# THE EFFECT OF POLICE ACCREDITATION ON ORGANIZATION ARREST-RELATED DEATHS: A COMPARATIVE EMPIRICAL EXAMINATION

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# A Thesis

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by

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#### **DEDICATION**

In loving memoriam of my high school criminal justice teacher who galvanized my policing interests, Stacy Mitchell (August 23, 1975 – December 28, 2012). "Even though I walk through the valley of the shadow of death, I fear no evil, for..." (Psalm 23:4) we are the baddest in the valley.

In loving memoriam of a real life superhero, Keagan Provost (February 11, 2010 – January 17, 2019). "When you die, that doesn't mean you lose to cancer. You beat cancer by how you live, why you live and the manner in which you live. So live. Fight like hell, and when you get too tired to fight, lay down and rest and let someone else fight for you" – Stuart Scott.

#### **ABSTRACT**

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Fatal police encounters in Ferguson, MO and subsequent events have raised concerns of who is being killed by police. This study focuses on police use of deadly force at the organizational level. This study hypothesized that specific organizational processes, such as CALEA accreditation, would lower an organization's number of citizens killed. This study utilized FatalEncounters.org data from January 1, 2000 to December 31, 2017, aggregated to the organizational level, as well as Annual Reports published by CALEA. This study found that CALEA accreditation neither significantly nor substantially lowered an organization's number of citizens killed. This study proposes future research ideas involving state accreditation, consent decrees, use of force training, and court interpretations of police use of deadly force.

KEY WORDS: Police deadly force, Police shootings, Arrest-related deaths, CALEA, Accreditation

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## **CHAPTER I**

#### INTRODUCTION

The Law Enforcement Code of Ethics and the Hippocratic Oath draw a number of parallels – the job responsibilities of both police officers and physicians encapsulate themes of protection, service, and 'doing no harm' (International Association of Chiefs of Police, n.d.; Johnson, n.d.). Though violent and fatal police encounters predate 2014, the deaths of Michael Brown in Ferguson, MO and Eric Garner in New York, NY in 2014 highlight a turning point in which substantial public scrutiny challenged these very themes. Legislators from thirty-four states and the District of Columbia responded with a wave of revised police policies and practices in 2015-16 (Subramanian & Skrzypiec, 2017; Walker, 2015). The collective of media attention, violent and nonviolent public demonstrations, and police reform have been described by some as a national crisis in policing (President's Task Force on 21st Century Policing, 2015; Walker, 2018; White, 2015). However, both these encounters and the scrutiny of police have persisted to today. In early-2018, audio and video were released of Kern County (CA) Sheriff Donny Youngblood expressing a controversial opinion regarding police use of force:

"You know what happens when a guy makes a bad shooting on somebody and kills them? 3 million bucks and the family goes away after a long back-and-forth, and back-and-forth. When it happens in corrections, it's a totally different ballgame. If you stack on top of that an inmate that's in restraints, if you tack on top of that the number of officers that may or may not be involved, if you tack on top of that the city that you're in, that is absolutely huge. It's no different than when a deputy shoots someone in the streets. Which way do you think is better financially? To cripple 'em or kill 'em, for the county? [a male in the room responds "kill 'em"]...Absolutely, because if crippled, we get to take care of them for life, and that cost goes way up." 1

<sup>1</sup> Audio (0:22-1:04) transcribed from video provided by Ridgecrest Daily Independent courtesy of the Kern County Detention Officers Association (https://www.youtube.com/watch?v=PO3ludAxBEk)

The social unrest surrounding deadly police encounters, referred to in this study as 'arrest-related deaths<sup>2</sup>,' have thus become one of the most pressing social and criminal justice issues in the United States.

The solution, then, in conjunction with understanding the demographic, situational, and spatial dynamics of these situations, is to reduce the number of people killed by police. Any proposed solutions require accurate data of these encounters – data that individual police organizations record and report to federal organizations, such as the Federal Bureau of Investigation (FBI) the Center for Disease Control and Prevention (CDC), and the Bureau of Justice Statistics (BJS). Scholars have criticized 'police homicide,' 'police justified homicide,' 'police shooting,' and 'arrest-related death' data for decades, suggesting that official data neither accurately describe the number of citizens killed by police officers annually, nor do they capture demographic and situational elements of these encounters (Klinger, 2012; Klinger, Rosenfeld, Isom, & Deckard, 2016). This issue was highlighted by then-FBI Director James Comey at the 2016 International Association of Chiefs of Police (IACP) Annual Conference:

"There were 10.7 million arrests in this country last year, and many times that number of encounters between officers and civilians. Out of those tens of millions of encounters, how many people were shot? What did they look like? What were the circumstances? Is deadly force use trending up or down? Where is it worst and where is it best? Nobody knows. They have no idea of these things because we have no idea of these things. We simply don't know. As a country, we simply haven't bothered to collect the data, to gather the information. And in the absence of information, we have anecdotes, we have videos, we have good people believing something terrible is going on. In a nation of almost a million law

<sup>2</sup> Because of the debate surrounding how "justifiable" recent homicides by police officers have been, this study will not use such terminology. For the sake of brevity and to avoid unnecessary repetition, any reference to 'arrest-related deaths' throughout this manuscript include all fatal officer-involved shootings and other police killings of a juvenile or adult criminal or noncriminal suspect eluding police or during the

apprehension by police. All jail or correctional custodial deaths are omitted from this study.

enforcement officers and tens of millions of police encounters each year, a small group of videos serve as proof of an epidemic."<sup>3</sup>

Turning away from official data in recent years, scholars have introduced studies of police deadly encounters using crowd-sourced data. Crowd-sourced data provide opportunities to look at arrest-related deaths demographically, situationally, spatially, and of particular concern to this study, organizationally. Outside of police television dramas and procedural programs, little to no empirical attention is given to the police organizations – especially those organizations that are frequently involved in deadly encounters. For example, are certain police organizations more likely to be involved in arrest-related deaths, and if so, what can these organizations do to mitigate the number of citizens killed?

This study focuses on three main issues: 1) arrest-related death data and recent attempts to crowd-source reliable data, 2) the need to further understand police organizations, especially those involved in fatal encounters with citizens and 3) organizational processes that may mediate fatal police-citizen encounters.

#### **Problem Statement**

In 1981, Who is Guarding the Guardians? A Report on Police Practices called for national data on police deadly force (United States Civil Rights Commission, 1981).

Nearly 35 years later, the Final Report of the President's Task Force on 21st Century Policing report in 2015 called for the same thing (President's Task Force on 21st Century Policing, 2015; White, 2015). Scholars have been skeptical of drawing conclusions of police use of force based on official data (see, Alpert, 2015; Loftin et al., 2003; Loftin,

<sup>&</sup>lt;sup>3</sup> The full *True Heart of American Law Enforcement* speech is available from https://www.fbi.gov/news/speeches/the-true-heart-of-american-law-enforcement

McDowall, & Xie, 2017; Shane, 2018; Shane, Lawton, & Swenson, 2017; Sherman, 2017; Sherman & Langworthy, 1979; Zimring, 2016, 2017). What is known of police use of force largely center on limited officer and suspect demographics, or situational variables at lower levels of force (see, Alpert, Dunham, & MacDonald, 2004; Belvedere, Worrall, & Tibbetts, 2005; Brandl & Stroshine, 2013; Crawford & Burns, 2002; Crotty, Crotty, & Fernandez, 2017; Friedrich, 1980; Garner et al., 2002; Miller, 2015; Riksheim & Chermak, 1993; Taylor et al., 2011; Terrill, Leinfelt, & Kwak, 2006; Terrill & Mastrofski, 2002). With respect to those studies, they are likely limited in the scope of the interpretations because they ignore that officers act on behalf of organizations. Fewer studies have examined deadly force at the organizational level (Jennings & Rubado, 2017; Nowacki, 2015). There is a need for further exploration into the topic. The present study will explore the use of deadly force by police organizations and the relationship it may potentially have with organization accreditation.

# **Purpose of the Study**

The purpose of this study is three-fold. The first goal is to understand the organizational aspects of arrest-related deaths. Certain organizations may cause more arrest-related deaths, a possibility that will be explored using crowd-sourced data on arrest-related deaths at the organizational level. The second goal is to establish the statistical impact, if any, of accreditation on the arrest-related death counts of CALEA-accredited and non-accredited agencies. Simply, does the process of accreditation, or having been accredited (by letting the organization's accreditation lapse) decrease counts of arrest-related deaths? The third goal is to explore trends in recent arrest-related deaths that may lead to necessary policy implications in policing.

Chapter two outlines the concept of deadly force, the organizational correlates of deadly force, and the brief history of police accreditation. Chapter three outlines the study design, sample, and the operationalization of the independent, dependent, and control variables. Chapter four outlines the results of the statistical analyses, and Chapter five highlights the findings, possible limitations of the study, and avenues of future studies.

#### **CHAPTER II**

#### LITERATURE REVIEW

This chapter will first examine the sources of arrest-related death data, as well as trends and patterns in reporting. Second, organizational correlates of deadly force found in previous studies will be reported to guide the expected findings of this study. Third, both the history of accreditation and findings related to administrative rule-making and accreditation will be explored to understand their impact on organizational behaviors.

