceptions of Police

Most people have very little direct contact with police officers. As stated above, in an average year, 45 million contacts occur between law enforcement officers and private citizens (Adams, 1999). Given that the population of the United States now stands at 316 million souls, a simple calculation reveals that one in seven people, a mere 14%, deal with the police annually. Keeping in mind that most of these contacts are quite brief, as during a routine traffic stop, and also considering that a small percentage of the population (habitual criminals) garners the lion's share of police resources, the typical citizen spends only a miniscule amount of time dealing with the police. Because of this, what most people believe they “know” about the work of law enforcement is based almost entirely on fictitious accounts in the entertainment media or exceptional cases broadcast by news outlets.

Despite popular media-derived impressions to the contrary, the public is generally very supportive of police officers and the police mission. “Close to 90 percent of people surveyed in one national poll have a great deal [or] quite a lot of confidence in the police” (Stojkovic, Kalinich, & Klofas, 2015, p. 275). Another recent poll (Neeley, 2016), reported that 80% of Wisconsin citizens approve of how their local police force does its job. There were race-based differences, however, as the approval rate was 85% for Caucasians but 59% for racial minorities.

The results of these polls are typical and robust, yet there is a common perception among criminal justice professionals that they are viewed negatively by the public.

M. Public Scrutiny of Police

Although Americans, in general, have positive views of the police, their views toward uses of force by police are not as positive. When police use force, especially deadly force, the media and public take notice. A new era of scrutiny regarding police use of force began in August of 2014 with the legally justified police shooting of Michael Brown in Ferguson, Missouri. In November of 2014, Akai Gurley, not suspected of any crime, was accidentally shot and killed in a dark stairwell by a startled Brooklyn, New York police officer who was patrolling with his weapon drawn. The same month, in Cleveland, Ohio, Tamir Rice, a child who was pointing a realistic- looking toy pistol at passing motorists, was confronted by police officers then shot and killed when he failed to comply with officer commands. Later in the month, Romain Brisbon, suspected of dealing illegal drugs, was shot and killed by a Phoenix police officer when he resisted arrest. By the end of 2014 there were daily protests, vigils, and rallies around the country, decrying the use of deadly force by police. As of 2017, public and private debates continue regarding police of force.

N. Demographics & Perceptions of Police

The demographic characteristic most associated with differential public perceptions of the police is race, with an overwhelming majority of studies showing that African-Americans and Hispanic-Americans have more negative opinions of the police than do Caucasian-Americans (Jefferis, Butcher, & Hanley, 2011). Even when controlling for income, education, and employment, statistically-speaking, race is a determining factor in a person's views of the police and the legitimacy of police conduct (Rice, Reitzel, & Piquero, 2005). Other personal factors that influence one's perception of the police are age, gender, and individual police contact. Numerous studies have bourn out that younger people and women tend to have more negative attitudes toward the police than do older people and men (Jefferis et al., 2011); as for personal experience, being arrested tends to lower one's opinion of the police, while seeking out the police for assistance typically produces no shift in attitude.

O. Demographics & Perceptions of Police Use of Force

In order to empirically test public perceptions of use of force incidents, researchers Jefferis et al. (2011) presented over 300 college students with the videotaped portion of an arrest that involved the police use of force. An actively fighting suspect was subdued with pepper spray, empty hand strikes, taken to the ground, and handcuffed. By design, the force example was chosen because it was violent, but lawful. Prior to viewing the footage, the test subjects were briefed on the details of the situation at hand and the legal parameters in which police operate relative to use of force laws and policies. Numerous participant demographic characteristics were measured, including race, gender, age, and income. While the researchers hypothesized that knowledge of use of force guidelines would partially mediate biases in force perception, they found this not to be the

case. In fact, the researchers found that nearly 75% of subjects deemed the force “unjustified,” over 65% felt it was “illegal,” more than 83% saw it as “violent,” and close to 88% claimed the police used “too much force” in the incident. While these percentages varied by race, age, gender, and prior arrest, it is significant to note that a distinct majority of all respondents perceived the police use of force in this case as illegitimate and/or excessive, despite being informed of its legality beforehand.

P. Holding Officers Accountable Who Use Excessive Force

We know that police are sometimes called upon to use physical force, including deadly force, during the course of fulfilling their duties to their communities. This is a painful fact that people are not always comfortable with. Nevertheless, it is true. As all officers are human, and all humans are fallible, police officers sometimes make mistakes or exercise poor judgment. Some police even commit crimes or engage in egregious misconduct in using force, even deadly force. In such cases, it is critically important that such matters be investigated properly and addressed appropriately. According to Sheldon Greenberg of Johns Hopkins University, cited by Gaines and Miller (2015, p. 199), “The minute the public feels that the police department is not investigating its own alleged wrongdoing well, the police department will not be able to function credibly in even the most routine matters.”

Allegations of use-of-force violations against police officers need to be investigated, and that investigation needs to be fair to the accused officers. “As public employees, criminal justice employees are guaranteed rights as defined by law” (Stojkovic et al., 2015, p. 239). Police officers in free societies are marked by a dual status. They are simultaneously instruments of the government and individual citizens. As agents of the state, officers are granted police powers that they are required to exercise with strict respect for individual rights. Officers whose job performance is lacking are generally subject to departmental sanctions, civil punishments, and criminal sentences. Of special relevance to internal affairs investigations is the fact that officers who face criminal prosecution for on-duty actions are necessarily afforded the same constitutional protections as all other citizens. Police officers, therefore, are guaranteed substantive and procedural due process.

While it may be tempting to “hold officers to a higher standard” than the general public, doing so is constitutionally circumscribed. Police officers, more so than any other segment of society, are thrust into dangerous situations in which lives are at risk through interpersonal violence. Still, not every officer is a saint, and not every action taken is justified or legal. Those on the receiving end of improper use-of-force incidents are aggrieved parties, but so, too, is the community at-large. While there are certainly a small number of cases annually of officers engaged in criminal misconduct, use of deadly force in such cases is not the focus of the present seminar paper. Instead, our focus is on legally justified uses of force that could be safely avoided.

Section II – Literature Review & Seminar Paper Organization

A. Calls for Change in the Modern Era

In years gone by, before the ubiquity of video capable smartphones, the widespread use of social media, and the 24-hour news cycle, use of force by the police was a “behind-the-scenes phenomenon” only visible to the parties directly involved (Solar, 2016, p. 12). Today the situation is quite different, and uses of deadly force are streamed live on the internet, then posted and shared indefinitely. Police officers are open to new levels of scrutiny and public condemnation, despite the fact that an untrained citizen, viewing video clips of an encounter, cannot necessarily distinguish a lawful use of deadly force from an unlawful one (Solar, 2016, p. 9).

The mid 2010s—especially the years following the lawful August 2014 officer-involved shooting death of Michael Brown in Ferguson, Missouri—have been marked by innumerable calls for police reform. These calls have come from many quarters of society, including: (1) activists and social justice organizations, (2) political leaders, (3) news media outlets, (4) police professional organizations, and (5) academic scholars and researchers. There have been peaceful protests and violent riots, as well as constructive criticism and flat-out condemnation. The central demand is that police agencies take all possible and rational steps to safely reduce the incidents of deadly force by officers.

The present author’s review of the available literature has found that nearly all of the calls for police reform regarding the use of deadly force fall into one or more of the following categories:

- | | |
|---------------------------------------|--|
| (1) Training Programs | (e.g. implicit bias awareness training, mental health crisis intervention training, de-escalation training)
(AI, 2015; Cordell, 2014; Curnutte, 2016; DeGue et al., 2016; Lee, 2015; Miller, 2015; PERF, 2016a; Presidential Task Force, 2015) |
| (2) Laws and Legal Standards | (e.g. going beyond Constitutional requirements such as Graham v. Connor)
(AI, 2015; Boykin, Desir, & Rubenfeld, 2016; Cordell, 2014; Curnutte, 2016; PERF, 2016a) |
| (3) Agency Policies | (e.g. allowing or prohibiting choke holds, wounding shots, warning shots, shooting from and to vehicles, and requiring verbal warnings)
(AI, 2015; Boykin et al., 2016; Cordell, 2014; Mckesson, Sinyangwe, & Packnett, 2017; Miller, 2015; PERF, 2016a; Presidential Task Force, 2015) |
| (4) Attitudes and Philosophies | (e.g. guardian or warrior mindsets, community policing, sanctity of life, proactive or reactive approaches, Broken Windows or Laissez Faire strategies) |

- (*AI, 2015; Cordell, 2014; DeGue et al., 2016; Mckesson et al., 2017; PERF, 2016a; Presidential Task Force, 2015*)
- (5) Equipment and Devices** (e.g. electronic control devices, chemical sprays and inhalants, ballistic shields, lightweight shields, radio wave weapons)
(*Boykin et al., 2016; Lankford, 2016; PERF, 2016a*)
- (6) Monitoring and Oversight** (e.g. nationalization or community control or independence)
(*Cordell, 2014; DeGue et al., 2016; Miller, 2015; NAACP, 2017; PERF, 2016a; Presidential Task Force, 2015*)
- (7) Hiring and Recruitment** (e.g. demographic diversity, educational attainment)
(*DeGue et al., 2016; Miller, 2015*)
- (8) Data Collection and Reports** (e.g. written reports, supervisory reports, body cameras, dash cameras, open data)
(*AI, 2015; Boykin et al., 2016; Cordell, 2014; DeGue et al., 2016; Klinger, Rosenfeld, Isom, & Deckard, 2016; Mckesson et al., 2017; NAACP, 2017; PERF, 2016a; Presidential Task Force, 2015*)
- (9) Contextual Factors** (e.g. prevalence of firearms, violent crime rates, availability of mental health care, community poverty levels)
(*AI, 2015; Klinger et al., 2016; PERF, 2016a*)

B. Activists & Social Justice Organizations

Activists DeRay Mckesson, Samuel Sinyangwe, and Brittany Packnett are the planning team for Campaign Zero, an initiative launched in 2014 to reduce the use of deadly force by American police. These activists, and Campaign Zero, are aligned with the Black Lives Matter Movement. According to their Campaign Zero website (Mckesson et al., 2017), “Police should have the skills and cultural competence to protect and serve our communities without killing people—just as police do in England, Germany, Japan and other developed countries.” Campaign Zero urges police departments to develop policies that require officers to de-escalate potentially lethal situations, use minimal amounts of force, and employ less-lethal weapons (Mckesson et al., 2017). Less-lethal weapons referenced include bean bag shotguns, police canines, Tasers, batons, and pepper spray (SPD, 2017). Furthermore, Campaign Zero also calls for the banning of chokeholds, transparency in lethal force investigations, and increased data collection and reporting (Mckesson et al., 2017). Campaign Zero promotes reliance on use-of-force continua, which is contrary to the recommendations of the Police Executive Research Forum (PERF), a prominent Washington-based think-tank comprised of leaders of most of the nation’s largest police agencies.

Amnesty International (AI), a non-governmental organization focused on protecting human rights worldwide, published a document in 2015 called “Deadly Force: Police Use of Lethal Force in the United States.” This report acknowledges that the work of police officers in America is “difficult and often dangerous,” but decries “an alarming use of force nationwide” (p. 1). To prepare their report, AI reviewed state laws and policing practices, and concluded that every state in the union fails to “comply with international law and standards on the use of lethal force by law enforcement officers” (2015, p. 2). While this issue is certainly a matter of debate, AI’s perspective stands. According to AI (2015), police use of deadly force in America needs to be reduced through new laws, policies, training programs, and policing practices. The organization also speaks out against the dangerousness of Tasers, chokeholds, and empty-hand techniques, and condemns “the pervasiveness of firearms among the general population in the U.S.” (2015, p. 3). AI calls for better tracking of police use-of-force data and emphasizes the need for police to receive de-escalation training (2015).

In July of 2016 the National Association for the Advancement of Colored People (NAACP) held its 107th annual convention, themed “Our Lives Matter, Our Votes Count” (Curnutte, 2016; NAACP, 2016). This event brought together approximately 1400 voting delegates from 2200 local chapters across the country. Held in Cincinnati, Ohio, the hosting branch introduced a resolution titled “Legislative Accountability to Eliminate Wrongful Use of Deadly Force by Law Enforcement,” which was approved and is now part of the NAACP national platform (Curnutte, 2016). This resolution’s primary focus was on de-escalation training for police officers, and called for states to adopt legislation that would require the following of law enforcement agencies: (1) devote at least as much time to de-escalation training as to firearms training, (2) provide clear instructions to guide interactions between police officers and legally armed citizens, and (3) raise the threshold for the use of deadly force from a “reasonable presumption of fear” to “incidents of absolute threats” (Curnutte, 2016). Additionally, the NAACP also urges police reform through anti-discrimination initiatives, use-of-force data collection and reporting, and independent review of officer-involved shootings (NAACP, 2017).

C. Political Leaders

Following the high-profile officer-involved shootings of 2014, President Barack Obama established a Task Force on 21st Century Policing, and directed it to investigate issues related to policing, including the use of deadly force by law enforcement. The Task Force received formal support from many people and agencies within the government, such as Assistant U.S. Attorney General Karol Mason and the head of the U.S. Department of Justice’s Civil Rights Division Acting Assistant Attorney General Vanita Gupta. The final report published by the Task Force, in mid-2015, identified six main areas, ripe for police reform: (1) Building Trust and Legitimacy, (2) Policy and Oversight, (3) Technology and Social Media, (4) Community Policing and Crime Reduction, (5) Officer Training and Education, and (6) Officer Safety and Wellness. Relevant to the current discussion of lethal force, the Task Force recommended universal training on de-escalation techniques and mental health crisis intervention methods (Presidential Task Force, 2015). Additionally, the Task Force stressed the importance for law enforcement officers of embracing a guardian culture, as opposed to a warrior culture, built upon trust-based community collaborations and overall transparency and accountability. The Task Force also urged the nation’s police departments to: (1) engage in greater use-of-force data collection, (2) openly

publish use-of-force data, (3) engage communities pro-actively through non-enforcement activities, (4) have clear use-of-force policies, (5) conduct non-punitive reviews of critical incidents to learn from them, and (6) establish community oversight mechanisms (Presidential Task Force, 2015).

D. News Media Outlets

The popular online news magazine *Slate* published a story in August of 2014, less than a week after the Michael Brown shooting, titled “Policing the Police.” Like many stories that would come to print in the popular press over the next several years, writer LaDoris Cordell condemned the current state of police culture as one in which citizens are viewed as “subhuman and dangerous” (Cordell, 2014). The author writes that while improved officer training is “essential,” her view is that more fruitful approaches include having independent civilian oversight of police agencies and requiring all officers to wear body cameras (Cordell, 2014). Cordell also supports the position that uses of force should be judged with consideration of officers’ “tactical conduct and decisions leading up to the use of force” (Cordell, 2014).

In December of 2014 *Saint Louis Post-Dispatch* ran a piece called “Police Departments Scrambling to Reduce Excessive Force” (Kohler, 2014). This article highlighted the current state of policing in America, with departments from Cleveland to Las Vegas to New Orleans and beyond reeling from the fall-out from controversial officer-involved shootings. *Saint Louis Post-Dispatch* reported that law enforcement agencies are taking a multitude of approaches to reduce the use of deadly force, including holding implicit bias awareness trainings, improving use-of-force decision-making models, increasing the usage of less-lethal weapons, training officers in de-escalation skills, and inculcating tactical approach procedures (Kohler, 2014).

The New York Times, in a 2016 op-ed (Boykin et al., 2016), has called for legislative bodies and individual police agencies to adopt stricter rules regarding when officers are authorized to employ deadly force. Officers, they write, should always follow a “necessity rule” and give pre-emptive verbal warnings. Implicit racial bias should be avoided, and the use of body and dashboard cameras should increase (Boykin et al., 2016).

According to the Associated Press’s (AP) annual survey of news directors and editors around the country, the top news story of 2014 was “the killing of unarmed black men Michael Brown and Eric Garner by police” and the ensuing federal investigations and civil unrest (Nicks, 2014). Similarly, in 2015, the AP poll found that “black deaths in encounters with police” in cities around the country, which fueled the Black Lives Matter movement, was the number five story of the year (Crary, 2015). In 2016, according to the AP survey, the number three story was “blacks killed by police,” referencing officer-involved shootings in Baton Rouge and a Minneapolis suburb; the number six story was “attacks on police,” as a result of five officers being murdered in Dallas, three in Baton Rouge, and two in Iowa, all linked to the current climate of anti-police animosity (AP, 2016).

Over the last several years there have been numerous other popular press articles addressing the need to reduce the use of deadly force by police. Criminal justice professor Adam Lankford (2016), writing for CNN, envisions a world in which officers can avoid deadly force in many cases through emerging less-lethal weapon technologies, including radio waves that induce

extreme motion sickness, chemical inhalants, and novel blunt munitions. Journalist Jaeah Lee, writing for *Mother Jones*, reports that police departments are currently re-evaluating their training programs related to the use of physical force, with many focusing on de-escalation, mental health crisis intervention, and unconscious bias mitigation (Lee, 2015). Lee (2015) concludes that there is a lack of rigorous scientific assessments of police training programs, and that “translating academic research into practice on the streets is complicated territory.”

E. Police Professional Organizations

PERF, which has been studying and releasing reports of police use of force issues since 1992, has championed the drive for increased and improved de-escalation training (PERF, 2016b). In August of 2015 PERF published a report, titled “Re-engineering Training on Police Use of Force,” which held that “the training currently provided to new recruits and experienced officers in most departments is inadequate” and that “we need to rethink how we are training officers to handle use of force, and we must recognize that current training is not providing officers with state-of-the-art techniques to minimize use of force” (PERF, 2015, p. 4). The report stressed that police need to be trained to de-escalate volatile situations, and that this training must align with police cultures that are grounded in a firm belief in the “sanctity of human life” (PERF, 2015, p. 4). PERF also advocates that individual police agencies adopt policies that: (1) hold their officers to higher legal standards than permitted under current constitutional law, (2) require the amount of force officers use to be directly proportional to the threats faced, and (3) strictly prohibit officer from shooting at vehicles being driven toward them, regardless of danger and circumstances, unless people in the vehicle are threatening deadly force by some means other than the vehicles (PERF, 2016a). Additionally, PERF urges police departments to train their officers on mental health crisis intervention, and ensure that officers are armed with less-lethal weapons; PERF recommends that officers have light-weight shields that can be deployed against knife-wielding subjects, and PAVA (pelargonic acid vanillylamid) spray, which is less likely to cause cross-contamination than traditional pepper spray (PERF, 2016a). Finally, PERF urges law enforcement agencies to provide prompt and close supervision at all critical incidents, including officer-involved shootings, and release accurate and timely reports to the public concerning use of force data (PERF, 2016a).

F. Academic Scholars & Researchers

Clinical psychologists Sarah DeGue, Katherine Fowler, and Cynthia Calkins wrote a report entitled “Deaths Due to Use of Lethal Force by Law Enforcement,” which appeared in the *American Journal of Preventive Medicine* in 2016. This report presented an analysis of 812 fatalities due to use of lethal force by law enforcement officers between 2009 and 2012, in the 17 states that provided data to the National Violent Death Reporting System (NVDRS). The authors found that of those killed, African-Americans were over-represented (32%) among the total sample and more likely to be unarmed (14.8%) than Caucasian-Americans (9.4%). DeGue et al. (2016) also found that 22% of deaths were mental-health related, 18% were suspected to be “suicide by cop,” 14% involved intimate partner violence, and 6% were the result of unintentional law enforcement action. The authors wrote that lethal force, even when legally justified, is sometimes avoidable (2016). They then reported that commonly-endorsed

approaches to reduce the use of deadly force by police officers include training in tactical disengagement and conflict de-escalation, use of pepper spray and Tasers, adoption of mental health crisis intervention programs, and holding implicit bias awareness trainings (DeGue et al., 2016). The authors also spoke highly of greater transparency and accountability regarding use-of-force issues, and increased police workforce demographic diversity.