#### **Arrest-Related Death Data**

Police use of physical force is rare. Less than two percent of the tens of millions of annual police-citizen encounters involve force, and deadly force is even rarer (Durose & Langan, 2007; Durose, Schmitt, & Langan, 2005; Eith & Durose, 2011; Garner, Maxwell, & Heraux, 2002; Garner, Hickman, Malega, & Maxwell, 2017; Greenfield, Langan, & Smith, 1997; IACP, 2001; McElvain, 2009; Nix, Campbell, Byers, & Alpert, 2017; Smith, Kaminski, Alpert, Fridell, MacDonald, & Kubu, 2009; Schatmeier, 2013; Taylor, Alpert, Kuba, Woods, & Dunham, 2011). While statistically rare, there are a substantial number of people killed by the police each year. Historically, scholars have relied upon a number of official data sources. The Federal Bureau of Investigation (FBI)'s Supplementary Homicide Report (SHR) and the Center for Disease Control and Prevention (CDC)'s National Vital Statistics System (NVSS) reported roughly 250 to 450 arrest-related deaths annually from 1975–1995 (Loftin, Wiersema, McDowall, & Dobrin, 2003). Additionally, the Bureau of Justice Statistics (BJS)'s Arrest-Related Death Program reported 375–500 arrest-related deaths annually from 2003–2009 (Burch, 2011). Scholars have been skeptical of these previous figures and voluntary reporting of arrestrelated deaths, suggesting that these totals may be less than half of the actual count of arrest-related deaths (Burch, 2011; Planty, Burch, Banks, Couzens, Blanton, & Cribb, 2015; Sherman & Langworthy, 1979). Journalists, too, have challenged the integrity of these figures. A number of articles in *The Wall Street Journal* in 2014 identified agencies that did not reliably track and report the number of citizens they killed (Barry, 2014; Barry & Jones, 2014). In the same year, BJS halted the ARD program, citing agency voluntary reporting and other issues attributing to poor methodology (Banks et al., 2016).

Since this time and in the midst of high-profile deaths in Ferguson, MO and New York, NY, crowd-sourced data became available; sources such as The Washington Post, The Guardian, fatalencounters.org, mappingpoliceviolence.org, and killedbypolice.net began compiling records and suggesting that more people were dying annually in police encounters than previously thought. The data are collected through compiling records from multiple sources. On the Washington Post's police shooting website, researchers suggest that they gather information from news reports, law enforcement websites and social media, and databases such as fatalencounters.org and killedbypolice.net (Tate et al., 2016). On 'The Counted' website, *The Guardian* suggests that they rely on individual submissions, news outlets, research groups, and websites such as fatalencounters.org and killedbypolice.net (The Guardian, n.d.). *The Guardian* re-examined previously reported BJS ARD figures from 2003-2009 (see, Burch, 2011) and found these figures to be roughly one-third of the actual number of deaths (McCarthy, 2015). A number of scholars have since used one or more of the aforementioned crowd-sourced arrest-related death databases to examine recent trends in police use of deadly force (see, Campbell et al., 2017; Jennings & Rubado, 2017; Krieger et al., 2015; Nix et al., 2017; Ozkan et al.,

2017; Pinchevsky & Nix, 2018). Further, comparisons of crowd-sourced arrest-related death data with data collected and maintained by police organizations revealed that while there was variation in specific details of the cases, the deaths were adequately reported in crowd-sourced data (see, Ozkan et al., 2017). The popularity and lack of evidence of invalidity of crowd-sourced data thus make it a useful tool to use in examining recent trends in those killed by the police.

#### **Contemporary Police Organizations**

"Police organizations exist in certain contexts – they have different histories and traditions, they come in a variety of sizes, they approach the job of policing in different ways, and they are located in different environments" (Maguire, 2003, p. 5). What is known about police organizations is limited, largely because the work and behaviors of individual officers have seen far more attention. Scholars and government officials estimate 18,000 police organizations in the United States (Alpert & Smith, 1999; Barry, 2014; Maguire, 2003a; McElvain, 2009; President's Task Force on 21st Century Policing, 2015; Schmalleger & Worrall, 2010; Sherman, 2017; Subramanian & Skrzypiec, 2017; Walker, 2018; Weisheit, Falcone, & Wells, 1999). Most of these organizations average ten full-time officers or fewer, and most serve populations of less than 25,000 (Alpert & Smith, 1999; Weisheit et al., 1999). These agencies face similar yet different historical, geographical, social, and criminal challenges, and, because their environments and contexts differ, departments have different missions, personnel, and structures. In short, police organizations vary from one another. While this variation does exist, some scholars have demonstrated clear relationships between attributes of police organizations with police officer behaviors (see, Riksheim & Chermak, 1993). With these

relationships in mind, this study will examine the citizens killed by these organizations, and how certain organizational attributes such as accreditation.

### **Organizational Correlates of Deadly Force Decisions**

There is little research on the organizational correlates of force. Simply, we do not know the types of police organizations that engage in greater rates of force (Alpert & Smith, 1999; Maguire, 2003a; Riksheim & Chermak, 1993). Official data from BJS from 2003-2009 suggests that organizations most likely involved in arrest-related deaths were municipal departments with 1,000 full-time officers or more (Burch, 2011). Recent studies, such as Nix and colleagues (2017), indicated (via *Washington Post* data) that over 700 police organizations shot and killed one or more citizens in 2015, and the majority of the agencies were municipal police departments. The average size of police organizations that kill, though in early stages of research, appear to point toward large agencies: Nowacki (2015) acknowledged that larger police departments kill more people, a finding supported by Nix and colleagues' (2017) study.

Administrative Rule-Making. While the body of literature surrounding organizational correlates of deadly force is limited, there is a small body of literature that indicates that administrative rule-making impacts police organization use of deadly force. More restrictive policies have been found to reduce the likelihood of force and the likelihood of deadly force (Fyfe, 1982, 1988; Nowacki, 2015; Terrill & Paoline, 2017; White, 2001). Additionally, organizations that required officers to report displaying their firearms were also found to have lower rates of police shootings (Jennings & Rubado, 2017). Reducing ambiguity in policies was found to lead to more positive policing outcomes – the goal of police organization accreditation.

# **Police Organization Accreditation**

A Brief History. "Accreditation on a national scale if it is successful, should, based on its process, do something" (Williams, 1989, p. 10). The history of accreditation is still relatively young, argued by some to be the reason why so little is known of its impact (Carter & Sapp, 1994). Accreditation is not a new concept, however. New York State implemented accreditation of educational institutions with its Board of Regents over 200 years ago (Bizzack, 1993). Accreditation appears in many fields, including education, medicine, food safety, and corrections (Bizzack, 1993; Carter & Sapp, 1994; Doerner & Doerner, 2012; McCabe, Ponomariov, & Estrada, 2017), though it became available for police organizations only a few decades ago. During the 1960's and 1970's, police organizations fought images of incompetency, brutality, and corruption, leading to subsequent calls for reform (Doerner & Doerner, 2009; Kelling & Moore, 1988). The police reforms of August Vollmer and O.W. Wilson are argued to likely have influenced the idea of accreditation (Baker, 1995), though accreditation found success in the late-1970s, albeit after multiple unsuccessful attempts. Scholars reference the initial 1967 report by the President's Commission on Law Enforcement and Administration of Justice as highlighting the need for reform (Baker, 1995; Bizzack, 1993; Cheurprakobkit, 1996; Williams, 1989). This report suggested that many officers were not adequately trained to use their firearms, nor were policies in place to instruct officers when to use them – a point similarly expressed in the commission's follow-up report, Task Force Report: The Police (President's Commission on Law Enforcement and Administration of Justice, 1967a; President's Commission on Law Enforcement and Administration of Justice, 1967b). The work of Chapman & Crockett (1963) predates the two aforementioned

reports, but their findings were similar in that many police organizations at that time either had no written policies or relied on an 'oral policy' regarding firearm instructions. Finally, the commission called for states to create standards and mandatory requirements for departments, with the latter report referencing the training standards that existed in California and New York agencies (President's Commission on Law Enforcement and Administration of Justice, 1967a; President's Commission on Law Enforcement and Administration of Justice, 1967b). Accreditation was thus believed to impact police behavior through policies and procedures (Alpert & McDonald, 2001).

This call for standards was seized by International Association of Chiefs of Police (IACP), though they did see failed attempts at creating accreditation standards in 1970 and 1976. In 1979, the IACP, after joining forces with the National Sheriff's Association (NSA), the National Organization of Black Law Enforcement (NOBLE), and the Police Executive Research Forum (PERF), received funding to create these standards by the Law Enforcement Assistance Administration (LEAA) (Baker, 1995; Williams, 1989). The newly-dubbed Commission on Accreditation for Law Enforcement Agencies (CALEA) created over 1300 policy standards, though this number was later reduced to around 900 mandatory and nonmandatory<sup>4</sup> standards (Baker, 1995; Leible, 2003; Mastrofski, 1986; Hougland & Mesloh, 2005; Williams, 1989). One hundred and seventy-five agencies applied for accreditation, and on December 31st, 1986, forty-two agencies were granted initial CALEA accreditation (Williams, 1989). Mastrosfki (1986) suggested that many of the first agencies to receive accreditation were relative 'shoo-in's, as the policy standards of these departments were similar to CALEA standards.

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<sup>&</sup>lt;sup>4</sup> Mastrofski (1986) argued that many of the nonmandatory standards were required to be met as well. It appears that based on CALEA's website, Mastrofski's argument still holds true at the time of this study.

Interestingly, there was early backlash towards CALEA by many chiefs in New York and California. Chiefs speculated that with federal programs came federal 'strings attached,' and suggested that as states with already high standards, there was no need for CALEA accreditation (Mastrofski, 1986). Nonetheless, the idea of CALEA accreditation quickly lead to the development of state standards, training, and accreditation boards in Arizona, California, Idaho, Kentucky, Maine, Michigan, New Hampshire, and Oregon (Bizzack, 1993). Today, nearly all 50 states and the District of Columbia have at least one CALEA accredited police organization (CALEA, 2017).