Medical doctor Alex Crosby and researcher Bridget Lyons, both with the Centers for Disease Control and Prevention, analyzed NVDRS data from 2013 regarding homicides by and of American law enforcement officers (Crosby & Lyons, 2016). While the data gained through this program is not nationally representative, since it only comes from 17 states, it is useful. In that year, 222 “legal intervention deaths” were recorded; African-Americans accounted for 38.9% of the total, while Caucasian-Americans accounted for 43.8%; 93.7% of all victims were male; and 82.9% of those killed were between the ages of 20 and 54 (2016, p. 1510). Crosby and Lyons observed that although “these killings represent a small percentage of U.S. homicides, they represent a significant public health burden and can incite further violence” (2016, p. 1509).

Clinical and forensic psychologist Laurence Miller wrote an article called “Why Cops Kill: The Psychology of Police Deadly Force Encounters,” which appeared in 2015 in *Aggression and Violent Behavior*. Miller sought to understand how deadly force encounters between citizens and law enforcement officers develop, and what steps can be taken to decrease their prevalence. Miller found that police often refrain from employing deadly force in situations where it is justified, and sometimes at the cost of their own personal safety (2015). Miller acknowledged that men, young adults, and African-Americans, are especially over-represented in incidents of police use of deadly force; however, he noted that “there is no evidence that police systematically single out or target certain citizens for use of force confrontations based on race alone” (2015, p. 107). Without providing highly specific recommendations, Miller writes that “selection, education, training, discipline, and supervision of police officers can improve police-citizen communication and further reduce the incidents of use of force, including deadly force encounters” (2015, p. 107).

Researchers David Klinger, Richard Rosenfeld, Daniel Isom, and Michael Deckard (2016), of the University of Missouri—Saint Louis, examined data from 230 police shootings that occurred in Saint Louis between 2003 and 2012. They studied and classified the details of each deadly force encounter, paying special attention to the demographic characteristics of the officers and subjects involved, and also the levels of poverty in the neighborhoods of occurrence. The researchers found that “neither the racial composition of neighborhoods nor their level of economic disadvantage directly increased the frequency of police shootings” (Klinger et al., 2016, p. 193). Furthermore, they found that areas with mid levels of violence had the most shootings, followed by those with high levels of violence, and areas with the low levels of violence had the fewest shootings (Klinger et al., 2016). The researchers addressed the thorny question of whether the disproportionately high rates of lethal force used against African-Americans is caused by racial bias, disproportionate criminality, or some combination of the two. Klinger et al. (2016) acknowledged that researchers have investigated this question and published opinions regarding it since the 1960s, but that there is not yet a definite answer. The reason, they write, is that there is currently a woeful lack of national data that would be necessary to come to a sound conclusion. With this in mind, the authors hope that their study will provide a model for the type of national data that will be available to researchers in the future (Klinger et al., 2016).

G. Seminar Paper Organization

Section I – Introduction of the present seminar paper began with a presentation of the problem to be examined: *What empirical evidence exists that supports the effectiveness of specific police training programs in safely reducing the use of lethal force by law enforcement officers?* The nature of this problem was examined with reference to the role of police in modern society, rates of crime and violence, and antecedents to uses of force. *Section I – Introduction* also explored the varying definitions of force that are in common usage, and quantified its prevalence. Extant efforts to track police uses of deadly force nationally were described, as was the legal environment that circumscribes lawful police actions. Next, risks faced by law enforcement officers were discussed, as well as the impacts upon police officers and community members when deadly force is used. *Section I – Introduction* also delved into public perceptions and scrutiny of police who employ lethal force, how such perceptions vary according to demographic characteristics, and how officers who use excessive force can be held accountable.

Section II – Literature Review and Seminar Paper Organization, the present section, identified the five main types of stakeholders who have called in recent years for reform on the issue of police use of lethal force. Collectively, these stakeholders have suggested or demanded a multitude of police reform initiatives. The proposed initiatives can be grouped into nine major categories, chief among them being training. There are three training programs that have received a great deal of attention, referred to here as “The Big Three”: (1) implicit bias awareness training, (2) mental health crisis intervention training, and (3) de-escalation training. The Big Three are each examined, in detail, in subsequent sections of the present seminar paper, forming the heart of the analysis. *Section II – Literature Review and Seminar Paper Organization* continued with a presentation of selected examples from the available literature, attesting to the variations and similarities among reform proposals. This section ends with a description of the organization of the seminar paper itself.

Section III – Law Enforcement Training presents background information intended to describe in both broad and fine strokes the nature of law enforcement training programs in the United States. This forms a backdrop for contextualizing proposed changes to police training. A brief historical overview is given, followed by discussions of the decentralized nature of American policing, training standards, pre-service police academies, and typical curricula composition. The section ends with descriptions of field training programs, continuing education, and budgetary limitations.

Section IV – Implicit Bias Awareness Training provides an in-depth examination of the current state of knowledge of implicit bias, its effects, and the relevance to police work. The present author then summarizes the arguments presented, and provides evidence for an informed judgment regarding the merit of implicit bias awareness training for safely reducing the incidence of lethal force by law enforcement officers. The section concludes by discussing how implicit bias knowledge can be incorporated into firearms training, and how such trainings could provide auxiliary benefits.

Section V – Mental Health Crisis Intervention Training explores the Memphis Model of mental health crisis intervention training, as well as similar spin-offs. Attention is paid to the impacts that untreated and undertreated mental illnesses have upon society, and the implications

for police officers. This section presents and analyzes the available data regarding the effectiveness of mental health crisis intervention trainings for safely reducing the use of deadly force by police officers. The present author then makes a supported judgment of the likelihood that mental health crisis intervention trainings can safely reduce citizen deaths by law enforcement officers.

Section VI – De-Escalation Training begins with a detailed overview of the special attention that this de-escalation training has garnered in recent years, making it the most touted of The Big Three. De-escalation is disambiguated, and the current state of de-escalation training is discussed. Then, five specific de-escalation training case studies are analyzed for evidence of empirical effectiveness. These case studies involve police departments in: (1) Miami-Dade, Florida circa 1985, (2) Portland, Oregon circa 2003, (3) Las Vegas, Nevada circa 2012, (4) Salt Lake City, Utah circa 2015, and (5) New York City between 1969 and the present. Examples of European countries' experiences with de-escalation training are then discussed, as well as the current rapid spread of such trainings. The present author then summarizes the evidence detailed and presents an informed opinion regarding the likelihood that de-escalation trainings can safely reduce the use of lethal force by law enforcement officers.

Section VII – Conclusion caps the present seminar paper. The uniqueness of the present author's approach is explained, before the summative findings are revealed. The present seminar paper ends with a discussion of issues related to police training, reducing preventable deaths, and the future of research in these areas.

Section III – Law Enforcement Training

A. Historical Overview

Police departments in America today are vastly different from their progenitors of the past few centuries. Contemporary police agencies are structured to effectively deploy and manage well-trained and well-equipped professionals, with the stated goal of law-enforcement, but this has not always been the case. The first American police forces arose in the early 1600s, and consisted of loosely organized bands of civic volunteers that sought to improve public health and sanitation, regulate commerce, and direct vehicular traffic. These volunteers also served warrants, punished criminals, and functioned as night watchmen and slave patrollers (Gaines & Kappeler, 2008). Such early police forerunners had a wide array of responsibilities, yet were not, by modern standards, professional. Often these civic “volunteers” were pressed into police service as a result of committing minor criminal offenses themselves, a situation not unlike modern court sentences of “community service.” Sleeping and drinking alcohol were common occurrences during duty time (Gaines & Kappeler, 2008, p. 72), and there is no indication that these officers received any significant or structured training.

Policing in early America continued in this manner throughout the colonial period, until approximately the time that the Industrial Revolution reorganized American society in the early 1800s. Scholars agree that the years from 1840 to 1920 marked the Political Era of American policing (Cole, Gertz, & Bunger, 2004, pp. 71-72). During this period the police were understood to be tools of the political bosses who dominated local and state governments throughout the nation. The police were as corrupt as their overseers, and were part of the political machinery. Fairness was not the goal. Politicians dictated how police departments were organized, who was hired and promoted, what the role of the police would play, and even who was arrested and which laws were enforced (Gaines & Kappeler, 2008, pp. 76-80). By the end of this period, police forces were akin to municipal armies: well-organized, hierarchically structured by rank and role, and better-equipped than ever before. We know very little about the training police received during this time period, but all accounts testify to the widespread use of heavy-handed tactics.

In the early 1900s a new political movement, Progressivism, captured the American consciousness. This high-minded idea envisioned the soaring of the human spirit, the elimination of suffering, and the betterment of society through public welfare and morality campaigns. This zeitgeist transformed American policing, and defined the Professional Era, which lasted from approximately 1920 to 1970 (Gaines & Kappeler, 2008, pp. 78-79). Describing the prior era’s corruption as abhorrent, reform commissions established during the Professional Era restructured police agencies around the country. Police officers were now expected to work for the benefit of the public good, and not be under the control of politicians. During this era of police agency autonomy, professionalism flourished. New police technologies emerged, and cars, guns, and radios all became commonplace (Schmallegger, 2009, p. 156). Police training came to be recognized as essential, and by 1950 the first statewide training standards were established, in both New York and California (Schmallegger, 2009, p. 212). Officers were expected to have high morals and virtuous behavior, be competent law enforcers, and maintain the peace and status quo.

Things changed in the 1960s and 1970s with the emergence of the Civil Rights Movement, the Women's Movement, the American Indian Movement, and other counter-cultural events. The police role in maintaining public order came to be seen as counter-revolutionary, and a new paradigm arose in which police needed to primarily serve the individual citizens of their communities. The time period from around 1970 to the present is considered the Community Era of American Policing. For the past four decades police have become increasingly accountable to their constituents and answerable to citizen review boards. We have prioritized local control. During this time period new technologies have been developed and adopted which have influenced policing, including handheld radios, bullet resistant vests, pepper spray, and electronic control devices (such as TASERs). Training in the current era has become consistently more standardized, and continues to evolve, both in content and methods.

B. Decentralization & Local Control in American Law Enforcement

From its earliest days, policing in America has been a highly decentralized and varied endeavor (Schmallegger, 2009, p.155). Over the centuries of its development, the network of law enforcement agencies has become ever more elaborate, such that today it is recognized as the most complex in the world (Schmallegger, 2009, p. 161). In the United States there are over 18,000 individual law enforcement agencies, organized at the village, town, city, county, tribal, regional, state, and federal level (Reaves, 2011). Their jurisdictions feature considerable overlap, as do their missions. The 765,000 full-time law enforcement officers who work for America's police forces fulfill many roles, and answer to a diverse array of constituencies. It is likely that the total number of police agencies will rise in the future, as every incorporated municipality in the country has the authority to establish its own police force (Schmallegger, 2009, p. 169), and not every municipality has yet done so.

Two-thirds of America's police officers (Reaves, 2015) are employed by local municipalities. This is in contrast to the situation in most countries of the world, as police forces are typically follow a national organizational scheme. America's police agencies vary dramatically in size, from small towns with a single officer to New York City's 36,000-member force (NYPD, 2017). While 48% of agencies employ fewer than 10 officers, 54% of officers work for agencies with 100 or more officers (Reaves, 2015). For local control, this situation is ideal. However, critics who seek universal changes to policing in America often view this variegated system as being disjointed and difficult to reform. In the absence of a constitutional mandate, universal adoption of any given change requires implementation by 18,000 distinct police entities.

C. Training Standards

Every law enforcement agency in the country is responsible for ensuring that its officers are properly trained. Officers must be trained before they hit the streets, and must partake in ongoing continuing education. These trainings are to impart new skills, refresh existing skills, and to modify patterns of behavior to shift to newer approaches that emerge over time. The U.S. Supreme Court has ruled (*City of Canton, Ohio v. Harris*, 1989) that law enforcement agencies are legally liable if they fail to train their officers.

The exact training program that an individual agency implements is determined by the agency in question, and must adhere to the general standards set forth by its certifying entity. Since 1950 every state in the union has established its own police certifying entity, examples include Delaware's Council on Police Training, Montana's Public Safety Officer Standards and Training Council, Texas's Commission on Law Enforcement, and Wisconsin's Law Enforcement Standards Board. Federal and tribal law enforcement agencies have their own police certifying entities that set broad training guidelines for their officers. Although there is significant variation in the training programs implemented by law enforcement agencies around the country, all training conforms to the rules set forth by the police certifying agencies and addresses the skills required for police proficiency.

D. Police Academies

Police training begins with enrollment in a pre-service academy. These academies are often stand-alone programs administered by colleges, universities, or technical schools. Additionally, many academies are hosted by individual law enforcement agencies. Typically, smaller agencies do not have the scale of resources necessary to run their own pre-service academies, and therefore require that prospective police officers obtain law enforcement training through a school-administered program prior to applying with the law enforcement agency. In contrast, larger agencies often hire prospective officers, then train them as recruits at an in-house pre-service academy.

The United States Department of Justice, through its Bureau of Justice Statistics (BJS), conducts periodic censuses of the nation's law enforcement training academies. The most recent comprehensive review of these academies was published in 2016, and drawn from data collected between 2011 and 2013. We, therefore, have a significant amount of information and detail about the current state of law enforcement training across the country. The following statistics, unless otherwise noted, are drawn from the most recent BJS census (Reaves, 2016).

Each year, 45,000 prospective police officers enroll in pre-service academies across the country. Ultimately, 86% of these recruits will successfully complete their programs and become law enforcement officers. The mean pre-service academy features 843 hours of classroom instruction, which is slightly more than 21 weeks of full-time (40 hours per week) training.

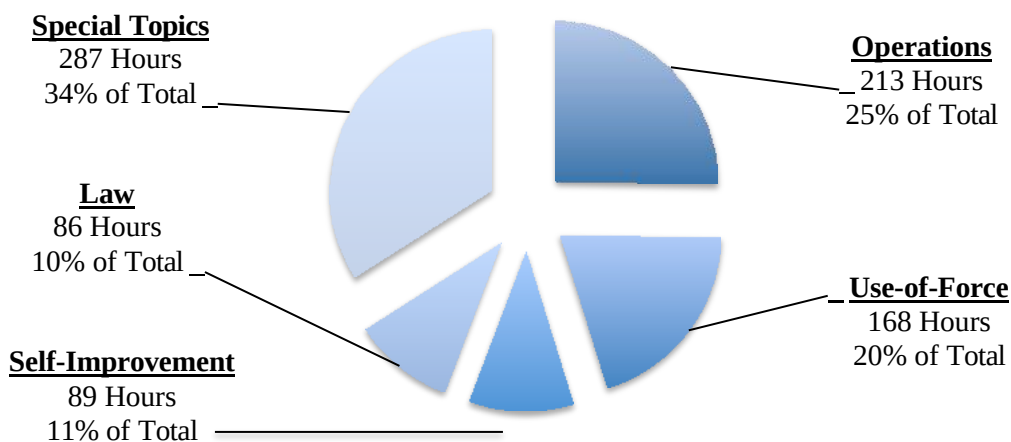
E. Content of Basic Police Training Nationwide

The 843 hours of the average pre-service training an officer receives is intended to address all aspects of the police role and impart every identified, necessary, trainable skill. These skills primarily fall into four categories. The largest category is "operations," which includes patrol procedures, investigations, emergency vehicle operations, report writing, and first-aid. On average, a recruit spends 213 hours learning operations skills, which amounts to 25% of the total pre-service academy time. The second largest category is "use-of-force," accounting for an average of 168 hours of training, or 20% of the total. Use-of-force covers firearms, self-defense, relevant agency policies, de-escalation, crisis intervention, and non-lethal weapons. The third largest category is "self-improvement," which fills an average of 89 hours, or 11%, of pre-service training time. Self-improvement covers health and fitness, communication skills,

professionalism, stress management, ethics, and integrity. The fourth and final of the major subject areas is “legal training,” which averages 86 hours, or 10%, of total academy training time. Legal training addresses constitutional law, traffic law, and juvenile justice. Combined, the “big four” subject areas average 556 hours, or 66% of academy training time. The remainder of recruits’ instruction addresses a variety of “special topics,” accounting for an average of 287 additional hours of training.

FIGURE 1: PRE-SERVICE ACADEMY TRAINING AREAS
(Average 843 Total Hours)

(Source: Reaves, 2016)

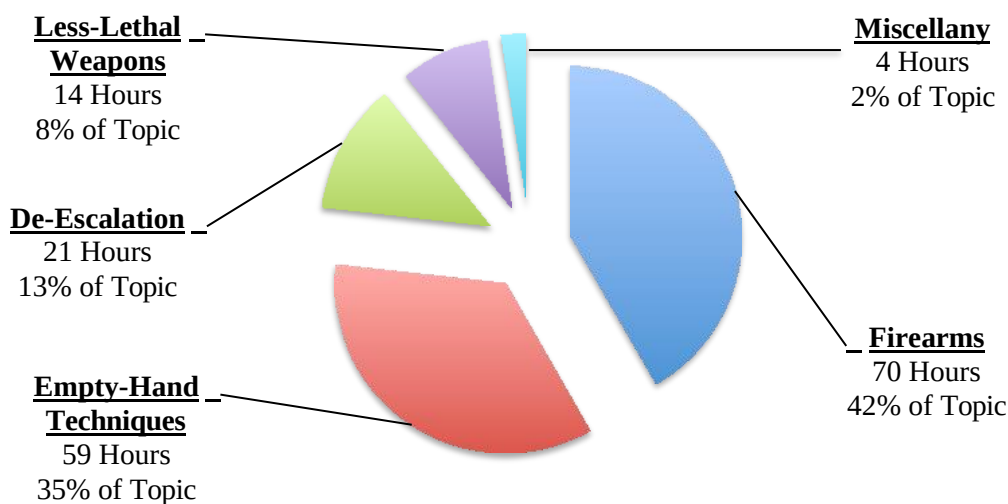


These special topics vary from one academy to another, but typically address such topics as domestic violence (98% of academies include this topic, with an average of 13 hours of instruction at such academies), community policing (97% of academies include this topic, with an average of 43 hours of instruction at such academies), mental illness (95% of academies include this topic, with an average of 10 hours of instruction at such academies), sexual assault (92% of academies include this topic, with an average of 6 hours of instruction at such academies), and hate or bias crimes (78% of academies include this topic, with an average of 3 hours of instruction at such academies), to highlight a few.

Because the focus on the present seminar paper is safely reducing incidents of deadly force, there are some detailed statistics that are worth drawing out. Within the category of use-of-force, police recruits spend an average of: 70 hours training in the proper and efficient use of their firearms (42% of use-of-force training time, 8% of total training time); 59 hours on empty-hand fighting (35% of use-of-force training time, 7% of total training time); 21 hours on a combination of agency use-of-force policies, de-escalation tactics, and crisis intervention (13% of use-of-force training time, 2% of total training time); and, 14 hours on less-lethal weapons (8% of use of force training time, 2% of total training time).