CALEA Today. CALEA has grown considerably since its inception, and even at the time of this study continues to grow. The number of reported CALEA-accredited organizations varies, with scholars reporting that only 3 percent, or 500-600 of 18,000 eligible agencies, are CALEA-accredited (Doerner & Doerner, 2009; Doerner & Doerner, 2012; Hougland & Mesloh, 2005; Walker & Archbold, 2013). CALEA, itself, reports considerably higher membership, with 864 agencies accredited, 208 agencies undergoing the accreditation process, and 74 agencies enrolled to begin the accreditation process in 2017 (CALEA, 2018). The process of accreditation has been heavily described in previous research (Bizzack, 1993; Cheurprakobkit, 1996; Cotter, 1983; Dyer, 2005; Falzarano, 1999; Geis, 2005; Kurz & Kelly, 2005; Mastrofski, 1986; Van Ness, 2013; Williams, 1989), so to avoid redundancy, this literature review will not go into great detail of the phases. However, it is important to note that the CALEA accreditation process entails five steps: 1) application for accreditation, 2) application review by CALEA, 3) agency self-assessment, 4) CALEA on-site assessment<sup>5</sup>, and 5)

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<sup>&</sup>lt;sup>5</sup> This study highlights the importance of policies and administrative rule-making in reshaping police behavior, though the CALEA on-site assessment phase of accreditation requires departments to provide

subcommittee review and accreditation decision (Bizzack, 1993; Cheurprakobkit, 1996; Cotter, 1983; Dyer, 2005; Falzarano, 1999; Geis, 2005; Kurz & Kelly, 2005; Mastrofski, 1986; Van Ness, 2013; Williams, 1989).

There are interesting points to make of CALEA. First, though these standards are marketed to 1) protect agencies from civil and criminal law suits, 2) effectively provide services that control criminal activity, 3) increase review of agency standards and policies, and 4) increase citizen confidence in police practices (Hougland & Mesloh, 2005), CALEA does not write the policies for the agencies. CALEA requires a directive to be written of a topic, though this directive is written at the discretion of the department seeking accreditation (Baker, 1995; Mastrofski, 1986; Walker, 2018; Walker & Archbold, 2013). Baker (1995) described the directives as "[telling] the agency what needs to be done rather than how to do it" (p. 66). There are exceptions to this statement, as CALEA directives on the use of deadly force must reflect the Garner<sup>6</sup> decision (Mastrofski, 1986; More, Wegener, Vito, & Walsh, 2006; Walker & Archbold, 2013). Second, even though CALEA reports a little under 1,000 accredited agencies members or prospective members in 2017, this points out that over 17,000 departments were not seeking CALEA accreditation in the same year. Some scholars have suggested that CALEA would become widespread within twenty years of its inception (see, Leible, 2003; Sandel, 1992), though it is relatively still under-utilized by departments.

proof of compliance with these practices. With this in mind, we understand that accreditation is not simply revising policies – it is both revising policies and demonstrating compliance with these policies.

<sup>&</sup>lt;sup>6</sup> Referencing *Tennessee v. Garner*, 471 U.S. 1 (1985), a landmark Supreme Court decision that deadly force could not be used to apprehend fleeing felons whom did not pose a threat to officers or the community.

Previous literature has shed some light on this issue, as many agencies cite accreditation costs, time, and paperwork as deterrents from CALEA accreditation (Bizzack, 1993; Carter & Sapp, 1994; Cheurprakobkit, 1996, Doerner & Doerner, 2009, 2012; Dyer, 2005; Falzarano, 1999; Kurz & Kelly, 2005; McCabe et al., 2017; Sandel, 1992; Williams, 1989). The accreditation process was found to average just under two years to just under three years to complete (Bizzack, 1993; Williams, 1989). Additionally, both Williams (1989) and Bizzack (1993) reported that direct and indirect costs to meet accreditation compliance totaled \$70,000–\$90,000. Simply put, accreditation takes a lot of time and a lot of money, something many agencies cannot provide. Doerner & Doerner (2009, 2012) indicated that these deterrents have opened the markets for state accreditation processes, such as the Commission for Florida Law Enforcement Accreditation that accredited 30 percent of Florida municipal agencies from 1997-2006. Bizzack (1993) found that compared with the average CALEA costs, the average state accreditation costs between New York, Colorado, and Washington were \$38,320. However, not all states have state accreditation bodies, and some states share accreditation bodies across states<sup>7</sup>.

Current Accreditation Findings. "Accreditation is having some positive impact albeit small and not statistically significant" (Baker, 1995, p.134). The current literature has not examined how accreditation affects police organization use of deadly force. The police accreditation literature, in general, has not fully explored its impact outside of a limited number of areas. CALEA accreditation has been included in studies of use of force (Alpert & McDonald, 2001) and how it impacts citizen complaints of use of force

<sup>7</sup> Law enforcement organizations in Alaska utilize standards from the Oregon Accreditation Alliance, found at: https://www.oracall.org/

(Hougland & Wolf, 2017). Several studies examined the impact of accreditation on police organizations, such as the number of lawsuits against accredited police organizations (Hougland & Mesloh, 2005), and organizational characteristics of accredited police organizations (Burlingame & Baro, 2005; McCabe & Fajardo, 2001; Sandel, 1992). Other studies have examined organizational behavioral outcomes of accredited agencies, such as the use of crime analysis units (Giblin, 2006), community-oriented policing efforts (Carter & Sapp, 1994; Gingerich & Russell, 2006; Johnson, 2015; Teodoro & Hughes, 2012), and crime control efforts (Leible, 2003). Finally, some studies have examined how CALEA accreditation affects both officer recruitment and individual officer attitudes (Baker, 1995; Hughes & Teodoro, 2012).

In general, police accreditation literature attempts to solicit the process and benefits of accreditation (Cotter, 1983; Falzarano, 1999; Kurz & Kelly, 2005), attempts to provide demographics of accredited organizations (Cheurprakobkit, 1996; Dyer, 2005; Van Ness, 2013; Williams, 1989), or argue when and if police organizations should become accredited (Geiss, 2005; Mastrofski, 1986). State accreditation has seen similarly little empirical attention (see, Doerner & Doerner, 2009; 2012). The current body of literature indicates that accreditation does not significantly impact the use of force or citizen complaints of excessive use of force, recruit selection methods, reduction of frequency or severity in lawsuits of police departments<sup>8</sup>, officer attitudes or involvement in community-oriented policing, crime control, or provide outcomes that offset the initial costs of accreditation (Alpert & McDonald, 2001; Baker, 1995; Bizzack, 1993; Cheurprakobkit, 1996; Dyer, 2005; Hougland & Mesloh, 2005; Hougland & Wolf,

8 Per CALEA's website, a reduction in risk and liability exposure is touted as something gained by departments from CALEA accreditation: http://www.calea.org/content/law-enforcement-program-benefits

2017; Hughes & Teodoro, 2012; Johnson, 2015; Leible, 2003; McCabe et al., 2017; Teodoro & Hughes, 2012). There has been some supportive findings of CALEA, suggesting that accredited departments were significantly more likely to use polygraph exams, employ women and women of color, have crime analysis units, employ street-level officers more receptive to community-oriented policing, and provide more non-classroom training to officers (Baker, 1995; Burlingame & Baro, 2005; Giblin, 2006; Gingerich & Russell, 2006; McCabe & Fajardo, 2001). Needless to say, the impact of accreditation is relatively unknown, though it leans towards not significant in many areas.

Gaps in Accreditation Research. Without a full understanding of its impact, some scholars have been critical of accreditation, suggesting it to be "a mostly empty, self-congratulatory exercise" (Hughes & Teodoro, 2012, p. 43). This study does not intend to attack CALEA or accreditation (Hougland & Mesloh, 2005). The goal of accreditation research is to understand what outcomes are affected by organization accreditation. Accreditation attracts new police organizations each year, yet little outside of anecdotal evidence can attest to its impact. The understanding of its statistical impact is limited to descriptive statistics from survey responses (see, Bizzack, 1993; Carter & Sapp, 1994; Cheurprakobkit, 1996; Dyer, 2005; Gingerich & Russell, 2006; Sandel, 1992) and questionnaires (Baker, 1995; Williams, 1989). CALEA has also not been explored with a large sample size. A number of studies were limited to samples sizes of six to sixteen CALEA-accredited departments (Cheurprakobkit, 1996; Hughes & Teodoro, 2012; Johnson, 2015; Teodoro & Hughes, 2012) or restricted to samples of CALEA-accredited agencies within one state (Cheurprakobkit, 1996; Doerner & Doerner, 2009, 2012; Gingerich & Russell, 2006; Johnson, 2015). The limitations of

previous studies thus introduce the need for a large-scale study of CALEA accreditation's impact on a large social issue such as arrest-related deaths.

In review, new data sources permit a new understanding of police use of deadly force. This data permits scholars to understand these encounters demographically, situationally, spatially, and organizationally. Scholars can now explore patterns in police organization deadly force, an area that has been historically unexplored. If there do exist organizations that kill substantially more citizens than others, organizational processes such as accreditation, another understudied aspect of policing, may impact the number of people killed.

# Hypothesis

Controlling for relevant variables, such as organization size, jurisdiction, and region, CALEA-accredited police organizations from 2000-2017 will have significantly fewer arrest-related deaths, as compared to police organizations that were never CALEA-accredited during 2000-2017.

Chapter three will describe the use of crowd-sourced data in examining trends in the number of citizens killed by police. The dependent variable, the count of those killed by each department, will be described in detail, as well as the independent variable, accreditation. Control variables such as agency size, jurisdictional type, and region will be outlined. Finally, the statistical analysis will be introduced.

#### **CHAPTER III**

#### **METHODS**

#### Data

Data for the current project were compiled from the crowd-sourced database, fatalencounters.org (FE). FE is a grant-funded national database of citizens killed by police. The database was developed by D. Brian Burghart, former journalism instructor at the University of Nevada and current editor of the *Reno News and Review*. On the FE website, Burghart suggested that the database was created due to a discovery that police deadly force encounters are often unreported or omitted from news. The goal of FE thus became to create a "comprehensive, searchable database of people who die for any reason through fatal police encounters" (Fatalencounters.org, n.d.). Burghart, assisted by paid researchers and volunteers, has attempted to capture, if known, the deceased's name; age; sex; race; photograph; date of injury resulting in death; address of injury; city location of injury; county location of injury; zip code of injury; state of injury; the agency or agencies responsible for the death; official cause of death; a brief description of events; disposition of death; link to news article; and documented symptoms of mental illness and/or drug and/or alcohol use (Fatalencounters.org, n.d.).

This database was chosen for four reasons: first, the scope of FE extended beyond all other crowd-sourced databases. FE data are available from January 1, 2000 to the present day. While many scholars have utilized the *Washington Post* and the *Guardian* data, they are only available from 2015 to the present day. Furthermore, killedbypolice.net data are only available from May 1, 2013 to May 1, 2018, and at the time of this study, is temporarily defunct. Using FE provides the longest possible scope

for the project, and this scope is most likely the crowd-sourced data to indicate the longitudinal patterns in police killings. Thus, the project will utilize FE data from January 1, 2000 to December 31, 2017, the longest possible span of data from complete years. Second, other crowd-sourced databases utilize FE to verify their own information. Both the *Washington Post* and the *Guardian* state on their webpages that they use FE to verify their data. Rather than relying on data that is verified using FE, this study will directly use the data that other crowd-sourced databases use to validate their information. Third, multiple recent studies have utilized FE when examining police killings (see, Jennings & Rubado, 2017; Ozkan et al., 2017), and Ozkan and colleagues (2017) found that FE adequately captured Dallas (TX) Police Department officer-involved shootings. Fourth, and finally, the Bureau of Justice Statistics cited the methodology of FE as a model they were looking to implement in a future revised ARD program (Banks et al., 2016).

IBM SPSS 22.0 was used to convert the Microsoft Excel spreadsheet of the FE database that was downloaded on January 22, 2018. Two waves of data cleaning were conducted to aggregate the individual cases to the police organizational level. First, 23,665 arrest-related deaths were recorded from January 1, 2000 to January 22, 2018. All deaths where the dates in the 'Dateofinjury' or 'DateYear' variables were missing or outside the scope of January 1, 2000 to December 31, 2017 were removed (97 deaths), reducing the usable sample to 23,569 deaths. All cases where the primary agency responsible for the death were missing were removed (57 deaths), reducing the usable sample 23,512 deaths. Finally, all cases that resulted in a cause of death that could not be rationally committed by officers and supported by police use of force policies were excluded: all deaths resulting from burning or smoke inhalation (28 deaths), drowning

(128 deaths), drug overdoses (168 deaths), falls from heights (65 deaths), medical emergencies (343 deaths), 'other' (50 deaths), stabbed (40 deaths), and 'undetermined' (103 deaths) were excluded, reducing the usable sample to 22,587 deaths.

Second, the data were aggregated to the departmental level through a number of ways. The existence of a police organization was primarily confirmed through an agency ORI table from the University of Michigan's ICPSR<sup>9</sup>. If the organization's ORI was not available, annual Police Employee data from the FBI's UCR, the PoliceOne law enforcement directory<sup>10</sup>, and the USACOPS online law enforcement directory<sup>11</sup> were used to confirm an organization's existence. One final attempt to confirm the organization's existence included searching for the organization on the Google search engine, and using the department's website, social media platforms, or Google reviews of the agency, if available. If none of the aforementioned venues confirmed an organization's existence, it was excluded from the study. Additionally, a combination of Google search engine queries, ORI lookup table listings, and municipal websites were used to appropriately name the organizations, as notable examples from Ohio and Pennsylvania included multiple similarly-named organizations in the same state. One hundred seventy-five deaths were ultimately excluded because an agency's existence could not be confirmed, or the death occurred outside of a traffic stop or call for service<sup>12</sup>. The final aggregation of the data resulted in 4,985 police organizations responsible for 22,412 deaths from January 1, 2000 to December 31, 2017.

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<sup>&</sup>lt;sup>9</sup> ORI lookup table available from https://www.icpsr.umich.edu/files/NACJD/ORIs/STATESoris.html

 $<sup>^{10}</sup>$  The PoliceOne law enforcement directory is available from https://www.policeone.com/law-enforcement-directory/

<sup>11</sup> USACOPs directory available from https://www.usacops.com/

<sup>&</sup>lt;sup>12</sup> All deaths that occurred in a jail/correctional facility, or by employees of such facilities were excluded from the study.

# **Dependent Variable**

Agency arrest-related deaths were operationalized into a total of 235 variables, including 216 monthly count variables, 18 yearly scale variables, and a scaled total variable that summed the yearly totals for all 18 years. Figure 3 reflects the scaled total variable and indicates the trend in those killed by police from 2000–2017<sup>13</sup>, as reported by FE.

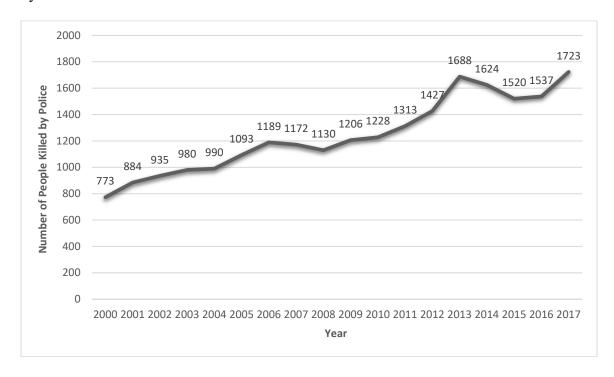


Figure 1. People Killed by Police Annually (FE Data), 2000-2017.

From 2000 to 2006, there was a steady increase in arrest-related deaths annually, breaking 1,000 people killed annually from 2005 to present. From 2006 to 2008, there is a slight decrease in the number of people killed annually, though these numbers still

<sup>&</sup>lt;sup>13</sup> On the 'Database & Name Check' page of the FE website, three points of data are stated to be inaccurately captured: 1) suspect race, 2) suspect mental state, and 3) legal disposition of the event. Due to none of those variables being included in the aggregation, this figure is believed to show valid increases in arrest-related deaths from 2000-2017. This is supported by a sentence on that same page stating, "We believe we include complete records for all 50 states and DC back to 2000."

exceed 1,000 annually. From 2009 to 2012, there is a steady increase in arrest-related deaths until 2012 to 2013, when there are one of two sharp increases in those killed. From 2013 to 2016, which includes many of the high-profile deadly police encounters in recent memory, there was a decrease of arrest-related deaths, followed by the second of two sharp increases in deaths from 2016-2017.

The distribution of the scale arrest-related death variable appeared problematic. Figure 2 highlights several issues with the distribution of the variable.

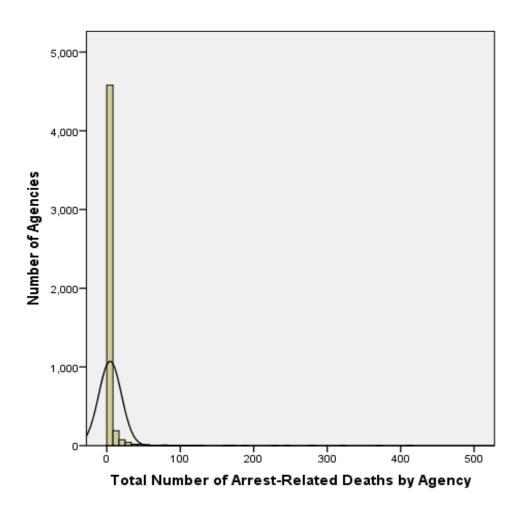


Figure 2. Distribution of Arrest-Related Death Totals across Agencies, 2000-2017. Note:  $\bar{x} = 4.50$  arrest-related deaths; M =1.00; SD = 15.42; Skewness = 13.79; Kurtosis = 266.00.

First, the larger standard deviation relative to the mean indicates a largely heterogeneous distribution (Acock, 2016). Taking into account outliers, agencies averaged 4.50 arrest-related deaths, though the median more-accurately identifies that most agencies killed only one person from 2000-2017; however, the standard deviation was over three times greater than the mean at 15.42, which indicates how dispersed the agency arrest-related totals were. Second, the positive skewness value and long tail of the distribution to the right indicate that there are relatively few larger values in the distribution (Acock, 2016; Bachman & Paternoster, 2017). Finally, the kurtosis value indicates that the peak values are much larger than those of a normal distribution. Acock (2016) identifies a normal distribution kurtosis value of '3', and the value of 266.0 further signals a non-normal distribution. A Shapiro-Wilk normality test confirmed that the distribution was statistically, significantly different from a normal distribution <sup>14</sup>, though recoding this variable was determined to be ill-advised for the analysis. Though there are clear distribution problems, it made intuitive sense to leave the number of arrest-related deaths as continuous rather than dichotomous or polychotomous. With either of the two latter alternatives, statistical power and interpretation may be lost in understanding how accreditation or other factors may impact the number of people an agency kills. Regrouping the numbers of people killed by an agency may prevent us from fully understanding the impact of accreditation on those numbers. Thus, the arrest-related death variable was left continuous. This decision, any other decisions like it, will be further discussed in Chapter 5 where the limitations of the study will be explored.

 $^{14}$  W = 0.195, p < .001.