FIGURE 2: USE-OF-FORCE TRAINING DETAIL
(Average 168 Topic Hours)

(Source: Reaves, 2016)



Within the category of operations, police recruits spend an average of: 51 hours training on proper patrol procedures (24% of operations training time, 6% of total training time); and 23 hours learning first-aid (11% of operations training time, 3% of total training time). Within the category of self-improvement, police recruits spend an average of: 8 hours training on ethics and integrity (9% of self-improvement training time, 1% of total training time); 47 hours training health and fitness (53% of self-improvement training time, 6% of total training time); 14 hours training on professional communication (a.k.a. verbal judo) (16% of self-improvement training time, 2% of total training time); 9 hours training on professionalism (10% of self-improvement training time, 1% of total training time); and 5 hours training on stress management (6% of self-improvement training time, 1% of total training time). Within the category of legal education, police recruits spend an average of 52 hours learning criminal and constitutional law, which deal with the protection of individual rights and liberties (60% of legal education training time, 6% of total training time). Of the special topics, police recruits spend an average of 42 hours learning methods of community policing, which include cultural diversity/human relations, mediation/conflict management, community collaboration, and problem-solving approaches (15% of special topics training time, 5% of total training time).

All of the aforementioned training topics can influence the use of deadly force, deadly-force decision-making, or could aid in safely minimizing the use of such force. Refer to the following figure (Figure 3), for an itemized breakdown of the average number of hours a police recruit spends training on each of these relevant topics. These numbers are significant, as a starting point, as this is the baseline that any proposed shift in training must be compared to.

As delineated above, and also in Figure 3, the slight majority of a police recruit's academy training addresses use-of-force issues. These 425 hours of instruction amount to more

than 10 full-time weeks. It is also important to recognize that much of the training a police officer receives is holistic and overlapping in nature, such that simple conceptual divisions into discrete silos is not truly accurate. For example, during an eight-hour block of scenario-based instruction a recruit might role-play scenarios involving community members in crisis, employ verbal judo, make tactical decisions, problem-solve with the subjects, manage space and distance, communicate with other officers, and make constitutionally-informed arrest decisions. Such a block of instruction could be categorized in multiple ways without being inaccurate. The situation is complex, as are the police role and police training.

FIGURE 3: AVERAGE RECRUIT TRAINING HOURS ON TOPICS INFLUENCING DEADLY-FORCE USAGE

(Source: BJS Census, Reaves, 2016)

422 hours	Field Training <i>(i.e. Job Shadowing under a Field Training Officer on Patrol)</i>
70 hours	Firearms Training <i>(e.g. Deadly-Force Decision-Making, Effective Shooting, Weapon Retention)</i>
59 hours	Empty-Hand Fighting <i>(e.g. Use-of-Force Decision-Making, Effective Striking, Handcuffing)</i>
52 hours	Constitutional & Criminal Law <i>(e.g. Use-of-Force Decision-Making, Arrest Decision-Making)</i>
51 hours	Patrol Procedures <i>(e.g. Tactical Approaches, Officer Coordination, Tactical Disengagement)</i>
47 hours	Health & Fitness <i>(e.g. Physical Exercise)</i>
42 hours	Community Policing <i>(e.g. Community Partnerships, Cultural Diversity Awareness, Conflict Resolution)</i>
23 hours	Life-Saving First-Aid <i>(e.g. CPR, Wound Dressing, Tourniquet Application)</i>
21 hours	Use of Force <i>(e.g. Agency Use-of-Force Policies, De-Escalation, Crisis Intervention)</i>
14 hours	Communication Skills <i>(e.g. Verbal Judo, Professional Communication, Crisis Negotiation)</i>
14 hours	Less-Lethal Weapons <i>(e.g. Pepper Spray, Electronic Control Devices (e.g. Taser), Baton)</i>
10 hours	Mental Illness <i>(e.g. Recognizing Signs, Interactions with the Mentally Ill, De-Escalation)</i>
9 hours	Professionalism <i>(e.g. Diction, Stance, Service Orientation, Responsiveness)</i>
8 hours	Ethics & Integrity <i>(e.g. Court Testimony, Honesty)</i>
5 hours	Stress Management <i>(e.g. Breathing Techniques, Employee Assistance Programs)</i>

The above training topics (Field Training is excluded) add up to 425 hours of instruction, and are not exhaustive. There are additional hours of relevant training not accounted for here.

F. Field Training

In addition to pre-service academy training, 81% of police officers complete mandatory field training prior to becoming independently operating officers. This figure is the mean for all types of academies and police agencies. However, 97% of municipal police agencies require field training. The mean duration of all field training programs is 521 hours. Since 81% of police officers complete such training, the true average amount of field training a police officer undergoes is 422 hours. Also of note is that of municipal police officers, the average duration of field training is 611 hours. Field training is a form of job shadowing, in which a new officer is accompanied at all times by a designated field training officer, who responds to calls for service with them. Gradually, over the course of several months, the new officer is expected to show increasing competence in police work, and receive less direction and assistance from the field trainer.

G. Continuing Education

Police training for officers does not end when academy training and field training end. Rather, police officers participate in regular continuing education throughout their careers. Typically, these trainings take place during duty time, several times per year and are called “in-service” trainings. A variety of topics are covered, in accordance with state and department mandates. Additionally, there are regular shooting-qualification courses that must be passed for officers to maintain their professional certifications. Police officers also participate in regular elective trainings on topics of individual or departmental interest. Officers seeking promotion also undergo additional training, as do newly promoted officers.

H. Budgetary Limitations

According to the Bureau of Justice Statistics (Reaves, 2015), in 2013 the average annual local police department budget was roughly \$130,000 per sworn officer. This amount varied according to the size of the department. Local police agencies serving communities of fewer than 2500 citizens spent an average of \$67,000 per sworn officer; in communities with between 100,000 and 250,000 residents the average was \$150,000 per sworn officer; and for departments serving populations greater than 1,000,000 people, the average was \$130,000 per sworn officer. These budget figures account for all expenses of running a local police department, including salary, benefits, training, equipment, overhead, and other costs. In the real world funds are finite, training costs money, and tough decisions must be made regarding fiscal priorities. Nationwide, the average annual amount spent, per resident, on local police forces is \$279 (Reaves, 2015).

Section IV – Implicit Bias Awareness Training

A. Implicit Bias Defined

Implicit bias exists. Every person—regardless of race, gender, political affiliation, or other identifiable feature—has implicit biases. Such biases dwell below the level of conscious thought, and are often not congruent with one’s professed and conscious attitudes. They are, essentially, subliminal in nature, and exert real power over our minds, lives, and societies. The Kirwan Institute (Staats, Capatosto, Wright, & Jackson, 2016, p. 14) defines implicit bias as “The attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner. Activated involuntarily, without awareness or intentional control. Can be either positive or negative. Everyone is susceptible.” Other terms for implicit bias include implicit social cognition, unconscious bias, and hidden bias.

Our implicit biases form as a result of mental associations made during the course of normal living, through personal experiences, observations, and learning. Implicit biases arise in all areas. We have implicit biases regarding foods, activities, professions, and specific types of people. When advertisers produce commercials, they often seek to associate their products with desirable qualities, thus influencing our purchasing decisions in the future. This process has proven to be immensely effective. Over time, whether through media exposure or first-hand experiences, we similarly develop such stereotypes regarding members of various racial, ethnic, and religious groups. Such stereotypes, even when we attempt to disregard them, can have an insidious ability to influence our conscious actions. This is implicit bias.

B. The Implicit Association Test

In 1995, academics Anthony Greenwald, Mahzarin Banaji, and Brian Nosek developed a method for measuring implicit bias, the Implicit Association Test, commonly referred to as the IAT. The IAT consists of a series of sorting tasks. Participants are asked to sort words and images according to certain characteristics. In one popular iteration of the IAT, the test for implicit racial bias, participants are presented with a series of images of African-American and Caucasian-American faces, intermixed with a series of inherently pleasant and unpleasant words. The participants may be instructed to sort the items such that the African-American faces and the pleasant words are grouped together, while the Caucasian-American faces and the unpleasant words are grouped together; or the African-American faces are to be placed with the unpleasant words, and the Caucasian-American faces put with the pleasant words. When participants are told to complete the sorting task as quickly as possible, it generally takes less time to sort items when the pairing is congruent with their implicit biases, as opposed to the greater amount of time required to pair against one’s implicit biases.

Psychology professor Mahzarin Banaji of Harvard University, one of the co-developers of the IAT, gives the following illustrative example (Penman, Schmidt, Cohen, & Klahr, 2017). If people are presented with a standard deck of playing cards, and asked to sort it into two piles, one for hearts and diamonds, and the other for clubs and spades, it will typically take 20 seconds to complete the task. However, if they are asked to place the clubs and hearts in one pile, and the spades and diamonds in the other pile, it will take around 40 seconds. Whether the test involves

sorting playing cards by suit combinations, or positive and negative words with faces by race, the order of the sorting tasks does not affect the end result (Penman et al., 2017). Because of implicit social cognition, certain combinations more naturally are associated with one another than alternative combinations.

In 1998 the IAT went online, and today it is available on the Web at <https://implicit.harvard.edu/implicit/takeatest.html>. Completing the test requires about 15-minutes. As of October of 2015, the IAT had been taken more than 17 million times (Singal, 2017). Currently, there are 14 variations of the IAT available on the Harvard website, on subjects including race, religion, sexuality, age, and others. Because the IAT precisely times and measures the accuracy of responses, it generates numeric scores of people's biases. Implicit bias, it turns out, is quantifiable. This is immensely attractive to researchers and the general public.

The IAT is widely considered to be the most influential test of implicit bias (Penman et al., 2017). A vast amount of data has been generated and published regarding the results of the IAT. One analysis (Xu, Nosek, & Greenwald, 2014; Mooney, 2014) of more than 2,000,000 individual responses to the IAT for race, gathered between 2002 and 2012, reveals the following for respondents. Regarding race, the average Caucasian-American shows "moderate bias" against African-Americans. The average African-American test-taker shows a small amount of bias against Caucasian-Americans, but still falls within the category of "little or no bias." As for political ideology, people who self-identify as "moderately conservative" show, on average, the greatest amount of bias against African-Americans, falling in the "moderate bias" category. Those who claim to be "strongly liberal" show, on average, the least amount of bias against African-Americans, but still register "slight bias." Concerning education, interestingly, M.D.s show the highest average level of bias, "moderate bias," against African-Americans. All other education levels, including high school dropout, college graduates, lawyers, and Ph.D.s show, on average, "slight bias" against African-Americans, with Ph.D.s having the lowest overall levels of bias. As for gender, men, on average, register "moderate bias" against African-Americans, while women, on average, show "slight bias" against African-Americans. According to Professor Banaji, "What we're discovering here is that the individual mind sits in society, and the connection between mind and society is an extremely important one that should not be forgotten" (Penman et al., 2017). This body of research and data on implicit bias has led many people speculate about the role that implicit bias plays in the use of deadly force by police.

C. Implicit Bias Awareness Training for the Police

Are America's law enforcement officers killing people, especially unarmed African-American men because of implicit bias? Judging by stories in the popular media, this is a question that society wants answered. In the years since the fatal police-involved shooting in Ferguson, Missouri, in August of 2014, there have been numerous mainstream news articles linking unconscious bias among police officers with the killing of unarmed African-American men. For example, the December of 2014 issue of *The Atlantic* monthly magazine ran a story stating, "Unconscious bias can lead officers to react more aggressively when confronting black men than they would when confronting others in otherwise identical situations. As we've seen too many times, the results are beyond tragic" (Stoughton). In Madison, Wisconsin, *Isthmus* newspaper published a story in 2015 that said, "Calls to address bias among police officers have grown louder in recent years as a spate of unarmed African American young men around the country

have been fatally shot by white police officers” (Geyer). Vox Media, in 2016, wrote, “During split-second decisions, racial bias may in fact be the *only* factor that comes to mind: As a police officer reaches for his gun, aims for a target, and fires within seconds, the color of someone’s skin is one of the quickest references that a racially biased cop may draw on to decide whether to shoot” (Lopez). In 2017, the National Broadcasting Company (NBC) quoted criminal justice professor Justin Nix as saying, “Earlier research shows people are biased to minorities. This gives a better understanding of fatal police shootings in a real setting and not just in experimental studies” (Duster). Also in 2017, the British Broadcasting Corporation (BBC) published a story purporting, “Implicit bias has been used to explain ... the disproportionate number of unarmed black men who are shot in the U.S. by police” (BBC). These stories, and countless others like them, make it clear that many people believe that implicit bias is at least partially responsible for the deaths of African-Americans by police.

Largely because of the suspected link between unconscious bias among American police officers and their killing of unarmed African-American men, there has been a loud and growing chorus of calls for law enforcement officers to receive implicit bias awareness training. For example, a joint statement issued by the American Bar Association (ABA) and Legal Defense and Education Fund (LDEF) of the National Association for the Advancement of Colored People (NAACP), in July of 2015, stated it is “time to initiate an affirmative effort to eradicate implied or perceived racial bias—in all of its forms—from the criminal justice system” (Hubbard & Ifill, 2015). In December of 2015, Ohio Attorney General Mike DeWine announced that new statewide training requirements, intended to reach every one of the Ohio’s 34,000 law enforcement officers, would include training on recognizing and eliminating implicit biases. DeWine said that new training requirements would “reduce the odds of fatal officer-involved shootings” (Ludlow). In June of 2016, the U.S. Department of Justice announced that its core curriculum would now include mandatory implicit bias awareness training for its police officers, attorneys, and agents. This implicit bias awareness training will be given to the more than 28,000 employees of the Drug Enforcement Agency (DEA), Federal Bureau of Investigation (FBI), Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), and other agencies (Haugh). In September of 2016, during the first presidential debate, candidate Hillary Clinton announced that, if elected, she would devote federal dollars toward implicit bias awareness training for officers around the country, “since it can have literally fatal consequences” (Chuck, 2016). As of June of 2017, an ever-growing list of local law enforcement agencies have implemented implicit bias awareness trainings for their officers, from Albuquerque to Baltimore, Chapel Hill to Detroit, El Cerrito to Fremont, Madison to Milwaukee to Minneapolis, and many others (Hoerig & Fridell, 2017).

While the form and content of implicit bias awareness trainings for police can vary considerably, there are several fundamental principles that curricula commonly address: (1) everyone holds biases, no matter how well-intentioned or educated one might be, (2) our biases can and do affect our thinking and decision-making, often because they are implicit, and therefore act below our level of conscious awareness, and (3) “policing based on biases or stereotypes is unsafe, ineffective, and unjust” (Fridell, 2016). Psychology professor Patricia Devine, of the University of Wisconsin-Madison, is a well-known bias researcher, and she regularly conducts implicit bias awareness trainings. In February of 2017 Devine and a co-presenter led a two-hour workshop designed to help the attendees break the habit of allowing implicit bias affect their actions (Nordell, 2017). Devine’s approach is to: (1) explain the science

of how people can act in biased ways without knowing it, (2) reveal evidence of how bias spreads, (3) encourage attendees to discuss with one another what their personal experiences with bias are, and (4) educate attendees about ways in which they can substitute habits based on stereotypes with fairer ones that are instead based on correctly assessing situational factors.

D. Simulator Shooting Tests

Joshua Correll, now a psychology professor at the University of Colorado-Boulder, became interested in the racial dimensions of the social psychology of police shootings in 1999, shortly after the much-publicized killing of Amadou Diallo (Penman et al., 2017). Diallo, an immigrant from Liberia, was African-American. Four Caucasian-American New York City police officers approached Diallo because they thought he might be the suspect in a rape case. The officers mistakenly thought that Diallo was holding a handgun, when in fact he was holding his wallet (Fritsch, 2000). Diallo was killed when he was struck by 19 of 41 bullets the police shot at him. Spurred to action by the Diallo case, Correll sought to test, in a laboratory setting, whether African-Americans are killed by police, in part, because of their race.

To set up his experiment, Correll developed a computer-based deadly-force decision making game (Correll, Park, Judd, Sadler, Wittenbrink, & Keese, 2007). Fifty men, half of them African-American and half of them Caucasian-American, were photographed in various stances holding a variety of objects, including semi-automatic handguns, revolvers, wallets, cell phones, and soda cans. Each model was photographed twice, once with a handgun, and once with one of the innocuous objects. The result was that there were a total of 100 distinct images, 25 featuring armed African-Americans, 25 with unarmed African-Americans, and 25 each of armed and unarmed Caucasian-Americans. Next, test subjects were recruited to view the 100 images in a random order, one-at-a-time, on a computer screen. Subjects were told to press a key indicating “shoot” for only the subjects armed with a gun, and “don’t shoot” for only the subjects holding an innocuous object. As each image of an armed or unarmed man appeared on the screen, the test subjects needed to indicate as fast as possible, within a very short period of time, their lethal force decision.

The participants in the experiment were recruited from three populations: officers with the Denver Police Department, law enforcement officers from around the country who were attending a two-day police training seminar in Denver, and civilians living in the Denver area. Altogether, 124 police officers and 127 civilians participated in the study (Correll et al., 2007). The correctness of the deadly-force decision-making was measured, as was how long it took participants to make their deadly force decisions. The results were striking. First, the police officers were significantly faster than the civilians in making their “shoot / don’t shoot” decisions. Second, the officers exhibit no statistical bias in the employment of deadly force. In other words, the small number of mistakes they made in shooting unarmed subjects was balanced by an equal number of mistakes in which they did not shoot armed subjects. For the police officers, there was no race-based bias in their decision whether to use deadly force. For the civilians, the situation was quite the opposite. The civilians were as good as the officers at accurately deciding whether to employ deadly force against Caucasian-American subjects, but they tended to make a significant number of mistakes regarding unarmed African-American subjects. In other words, the civilians were biased such that they made the most mistakes regarding the shooting of unarmed African-Americans. Third, the officers and civilian test

subjects all had a tendency to take longer to process “stereotype-incongruent targets.” This means that it took test subjects longer to assess the threat of an unarmed African-American than an armed African-American, and also longer to assess an armed Caucasian-American than an unarmed one. In summation, this groundbreaking study demonstrated, for its test subjects and under its conditions, that police were not biased in whether they employed deadly force against African-Americans, but civilians were.

Correll (et al., 2007), conducted several more iterations of the experiment, involving new officer and civilian test subjects, and adjusting the variables in the study, such as the amount of time available to make the deadly-force decision, and allowing for subjects to practice the “game” for several days to hone their decision-making skills. While the researchers found that practicing deadly-force decision making somewhat decreased the anti-African-American bias displayed by the civilians, it did not extinguish it. In all trials, the police officers showed no racial bias in shooting unarmed African-Americans (Correll et al., 2007). The officers did not make the mistakes that the civilians did. The study authors attributed the exemplary performance of the officers to their 72 hours of pre-service firearms training and quarterly shooting exercises, which include photorealistic targets and actor-based scenarios that require “shoot / don’t shoot” decisions. Correll (et al., 2007, p. 1015) wrote, “The expertise that police bring to a shoot / don’t shoot situation may not eliminate the difficulty of interpreting a stereotype-inconsistent target, but it does seem to minimize the otherwise robust impact of target race on the decision to shoot.” Correll (et al., 2007) conducted follow-up research involving police recruits, and found that upon entering police training, prior to firearms training, the recruits performed the same as civilians. After their firearms training, the recruits, like all the officers studied, “never showed significant evidence of bias” in their ultimate deadly-force decisions (Correll et al., 2007, p. 1021). Note that these studies were conducted prior to the introduction of implicit bias awareness trainings.