# **Independent Variable(s)**

Agency accreditation records were retrieved from CALEA Annual Reports from 2000-2017<sup>15</sup>. 'Law Enforcement Accreditation' was documented for police organizations from all 50 states, and the District of Columbia. Police organizations accredited with 'Communications Accreditation,' 'Training Academy Accreditation,' 'Campus Security Accreditation,' or accredited organizations outside of the United States (i.e., organizations in Barbados and Canada) were excluded. Because the CALEA annual reports did not differentiate between agencies in the same state that shared the same name, the accreditation statuses of Miami Township (OH)<sup>16</sup>, Springfield Township (OH)<sup>17</sup>, Union Township (OH)<sup>18</sup>, and Derry Township (PA)<sup>19</sup> were verified through their department webpages. Additionally, the United States Capitol Police organizations in both the District of Columbia and Virginia were consolidated because they were the same organization. Agency CALEA accreditation was thus operationalized into 19 variables, including 18 dichotomous (0/1) year variables and a scale variable that totaled the number of years (out of 18) that an agency was accredited. Of the 4,985 organizations, 4,362 (87.5 percent) had not been accredited at any point from 2000-2017. Of accreditation length, 18 years of accreditation was the most frequent (4.2 percent), and each accreditation length from one year to 17 years each accounted for less than one

<sup>&</sup>lt;sup>15</sup> CALEA Annual Reports from 2000-2017 can be found at: http://www.calea.org/news/annual-reports

<sup>&</sup>lt;sup>16</sup> The webpage for Miami Township (Montgomery County, OH) can be found at: https://www.miamitownship.com/150/Police

<sup>&</sup>lt;sup>17</sup> The webpage for Springfield Township (Hamilton County, OH) can be found at: https://www.springfieldtwp.org/139/Police

<sup>&</sup>lt;sup>18</sup> The webpage for Union Township (Clermont County, OH) can be found at: http://www.uniontownship.oh.us/

<sup>&</sup>lt;sup>19</sup> The webpage for Derry Township (Dauphin County, PA) can be found at: http://www.derrypd.com/

percent each. This scale variable, however, proved to be problematic in the analysis. Figure 3 highlights several issues with the distribution of the scale accreditation variable.

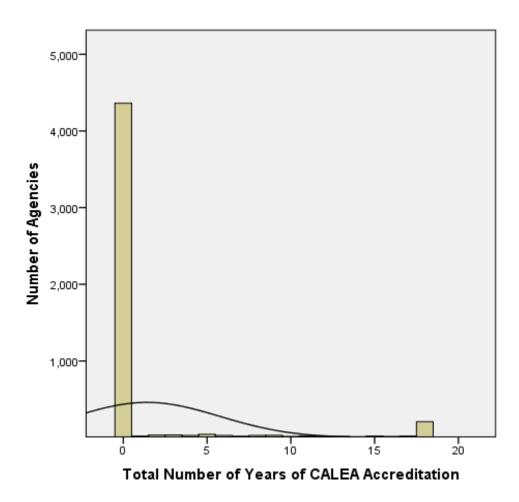


Figure 3. Distribution of CALEA Accreditation Total across Agencies, 2000-2017. Note:  $\bar{x} = 1.41$  years of accreditation; M = 0; SD = 4.32; Skewness = 3.12; Kurtosis = 8.40.

Like the arrest-related death variable, the accreditation variable is statistically, significantly different than a normal distribution<sup>20</sup>, though it made more sense to recode this variable rather than the arrest-related death variable. Dichotomizing (0 = never) accredited, 1 = accredited 1 year or more) and polychotomizing (0 = never) accredited, 1 = accredited 1 year or more) and polychotomizing (0 = never) accredited, 1 = accredited 1 year or more)

 $<sup>^{20}</sup>$  W = 0.361, p < .001.

accredited 1–9 years, 2 = accredited 10–18 years) the accreditation variable would allow one of the goals of the study to be accomplished: understanding to what degree, if any, that accreditation impacts an agency's number of arrest-related deaths. Whether an agency had ever been accredited, or whether an agency had been accredited for less than a decade/more than a decade may indicate at what point accreditation may matter for an agency.

There were a number of additional variables that were included in this study, though because of the analysis (discussed further in Chapter 4), they were not controlled for. First, organization jurisdiction was used to understand what kind of agencies were more-frequently involved in arrest-related deaths. Jurisdiction was primarily retrieved from FBI Police Employee data; if jurisdictional type was unavailable, department webpages were used. All city-level police organizations and regional<sup>21</sup> police departments were codified as '1'. All county-level police organizations, including sheriff's offices and county police departments, were codified as '2'. All state agencies were classified as '3'. All 'other' police organizations, including those serving school districts, college campuses, transportation systems, hospital/healthcare systems, military bases, Native American tribes, special agencies (e.g., prosecutor's offices, bay and harbor police departments, etc.), and organizations with limited jurisdiction in multiple states (i.e., Delaware River Port Authority, Palisades Interstate Parkway Police Department, and Port Authority of New York and New Jersey Police Department) were codified as '4'. All federal agencies were codified as '5'. Municipal agencies (N=3,264) accounted for 65.5 percent of the sample, followed by county agencies (N=1,446) at 29.0 percent,

<sup>&</sup>lt;sup>21</sup> FBI Police Employee Data classifies various regional police organizations in Pennsylvania as municipal agencies rather than county agencies.

'other' agencies (N=146) at 2.9 percent, state agencies (N=106) at 2.1 percent, and federal agencies (N=23) at 0.5 percent. As municipal and county agencies accounted for nearly 95 percent of the sample, these two jurisdictions became the focus of the study, reducing the organization sample size to 4,710 municipal and county police organizations that killed one person or more from 2000-2017.

Second, organization size<sup>22</sup> was used to understand the effect of department size on the number of arrest-related deaths an agency has. Law Enforcement Management and Administrative Statistics (LEMAS) or Census of State and Local Law Enforcement Agencies (CSLLEA) data are traditionally used for agency size (see, Hougland & Wolf, 2017; Jennings & Rubado, 2017; Nix et al., 2017; Shjarback & White, 2016; Willits & Nowacki, 2014). However, LEMAS data were only available from the years 2000, 2003, 2007, and 2013, and CSLLEA data are only available from the year 1996, 2004, 2008, and 2014. FBI Police Employee Data was used captured from the years 2000, 2005, 2010, 2015, and 2017. However, missing data concerns encouraged the use of 2010 data, as they provided full-time department, officer/sworn personnel, and civilian totals for 4,339 (92.1 percent) of the 4,710 municipal and county agency sample. This reduced the sample size to a final sample of 4,339 municipal and county agencies. Organization size was operationalized into two variables: one continuous variable (ranging from 1 to 34,817 full-time sworn personnel), and one dichotomous variable (0 = 1.99 sworn personnel,  $1 = 100 + \text{sworn personnel})^{23}$ . The latter dichotomous variable was ultimately used in the analysis. Of the 4,339 municipal and county police organizations in the

<sup>&</sup>lt;sup>22</sup> Agency size was used in lieu of 'population served.' As many police jurisdictions overlap, this prevented any unnecessary complications in the analyses.

<sup>&</sup>lt;sup>23</sup> This variable is consistent with LEMAS survey data collection; see, https://www.icpsr.umich.edu/icpsrweb/NACJD/studies/36164

sample with available department size data, 3,071 (70.8 percent) were considered employed 99 or fewer full-time sworn personnel, and 1,268 (29.2 percent) employed 100 or more full-time sworn personnel.

Third, *organization region* was included to understand the differences in arrest-related deaths across different parts of the United States. Similar studies (see, Nix et al., 2017; Pinchevsky & Nix, 2018) controlled for regional effects on the number of people killed by police. This study used United States Census Bureau Federal Information Processing Standards (FIPS) codes<sup>24</sup> to classify states by region. These codes mirror UCR region codes<sup>25</sup>. In the full sample, 'National' was codified as '5' and included all federal agencies (excluding Tennessee Valley Authority Police Department, which was reclassified into 'South'). Of the 4,339 municipal and county agencies included in the analysis, 1,781 (41.1 percent) of these agencies were located in the South, 1,208 (27.8 percent) were located in the Midwest, 778 (17.9 percent) of the agencies were located in the West, and 572 (13.2 percent) were located in the Northeast.

Chapter four presents the results of the analytic strategy of the study. Bivariate analyses will be conducted across accreditation lengths, agency sizes and jurisdictions to understand what may impact an organization's number of arrest-related deaths. Chapter five includes the discussion of the results, study limitations, policy implications, and general conclusions from the study.

<sup>&</sup>lt;sup>24</sup> United States Census Bureau FIPS codes can be found at:

https://web.archive.org/web/20130921053705/http://www.census.gov/geo/maps-data/maps/pdfs/reference/us regdiv.pdf

<sup>&</sup>lt;sup>25</sup> UCR regions can be found in regional breakdowns of crime in the United States; for 2017, see: https://ucr.fbi.gov/crime-in-the-u.s/2017/crime-in-the-u.s.-2017/tables/table-4

#### **CHAPTER IV**

#### **ANALYSIS**

To acknowledge the difference in duties and responsibilities between municipal and county agencies, two separate analyses will be conducted. This chapter will thus begin with an analysis of all municipal (i.e., city and select regional police) organizations, and will conclude with county (sheriff's offices, county police, and constable's offices) organizations.

# Municipal Police Organizations (N = 3,010)

To ensure that there were no differences in arrest-related deaths based on agency size, a series of *t*-tests were chosen as the population variance of the sample was unknown, and both *z*-tests (primarily used with large samples) and *t*-tests (primarily used with small samples) yield similar results (Acock, 2016). Table 1 highlights the differences between small and large municipal organizations.

Table 1
Sample descriptives using t-test for equality of means between small and large municipal police organizations (N = 3,010)

	Small Organizations $(N = 2,475)$		Large Organizations (N = 535)		
	M	SD	M	SD	t-test
Arrest-Related Deaths	1.82	1.59	17.15	36.32	-9.759***
Accreditation Length (in years)	0.92	3.42	4.57	6.92	-11.878***

<sup>\*\*\*</sup>p < .001

*Note.* M = Mean. SD = Standard Deviation. Arrest-related deaths range from 1 to 416. Accreditation length ranges from 0 to 18 years.

The *t*-test in Table 1 revealed that there were significant differences in both the number of arrest-related deaths and accreditation length between small and large municipal police organizations. Large municipal organizations averaged significantly more arrest-related deaths (17 deaths) compared to the 2 deaths averaged by small municipal organizations. Further, large municipal organizations averaged significantly more average years of accreditation (4.5 years) compared to the 1 year averaged by small municipal organization. Because size was found to be a significant factor in an agency's number of arrest-related deaths, this requires a further breakdown of municipal agencies, separated by organization size, to understand the intricacies of accreditation.

## Small Municipal Police Organizations (N = 2,475).

The impact of accreditation on small municipal organizations' arrest-related deaths was tested with both the dichotomous and polychotomous accreditation variables. First, a *t*-test was used conducted to understand arrest-related deaths between accredited and non-accredited agencies. There was a significant difference in arrest-related deaths between small municipal agencies that were never accredited ( $\overline{x} = 1.80$ , SD = 1.59) and small municipal agencies that were accredited one year or more ( $\overline{x} = 2.10$ , SD = 1.56); t(274.202) = -2.811, p = .005. These results suggest that accredited small municipal agencies averaged significantly more arrest-related deaths than like-agencies who had never been accredited.

A one-way analysis of variance (ANOVA) test was conducted to compare the effect of small agency accreditation on arrest-related deaths with agencies never accredited, those accredited 1 to 9 years, and those accredited 10 to 18 years. There was a significant effect of accreditation on arrest-related deaths at the p < .01 level among the

three levels of accreditation [F (2, 2,472) = 4.695, p = 0.009]. Because the F test was statistically significant, a post hoc test was conducted to understand specific differences between these groups. Tukey's Honest Significant Difference (HSD) test selected as it can highlight significant mean differences between groups (Bachman & Paternoster, 2017). The Tukey HSD test indicated that the mean number of arrest-related deaths for small agencies never accredited ( $\overline{x} = 1.80$ , SD = 1.59) was significantly different than arrest-related deaths for small agencies accredited 1 to 9 years ( $\overline{x} = 2.23$ , SD = 1.69). However, arrest-related deaths for small agencies accredited 10 to 18 years ( $\overline{x} = 1.95$ , SD = 1.39) did not significantly differ from the 'never accredited' and 'accredited 1 to 9 year' groups. These results suggest that accreditation significantly increased an agency's arrest-related deaths. However, it should be noted that this effect was not significant after an agency was accredited 10 or more years.

A second ANOVA was conducted to compare the effect of small agency number arrest-related deaths in the Midwest, Northeast, South, and West. There was a significant effect of region on arrest-related deaths at the p <.001 level among the four regions [F (3, 2,471) = 50.698, p = 0.000]. The Tukey HSD test indicated that the mean number of arrest-related deaths for small agencies in the West ( $\overline{x}$  = 2.59, SD = 2.67) was significantly different than arrest-related deaths for small agencies in the Northeast ( $\overline{x}$  = 1.34, SD = 0.68), Midwest ( $\overline{x}$  = 1.75, SD = 1.29), and South ( $\overline{x}$  = 1.75, SD = 1.27). These significant differences in arrest-related deaths existed between Northeastern small agencies and Midwestern and Southern agencies as well. Arrest-related deaths did not significantly differ between Midwestern and Southern agencies. These results suggest that arrest-related deaths in small municipal organizations differ significantly across

regions and are significantly more likely to happen in the West, as compared to the Northeast, Midwest, and South.

## Large Municipal Police Organizations (N = 535).

Similar to small municipal organizations, the impact of accreditation on large municipal organizations' arrest-related deaths was first tested with both the dichotomous and polychotomous accreditation variables. First, a *t*-test was used conducted to understand arrest-related deaths between accredited and non-accredited agencies. No significant differences in arrest-related deaths were found between large municipal agencies that were never accredited ( $\overline{x} = 17.01$ , SD = 41.16) and large municipal agencies that were accredited one year or more ( $\overline{x} = 17.38$ , SD = 27.03); t(532.145) = -0.127, p = .899. A one-way analysis of variance (ANOVA) test was conducted to compare the effect of large agency accreditation on arrest-related deaths with agencies never accredited, those accredited 1 to 9 years, and those accredited 10 to 18 years. No significant differences in arrest-related deaths of large municipal agencies were found among the three levels of accreditation [F (2, 532) = 0.438, p = 0.646].

A second ANOVA was conducted to compare the effect of large agency number arrest-related deaths in the Midwest, Northeast, South, and West. There was a significant effect of region on arrest-related deaths at the p <.05 level across the four regions [F (3, 531) = 3.505, p = 0.015]. The Tukey HSD post hoc test indicated that the mean number of arrest-related deaths for large agencies in the West ( $\overline{x}$  = 24.58, SD = 44.48) was significantly different than arrest-related deaths for small agencies in the Northeast ( $\overline{x}$  = 10.18, SD = 34.21). However, there were no significant differences in arrest-related deaths in large municipal organizations in the Midwest ( $\overline{x}$  = 19.33, SD = 43.88) and

South ( $\bar{x}$  = 14.73, SD = 25.67). Like small municipal organizations, these results suggest that arrest-related deaths in large municipal organizations differ significantly across regions and are significantly more likely to happen in the West, as compared to the Northeast, Midwest, and South.

## County Police Organizations (N = 1,329)

This section of the analysis if similarly examine agencies with county jurisdictions, which include sheriff's offices, county police, and constable's offices.

Table 2 highlights the differences between small and county organizations.

Table 2
Sample descriptives using t-test for equality of means for small and large county police agencies (N = 1,329)

	Small Organizations $(N = 989)$		Large Organizations $(N = 340)$		
	M	SD	M	SD	<i>t</i> -test
Arrest-Related Deaths	1.84	1.26	10.71	23.38	-12.421***
Accreditation Length (in years)	0.15	1.43	3.96	6.80	-16.601***

<sup>\*\*\*</sup>*p* < .001

*Note*. M = Mean. SD = Standard Deviation. Arrest-related deaths range from 1 to 416. Accreditation length ranges from 0 to 18 years.

The *t*-test in Table 2 revealed that there were significant differences in both the number of arrest-related deaths and accreditation length between small and large municipal county organizations. Large county organizations averaged significantly more arrest-related deaths (nearly 11 deaths) compared to the roughly 2 deaths averaged by small county organizations. Further, large county organizations averaged significantly more average years of accreditation (roughly 4 years) compared the little or no accreditation

average of small county organizations. Like municipal organizations, size was found to be a significant factor in a county agency's number of arrest-related deaths, thus requiring a further breakdown of county agencies, separated by organization size, to understand the impact accreditation may or may not have.

## Small County Police Organizations (N = 989).

The impact of accreditation on small municipal organizations' arrest-related deaths was tested with both the dichotomous and polychotomous accreditation variables. First, a *t*-test was used conducted to understand arrest-related deaths between accredited and non-accredited agencies. There was a significant difference in arrest-related deaths between small county agencies that were never accredited ( $\bar{x} = 1.82$ , SD = 1.24) and small county agencies that were accredited one year or more ( $\bar{x} = 2.94$ , SD = 2.02); t(987) = -3.664, p = .000. These results suggest that accredited small county agencies averaged significantly more arrest-related deaths than agencies who had never been accredited.

A one-way analysis of variance (ANOVA) test was conducted to compare the effect of small agency accreditation on arrest-related deaths with agencies never accredited, those accredited 1 to 9 years, and those accredited 10 to 18 years. There was a significant effect of accreditation on arrest-related deaths at the p <.001 level among the three levels of accreditation [F (2, 986) = 7.641, p = 0.001]. The Tukey HSD post hoc test indicated that the mean number of arrest-related deaths for small agencies never accredited ( $\overline{x}$  = 1.82, SD = 1.24) was significantly different than arrest-related deaths for small agencies accredited 10 to 18 years ( $\overline{x}$  = 3.50, SD = 2.51). However, arrest-related deaths for small agencies accredited 1 to 9 years ( $\overline{x}$  = 2.64, SD = 1.75) did not

significantly differ from the 'never accredited' and 'accredited 10 to 18 year' groups.

These results suggest that accreditation significantly increased an agency's arrest-related deaths. However, it should be noted that this effect was significant only after an agency was accredited 10 or more years.

A second ANOVA was conducted to compare the effect of small agency number arrest-related deaths in the Midwest, Northeast, South, and West. No significant differences in arrest-related deaths were found among the four regions [F (3, 985) = 1.794, p = 0.147]. These results suggest that arrest-related deaths in small county organizations did not significantly differ across the Northeast, Midwest, South, and West.

## Large County Police Organizations (N = 340).

Similar to small county organizations, the impact of accreditation on large county organizations' arrest-related deaths was first tested with both the dichotomous and polychotomous accreditation variables. First, a *t*-test was used conducted to understand arrest-related deaths between accredited and non-accredited agencies. There was a significant difference in arrest-related deaths between large county agencies that were never accredited ( $\overline{x} = 9.12$ , SD = 23.71) and large county agencies that were accredited one year or more ( $\overline{x} = 14.27$ , SD = 18.69); t(249.845) = -2.153, p = .032. These results suggest that accredited large county agencies averaged significantly more arrest-related deaths than agencies who had never been accredited.