E. Research on Race-Based Disparities in Lethal Force

Economics professor Ronald Fryer, the youngest African-American to receive tenure from Harvard University, was driven by anger after the deaths of Michael Brown in Ferguson, Missouri and Freddie Gray in Baltimore, Maryland to study the issue of race-based disparities in police use of lethal force (Bui & Cox, 2016). Fryer and his student researchers spent about 3,000 hours assembling and examining detailed data from 1,332 police shootings between 2000 and 2015 involving 10 major police departments in California, Florida, and Texas (Bui & Cox, 2016). According to Fryer (2016), African-Americans and Hispanic-Americans were not more likely to be shot by police than were Non-Hispanic Caucasian-Americans. Fryer found this to be true when examining the raw data, and also when considering contextual factors, such as threatening and combative actions on the part of suspects. Fryer even found that officers were more likely to shoot Caucasian-Americans without first having been attacked than they were to shoot African-Americans (Bui & Cox, 2016). However, Fryer found that police were more likely to subject African-Americans and Hispanic-Americans to greater amounts of non-lethal force than they did to non-Hispanic Caucasian-Americans (2016). This held true even when controlling for contextual factors. Fryer published his findings in 2016, and called them “the most surprising result of my career” (Bui & Cox, 2016).

F. The Usefulness of Implicit Bias Awareness Training

It has been argued in this section that:

- (1) implicit biases exist, and we all hold them, especially regarding race (Staats et al., 2016; Penman et al., 2017);
- (2) these biases, especially when unacknowledged and unchallenged, have the power to influence our actions (Staats et al., 2016; Fridell, 2016);
- (3) many police officers across the country have been receiving implicit bias awareness training since 2015 (Hoerig & Fridell, 2017; Nordell, 2017);
- (4) there are increasing calls and plans for more of such trainings (Hubbard & Ifill, 2015; Ludlow, 2015; Haugh, 2016; Chuck, 2016);
- (5) in the public mind there is a persistent perception that police are killing innocent, unarmed African-Americans because of implicit racial bias (Stoughton, 2014; Geyer, 2015; Lopez, 2016; Duster, 2017; BBC, 2017); and
- (6) laboratory and real-world evidence regarding police use of lethal force shows that African-Americans are not unduly targeted by police, and, in fact, the opposite is likely true (Correll et al., 2007; Fryer, 2016).

Therefore, it is the *partial* conclusion of the present seminar paper that **implicit bias awareness training is unlikely to safely reduce citizen deaths by law enforcement officers**. This is largely because standard police firearms training has long inculcated skills of accurate threat identification, and that race is not considered when determining whether a subject is wielding a deadly weapon and threatening people with it. However, there is more to consider regarding implicit bias awareness trainings.

G. Incorporating Implicit Bias Knowledge into Firearms Training

Criminology professor Lorie Fridell, of the University of South Florida, is a leading figure in the field of police implicit bias awareness training. Fridell has a nuanced view of implicit bias awareness training, and stresses the importance of video-simulation use-of-force training that utilizes counter stereotypes (2016). Correll also seems to have recognized this issue in the design of his seminal laboratory deadly-force study (2007). In other words, if racial bias is to be avoided in lethal force situations, it is important that the police undergoing such training are presented with “shoot / don’t shoot” stimuli that are racially balanced. This applies to all types of realism-emulating firearms training, such as photorealistic target identification, firearms training simulators (FATS), and live-actor scenarios. While it may be the case that most such training already adheres to this principle, it is worth underscoring its importance here, and acknowledging its intersection with implicit bias. The goal, after all, is accurate threat assessment.

H. Benefits of Implicit Bias Awareness Training

While it has been argued herein that implicit bias awareness training is likely not useful in safely reducing deadly force by police officers, the same is not true for lesser levels of force. In fact, it

is very likely that implicit bias awareness training would be effective here. As noted by Fryer, even when accounting for contextual factors, African-Americans and Hispanic-Americans, on average, are subjected to disproportionately high amounts of non-lethal force (2016).

Additionally, implicit bias awareness training can benefit police officers and the citizens of the communities they serve in many other areas, including criminal investigations, problem-solving initiatives, community partnerships, and outreach efforts. The majority of police work relies upon the communication and relational skills of individual officers. Implicit bias awareness training increases officers' knowledge of self, and creates opportunities for greater cultural and interpersonal competency.

Section V – Mental Health Crisis Intervention Training

A. The Scope of the Problem

In America, beginning in the early 1800s, people suffering from mental illness were “warehoused,” moved out of view of decent society, and sent to insane asylums, workhouses, and prisons (Jennings & Hudak, 2010). The medical community had little understanding of the brain, and much less of mental illness; effective treatments were not available. By the 1950s there were nearly 600,000 citizens living in public hospitals, many against their will (Gaines & Miller, 2015). The era of mass institutionalization of the mentally ill lasted until the 1960s and 1970s, when several factors converged and led to the shuttering of the nation’s sanatoria. Media coverage drew attention to the horrible conditions in the “mental hospitals,” there was an increasing societal recognition of the universality of human rights, new and effective anti-psychotic drugs were developed, and the costs of running the institutions became unaffordable (Miller & Hess, 2008). Over a relatively short period of time, hundreds of thousands of mentally ill citizens were released and expelled from these institutions. Many ended up homeless, many ended up in jails and prisons, and many ended up living with family members lacking the necessary resources to properly care for them. Today, citizens suffering from mental illness have greater rights than in the past, and, theoretically, more treatment options. However, people suffering from mental illnesses constitute a vulnerable population (DeGue et al., 2016), with disproportionate levels of police contact.

Nationwide, the average police officer has six encounters per month with people suffering acute mental health crises (Gaines & Kappeler, 2008, p. 266). Many police officers have received no formal training in effective ways of interacting with mentally ill people. It is well documented that citizens in the throes of a mental break or other psychotic episode often exhibit dangerous, bizarre, or ambiguous behaviors (PERF, 2016, Guiding Principles). All too often, encounters between police officers and mentally ill subjects have tragic results. Informed estimates hold that between 25% and 50% of deaths at the hands of law enforcement officers involve people with mental illness (DeGue et al., 2016). A recent in-depth review of all 812 instances of lethal force fatalities by law enforcement, from 2009 to 2012, as reported by the 17 states that voluntarily participate in the National Violent Death Reporting System found that 40% were mental health related (DeGue et al., 2016). Of note, nearly half of the 40% (18% of the total) were categorized as “suicide by cop.” The Washington Post, in mid-2015, conducted a review of the 462 people that police nationwide shot and killed during the first half of that year (Lowery et al., 2015). More than a quarter (124 people) was suffering a mental or emotional crisis. Most were armed with some sort of weapon, but police were typically summoned because of the subject’s erratic behavior, not criminal suspicion. More than 50 were suicidal.

According to Chuck Wexler, Executive Director of the Police Executive Research Forum (PERF), “This is a national crisis. We have to get American police to rethink how they handle encounters with the mentally ill. Training has to change” (Lowery et al., 2015). John Snook, Executive Director of Treatment Advocacy Center, a non-profit advocating better mental health policies, is even more blunt: “We have completely failed as a mental health system. You are taking a medical illness, especially a medical illness in crisis, and responding to it with law enforcement. If this was a heart attack or stroke and we sent in a SWAT team, people would be up in arms” (Smith, 2016). According to the Treatment Advocacy Center, people suffering from

severe untreated mental illness are 16 times more likely than the general population to be killed in an encounter with police (Bjorhus, 2016; Madhani, 2016). Researchers on this subject have warned that without large-scale police retraining, as well as a nationwide increase in mental health services, these deadly encounters will continue (Lowery et al., 2015). Sue Abderholden, Executive Director of Minnesota's chapter of the National Alliance on Mental Illness (NAMI), echoes the sentiment that police training is not the beginning and the end of the discussion: "I would say it's a failure of our community to really make sure that people have access to the mental health services they need, when they need them" (Bjorhus, 2016).

It has long been recognized that police officers fill a unique set of roles in society. They can be called upon at any hour of the night or day to address the acute problems in society that other people are either unwilling or unable to handle. When it comes to interacting with people experiencing acute mental health crises, the police must often act as "de facto psychiatric triage specialists" (Compton et al. 2009, p. 737), and "front-line mental health workers (Miller & Hess, 2008). By necessity, the police are armed and trained in the effective and legal use of force. In recent years, deadly encounters between mentally ill citizens and police have led many communities and departments to prioritize mental health crisis intervention training (Goode, 2016).

B. The Memphis Model

In 1987, the police in Memphis, Tennessee were called to deal with the Joseph Robinson, a 27-year-old man suffering an acute mental health crisis. Robinson was holding a knife and threatening to kill himself with it. When Memphis police approached Robinson, he charged the officers and was shot dead (Jones, 2016). The community outcry was intense, and the authorities roundly criticized for killing Robinson, a man in distress. As a result of the tragic death of Robinson, the Memphis Police Department pioneered a police training program aimed at reducing the odds of such a situation repeating itself.

The Memphis Model took shape in 1988 as a pilot program, and quickly became recognized across the country, and around the world as the "gold-standard" in mental health crisis intervention training for law enforcement (Smith, 2016). This training model is rooted in the belief that police agencies must partner with and have access to local mental health professionals and resources to be successful in alleviating crises (Lucas, 2016). Retired police Major Sam Cochran was a coordinator for the Memphis Crisis Intervention Training (CIT) Program in 1988; now he consults with training programs nationwide through the University of Memphis CIT Center. In Cochran's words, if attention is only given to law enforcement, "you will fail as a training program" (Lucas, 2016).

The Memphis Model CIT Program is an intensive, 5-day, 40-hour affair. The focus of the program is instilling in officers the importance of approaching mentally ill people in crisis with as much listening and empathy as possible, and as little "command presence" and social distance as feasible. The goal during interactions with those in crisis is to first de-escalate, then stabilize, and finally connect the subject with necessary services (Smith, 2016). Officers are taught, in a classroom setting, about the nature of various mental illnesses, including their symptoms and treatments. People who are chronic or past sufferers of mental illness are brought in to talk with the officers, and share their personal experiences dealing with the mental health system and law

enforcement officers in the past. Officers are educated in what community resources exist to help the mentally ill, and instructions are given regarding how the officers can help citizens in need access these resources. Trainers present to the officers information on effective communication strategies for getting through to people in crisis, as well as de-escalation techniques. Much of the time during the 40-hour training is devoted to having the officers role-play scenarios involving live actors. During these simulations, the officers are able to practice their newly-honed communication and de-escalation techniques. Use of force issues are discussed, as are common barriers to de-escalation. Often, officers completing the Memphis Model CIT Program tour a mental health facility, and interact with mentally ill people in various environments. Additional specialized topics within the program include: veteran issues, traumatic brain injuries, co-existing substance abuse, responder stress, cultural factors in de-escalation, and suicide case studies (MHCI, 2017; Dupont, Cochran, & Pillsbury, 2007; Oliva, Morgan, & Compton, 2010).

According to the Memphis Model CIT Program, 20% to 25% of an agency's patrol division should be graduates of the training, in order that there are always sufficient CIT officers available during any shift to meet the demands of the community (Dupont et al., 2007). Dispatchers need to be trained to elicit the necessary information from callers and call-takers to determine whether a given call-for-service constitutes a mental health crisis. If so, the nearest CIT officer is to be dispatched. Once on scene, the designated CIT officer assumes command of the scene, regardless of the formal rank structure of the officers present (Dupont et al., 2007).

In 1988 there was only one CIT program in the country. Today, the program has been replicated more than 2700 times (NAMI, 2017). Memphis Model CIT Programs are now standard training at police departments in 45 states and the District of Columbia—only Alabama, Arkansas, Delaware, Rhode Island, and West Virginia lack a CIT presence (Pauly, 2013). Still, there is wide variation between states in terms of how many officers gain CIT certification. For example, while the State of Florida requires that all police officers receive 40 hours of such training, other states have much lower requirements. In fact, most states have CIT programs in only one or two counties (Pauly, 2013).

Just as the Memphis Model CIT Program was developed in 1988 as a result of a tragic death, so too, is the program often adopted in other cities. The Memphis Model took root in Minnesota after the June 2000 death of Barbara Schneider. Schneider was a 49-year-old Minneapolis woman with bipolar disorder who, during an acute episode, was being loud and disruptive to neighbors. A 911 caller asked that a crisis team be sent to address the problem. However, there was no crisis team established. Responding officers confronted Schneider in her bedroom, she declared that they were the “Satan Squad,” and advanced on them with a knife. The officers shot and killed her. This incident led to the creation of the Barbara Schneider Foundation, which now trains law enforcement officers, correctional officers, and mental health professionals on the Memphis Model of CIT. The foundation was incorporated in 2002, and has trained thousands of people across Minnesota. (Smith, 2016; BSF, 2017). Sgt. William Palmer, one of the two officers who shot Schneider, is today one of the greatest advocates for the Memphis Model CIT Program (Rosario, 2010).

C. Analysis of the Effectiveness of the Memphis Model CIT Program

The purpose of the present seminar paper is to review selected training programs, and analyze their effectiveness at and potential for *safely reducing the use of lethal force by law enforcement*. So, what of the highly-touted Memphis Model CIT Program?

To address this question, researchers Skeem and Bibeau (2008), examined the police reports for all 189 cases handled by the Las Vegas Police Department's CIT-trained officers, covering the time period from March of 2003 through May of 2005. The results were encouraging, and impressive, especially considering that all of the cases were deemed to pose a "serious to extreme risk of violence." Skeem and Bibeau discovered that 74% of the cases were resolved through hospitalization, and only 4% through arrest. Less-lethal force was employed in 15% of the cases, and there were no uses of deadly force. Furthermore, empty-hand techniques were successfully employed by the officers in all but eight of the cases. As for these eight, there were seven TASER deployments and one pepper spray usage. No subjects were seriously injured in any of the cases. This study suggests that CIT training could promote safety for officers and subjects, and also achieve jail diversion. However, the results of this study can only be considered tentative, as there was no control group identified for comparison purposes (Skeem & Bibeau, 2008).

Roberta Opheim, Minnesota's Ombudsman for Mental Health and Developmental Disabilities, provides a positive assessment of Memphis Model CIT programs in her state, also as a result of anecdotal evidence. Between 2010 and 2015, Minneapolis police only killed one mentally ill person, and St. Paul police only killed five. "We've seen [CIT training] make a difference" (Smith, 2016).

In 2009, Michael Compton, a Professor of Psychiatry at Emory University, sought to scientifically test, in a "laboratory setting," the impact of Memphis Model CIT programs (Compton et al., 2009). Compton and his colleagues partnered with a large, urban police department in the southeastern United States to do this. During a routine training session, Compton et al. administered a survey-format study to 135 police officers with that department. Of these 135 officers, 48 were CIT-trained, while 87 were not. The two groups of officers had similar years of experience (11.7 years for the CIT-trained group, and 12.3 years for the non-CIT-trained group). Both groups reported having a similar number of monthly interactions with people suffering from mental illness (12.4 for the CIT-trained cohort, and 10.3 for the non-CIT-trained cohort). Study participants were presented with a series of three written vignettes, each describing the details of fictitious, but plausible, encounter that officers might have on the job with a mentally ill person. Each vignette featured one of the following types of symptoms related to schizophrenia: bizarre and paranoid behavior (the least threatening); agitated and verbally aggressive behavior (mid-level threatening); or ambiguous and physically aggressive behavior (the most threatening). Officers were asked to indicate how they would respond to such situations, with options ranging from simple dialogue and physical presence to calling for backup to negotiation to using non-lethal force. Then officers were asked to rank how effective they thought their chosen action would be. The data were analyzed using repeated-measures analyses of variance. The authors found that the CIT-trained officers, relative to the non-CIT-trained officers, chose tactics involving less escalation, predicted their non-physical interventions would be more effective, and predicted their physical interventions would be less effective. This led the researchers (Compton et al., 2009, p. 743) to conclude, "CIT training may slow the advance toward forceful measures, ultimately lessening the risk of physical confrontation, injury, and

perhaps even death.” These results are promising, yet are theoretical, given that they are based on self-report surveys.

Investigative journalist Erica Goode, of *The New York Times* (2016), conducted a review of the extant literature to determine whether proof exists that Memphis Model CIT programs lead to less force being used by officers in real life. Goode was able to secure yet-to-be published data from Portland that showed a 65% reduction in the use of force by Portland Police Bureau (PPB) officers between 2008 and 2014. Also, PPB averaged eight law enforcement shootings per year from 2002 to 2005, but then reduced the number to three per year from 2007 to 2014. Finally, from 2004 to 2014 allegations of excessive force against the bureau fell 74%. It is possible that some or all of these improvements came as a result of PPB’s Memphis Model CIT Program. Then again, it is also possible that other factors were partially or entirely responsible for these changes.

The University of Pittsburgh’s Center of Excellence for Mental Health and Justice published a paper (PCE, 2017) summarizing the current state of research on the effectiveness of Memphis Model CIT programs. The Center concluded that the 40-hour CIT curriculum has been shown to (1) increase officers’ positive attitudes toward people suffering from mental illness, (2) increase officers’ knowledge about mental health issues, (3) increase officers’ level of confidence and comfort when dealing with people experiencing mental health crisis, and (4) improve officers’ ability to connect mentally ill people with beneficial community resources. All of these outcomes are quite positive and potentially helpful. However, according to PCE (2017, p. 5), “No scientific studies have examined whether CIT reduces officer or consumer injuries (although informal evidence suggests that CIT is associated with reduced officer injuries).” It is noted that scientific studies must necessarily include either a comparison group, or use a pre-post design with a manipulated intervention, in order to be considered valid. Canadian researchers Coleman and Cotton (2010, p. 6), have a similar critique of the available research on Memphis Model CIT programs: “There is little outcome research or data-based evidence to inform the exact nature of an effective program, and the research that does exist does not provide guidance as to which components of a learning program are most effective.”

D. Alternative Mental Health Crisis Intervention Programs

While the Memphis Model CIT Program is the most widespread mental health crisis intervention program today, other models exist. Of these, one that is well regarded is the Los Angeles Model Co-Responder Program (Schwarzfeld, Reuland, & Plotkin, 2008). In a Co-Responder program, civilians who are licensed mental health workers ride in police vehicles with police officers, and respond to mental health crisis calls as a duo. As with the Memphis Model, the Los Angeles Model seeks to leverage the resources that mental health workers and agencies can bring to bear on calls for police service. The Overland Park Police Department (OPPD) in Kansas, with 250 officers, hired a co-responder in 2014 to assist officers with mental health calls. The co-responder, Megan Younger, helped divert people experiencing acute mental health crises 129 times during her first year with OPPD, and the department says that her work avoided 40 arrests, saving the department \$61,000 (Madhani, 2016). Duluth, Minnesota is another community in which the local police department has implemented a Los Angeles Model Co-Responder Program; social workers are now embedded with police units to help connect people experiencing mental health problems with social services (Smith, 2016).