A one-way analysis of variance (ANOVA) test was conducted to compare the effect of large agency accreditation on arrest-related deaths with agencies never accredited, those accredited 1 to 9 years, and those accredited 10 to 18 years. There was a significant effect of accreditation on arrest-related deaths at the p <.05 level among the

three levels of accreditation [F (2, 337) = 3.311, p = 0.038]. The Tukey HSD post hoc test indicated that the mean number of arrest-related deaths for large agencies never accredited ( $\overline{x}$  = 9.12, SD = 23.71) was significantly different than arrest-related deaths for small agencies accredited 10 to 18 years ( $\overline{x}$  = 16.75, SD = 21.79). However, arrest-related deaths for small agencies accredited 1 to 9 years ( $\overline{x}$  = 9.09, SD = 7.31) did not significantly differ from the 'never accredited' and 'accredited 10 to 18 year' groups. These results suggest that accreditation significantly increased an agency's arrest-related deaths. However, it should be noted that this effect was significant only after an agency was accredited 10 or more years.

A second ANOVA was conducted to compare the effect of large agency number arrest-related deaths in the Midwest, Northeast, South, and West. There was a significant effect of region on arrest-related deaths at the p <.001 level across the four regions [F (3, 336) = 6.219, p = 0.000]. The Tukey HSD post hoc test indicated that the mean number of arrest-related deaths for large agencies in the West ( $\bar{x}$  = 24.58, SD = 44.48) was significantly different than arrest-related deaths for small agencies in the Northeast ( $\bar{x}$  = 19.70, SD = 40.81), Midwest ( $\bar{x}$  = 5.08, SD = 6.61), and South ( $\bar{x}$  = 9.82, SD = 14.65). These results suggest that arrest-related deaths in large county organizations differ significantly across regions and are significantly more likely to happen in the West, as compared to the Northeast, Midwest, and South.

#### **CHAPTER V**

#### **DISCUSSION AND CONCLUSIONS**

Police use of deadly force has become one of the most controversial social and legal topics in the United States. Historically, deadly force research has focused on the 'what' rather than the 'why' of these occurrences – this study has made an exploratory step into examining ways to reduce these occurrences from a police perspective. Based on the review of existing literature, there was evidence to suggest that administrative rule-making and police organization policy would have a significant impact on an organization's behavior and outcomes. Thus, CALEA accreditation and the 'standardization' of a use of force policy, with a proof of compliance component, was hypothesized to significantly lower the number of citizens killed by organizations.

This study surprisingly found evidence of the contrary. When accreditation was found to have a significant effect on an organization's number of arrest-related deaths, we saw that the accredited groups averaged significantly higher numbers of deaths than their non-accredited counterparts. These findings do not directly suggest that accreditation leads to more people dying, though it is important to speculate what real-world and study design factors may have led to these conclusions. Purely speculating, it is possible that national accreditation serves as an assurance to officers that adherence to the policy is supported 'nationally' so to speak, and such an assurance may lead officers to use deadly force that is grounded in support. That is, following an accredited policy may promote more deadly force as it would be grounded in support from police executives, both at the national and department level. Though scholars believed police organization accreditation to be a method of improving performance (Baker, 1995; Bizzack, 1993;

Carter & Sapp, 1994; Mastrosfki, 1986), improving performance here may not necessarily translate to less deaths, but rather, more justified deaths. This speculation would require extensive empirical study before this idea could be validated, however. This may be where this study interpreted accreditation as having a different effect on outcomes than it may actually have. Early in this study, CALEA provided over 100 written testimonies and links under its AccreditationWorks! tab on its webpage that include many police chiefs discussing a reduction in their department insurance premiums. Currently, many of these same testimonies, as well as video case studies, now exist on the 'Perspectives on Accreditation' webpage. Many of these testimonies and CALEA itself suggest that police organizations who seek CALEA accreditation gain 1) comprehensive, well thought-out written directives; 2) reports and analyses to make informed management decisions; 3) preparedness programs; 4) improved relationships with the community and government officials; 5) strengthened agency accountability; 6) limited liability and risk exposure; and 7) a distinct mark or affirmation of excellence (CALEA, n.d.). It is possible that this study over-fixated on the liability and risk components, as one can rationally conclude, that there may be no greater risk or liability for police organizations than when officers use force against citizens. However, as speculated earlier, accreditation may further promote deadly force with an increased emphasis on its justification.

Relative to the accreditation finding, there were two additionally significant findings in this study: organization size and region. The size finding was expected – bigger agencies have more citizen encounters, and thus a greater possibility for deadly force encounters. Region may not have come as a surprise, either. Of the top ten

organizations with the most arrest-related deaths, five come from the 'West': Los Angeles (CA) Police Department, Los Angeles County (CA) Sheriff's Department, California Highway Patrol, Phoenix (AZ) Police Department, and Las Vegas Metropolitan (NV) Police Department. While the variables to further ponder this finding were not captured in this study, the differences in policing across regions may be further explored for region-specific outcomes.

#### **Study Limitations**

There are several study limitations in this study that should be mentioned, though these limitations do not necessarily discredit the findings. First, the study design was built on a nonrandom sample. Police agencies <u>had</u> to have killed at least one person from 2000-2017 to be included in the analysis, so 1) we only understand one aspect of one organizational behavior (through the number of people they kill) and 2) because all organizations killed in this study, meaningful comparisons to those that did not are unfortunately missing. While these benchmarks are necessary in future studies, it would be hard-pressed to find commensurate agencies to the likes of the New York City, Los Angeles, Chicago, etc. police departments that did not kill anyone during that time. Second, the study relied upon bivariate analyses to draw these conclusions. While these analyses provided valuable insight, variables such as size, jurisdiction, and region were not controlled for, thus our findings do not depict a definite causal relationship. Third, crowd-sourced data is new and should be understood with caution, though it may be the best alternative to using official data that is currently available. Since Ferguson and subsequent events, the United States Department of Justice responded with a proposal<sup>26</sup>

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<sup>&</sup>lt;sup>26</sup> This proposal can be found in the *Federal Register*'s online journal at https://www.gpo.gov/fdsys/pkg/FR-2016-08-04/pdf/2016-18484.pdf

in 2016 to collect all use of force data (Ortiz, 2016), and in 2017, Senators Cory Booker (D-New Jersey), Chris Van Hollen (D-Maryland), and Representative Joaquin Castro (D-Texas) introduced the Police Reporting Information, Data, and Evidence (PRIDE) Act<sup>27</sup> before Congress that would require all agencies seeking and/or receiving federal grant funding to report all use of force incidents. In January 2019, the FBI is set to begin collecting information on use of force incidents that result in death or serious bodily injury under The National Use-of-Force Data Collection, though early criticisms of the data include voluntary participation (Donaghue, 2018). In the meantime, scholars should seek to further validate crowd-sourced data. This data provided a thorough look at the number of how people are killed by these agencies, though it is unclear how this data stacks up compared to other crowd-sourced data during the same time period.

On a broader scale, there are a few issues that exist throughout police use of deadly force literature – highlighted by the inconsistent conceptualization and operationalization of deadly force. While this study captures the number of those killed, we do see this concept inconsistently captured across the literature, nor is it the ideal measure of use of deadly force. Scholars such as James Fyfe, David Klinger, and John Worrall have suggested that deadly force should be operationalized as any time an officer brandishes his or her service weapon (referenced by Worrall and colleagues (2018) as a 'gun draw'), and include the number of suspects shot at and missed, and shot and wounded (Fyfe, 2002; Klinger et al., 2016). Fyfe (2002) pointed out that while national data does not completely include those killed by police, it also completely omits those who are not killed in similar incidents. These issues with national data call into question

 $<sup>^{27}</sup>$  The PRIDE Act can be found online on Congress's website at https://www.congress.gov/bill/115th-congress/senate-bill/1258

what we know of police deadly force (Klinger, 2012; Klinger et al., 2016; Williams et al., 2016) so long as these issues persist.

Further, this study, and many commensurate police deadly force studies like it, lack a theoretical foundation to guide them. Few theories have been suggested to explore police shootings, such as Reiss's (1980) sequential decision theory and MacDonald and colleagues' (2001) danger perception theory, though these are likely suited only for situational-level analyses. Social psychologists have turned to various biological or psychological frameworks such as racial profiling and implicit racial bias, social conditioning and illusory correlations, and 'shooter bias' (Correll, Park, Judd, & Wittenbrink, 2002; Correll, Park, Judd, Wittenbrink, Salder, & Keesee, 2007; Fazio, Jackson, Dunton, & Williams, 1995; Fridell, 2017; Glaser, 2015; Greenwald & Banaji, 1995; Greenwald & Krieger, 2006; James, Fridell, Straub, 2016; Payne, 2001; Plant & Peruche, 2005; Smith & Alpert, 2007; and Wilson, Lindsey, & Schooler, 2000), though these will be ideal only at the demographic- and individual-level analyses. The abundance of theories and perceptions may be in due, in part, to the emphasis placed on different areas of demographic, situational, spatial, and organizational correlates of police deadly force, though it remains an issue moving forward. While there may or may not be an appropriate theoretical foundation for exploring police deadly force (as it is more-so a legal issue rather than a theoretical one), scholars should seek to embed one, if at all possible.

#### **Future Research**

There are several areas that deserve future exploration. First, participation in national accreditation may be insignificant compared to participation in state

accreditation. Many police organizations elect to become accredited through state processes, and many states have developed their own police accreditation bodies in recent years<sup>28</sup>. To include both national and state accreditation was not possible within the parameters of a master's thesis (in part due to methodological wherewithal and the variation across lifespans and involvement in these state accreditation bodies), though it was relevant to this study – many states such as Pennsylvania and Florida are heavily involved in state accreditation (see, Doerner & Doerner, 2009, 2012). In addition, the use of memorandums of agreement and consent decrees (also to be understood as federal intervention or takeovers) were popular in previous Presidential administrations. From 2009 to January 18, 2017, 24 police organizations entered into memorandums of agreement or consent decrees with the United States Department of Justice (DOJ, 2017), many of which resulted from high-profile police shootings or long-term institutional misconduct. Granted, many of these organizations serve metropolitan areas, though there may be no better way to improve organizational performance than federal government intervention. It is important for future scholars, if organizational processes are still believed to impact organizational behaviors, to explore state accreditation and federal programs as well.