A third type of mental health crisis intervention program is the Houston Model Hybrid Program. Houston's system was piloted in 1999 and reached its current form in 2008. It combines CIT-style training with co-responder embedding. The Houston Police Department (HPD) puts all of its recruits, and all volunteering veteran officers, through a 40-hour CIT-style training program. As of 2016, HPD had 2654 officers who completed that training. From this pool of trained officers, HPD has formed 12 teams of full-time, dedicated Crisis Intervention Team officers. Each team also has civilian clinicians that hold masters-level licensing in mental health care. In 2015 alone, Houston Model Hybrid Program officers responded to over 35,000 mental health crisis calls (HPD, 2017).

Many police agencies across the country have implemented mental health crisis intervention trainings within their departments without adopting one of the three main models. Typically, such trainings last from several hours to two days in length, and are delivered to patrol officers and supervisors during periodic continuing-education events. The Barbara Schneider Foundation, for example, delivers single-day trainings on mental health crisis intervention to interested police agencies in Minnesota, in addition to the 40-hour Memphis Model CIT Program it provides (Smith, 2016). In 2016 the Chicago Police Department instituted a new mandatory de-escalation training that incorporates a sizable mental health component. This Chicago program lasts 2 days, and involves live scenarios and exercises involving problem-solving and force decisions (Madhani, 2016).

E. Budgetary Concerns

According to the Bureau of Justice Statistics' comprehensive national census of law enforcement training centers, 95% of recruit academies address mental health crisis intervention, and spend an average of 10 hours on the topic (Reaves, 2016). There is, however, a significant amount of variation in the amount of training officers receive on the topic, with the range generally falling somewhere between zero and 40 hours. Although there are exceptions, smaller departments generally have smaller per-officer training budgets, which can affect the amount of mental health crisis intervention training officers receive (Pauly, 2013). For example, Richfield, Minnesota has a total of 45 officers on its force; putting them all through the Memphis Model CIT Program has been deterred because of the excessive cost of doing so (Smith, 2016). However, nearby St. Paul, Minnesota, has made the training mandatory, and is able to send 130 officers each year through the program; soon all 609 officers will be certified. In Minneapolis, an expenditure of \$150,000 in funds this year will allow the police department to finish sending every patrol officer and supervisor through the training, around 700 officers total (Smith, 2016). Eden Prairie, Minnesota, put all 42 of its patrol officers through the 40-hour training, which cost a total of \$20,000 (Smith, 2016). In addition to the large price-tag associated with in-depth mental health crisis intervention training, police departments must also work to adjust staffing levels to ensure patrol coverage when officers are away from their regular duties. The expenses associated with the trainings are significant. Even Laura Usher, a program manager for the National Alliance on Mental Illness (NAMI), acknowledges that, "most law enforcement agencies can't afford to train everyone" (Pauly, 2013).

Police leaders, mental health advocates, and community members recognize the importance of mental health training, but departments have a difficult time budgeting for it, given all the competing demands that must be weighed (Madhani, 2016). Despite the costs of

CIT training, there are also significant financial benefits. San Antonio's Center for Health Care Services, for example, reports that the San Antonio Police Department's Memphis Model CIT Program has contributed to savings of more than \$50 million in the county mental health system (Lucas, 2016).

F. The Usefulness of Mental Health Crisis Intervention Training

It has been argued in this section that:

- (1) people suffering from mental illnesses, especially those in acute crisis, constitute a vulnerable population with disproportionate levels of police contact (DeGue et al., 2016; Gaines & Kappeler, 2016);
- (2) encounters between police officers and mentally ill subjects, all too often, have tragic results—between 25% and 50% of deaths at the hands of law enforcement officers involve people with mental illness (DeGue, Fowler, & Calkins, 2016; Lowery et al., 2015);
- (3) there is significant consensus among qualified experts that outcomes for mentally ill people need to be improved through increased mental health services, improved police training, and increased systemic coordination (Lowery et al., 2015; Smith, 2016; Bjorhus, 2016; Compton et al., 2009; Miller & Hess, 2008; Goode, 2016);
- (4) mental health crisis intervention training programs, such as the Memphis Model CIT Program, and others, show encouraging preliminary results regarding their ability to safely reduce citizen deaths by law enforcement officers (Skeem & Bibeau, 2008; Smith, 2016; Compton et al., 2009; Goode, 2016);
- (5) no truly scientific studies have demonstrated that existing mental health crisis intervention programs, including the Memphis Model CIT Program, and others, safely reduce citizen deaths by law enforcement officers (PCE, 2017; Coleman & Cotton, 2010); and
- (6) there is significant variation in the amount and type of mental health crisis intervention training that America's police forces receive—although this is often related to budgetary constraints, there is also significant opportunity to save costs on a society-wide level by implementing such police training programs (Reaves, 2016; Pauly, 2013; Smith, 2016; Madhani, 2016; Lucas, 2016).

Therefore, it is the *partial* conclusion of the present seminar paper that **mental health crisis intervention trainings are likely to safely reduce citizen deaths by law enforcement officers**. However, there is a glaring lack of high-quality, scientific research regarding the impacts and effectiveness of such trainings.

Section VI – De-Escalation Training

A. Calls for Police Officers to Minimize the Use of Force through De-Escalation Training

Just after noon on August 9, 2014 Police Officer Darren Wilson, of Ferguson, Missouri, was on routine patrol when he encountered a pair of young men walking down the middle of a residential street. The men had recently robbed a nearby convenience store and assaulted a clerk. Both men were unarmed. When Officer Wilson stopped and contacted them, the situation quickly escalated into a violent physical confrontation. One of the men, Michael Brown, punched Officer Wilson in the face and blocked him from exiting his squad vehicle. When Officer Wilson drew his duty handgun, Brown attempted to disarm the officer. During the fight for control of the gun, Officer Wilson fired a single round, striking Brown in the hand. Brown and his companion then fled, with Officer Wilson pursuing them on foot. After a brief chase, Brown stopped, turned around, and charged at the officer, only to be stopped in his tracks by a fusillade of bullets. Officer Wilson's shots struck Brown 12 times, killing him instantly. (United States Department of Justice, 2015).

To call the shooting death of Michael Brown a significant event in the history of American law enforcement would be a gross understatement. As news of this incident spread, peaceful protests and violent riots sprang up around the country. While much of the outrage over the fatal shooting can be attributed to misinformation about the facts of the case—such as the disproven claim that Brown was executed while trying to surrender—many people felt it was an example of police being too willing to employ deadly force. Within days, activists, law enforcement educators, police leaders, and the general public were demanding that police take steps to reduce their use of deadly force, especially in situations involving unarmed subjects (Gilbert, 2017).

Soon, President Obama convened a Task Force on 21st Century Policing, and charged it with examining the use of deadly force and related issues. In May of 2015 the task force released its final report, which placed a heavy emphasis on the need for “de-escalation training” (Presidential Task Force, 2015, p. 20). The term “de-escalation” was not new, but it had not yet entered the public consciousness. Law enforcement trainings that today would be called “de-escalation training” have been around for decades (Gilbert, 2017), but these programs have not typically been central to use-of-force education.

After holding a series of conferences focusing on de-escalation training and other related measures, PERF released a report in January of 2016 called “Use of Force: Taking Policing to a Higher Standard.” This report outlined a 30-point plan for safely reducing the frequency and severity of uses of force by American police. To effectively de-escalate dangerous encounters between police and citizens, the PERF report advises that officers: (1) use direct verbal communication throughout the entirety of an interaction, (2) rely primarily on calm, low-level speaking, not on harsh commands, (3) increase distance and cover to “slow situations down,” which will allow more time for officers to communicate, marshal resources, and develop plans of action, (4) employ the least amount of force that is “possible and safe,” since unnecessarily high levels of force often spur further escalation, and (5) continually evaluate situations and adjust responses appropriately (PERF, 2016a). In order to achieve this, PERF has written that police agencies must move beyond “shoot-don’t-shoot” simulation trainings, and instead make use of

formal decision-making models that allow for a much wider range of options, including tactical disengagement and less-lethal alternatives (PERF, 2015).

Training officers in de-escalation involves inculcating new skill sets. Because of the primacy of communications during de-escalation efforts, PERF recommends that all police officers receive training in basic negotiation skills (PERF, 2016a), the type of which are typically only given to designated specialists within SWAT and hostage recovery teams. Additionally, officers must be trained that rushing toward dangerous situations, heroic as it may be, is often not the best course of action. Instead, “officers should be trained to use distance and cover to create a “reaction gap” between themselves and the individual, and to consider all options for responding” PERF, (2016a). To make these new approaches a reality, PERF writes that agencies must greatly increase the amount of training hours officers get on de-escalation, and train officers as teams to promote “coordination and consistency” and improve performance in the field (PERF, 2016). De-escalation training should be scenario-based, challenging, realistic, and provide for a full range of officer options (PERF, 2016a).

Calls for police agencies, nationwide, to commit to de-escalation training have not just come from the President’s Task Force and the Police Executive Research Forum. Members of the general public, policy makers, and many scholars are also supportive of the effort. Maria Haberfeld, a veteran of the Israel Defense Forces and the Israel National Police, and now a professor at the John Jay College of Criminal Justice in New York researches policing. According to Haberfeld, “the majority of police officers are overwhelmingly trained with a focus on the technical part of use of force, and are not trained enough in the emotional, psychological, physiological aspects of use of force” (Campbell, 2014). In Haberfeld’s view, many police agencies claim they are already training de-escalation in an effective and integrated way, but she disagrees (Campbell, 2014). David Rudovsky is a Senior Fellow at the University of Pennsylvania Law School, a criminal justice scholar, and a civil rights attorney. Rudovsky has called for police to shift from a “warrior” model of policing to a “guardian” model (Rudovsky, 2017). Seth Stoughton, a law professor at the University of South Carolina and former Tallahassee police officer, explains that police who view their role as guardians see themselves as peacekeepers and protectors, while warriors see themselves as enforcers and wielders of authority. Stoughton urges the guardian mindset (Lantigua-Wiliams, 2016). The shift in thinking from being warriors to guardians is at the heart of de-escalation training.

Chuck Wexler, Executive Director of PERF, is painfully aware of the difficult position American police officers find themselves in. The public expects officers to make split-second, life-and-death decisions involving subjects who are often armed and extremely dangerous. He writes, “The preservation of life has always been at the heart of American policing. Refocusing on that core ideal has never been more important than it is right now” (PERF, 2016b, p. 4). Wexler acknowledges that “in nearly all the use-of-force incidents that have proved controversial, the officers should not be faulted, because their actions reflected the training they received.” In the majority of cases in which police officers employ deadly force, the subjects killed have posed imminent threats with firearms. However, 30% of the time when police shoot and kill subjects, those subjects have no firearms: 16% had knives, 9% were unarmed, and 5% were armed only with a motor vehicle (PERF, 2016b, p. 7). Since there are approximately 1000 people killed each year by American police, this 30% figure amounts to 300 lives. It is these cases, in which the subject has no firearm, that de-escalation training is mainly intended to impact (PERF, 2016b). De-escalation is about avoiding creating “an exigency that justifies use of

lethal force” (PERF, 2016b, p. 47). According to Wexler, “What is happening now is right at the front end of a movement” (Johnson, 2015).

B. Disambiguation of De-Escalation Terminology

Although the term “de-escalate” has been in use since at least the early 1960s (Dictionary.com, 2017), it has only recently become a buzzword (Sweeney, 2016). While no universally accepted definition for de-escalation exists, there is general agreement that de-escalation training “teaches officers to slow down, create space, and use communication techniques to defuse potentially dangerous situations” (Gilbert, 2017).

The use of the term de-escalation varies from one location to another. What is called de-escalation in Seattle, for example, is called “force mitigation” in Chicago (Sweeney, 2016). In Los Angeles, the term “preservation of life” is preferred (Klemack, 2015). Police in Kansas City have adopted the term “tactical disengagement and redeployment” (Rice, 2015). In San Diego de-escalation training is labeled “emotional intelligence” training (Johnson, 2015). Cynics of de-escalation have pointed out that police of bygone eras would call de-escalation “cowardice” (Rice, 2015). Another pejorative term for de-escalation is “hug-a-thug.” Whatever term one uses to refer to de-escalation, the concepts of “sanctity of life” and “preservation of life” are always essential, and often articulated. In the words of Los Angeles Police Department Chief Charlie Beck, “We’ve always said that preservation of life is the number one thing in policing and we want to make sure that everybody understands that” (Klemack, 2015).

C. The Current State of De-Escalation Training

As of May 2017, 16 states require that police officers receive some amount of de-escalation training while 34 states require none. Of the 16 that require de-escalation training, eight of them introduced their requirements after the previously described August 2014 officer-involved shooting in Ferguson, Missouri. Of the 34 states that do not require de-escalation training, 24 have police certification boards with the power to mandate such a requirement, while the remainder have their requirements set by state legislatures. (Gilbert, 2017).

As was discussed in section two of the present seminar paper, per the categories of the U.S. Bureau of Justice Statistics, de-escalation training is measured as a component of “use-of-force” training. As such, we know that American police officers, during their initial training, currently receive, on average, 21 hours of training on a combination of agency use-of-force policies, de-escalation tactics, and crisis intervention techniques. This 21 hours accounts for an average of 13% of use-of-force training time, and 2% of total training time (Reaves, 2016). While some officers receive much more de-escalation training than others, some receive no such training at all. PERF conducted its own survey of law enforcement agencies to reveal more data than was available by the BJS census. According to PERF, 65% of police agencies devote some amount of time to continuing education for officers on the topic of de-escalation (Gilbert, 2017). However, PERF also found that, on average, agencies spend more than three times as much of their in-service training time on firearms shooting than they did on de-escalation (Gilbert, 2017). The most common reason for police chiefs to forgo de-escalation training are “cost, lack of staff,

and a belief that the training is unnecessary or constitutes a rebuke of traditional policing” (Gilbert, 2017).

Investigative journalist Curtis Gilbert, writing for American Public Media in May of 2017, obtained through open records requests all the information that was available regarding fatal officer-involved shootings in 2015 and 2016 of unarmed subjects in states that require no de-escalation training. Out of 34 total cases for which data was available, Gilbert (2017) found that more than half of the officers involved in these fatal shootings received two or fewer hours total of de-escalation training since 2012.

In an effort to better understand the content of de-escalation training, Annie Sweeney, an investigative journalist with the Chicago Tribune, approached the Chicago Police Department (CPD). In September of 2016 Sweeney was given special permission to see, firsthand, what the de-escalation training put on for veteran police officers consisted of. Sweeney reports that CPD’s two-day training involved classroom instruction on the first day and live scenarios on the second day. Classroom topics included confrontation responses, threat assessments, active listening, mediation, and empathy. Live scenarios were designed to test officers’ reactions and judgements, and included reminders that it is appropriate to use firearms under designated circumstances. Time was also devoted to refreshing officers’ knowledge of the department’s use-of-force model and guidelines. Sweeney reports that officers commented that the training was not new material, but that getting a “refresher” was appreciated, and doing so more often would be welcome (Sweeney, 2016). Criminal justice researchers have long observed that police officers use verbal techniques as their primary tool in dealing with potentially violent subjects, and that enhancing these skills through training is both possible and beneficial (Miller, 2015).

D. Analysis of De-Escalation Training Impacts

The present author completed a review of the available literature on the impacts of de-escalation programs in the United States on local rates of fatal officer-involved shootings. From this review, five case studies emerged: (1) Miami-Dade Police Department circa 1985, (2) Portland Police Bureau circa 2003, (3) Las Vegas Metro Police Department circa 2012, (4) Salt Lake City Police Department circa 2015, and (5) New York City Police Department between 1969 and the present.

E. Case Study: Miami-Dade Police Department, 1985

The Miami-Dade Police Department (MDPD, previously called “Metro-Dade Police Department”), in south Florida, experienced a series of controversial police shootings in the late 1970s and the early 1980s that led to considerable civil unrest (Prenzler, Porter, & Alpert, 2013; Klinger, 2010). In order to improve community relations and address the proximal factors that led to the shootings, MDPD formed a partnership in 1985 with a research and policy institute called the “Police Foundation.” Together the organizations created a program to “enhance patrol officers’ skills in defusing the potentially violent situations they encounter every day” (Prenzler et al., 2013, p. 346; Police Foundation, 1988, p. 6). After analyzing contextualized patterns of force used by officers, the partnership developed a three-day training program that included use- of-force lectures, case history video presentations, and reality-based live scenarios featuring

professional actors portraying potentially violent subjects (Prenzler et al., 2013; Klinger, 2010). A randomly determined half of MPDP's officers were given the intensive training, creating a full experimental design. The Police Foundation analyzed pre- and post-intervention data from all MPDP officers, which covered many thousands of hours of patrol time and thousands of "potentially violent situations" (Prenzler et al., 2013, p. 347).

The Police Foundation found notable reductions in the levels of force used by the officers who received the three-day de-escalation training, as compared to the officers in the control group (Police Foundation, 1988). Subsequent regression analysis of the original data (Klinger, 2010) controlled for situational variables, supported the initial findings of less force used by the officers who completed the de-escalation training, and was able to quantify the reduction as one-quarter of a level less. The subsequent analysis also addressed the issue of excessive force (Prenzler et al., 2013), and found that the officers in the control group, who used more force, had not used impermissible levels of force (Klinger, 2010). Rather, it was determined that both groups of officers performed their jobs legally and according to policy, but that the officers trained in de-escalation were able to achieve their objectives with less force used (Prenzler et al., 2013).

The MDPD Violence Reduction Project did not focus strictly on safely reducing the use of deadly force by police officers, but instead sought to test the question of whether a three-day de-escalation training could reduce overall levels of all types of force used. Still, the MDPD data is relevant to the present seminar paper. Because deadly force is the highest possible level of force, a reduction in the level of force used has the potential to convert an otherwise deadly force incident into a non-force or less-lethal event. It is also worth mentioning that MPDP's de-escalation training focused on alternative actions officers could take once force was already situationally permissible. If the training had included techniques to prevent such situations from developing in the first place, it is possible that the program's results could have been even stronger (Prenzler et al., 2013).

F. Case Study: Portland Police Bureau, 2003

The Portland Police Bureau (PPB) experienced a period in the late 1990s of controversy and community outcry over a series of fatal police shootings. As a result, a number of reform efforts were undertaken to reduce the level and amounts of force used by the police; one focused on "officer-involved shootings" and another addressed "broader force issues" (Prenzler et al., 2013). In 2003, the City of Portland, through its Independent Police Review (IPR) Division, assessed the fatal police shootings that occurred between 1997 and 2000. While the IPR found that many of the shootings showed excellent tactics, many featured "field tactics that unnecessarily exposed officers to harm and increased the likelihood that they would need to use deadly force to defend themselves" (Prenzler et al., 2013; PARC, 2003, p. 2).

In response, PPB implemented policy, procedural, and supervisory changes that ultimately redefined appropriate levels of force to be used and tactics employed by officers, and trained accordingly (Prenzler et al., 2013). A key part of this process was the establishment of a Use of Force Review Board within PPB, so that lessons could be learned by dissecting officer-involved shootings incidents, and applied to new policies and trainings aimed at employing minimal levels of effective force. From 2005 to 2009 PPB saw its annual number of officer-

involved shootings decrease from nine to one (Prenzler, Porter, & Alpert, 2013). In 1998 and 1999, two of the years with greatest public outcry, there had been 10 shootings annually. In its official assessment reports, the Police Assessment Resource Center praised the PPB for its excellent results and strong implementation of the IPR recommendations regarding what would now be termed de-escalation (PARC, 2006 & 2009).

G. Case Study: Las Vegas Metro Police Department, 2012

In January of 2012 the United States Department of Justice (DOJ), through its Office of Community Oriented Policing Services (COPS Office), launched a new project called the “Collaborative Reform Initiative for Technical Assistance,” with the Las Vegas Metro Police Department (LVMPD) as its first partner agency. This collaborative effort is designed to be voluntary, long-term, and not court-ordered, making it different from a consent decree. The goals for LVMPD that the collaborative effort set forth were to: (1) reduce the number of officer-involved shootings, (2) reduce the number of people killed by LVMPD officers, (3) change the culture of LVMPD regarding deadly force, and (4) enhance LVMPD officer safety (Collins, Cole, Finn, & Lawrence, 2017).

The training portion of the collaborative effort began in January of 2012 and ended in May of 2014. “Through the use of Reality-Based Training (RBT) and other forms of instruction, officers are being encouraged to slow down, think, and try to de-escalate situations, rather than just react” (Collins et al., 2017, p. 10). Use-of-force training for LVMPD officers now emphasizes such de-escalation tactics as not closing the distance with suspects prematurely and waiting, when appropriate, for additional officers to arrive on scene prior to subject engagement (Collins et al., 2017).

In 2017, the first full report of the outcomes connected to the collaborative effort were released, with 2015 being the most recent year with full data included. According to the COPS Office, “the number of officer-involved shootings has declined notably since the start of the [the program],” with a 36% reduction seen between 2010 and 2015, with 25 and 16 shootings, respectively (Collins et al., 2017, p. 6). Additional data show that LVMPD officers were involved in 10 shootings in the following year, seven of them non-fatal, making the 2016 figures the lowest in 20 years (Torres-Cortez, 2017). Proud of these results, Clark County Sheriff Joe Lombardo said in an interview, “At a time when other agencies are under a great deal of public scrutiny over police use of force, this agency did some hard work five years ago and underwent changes with the guidance of the COPS Office” (Torres-Cortez, 2017).

H. Case Study: Salt Lake City Police Department, 2015

In mid-2014 and early-2015, police officers with the Salt Lake City Police Department (SLCPD) killed two men in justified shootings; in the first shooting the man was armed with a shovel, and in the second the man was unarmed (Smart, 2016). As a result, Police Chief Mike Brown implemented a de-escalation program grounded in realistic live scenarios. Officers now spend 24% of their training time practicing de-escalation skills, and only 6% on firearms (Smart, 2016). Since late-2015 SLCPD officers have not had a single fatal encounter with the public (Macias, 2017; SLCC, 2017). According to Chief Brown, “The Salt Lake City Police Department is

probably one of the leading agencies in the country as far as how we train and deploy and use these tactics to de-escalate and save lives” (KSTU, 2017).

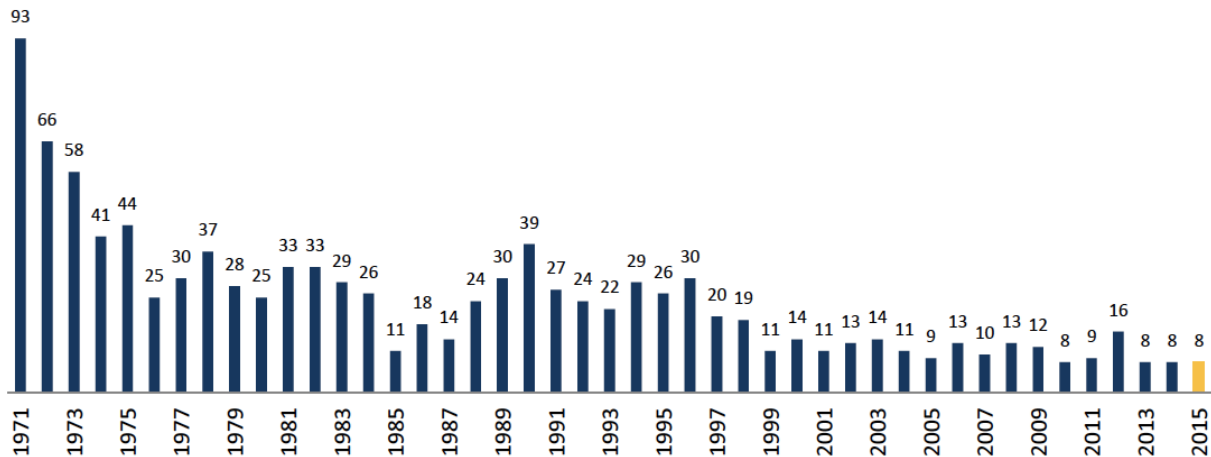
It is certainly possible that SLCPDs success is simply happenstance, and has no relation to its de-escalation training. Still, there is body camera footage in circulation of an incident that reflects the department’s new approach in action. In June of 2016, several months after the introduction of the de-escalation training, SLCPD were called to deal with a man who was brandishing a knife in the street. The responding officers approached the man in a coordinated manner and gave ground when he advanced on them. Then, as planned, another officer flanked the man and incapacitated him with a Taser. He was then taken into custody with no injuries to any party (Adams, 2017).

I. Case Study: New York City Police Department, 1969 – Present

Perhaps the greatest single example of the potential for de-escalation training to safely reduce the use of deadly force by law enforcement officers comes from America’s largest police force, the New York City Police Department (NYPD). In 1969, NYPD adopted Department Order SOP 9, which outlines the department’s investigation and review process (NYPD, 2016). According to the rules laid out in SOP 9, every discharge of a firearm linked to an NYPD officer is thoroughly investigated and documented, and within 90 days a final incident report is published and routed to the Chief and other staff (NYPD, 2016). After determining whether the officer involved receives any disciplinary or legal sanctions, the department analyzes “the circumstances of the discharges as they relate to the tactics employed, equipment available, and what can be learned and improved upon from these rapidly unfolding incidents. A team of investigators assesses strategies, creates lesson plans, and lectures in-service audiences so that members performing enforcement duty are made aware of best practices and tactical concerns in a timely manner” (NYPD, 2016, p. 9).

As a result of SOP 9, the agency’s policies and training procedures have been continually improved and updated. Today, NYPD policy states, “Only the amount of force necessary to overcome resistance will be used” (NYPD, 2016, p. 4). Departmental “firearms training emphasizes that the ultimate goal of every police officer is to protect life. This means all lives: those of bystanders, victims, subjects, and other officers” (NYPD, 2016, p. 59). NYPD has “made restraint the norm” (NYPD, 2016, p. 10). The impacts of this approach have been tremendous, and have been tracked for the past 46 years. As illustrated in the following figure, over the course of 44 years of data, fatal shootings by NYPD officers decreased more than 91%! While this change is likely not purely a result of the department’s dedication to implementing what we would now call de-escalation skills, a strong case can be made for its impact. There was a precipitous drop in fatal shootings by officers after SOP 9 was first implemented, and sustained and continued progress has been made since then, with fluctuations between the late-1980s and the mid-1990s.

Figure 4: NYPD Deadly Force Data
Subjects Shot and Killed by Officers, 1971-2015



(Source: NYPD 2016, p. 57)

In 2015, NYPD commenced formal de-escalation training, emphasizing the “4 Cs” of *cover, concealment, containment, and communication* (NYPD, 2016). However, the four-decade-old SOP 9 approach, with its goals and methods, can fairly be interpreted as an early model for developing value-driven and experience-informed training procedures that would today be labeled de-escalation training. In 2015, the most recent year for which data is available, NYPD officers shot and killed a total of eight subjects across eight separate incidents, tied for the lowest annual number on record. In two of these incidents the subjects fired upon officers with handguns prior to being killed; in two incidents the subjects pointed handguns at officers before being killed; in one incident the subject opened fire upon officers with a fully-automatic AK-47 machine gun prior to being killed; in one incident the subject stabbed an officer in the torso with a large knife before being killed; in one incident the subject attempted to disarm an officer who was arresting him prior to being killed; and in one incident an unarmed subject with a history of mental illness resisted arrest and caused “significant lacerations” to the heads of both officers that required hospital treatment before being shot and killed by one of the officers (NYPD, 2016, pp. 61-64). Eight fatal police shootings in a single year in New York is an extremely low number, considering national averages. Out of America’s 765,000 full-time law enforcement officers, 36,000, or 4.7%, are part of the NYPD. As there are approximately 1000 annual fatal police shootings in the country, a simple calculation reveals that 47 fatal police shootings per year would put NYPD on par with the national mean.

J. What About Europe?

English and Scottish police, for the most part, do not carry firearms (Alexander, 2016), yet they still have to deal with actual and potential threats posed by subjects with knives and other weapons. In contrast to the current situation in America, “No police officer in England has died

from a weapon attack during the past two years, according to the most recent published data, and none have been involved in fatal shootings during that period” (Appuzo, 2015). In Scotland, the police “have not shot a single person in the last three-and- one-half years,” despite responding to 1.8 million emergency calls for service per year (PERF, 2015, p. 8). How is this possible? According to Professor Haberfeld of John Jay College of Criminal Justice, the answer is that these countries have “much more extensive, in-depth training than we have” (Campbell, 2014). In Haberfeld’s view, American police are being “irresponsible” by trying to save money on training, including de-escalation training (Campbell, 2014). English and Scottish police officers are well-versed in “tactical withdrawal,” verbal control techniques, the use of less-lethal weapon systems such as batons, pepper spray, and Tasers, and team-tactics involving the use of plastic shields (Alexander, 2016).

Most other European countries, including France, the Netherlands, Norway, Sweden, Finland, Germany, also boast rates of officer-involved shootings and fatalities that are dramatically lower than in the United States (Hirschfield, 2015; Stute, 2014). While experts do not agree on the reasons for the gross disparities between America and Europe on rates of police use of deadly force, the prevalence of firearms in the United States is a clear difference. In England and Wales, for example, there are 6.2 guns per 100 people, while America has 112.6 guns per 100 people, an 18-fold difference (Alexander, 2016).

American police officers shoot and kill approximately 160 people annually who are armed with knives, 90 people who are unarmed, and 50 people armed only with a motor vehicle (PERF, 2016b, p. 7). In the last several years British and Scottish police have killed zero people under such circumstances. It is certainly possible that if American police were to receive more British- and Scottish-style de-escalation training that America’s rates of such killings could be reduced.

K. The Spread of De-Escalation Training

Since its emergence a hot topic in law enforcement in 2015, de-escalation training has come to be embraced and implemented by hundreds, if not thousands of individual police agencies. A very truncated list of departments that are working quickly to give their officers more training in de-escalation skills includes: Chicago (Lindsay, 2016), Dallas (Gilbert, 2017), Kansas City (Rice, 2015), Los Angeles (Klemack, 2015), Minneapolis (Gilbert, 2017), Oakland (PERF, 2015), San Diego (PERF, 2015), San Francisco (Lee, 2016), and Seattle (Williams, 2015). While there are “no unassailable, scientific studies showing that de-escalation training leads to fewer police shootings,” ample anecdotal evidence exists to support its beneficial impact (Gilbert, 2017).

L. De-Escalation Training Assessment

It has been argued in this section that:

- (1) soon after a fatal officer-involved shooting in Ferguson, Missouri, in August of 2014, activists, law enforcement educators, police leaders, and the general public began demanding that police take steps to reduce their use of deadly force and increase the

- amount of training officers receive in de-escalation (Gilbert, 2017; Presidential Task Force, 2015; PERF, 2015; Rudovsky, 2017);
- (2) de-escalation is also known as force mitigation, preservation of life, tactical disengagement and redeployment, and emotional intelligence, and often linked to the concepts of sanctity of life and preservation of life (Sweeney, 2016; Klemack, 2015; Johnson, 2015);
 - (3) most states do not require that officers complete de-escalation training, but a majority of officers ultimately receive de-escalation training, although the time dedicated to the topic is much less than for firearms (Gilbert, 2017; Reaves, 2016);
 - (4) anecdotal examples exist that suggest the effectiveness of de-escalation training in safely reducing the number of citizen deaths at the hands of law enforcement officers, including Miami-Dade Police Department in 1985, Portland Police Bureau in 2003, Las Vegas Metro Police Department in 2012, Salt Lake City Police Department in 2015, and New York City Police Department from 1969 to present (Prenzler et al., 2013; PARC, 2003; Collins et al., 2017; Macias, 2017; & NYPD, 2016);
 - (5) English and Scottish police have not killed any people in recent years, and their high level of de-escalation is largely credited for this result (Campbell, 2014; PERF, 2016b); and
 - (6) Ever more American police agencies are embracing and implementing de-escalation trainings for their officers (Lindsay, 2016; Rice, 2015; Klemack, 2015; Lee, 2016; Williams, 2015).

Therefore, it is the *partial* conclusion of the present seminar paper that **de-escalation trainings are very likely to safely reduce citizen deaths by law enforcement officers**. The MDPD Violence Reduction Project stands out in the literature as an excellent example of how police training programs can be implemented and studied. Researchers and law enforcement officers paired up to address a real-world problem, implemented their pilot program with a randomized control group, and analyzed the results.

Section VII – Conclusion

A. Seminar Paper Approach

The aim of the present seminar paper has been to identify and synthesize the existing empirical evidence regarding the effectiveness of specific police training programs in safely reducing the use of lethal force by law enforcement officers. To accomplish this task, the present author read and analyzed dozens of criminal justice textbooks, scores of peer-reviewed scholarly articles, hundreds of popular press articles, and drew upon knowledge gained over the course of seven years of police work and three years of graduate studies. The Big Three training programs that emerged from current literature and formed the object of study were: (1) implicit bias awareness training, (2) mental health crisis intervention training, and (3) de-escalation training. These programs, although they have existed in one form or another for decades, have recently captured the public's attention as never before. To many people, each of The Big Three makes intuitive sense and proffers a facile solution to the quandaries created when police use deadly force. A vocal and influential number of police administrators, trainers, activists, politicians, journalists, and academics have lauded The Big Three, underscoring the need to assess them fairly.

The approach taken in the present seminar paper is unique. While many researchers have contributed to the body of knowledge on police use of force, none have compiled the *extant empirical research* in the manner herein. Rather than addressing *general use of force*, the present work focuses on *deadly force*; rather than studying *all types of interventions*, the present work focuses on *police training interventions*. Furthermore, the present paper seeks to *broadly survey multiple promising training programs*, not examine a single iteration of a training program or explore a single aspect of policing. A significant amount of relevant research has been undertaken in recent years, which has informed the present seminar paper. Academics who are on the forefront of this important work include Geoffrey Alpert, David Klinger, Laurence Miller, Tim Prenzler, Patrick Solar, and William Terrill.

B. Research Findings

As detailed at length in Sections IV, V, and VI of the present seminar paper, the existing evidence supports the finding that implicit bias awareness training is unlikely to safely reduce citizen deaths by law enforcement officers, but mental health crisis intervention training is likely to do so, and de-escalation training is very likely to do so.

C. General Discussion

While it is certainly true that implicit biases exist, and that all people hold them, especially regarding race, laboratory and real-world evidence shows that putting police through implicit bias awareness trainings will likely not have any effect whatsoever on the number of people killed by law enforcement officers. Despite beliefs and claims to the contrary, American police officers do not unduly target African-Americans through deadly force. However, implicit bias concepts are very important to incorporate into the design of firearms training exercises. One of the primary reasons why police officers are currently able to conduct deadly force threat

assessments in a racially unbiased manner is that standard firearms training programs avoid correlating subject race with threat likelihood. Furthermore, it is worth repeating here that although implicit bias awareness training is not likely to reduce the use of deadly force, it is possible that this type of training could be of benefit in other areas of police work. These other areas could include outreach efforts, community partnerships, problem-solving initiatives, criminal investigations, and less-lethal force.

In America today, mental illness is a serious problem that often goes undertreated. People suffering from mental health crises have disproportionately high levels of police contact. These contacts, unfortunately, can end with law enforcement officers lawfully employing deadly force against subjects experiencing mental health crises. There are encouraging preliminary results suggesting that mental health crisis intervention training can safely reduce citizen deaths. Popular training models include Memphis' CIT Program, Los Angeles' Co-Responder Program, and Houston's Hybrid Program. Across the country many police agencies are implementing variations of these programs, with durations generally ranging from 16 to 40 hours. Despite the large body of anecdotal evidence that exists to support mental health crisis intervention training, no truly scientific studies have addressed its effectiveness.

De-escalation training is probably the most talked about, celebrated, maligned, and misunderstood training topic in the last several years. This type of training can go by many names, including tactical disengagement, force mitigation, or professional communications, and is linked to the concepts of sanctity and preservation of life. The essence of de-escalation training is to: (1) be cautious and circumspect when employing force, especially deadly force, and to, (2) whenever feasible, strategically increase distance and cover to allow for safer force tactics. While virtually all police officers currently receive de-escalation training, whether it is labeled such or not, there is ample and strong anecdotal evidence that increased de-escalation training safely reduces citizen deaths by law enforcement officers. There is also limited experimentally controlled data to support the same conclusion. Interestingly, many mental health crisis intervention training programs incorporate de-escalation training into their curricula, and the possibility exists that this is the reason for the likely effectiveness of those programs.

Although some people might advocate shifting existing training hours away from firearms training and into de-escalation training, doing so could be extremely dangerous. The current level of firearms training that police officers receive, approximately 70 hours per officer during the pre-service academy, has been proven to be sufficient for police officers to correctly identify deadly threats in high-stress emergency situations. The untrained public, in contrast, has been proven to make deadly errors in simulated high-stress emergency situations, and these errors follow patterns consistent with implicit racial bias. Reducing the number of hours of high-quality firearms training officers receive, at some point, would likely cause them to make the same errors in deadly-threat assessment that members of the general public make. Rather than shifting hours away from firearms training into de-escalation training, de-escalation training could be increased by raising the total amount of training hours officers receive.

Nearly 1000 citizens are killed each year by American police officers. The overwhelming majority of these homicides are legal, justified, and situationally necessary to address grave threats to public safety. However, the fact still remains that each and every death is a tragedy that wreaks a tremendous toll on all involved, and weighs heavily on society. Of these 1000 annual deaths: about 700 involve subjects threatening others with real or facsimile firearms, 160 are

precipitated by subjects armed with knives or swords, 90 feature subjects attacking others with their bare hands, and 50 in which the subject is posing a deadly threat with a motor vehicle. In other words: about 700 people are killed per year by American police when they threaten others with real or fake firearms, while another 300 who similarly die have edged weapons, no weapons, or a motor vehicle as a weapon. The potential for de-escalation and mental health crisis intervention trainings to safely reduce these death rates is likely more profound for those in the 30% category (not armed with a firearm) than those in the 70% category (armed with a firearm, real or perceived). If the examples of England, Scotland, and New York City could be emulated, and their success replicated, annual death rates could be dramatically reduced. De-escalation tactics are central to the deadly force training that police officers in England, Scotland, and New York City receive. The NYPD has been implementing de-escalation tactics for more than four decades, and in that time has safely reduced its annual rate of fatal shootings by police by more than 91%.

Although the focus of the present seminar paper is on evaluating police training programs that have been promoted for their potential to safely reduce the use of deadly force by law enforcement officers, there are certainly other things that hold promise in this area. *Section II – Literature Review* outlined the other major categories of potentially effective police innovation: laws and legal standards, agency policies, attitudes and philosophies, equipment and devices, monitoring and oversight, hiring and recruitment, data collection and reports, and contextual factors. Under the rubric of equipment and devices, unfailing less-lethal weapons may be developed in the future—perhaps a Star Trek-style phaser, set to stun. If a device existed that were as effective, reliable, and affordable as a handgun, yet posed no risk of death, it would be adopted overnight by all American police officers and replace their handguns. Current less-lethal weapons, unfortunately, are not sufficiently effective or reliable to serve this purpose. Falling under the category of contextual factors, changes in violent crime rates and gun ownership levels could drastically change the number of people that police kill. What causes shifts in violent crime rates is one of the most debated topics in criminal justice, and is beyond the scope of the present work, as are the merits of gun control measures.

In the absence of new, foolproof technologies, or sweeping societal changes that eliminate mortal danger, it is incumbent upon police agencies and other stakeholders to take rational, effective steps to safely reduce the use of deadly force by law enforcement officers. Specific training programs, especially de-escalation training and mental health crisis intervention training, hold the most promise in this area, as supported by the available evidence. However, there is a woeful lack of scientifically sound, randomized, controlled-intervention studies of police training programs. One clear avenue for progress on this front would be for any of America's 18,000 state and local law enforcement agencies to reach out to public health and criminal justice departments at research universities or institutions and collaborate on training projects. These projects could focus on The Big Three (or explore other areas), carefully measure before and after data, utilize random control groups, and produce published results. More such research would surely benefit police agencies, the field of criminal justice, and society as a whole.

References

- Adams, A. (2017, April 6). Body camera video documents SLCPD de-escalation training in action vs. man with knife. *KSL Broadcasting, Salt Lake City, Utah*. Retrieved from <https://www.ksl.com/?sid=43778896&nid=148>
- Adams, K. (1999). What we know about police use of force. In R. Dunham & G. Alpert (Eds.), *Critical issues in policing: Contemporary readings* (6th ed.) (2010, pp. 496-512). Long Grove, Illinois: Waveland Press, Inc.
- Alexander, B. (2016, October 27). Do British police tactics work for knife-wielding subjects? *Law Officer*. Retrieved from <http://lawofficer.com/tactics-weapons/do-british-police-tactics-work-for-knife-wielding-subjects/>
- Allen, J., & Sawhney, R. (2015). *Administration and management in criminal justice* (2nd ed.). Los Angeles, California: SAGE Publications.
- Amnesty International [AI]. (2015). *Deadly force: Police use of lethal force in the United States*. New York, New York: Amnesty International USA. Retrieved from <https://www.amnestyusa.org/reports/deadly-force-police-use-of-lethal-force-in-the-united-states/>
- Apuzzo, M. (2015, May 4). Police rethink long tradition on using force. *The New York Times*. Retrieved from <https://www.nytimes.com/2015/05/05/us/police-start-to-reconsider-longstanding-rules-on-using-force.html>
- Apuzzo, M., & Cohen, S. (2015, August 11). Data on use of force by police across U.S. proves almost useless. *The New York Times*. Retrieved from <https://www.nytimes.com/2015/08/12/us/data-on-use-of-force-by-police-across-us-proves-almost-useless.html>
- Associated Press [AP]. (2016, December 22). 2016 top stories. *Associated Press Interactive*. Retrieved from <http://interactives.ap.org/2016/2016-top-stories/>
- Barbara Schneider Foundation [BSF]. (2017, July 28). About. *The Barbara Schneider Foundation*. Retrieved from <http://thebarbaraschneiderfoundation.org/about/>
- Bennett, T. (1993). Community policing in Britain. In D. Dolling and T. Feltes (Eds.), *Community policing: Comparative aspects of community oriented police work*. Holzkirchen, Germany: Felix Verlag.
- Bjorhus, J. (2016, June 5). Police being forced to the front lines of mental health crisis. *Star Tribune*. Retrieved from <http://www.startribune.com/part-1-police-being-forced-to-front-lines-of-mental-health-crisis/374510841/>
- Blake, A. (2016, September 26). The first Trump-Clinton presidential debate transcript, annotated. *The Washington Post*. Retrieved from https://www.washingtonpost.com/news/the-fix/wp/2016/09/26/the-first-trump-clinton-presidential-debate-transcript-annotated/?utm_term=.2f8374932c6b

- Boykin, O., Desir, C., & Rubenfeld, J. (2016, January 1). A better standard for the use of deadly force. *The New York Times*. Retrieved from <https://www.nytimes.com/2016/01/01/opinion/a-better-standard-for-the-use-of-deadly-force.html>
- British Broadcasting Corporation [BBC]. (2017, June 5). Implicit bias: Is everyone racist? *BBC News Magazine*. Retrieved from <http://www.bbc.com/news/magazine-40124781>
- Bui, Q., & Cox, A. (2016, July 11). Surprising new evidence shows bias in police use of force but not in shootings. *The New York Times*. Retrieved from <https://www.nytimes.com/2016/07/12/upshot/surprising-new-evidence-shows-bias-in-police-use-of-force-but-not-in-shootings.html>
- Bureau of Labor Statistics [BLS]. (2013). *National census of fatal occupational injuries in 2012*. Washington, District of Columbia: U.S. Department of Labor. Retrieved from http://www.bls.gov/news.release/archives/cfoi_08222013.pdf
- Bureau of Labor Statistics [BLS]. (2014). *Occupational outlook handbook: Police and detectives*. Washington, District of Columbia: U.S. Department of Labor. Retrieved from <http://www.bls.gov/ooh/protective-service/police-and-detectives.htm#tab-3>
- Centers for Disease Control & Prevention [CDC]. (2005). *Injury statistics query and reporting system*. Atlanta, Georgia: Centers for Disease Control & Prevention. Retrieved from www.cdc.gov/injury/wisqars
- Chuck, E. (2016, October 1). Can 'implicit bias' training stop police officers from acting on hidden prejudice? *National Broadcasting Company [NBC] News*. Retrieved from <http://www.nbcnews.com/news/us-news/can-implicit-bias-training-stop-police-officers-acting-hidden-prejudice-n656071>
- Cole, G., Gertz, M., & Bunger, A. (2004). *The criminal justice system: Politics and policies*. Belmont, California: Wadsworth.
- Collins, M., Cole, C., Finn, J., & Lawrence, S. (2017). *Assessment of the collaborative reform initiative in the Las Vegas Metropolitan Police Department: A catalyst for change*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <https://ric-zai-inc.com/Publications/cops-w0834-pub.pdf>
- Compton, M., Bahora, M., Watson, C., & Oliva, J. (2008). A comprehensive review of extant research on Crisis Intervention Team (CIT) programs. *Journal of the American Academy of Psychiatry and the Law*, 36, pp. 47-55. Retrieved from <http://jaapl.org/content/jaapl/36/1/47.full.pdf>
- Compton, M., Demir Neubert, B., Broussard, B., McGriff, J., Morgan, R., & Oliva, J. (2009). Use of force preferences and perceived effectiveness of actions among Crisis Intervention Team (CIT) police officers and non-CIT officers in an escalating psychiatric crisis involving a subject with schizophrenia. *Schizophrenia Bulletin*, 37(4), pp. 737-745. doi:10.1093/schbul/sbp146

- Correll, J., Park, B., Judd, C., Sadler, M., Wittenbrink, B., & Keesee, T. (2007). Across the thin blue line: Police officers and racial bias in the decision to shoot. *Journal of Personality and Social Psychology*, 92(6), pp. 1006-1023. doi:10.1037/0022-3514.92.6.1006
- Cordell, L. (2014, August 15). Policing the police: Training, retraining, and yet more training are not the way to stop police brutality. *Slate*. Retrieved from http://www.slate.com/articles/news_and_politics/jurisprudence/2014/08/we_know_how_to_decrease_police_violence_like_what_we_ve_seen_after_the_michael.html
- Crary, D. (2015, December 31). AP editors' Top Ten news stories of 2015. *The Seattle Times*. Retrieved from <http://www.seattletimes.com/nation-world/ap-poll-islamic-state-conflict-voted-top-news-story-of-2015/>
- Crosby, A., & Lyons, B. (2016). Assessing homicides by and of U.S. law-enforcement officers. *The New England Journal of Medicine*, 375(16), pp. 1509-1511. doi:10.1056/NEJMp1609905
- Cummins, D. (2016, July 13). Are police shootings racially biased? *Public Broadcasting Service [PBS] News Hour*. Retrieved from <http://www.pbs.org/newshour/updates/police-shootings-racially-biased/>
- Curnutte, M. (2016, July 19). NAACP calls for de-escalation training for police. *The Cincinnati Enquirer*. Retrieved from <http://www.cincinnati.com/story/news/2016/07/19/naacp-calls-de-escalation-training-police/87284186/>
- Dawson, S. (2014). *Written testimony in support of 2SSB 5311, Crisis Intervention Training*. Washington, District of Columbia: National Alliance on Mental Illness. Retrieved from <http://www.namitm.org/wp-content/uploads/2016/02/NAMI-Crisis-Intervention-Trainings-Positive-Fiscal-Impacts.pdf>
- DeGue, S., Fowler, K., & Calkins, C. (2016). Deaths due to use of lethal force by law enforcement. *American Journal of Preventive Medicine*, 51(5-3), pp. S173-S187. Retrieved from <https://doi.org/10.1016/j.amepre.2016.08.027>
- Dictionary.com. (2017, July 28). De-Escalate. *Dictionary.com*. Retrieved from <http://www.dictionary.com/browse/de-escalate>
- Dupont, R., Cochran, S., & Pillsbury, S. (2007). *Crisis Intervention Team core elements*. Memphis, Tennessee: The University of Memphis. Retrieved from <http://cit.memphis.edu/pdf/CoreElements.pdf>
- Duster, C. (2017, February 11). Fatally shot black Americans twice as likely as whites to be unarmed: Study. *National Broadcasting Company [NBC] News*. Retrieved from <http://www.nbcnews.com/news/nbcblk/afr-americans-fatally-shot-less-likely-be-armed-whites-n718666>
- Ederheimer, J., & Fridell, L. (2005). *Chief concerns: Exploring the challenges of police use of force*. Washington, District of Columbia: Police Executive Research Forum. Retrieved from <http://www.policeforum.org/assets/chiefconcernsuseofforce.pdf>

- Elinson, Z., & Palazzolo, J. (2014, November 24). Police rarely criminally charged for on-duty shootings. *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/police-rarely-criminally-charged-for-on-duty-shootings-1416874955>
- Federal Bureau of Investigation [FBI]. (2012). *Crime in the United States, 2012*. Washington, District of Columbia: Federal Bureau of Investigation. Retrieved from <http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/>
- Federal Bureau of Investigation [FBI]. (2014). *Law enforcement officers killed and assaulted, 2013*. Washington, District of Columbia: Federal Bureau of Investigation. Retrieved from <http://www.fbi.gov/about-us/cjis/ucr/leoka/2013>
- Federal Bureau of Investigation [FBI]. (2017a). *2015 crime clock statistics*. Washington, District of Columbia: Federal Bureau of Investigation. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/resource-pages/crime-clock>
- Federal Bureau of Investigation [FBI]. (2017b). *Crime in the United States, 2015*. Washington, District of Columbia: Federal Bureau of Investigation. Retrieved from <https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015>
- Fridell, L. (2016, August 1). Can better training solve cops' implicit biases? *Democracy Journal*. Retrieved from <http://democracyjournal.org/arguments/can-better-training-solve-cops-implicit-biases/>
- Fritsch, J. (2000, February 26). The Diallo verdict: The overview; four officers in Diallo shooting are acquitted of all charges. *The New York Times*. Retrieved from <http://www.nytimes.com/2000/02/26/nyregion/diallo-verdict-overview-4-officers-diallo-shooting-are-acquitted-all-charges.html>
- Fryer, R. (2016). An empirical analysis of racial differences in police use of force. *National Bureau of Economic Research*, working paper no. 22399. Retrieved from <http://www.nber.org/papers/w22399>
- Gaines, L., & Kappeler, V. (2008). *Policing in America* (6th ed.). Newark, New Jersey: Matthew Bender & Company, Inc.
- Gaines, L., & Miller, R. (2015). *Criminal justice in action* (8th ed.). Stamford, Connecticut: Cengage Learning.
- Garner, J., Buchanan, J., Shade, T., & Hepburn, J. (1996). *Understanding use of force by and against the police* (NCJ 158614). Washington, District of Columbia: U.S. Department of Justice. Retrieved from: <https://www.ncjrs.gov/pdffiles/forcerib.pdf>
- Geller, W. (n.d.). *Crime file: Deadly force*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <https://www.ncjrs.gov/pdffiles1/Digitization/100734NCJRS.pdf>
- Geyer, A. (2015, July 29). Addressing racial bias in police officers: Experts are split on how well screening and diversity training work. *Isthmus*. Retrieved from <http://isthmus.com/news/news/Racial-Bias-Police/>

- Gilbert, C. (2017, May 5). Most states neglect ordering police to learn de-escalation tactics to avoid shootings. *American Public Media*. Retrieved from <http://www.apmreports.org/story/2017/05/05/police-de-escalation-training>
- Goode, E. (2016, April 25). For police, a playbook for conflicts involving mental illness. *The New York Times*. Retrieved from <https://www.nytimes.com/2016/04/26/health/police-mental-illness-crisis-intervention.html>
- Haugh, C. (2016, July 2). The U.S. government confronts its bias: A new program at the Department of Justice will train thousands of officers and attorneys on the way prejudice affects law enforcement. *The Atlantic*. Retrieved from <https://www.theatlantic.com/politics/archive/2016/07/the-us-government-confronts-its-stereotypes/489470/>
- Hickman, M. (2006). *Citizen complaints about police use of force*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <http://bjs.gov/content/pub/pdf/ccpuf.pdf>
- Hirschfield, P. (2015, November 25). Why American cops kill so many compared to European cops. *The Conversation*. Retrieved from <http://theconversation.com/why-do-american-cops-kill-so-many-compared-to-european-cops-49696>
- Hoerig, M., & Fridell, L. (2017, July 28). *Fair and impartial policing*. Retrieved from <http://www.fairimpartialpolicing.com/>
- Houston Police Department [HPD]. (2017, July 28). Order through law, justice with mercy. *HPD Mental Health Division*. Retrieved from <http://www.houstoncit.org/boarding-homes/>
- Hubbard, W., & Ifill, S. (2015, July 16). *Eliminating bias in the criminal justice system*. Baltimore, Maryland: National Association for the Advancement of Colored People. Retrieved from <http://www.naacpldf.org/press-release/joint-statement-eliminating-bias-criminal-justice-system>
- Jefferis, E., Butcher, F., & Hanley, D. (2011). Measuring perceptions of police use of force. *Police Practice and Research*, 12(1), pp. 81-96. doi:10.1080/15614263.2010.497656
- Jennings, W., & Hudak, E. (2010). Police response to persons with mental illness. In R. Dunham & G. Alpert (Eds.), *Critical issues in policing: Contemporary readings* (6th ed.) (2010, pp. 109-123). Long Grove, Illinois: Waveland Press, Inc.
- Johnson, K. (2015, October 7). In face of criticism, police officials preaching de-escalation tactics. *USA Today*. Retrieved from <https://www.usatoday.com/story/news/nation/2015/10/07/police-encounters-violent-baltimore-ferguson/72636622/>
- Jones, Y. (2016, March 5). Memphis police Crisis Intervention Team works to defuse mental health calls. *The Commercial Appeal Memphis*. Retrieved from <http://archive.commercialappeal.com/news/memphis-police-crisis-intervention-team-works-to-defuse-mental-health-calls--2c9bba98-fe28-1e3b-e053-371108951.html/>

- Klemack, J. (2015, July 13). LAPD focuses on use of force in new training series. *NBC Los Angeles*. Retrieved from <http://www.nbclosangeles.com/news/local/LAPD-Focuses-on-Use-of-Force-in-New-Training-Series-314801891.html>
- Klinger, D. (2010). Can police training affect the use of force on the streets? The Metro-Dade Violence Reduction Field Experiment. In C. McCoy (Ed.), *Holding police accountable* (pp. 95-107). Washington, District of Columbia: Urban Institute Press.
- Klinger, D., & Brunson, R. (2009). Police officers' perceptual distortions during lethal force situations: Informing the reasonableness standard. *Criminology & Public Policy*, 8(1). doi:10.1111/j.1745-9133.2009.00537.x
- Klinger, D., Rosenfeld, R., Isom, D., & Deckard, M. (2016). Race, crime, and the micro-ecology of deadly force. *Criminology and Public Policy*, 15(1). doi:10.1111/1745-9133.12174
- Kohler, J. (2014, December 6). Police departments scrambling to reduce excessive force. *Saint Louis Post-Dispatch*. Retrieved from http://www.stltoday.com/news/local/crime-and-courts/police-departments-scrambling-to-reduce-excessive-force/article_93f61c22-5a81-55e2-a17a-1eff61ca8143.html
- Krameddine, Y., DeMarco, D., Hassel, R., & Silverstone, P. (2013). A novel training program for police officers that improves interactions with mentally ill individuals is cost-effective. *Frontiers in Psychiatry*, 2013(4). doi:10.3389/fpsy.2013.0009
- KSTU. (2017, May 16). When police can use deadly force, but don't. *KSTU News*. Retrieved from <http://fox13now.com/2017/05/16/deadly-force-or-de-escalation/>
- Lankford, A. (2016, July 12). Analysis: Police use of deadly force could be solved by technology. *Cable News Network [CNN]*. Retrieved from <http://www.cnn.com/2016/07/12/health/police-deadly-force-technology-solutions/index.html>
- Lantigua-Williams, J. (2016, July 13). How much can better training do to improve policing? *The Atlantic*. Retrieved from <https://www.theatlantic.com/politics/archive/2016/07/police-training/490556/>
- Lee, J. (2015, October 13). Why no one really knows a better way to train cops. *Mother Jones*. Retrieved from <http://www.motherjones.com/politics/2015/10/police-training-reform-research/>
- Lee, V. (2016, June 28). San Francisco police train to de-escalate confrontations before using deadly force. *KGO-TV San Francisco*. Retrieved from <http://abc7news.com/news/sf-police-train-to-de-escalate-confrontations-before-using-deadly-force/1406096/>
- Lindsay, R. (2016, October 8). New weapons policy for Chicago police emphasizes 'sanctity of life.' *The Christian Science Monitor*. Retrieved from <https://www.csmonitor.com/USA/Justice/2016/1008/New-weapons-policy-for-Chicago-police-emphasizes-sanctity-of-life>
- Loftin, C., Wiersema, B., McDowall, D., & Dobrin, A. (2003). Underreporting of justifiable homicides committed by police officers in the United States, 1976-1998. *American*

- Journal of Public Health*, 93(7). Retrieved from <http://dx.doi.org/10.2105/AJPH.93.7.1117>
- Lopez, G. (2016, March 17). After police shot a black cop, the police chief made an alarming comment about racial bias. *Vox Media*. Retrieved from <https://www.vox.com/2016/3/17/11253818/police-shooting-racism-prince-georges-county>
- Lowery, W., Kindy, K., Alexander, K., Tate, J., Jenkins, J., & Rich, S. (2015, June 30). Distraught people, deadly results. *The Washington Post*. Retrieved from http://www.washingtonpost.com/sf/investigative/2015/06/30/distraught-people-deadly-results/?utm_term=.c813a8f1f1e4
- Lucas, L. (2016, September 28). Changing the way police respond to mental illness. *Cable News Network [CNN]*. Retrieved from <http://www.cnn.com/2015/07/06/health/police-mental-health-training/index.html>
- Ludlow, R. (2015, December 8). Tougher standards expected at Ohio's police-training academies. *The Columbus Dispatch*. Retrieved from <http://www.dispatch.com/content/stories/local/2015/12/08/1208-uniform-standards-sought-for-ohios-police-academies.Html>
- Macias, K. (2017, May 29). Salt Lake City police invested in training and haven't had an officer-involved shooting in two years. *Daily Kos*. Retrieved from <https://www.dailykos.com/stories/2017/5/29/1665600/-Salt-Lake-City-police-invested-in-training-and-haven-t-had-an-officer-involved-shooting-in-two-years>
- Madhani, A. (2016, October 2). Police departments struggle to get cops mental health training. *USA Today*. Retrieved from <https://www.usatoday.com/story/news/nation/2016/10/02/police-departments-struggle-cops-mental-health-training/91297538/>
- Marks, M., & Fleming, J. (2006). The right to unionize, the right to bargain, and the right to democratic policing. *Annals of the American Academy of Political and Social Science*, 605, pp. 178- 199. doi:10.1177/0002716206287181
- Mckesson, D., Sinyangwe, S., & Packnett, B. (2017, July 28). Limit use of force. *Campaign Zero*. Retrieved from <https://www.joincampaignzero.org/force/>
- Mental Health Crisis Institute [MHCI]. (2017, July 28). Crisis Intervention Team training: Mental health response for law enforcement (Lesson plan, Oct. 30 – Nov. 3, 2017). *Hennepin County Sheriff's Office*. Retrieved from <http://www.mentalhealthcrisis.org/citlawenf.html>
- Miller, L. (2006). Officer-involved shooting: Reaction patterns, response protocols, and psychological intervention strategies. *International Journal of Emergency Mental Health*, 8(4), pp. 239-254. Retrieved from https://www.psychceu.com/miller/Miller_OIS.pdf
- Miller, L. (2015). Why cops kill: The psychology of police deadly force encounters. *Aggression and Violent Behavior* 22, pp. 97-111. Retrieved from <http://dx.doi.org/10.1016/j.avb.2015.04.007>

- Miller, L., & Hess, K. (2008). *Community policing: Partnerships for problem solving* (5th ed.). Belmont, California: Thomson Wadsworth.
- Miller, T., Lawrence, B., Carlson, N., Hendrie, D., Randall, S., Rockett, I., & Spicer, R. (2017). Perils of police action: A cautionary tale from U.S. data sets. *Injury Prevention*, 2017(23), pp. 27-32. doi:10.1136/injuryprev-2016-042023
- Mooney, C. (2014, December 1). The science of why cops shoot young black men: And how to reform our bigoted brains. *Mother Jones*. Retrieved from <http://www.motherjones.com/politics/2014/12/science-of-racism-prejudice/#>
- Morrison, G., & Garner, T. (2011). Latitude in deadly force training: Progress or problem? *Police Practice and Research*, 12(4), pp. 341-361. doi:10.1080/15614263.2011.563968
- Murphy, G., & Plotkin, M. (2003). *Protecting your community from terrorism: Strategies for local law enforcement, Volume 1: Local-federal partnerships*. Washington, District of Columbia: Police Executive Research Forum. Retrieved from <https://ric-zai-inc.com/Publications/cops-w0359-pub.pdf>
- National Alliance on Mental Illness [NAMI]. (2017, July 28). Law enforcement and mental health. *National Alliance on Mental Health*. Retrieved from <https://www.nami.org/Get-Involved/Law-Enforcement-and-Mental-Health>
- National Association for the Advancement of Colored People [NAACP]. (2016, March 8). *Press release: NAACP announces 2016 convention theme "our lives matter, our votes count."* Retrieved from <http://www.naACP.org/latest/naACP-announces-2016-convention-theme-our-lives-matter-our-votes-count/>
- National Association for the Advancement of Colored People [NAACP]. (2017, July 28). Protect and preserve our lives pledge. *NAACP*. Retrieved from <http://www.naACP.org/campaigns/protect-preserve-lives-pledge/>
- Neeley, J. (2016, April). New poll highlights strong support (and challenges) for police. *Wisconsin Police Journal*. Madison, Wisconsin: Wisconsin Professional Police Association.
- New York City Police Department [NYPD]. (2016, October). *Annual firearms discharge report: 2015*. New York, New York: New York City Police Department. Retrieved from http://www1.nyc.gov/assets/nypd/downloads/pdf/analysis_and_planning/firearms-discharge/annual-firearms-discharge-2015.pdf
- New York City Police Department [NYPD]. (2017, July 28). About NYPD. *New York City Police Department*. Retrieved from <http://www1.nyc.gov/site/nypd/about/about-nypd/about-nypd-landing.page>
- Nicks, D. (2014, December 22). Shootings by police voted top story of 2014 in AP poll. *Time Magazine*. Retrieved from <http://time.com/3643962/police-killings-top-story-ap-poll/>
- Nordell, J. (2017, May 7). Is this how discrimination ends? *The Atlantic*. Retrieved from <https://www.theatlantic.com/science/archive/2017/05/unconscious-bias-training/525405/>

- Officer Down Memorial Page [ODMP]. (2014, December 7). Line of duty deaths, 2003-2012. *Officer Down Memorial Page*. Retrieved from <http://www.odmp.org/>
- Oliva, J., Morgan, R., & Compton, M. (2010). A practical overview of de-escalation skills in law enforcement: Helping individuals in crisis while reducing police liability and injury. *Journal of Police Crisis Negotiations*, 10, pp. 15-29. doi:10.1080/15332581003785421
- Oudejans, R. (2008). Reality-based practice under pressure improves handgun shooting performance of police officers. *Ergonomics*, 51(3), pp. 261-273. doi:10.1080/00140130701577435
- Pauly, M. (2013, October 11). How police officers are (or aren't) trained in mental health. *The Atlantic*. Retrieved from <https://www.theatlantic.com/health/archive/2013/10/how-police-officers-are-or-aren-t-trained-in-mental-health/280485/>
- Penman, M., Schmidt, J., Cohen, R., & Klahr, R. (Producers). (2017, June 5). *The 'thumbprint of the culture': Implicit bias and police shootings*. National Public Radio: Hidden Brain. Audio podcast. Retrieved from <http://www.npr.org/series/423302056/hidden-brain>
- Pennsylvania Center of Excellence [PCE]. (2017). *Background and summary of evidence about Crisis Intervention Team policing*. Pittsburgh, Pennsylvania: University of Pittsburgh. Retrieved from <http://www.pacenterofexcellence.pitt.edu/documents/CIT%20Background%20and%20Evidence%20Summary.pdf>
- Perez, M., Davis, C., Harrington, R., Kirby, D., Ward, T., Stair, B., ... Klein, M. (2005). *Standards and guidelines for internal affairs: Recommendations from a community of practice*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <http://ric-zai-inc.com/Publications/cops-p164-pub.pdf>
- Police Assessment Resource Center [PARC]. (2003, August). *The Portland Police Bureau: Officer-involved shootings and in-custody deaths*. Los Angeles, California: Police Assessment Resource Center. Retrieved from <https://www.portlandoregon.gov/ipr/article/26225>
- Police Assessment Resource Center [PARC]. (2006, December). *The Portland Police Bureau: Officer-involved shootings and in-custody deaths, second follow-up report*. Los Angeles, California: Police Assessment Resource Center. Retrieved from <http://www.portlandonline.com/shared/cfm/image.cfm?id=144963>
- Police Assessment Resource Center [PARC]. (2009, February). *The Portland Police Bureau: Officer-involved shootings and in-custody deaths, third follow-up report*. Los Angeles, California: Police Assessment Resource Center. Retrieved from <https://www.portlandoregon.gov/ipr/article/231812>
- Police Executive Research Forum [PERF]. (2012, August). *An integrated approach to de-escalation and minimizing use of force*. Washington, District of Columbia: Police Executive Research Forum. Retrieved from <http://www.policeforum.org/critical-issues-series>

- Police Executive Research Forum [PERF]. (2015, August). *Critical issues in policing series: Re-engineering training on police use of force*. Washington, District of Columbia: Police Executive Research Forum. Retrieved from <http://www.policeforum.org/critical-issues-series>
- Police Executive Research Forum [PERF]. (2016a, January 29). *Use of force: Taking policing to a higher standard: 30 guiding principles*. Washington, District of Columbia: Police Executive Research Forum. Retrieved from <https://assets.documentcloud.org/documents/2701999/30guidingprinciples.pdf>
- Police Executive Research Forum [PERF]. (2016b, March). *Guiding principles on use of force*. Washington, District of Columbia: Police Executive Research Forum. Retrieved from <http://www.policeforum.org/critical-issues-series>
- Police Foundation. (1988). *The Metro-Dade Police/Citizen Violence Reduction Project: Final report: Executive summary*. The Police Foundation. Washington, District of Columbia: The Police Foundation.
- Pollock, J. (2010). Ethics and law enforcement. In R. Dunham & G. Alpert (Eds.), *Critical issues in policing: Contemporary readings* (6th ed.) (2010, pp. 313-342). Long Grove, Illinois: Waveland Press, Inc.
- Prenzler, T., Porter, L., & Alpert, G. (2013). Reducing police use of force: Case studies and prospects. *Aggression and Violent Behavior* 18, pp. 343-356. Retrieved from <http://dx.doi.org/10.1016/j.avb.2012.12.004>
- President's Task Force on 21st Century Policing [PTF]. (2015, May). *Final report of the President's Task Force on 21st Century Policing*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from https://cops.usdoj.gov/pdf/taskforce/taskforce_finalreport.pdf
- Reaves, B. (2011, July). *Census of state and local law enforcement agencies, 2008*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <https://www.bjs.gov/content/pub/pdf/cslllea08.pdf>
- Reaves, B. (2015, May). *Local police departments, 2013: Personnel, policies, and practices*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <https://www.bjs.gov/content/pub/pdf/lpd13ppp.pdf>
- Reaves, B. (2016, July). *State and local law enforcement training academies, 2013*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <https://www.bjs.gov/content/pub/pdf/slleta13.pdf>
- Rice, G. (2015, May 8). Kansas City police learning to “tactically disengage” to avoid violent confrontations. *The Kansas City Star*. Retrieved from <http://www.kansascity.com/news/local/crime/article20561061.html>
- Rice, S., Reitzel, J., & Piquero, A. (2005). Shades of brown: Perception of racial profiling and the intra-ethnic differential. *Journal of Ethnicity in Criminal Justice*, 3(1-2), pp. 47-70. doi:10.1300/J222V03N01_03

- Wisconsin Department of Justice [WI DOJ]. (2014, December). *Defensive and arrest tactics: A training guide for law enforcement officers*. Madison, Wisconsin: Wisconsin Department of Justice.
- Rojek, J., Decker, S., & Wagner, A. (2010). Addressing police misconduct: The role of citizen complaints. In R. Dunham & G. Alpert (Eds.), *Critical issues in policing: Contemporary readings* (6th ed.) (2010, pp. 292-312). Long Grove, Illinois: Waveland Press, Inc.
- Rosario, R. (2010, June 9). Minneapolis police learn lifesaving lessons the hard way. *Twin Cities Pioneer Press*. Retrieved from <http://www.twincities.com/2010/06/09/ruben-rosario-minneapolis-police-learn-lifesaving-lessons-the-hard-way/>
- Rudovsky, D. (2017, February 27). The troubling issues regarding police use of force. *The Regulatory Review*. Retrieved from <https://www.theregreview.org/2017/02/27/rudovsky-troubling-issues-police-use-force/>
- Ruiz, J., & Miller, C. (2004). An exploratory study of Pennsylvania police officers' perceptions of dangerousness and their ability to manage persons with mental illness. *Police Quarterly*, 7(3), pp. 359-371. Retrieved from <https://doi.org/10.1177/1098611103258957>
- Salt Lake City Corporation [SLCC]. (2017, July 28). Salt Lake City Police Department use of force data. *Salt Lake City Corporation*. Retrieved from <https://dotnet.slcgov.com/police/useofforce#/chartpresentation>
- Samaha, J. (2014). *Criminal law* (11th ed.). Belmont, California: Wadsworth.
- Schmallegger, F. (2009). *Criminal justice today: An introductory text for the 21st century* (10th ed., pp. 60-63). Upper Saddle River, New Jersey: Pearson Prentice Hall.
- Schwarzfeld, M., Reuland, M., & Plotkin, M. (2008). *Improving responses to people with mental illnesses: The essential elements of a specialized law enforcement-based program*. New York, New York: Council of State Governments Justice Center. Retrieved from https://csgjusticecenter.org/wp-content/uploads/2015/09/Improving_Responses_to_People_with_Mental_Illnesses_at_the_Pretrial_Stage_Essential_Elements.pdf
- Seattle Police Department [SPD]. (2017, July 28). Seattle Police Department manual: 8.300 use of force tools, effective September 1, 2015. *City of Seattle*. Retrieved from <https://www.seattle.gov/police-manual/title-8---use-of-force/8300---use-of-force-tools>
- Sikora, A., & Mulvihill, M. (2002). Trends in mortality due to legal intervention in the United States, 1979 through 1997. *American Journal of Public Health*, 92(5), pp. 841-843. Retrieved from <http://dx.doi.org/10.2105/AJPH.92.5.841>
- Singal, J. (2017, January 11). Psychology's favorite tool for measuring racism isn't up to the job: Almost two decades after its introduction, the Implicit Association Test has failed to deliver on its lofty promises. *New York Magazine*. Retrieved from <http://nymag.com/scienceofus/2017/01/psychologys-racism-measuring-tool-isnt-up-to-the-job.html>

- Skeem, J., & Bibeau, L. (2008). How does violence potential relate to Crisis Intervention Team responses to emergencies? *Psychiatric Services*, 59(2), pp. 201-204. Retrieved from <http://ps.psychiatryonline.org/doi/pdf/10.1176/ps.2008.59.2.201>
- Smart, C. (2016, February 16). SLC police chief shows City Council how he wants to de-escalate his way into fewer shooting deaths. *The Salt Lake Tribune*. Retrieved from <http://www.sltrib.com/news/3545746-155/slc-police-chief-shows-city-council>
- Smith, K. (2016, June 6). Fueled by grief, mom tries to reform mental health calls. *Star Tribune*. Retrieved from <http://www.startribune.com/part-2-fueled-by-grief-mom-tries-to-reform-mental-health-calls/374523171/?preview=1>
- Solar, P. (2016). Police culture and the use of force. *Academy of Criminal Justice Sciences, Police Section*, 26(3), pp. 9-18. Retrieved from http://c.ymcdn.com/sites/www.acjs.org/resource/resmgr/sections/policeforum_Dec2016.pdf
- Staats, C., Capatosto, K., Wright, R., & Jackson, V. (2016). *State of the science: Implicit bias review*. Columbus, Ohio: The Ohio State University. Retrieved from <http://kirwaninstitute.osu.edu/wp-content/uploads/2016/07/implicit-bias-2016.pdf>
- Stojkovic, S., Kalinich, D., & Klofas, J. (2015). *Criminal justice organizations: Administration and management* (6th ed.). Stamford, Connecticut: Cengage Learning.
- Stoughton, S. (2014, December 12). How police training contributes to avoidable deaths: To save lives, cops must be taught to think beyond the gun belt. *The Atlantic*. Retrieved from <https://www.theatlantic.com/national/archive/2014/12/police-gun-shooting-training-ferguson/383681/>
- Stute, D. (2014, August 27). Why German police officers rarely reach for their guns. *Deutsche Welle*. Retrieved from <http://p.dw.com/p/1D2eB>
- Sweeney, A. (2016, September 17). Chicago police rolling out new, mandatory “de-escalation” training. *The Chicago Tribune*. Retrieved from <http://www.chicagotribune.com/news/ct-chicago-police-training-met-20160916-story.html>
- Terrill, W. (2003). Police use of force and suspect resistance: The micro process of the police-suspect encounter. *Police Quarterly*, 6(1), pp. 51-83. doi:10.1177/1098611102250584
- Terrill, W., & Paoline, E. (2012). Examining less lethal force policy and the force continuum: Results from a national use-of-force study. *Police Quarterly*, 16(1), pp. 38-65. doi:10.1177/1098611112451262
- Torres-Cortez, R. (2017, January 19). Feds praise Metro on use-of-force reforms as police shootings plummet. *Las Vegas Sun*. Retrieved from <https://lasvegassun.com/news/2017/jan/19/feds-praise-metro-police-transparency-use-of-force/>
- Truman, J., & Morgan, R. (2016, October). *Criminal victimization, 2015*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from <https://www.bjs.gov/content/pub/pdf/cv15.pdf>

- Uchida, C. (2010). The development of the American police: An historical overview. In R. Dunham & G. Alpert (Eds.), *Critical issues in policing: Contemporary readings* (6th ed., pp. 17-36). Long Grove, Illinois: Waveland Press, Inc.
- United States Census Bureau. (2017, July 28). Main search portal. U.S. Department of Commerce. Retrieved from <https://www.census.gov/>
- United States Court of Appeals, 7th Circuit. (1994). *Plakas v. Drinski*, 19 F. 3d 1143. Retrieved from http://www.leagle.com/decision/19932167811FSupp1356_11990.xml/PLAKAS%20v.%20DRINSKI
- United States Department of Justice. (2015, March 4). *Department of Justice report regarding the criminal investigation into the shooting death of Michael Brown by Ferguson, Missouri police officer Darren Wilson*. Washington, District of Columbia: U.S. Department of Justice. Retrieved from https://www.justice.gov/sites/default/files/opa/press-releases/attachments/2015/03/04/doj_report_on_shooting_of_michael_brown_1.pdf
- United States Supreme Court. (1985). *Tennessee v. Garner*, 471 U.S. 1. Retrieved from <https://supreme.justia.com/cases/federal/us/471/1/>
- United States Supreme Court. (1989a). *City of Canton, Ohio v. Harris*, 489 U.S. 378. Retrieved from <https://supreme.justia.com/cases/federal/us/489/378/>
- United States Supreme Court. (1989b). *Graham v. Connor*, 490 U.S. 386. Retrieved from <https://supreme.justia.com/cases/federal/us/490/386/>
- United States Supreme Court. (2004). *Brosseau v. Haugen*, 396 F. 3d 1036. Retrieved from <http://openjurist.org/396/f3d/1036/haugen-v-brosseau>
- Waldman, P. (2014, August 27). Expert: U.S. police training in use of deadly force woefully inadequate. *The American Prospect*. Retrieved from <http://prospect.org/article/expert-us-police-training-use-deadly-force-woefully-inadequate>
- Washington Post. (2017, July 28). Fatal force database, 2016. *The Washington Post*. Retrieved from <https://www.washingtonpost.com/graphics/national/police-shootings-2016/>
- Williams, T. (2015, June 27). Long taught to use force, police warily learn to de-escalate. *The New York Times*. Retrieved from <https://www.nytimes.com/2015/06/28/us/long-taught-to-use-force-police-warily-learn-to-de-escalate.html>
- Wisconsin State Legislature. (2015). *2013-2014 Wisconsin statutes and annotations*. Madison, Wisconsin: Wisconsin State Legislature. Retrieved from <http://docs.legis.wisconsin.gov/statutes/statutes/1>
- Xu, K., Nosek, B., & Greenwald, A. (2014). Data from the Race Implicit Association Test on the Project Implicit demo website. *Journal of Open Psychology Data*, 2(1), art. e3. Retrieved from <http://dx.doi.org/10.5334/jopd.ac>