Second, the use of force continuum adopted by departments likely has an impact in the use of force against citizens. While there is no universal use of force policy, departments do not act with complete autonomy in force decisions, and nearly all police

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<sup>&</sup>lt;sup>28</sup> Law enforcement accreditation programs are not available or active in all 50 states. Accreditation programs can be found in the states Arkansas, Arizona, California, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kentucky, Massachusetts, Michigan, Mississippi, New Jersey, New Mexico, New York, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Virginia, and Washington.

organizations have written policies on all levels of use of force (Terrill & Paoline, 2013a; Terrill, Paoline, & Ingram, 2018). The majority of U.S. police organizations utilize a linear force model (Terrill & Paoline, 2013a; Terrill, Paoline, & Ingram, 2012, 2018). In this continuum, officers are not permitted to use force on citizens who are compliant, though they have step-wise options above simple commands if citizens become noncompliant (Paoline & Terrill, 2011; Schmalleger & Worrall, 2010; Worrall & Schmalleger, 2013). However, when citizens become verbally resistant (e.g., ignoring officer commands, blank stares, and verbal disagreements with the officer) or passively resistant (e.g., 'going limp,' clenching their fists), officers are permitted to use soft-hand tactics (e.g., touching, pat-downs, firm grips, and simple restraints) and pain compliance techniques (e.g., pressure points grips) to gain compliance (Garner, Buchanan, Schade, & Hepburn, 1996; Paoline & Terrill, 2011; Schmalleger & Worrall, 2010; Terrill & Paoline, 2013a; Worrall & Schmalleger, 2013). In addition, as citizens become actively and physically resistant, officers are permitted to use oleoresin capsicum (OC, or pepper) spray, conducted energy devices (CEDs) (e.g., Taser), hard-hand tactics (e.g., hand strikes, punches, kicks, takedowns) and impact munitions (e.g., less-lethal weapons, such as the 'bean-bag shotgun') (Garner et al., 1996; Paoline & Terrill, 2011; Schmalleger & Worrall, 2010; Terrill & Paoline, 2013a; Worrall & Schmalleger, 2013).

Though included in the linear continuum, most agencies separate deadly force policy into its own section (Terrill & Paoline, 2013a). At the climax of citizen resistance, any threat of severe harm or loss of life that a citizen poses to an officer or other citizens can be reciprocated through an officer's use of deadly force (Garner et al., 1996; Schmalleger & Worrall, 2010; Tennessee v. Garner, 1985; Worrall & Schmalleger,

2013). The use of deadly force is intended to 'neutralize the threat' (Schmalleger & Worrall, 2010; Worrall & Schmalleger, 2013).

Nonlinear force continuums exist, albeit in a minority of police organizations (Terrill & Paoline, 2013a, 2013b; Terrill, Paoline, & Ingram, 2012, 2018). The same concepts of citizen resistance and officer force responses appear, though this design promotes de-escalation of force rather than a linear increase in force decisions (IACP, 2017; Terrill et al., 2012). Many officers have reported nonlinear models are inadequate for addressing what force is appropriate to use in certain situations (Terrill & Paoline, 2013b). Officers report being well-trained when citizens become physically resistant but desire greater direction up to that point, especially in situations when citizens are verbally- and passively-resistant (Terrill & Paoline, 2013b; Terrill et al., 2018).

Some have been openly critical of the use of continuums with police use of force. Criticisms of continuum models include that they may conflict with contemporary expectations of policing, and that they do not include all circumstances in force situations (Flosi, 2012). Instead, it is proposed that a 'Graham Scale' be conceptualized to include one plate that factors in officer perception of the event, and the other plate that includes the reasonable force option (Flosi, 2012). Others have heavily emphasized officer training of use of force, to include the 'four R's': realism, repetition, review of performance, and responsibility (Artwohl & Christensen, 1997). First, training should require officers learn to respond to sudden, unexpected threats that will allow them to become familiar with the elements of these situations (Artwohl & Christensen, 1997). Second, officers must consistently rehearse these scenarios to remain familiar and improve responses (Artwohl & Christensen, 1997). Third, departments must provide the

effective feedback, either via simulations or instructors that can constructively critique scenario performance (Artwohl & Christensen, 1997). Finally, it should be the responsibility of the department and officers that deadly force is not used arbitrarily in 'defense of life,' but rather, only when it is defending life.

The defense of life standard, as well as objective legal reasonableness, have remained largely unscathed through decades of rigorous testing. While *Tennessee v*. Garner (1985) and Graham v. Connor (1989) are quintessential in discussion the reasonableness of police use of force, and most, if not all, use of force policies reflect these decisions – however, it is important to understand that the parameters of these decisions have been further clarified across lower and higher court levels. Concepts of qualified immunity are intertwined in these conversations, as so long as officers can demonstrate that they acted in accordance with the defense of life standard, or that a reasonable officer in the same situation would have acted in the same manner, officers are generally protected by qualified immunity (see, Bivens v. Six Unknown Agents (1971), Harlow v. Fitzgerald (1982), Anderson v. Creighton (1987), and Saucier v. Katz (2001)). Supreme Court cases, including but not limited to, *Brosseau v. Haugen* (2004), Scott v. Harris (2007), Plumhoff v. Rickard (2014), and Mullenix v. Luna (2017) have further clarified that officers could use deadly force against suspects whose actions threatened the life of officers or others in a number of ways, and examples from these cases can benefit agencies willing to include these cases into training and policy making. Finally, lower court decisions, including but not limited to, *Penley v. Eslinger* (2010), Wilkinson v. Torres (2010), Lamont v. New Jersey (2011), Henry v. Purnell (2011), Terrell v. Smith (2012), Zion v. Nassan (2014), Gonzalez v. City of Anaheim (2014),

McGrath v. Tavares (2014), Godawa v. Byrd (2015), Cole v. Carson (2015), McKenney v. Mangino (2017), Conlogue v. Hamilton (2018), and Kisela v. Hughes (2018) have debated, across circuit courts of appeals, these precedents across police uses of force. It is possible that regardless of policy, so long as officers act with regard to these standards, qualified immunity will have a greater impact on police behavior than any organizational factor.

#### REFERENCES

- Acock, A. C. (2016). *A Gentle Introduction to Stata* (5th Ed). College Station, TX: Stata Press.
- Alpert, G. P. (2015). Toward a national database of officer-involved shootings.

  \*Criminology & Public Policy, 15(1), 237-242. DOI: 10.1111/1745-9133.12178.
- Alpert, G. P., Dunham, R. G., & MacDonald, J. M. (2004). Interactive police-citizen encounters that result in force. *Police Quarterly*, 7(4), 475-488.
- Alpert, G. P., & McDonald, J. M. (2001). Police use of force: An analysis of organizational characteristics. *Justice Quarterly*, 18(2), 393-409. DOI: 10.1080/07418820100094951.
- Alpert, G. P., & Smith, M. R. (1999). Police use-of-force data: Where we are and where we should be going. *Police Quarterly*, 2(1), 57-78.
- Alpert, G.P., & Smith, W.C. (1994). How reasonable is the reasonable man: Police and excessive force. *Journal of Criminal Law and Criminology*, 85(2), 481-501.
- Artwohl, A., & Christensen, L. W. (1997). Deadly Force Encounters: What Cops Need to Know to Mentally and Physically Prepare for and Survive a Gunfight. Boulder, CO: Paladin Press.
- Bachman, R. D., & Paternoster, R. (2017). *Statistics for Criminology and Criminal Justice* (4th Ed). Thousand Oaks, CA: SAGE Publications.
- Baker, S. A. (1995). Effects of Law Enforcement Accreditation: Officer Selection,

  Promotion, and Education. Westport, CT: Greenwood Publishing Group.

- Banks, D., Ruddle, P., Kennedy, E., & Planty, M. G. (2016). Arrest-related deaths program redesign study, 2015-16: Preliminary findings. Washington, DC: Bureau of Justice Statistics.
- Barber, C., Azrael, D., Cohen, A., Miller, M., Thymes, D., Wang, D. E., & Hemenway, D. (2016). Homicides by police: Comparing counts from the national violent death reporting system, vital statistics, and supplementary homicide reports.

  \*American Journal of Public Health, 106(5), 922-927. DOI: 10.2105/AJPH.2016.303074.
- Barry, R. (2014 December 11). Push for greater transparency on police killings gathers pace. *The Wall Street Journal*. Retrieved from https://www.wsj.com/articles/push-for-greater-transparency-on-police-killings-gathers-pace-1418327289
- Barry, R., & Jones, C. (2014 December 3). Incomplete records: Hundreds of police killings uncounted in federal stats. *The Wall Street Journal*. Retrieved from https://www.wsj.com/articles/hundreds-of-police-killings-are-uncounted-infederal-statistics-1417577504
- Belvedere, K., Worrall, J. L., Tibbetts, S. G. (2005). Explaining suspect resistance in police-citizen encounters. *Criminal Justice Review*, 30(1), 30-44.
- Bittner, E. (1970). The functions of police in modern society. *Crime and Delinquency Issues: A Monograph Series*. National Institute of Mental Health.
- Bizzack, J. W. (1993). *Professionalism & Law Enforcement Accreditation: The First Ten Years*. Lexington, KY: Autumn House Publishing.
- Brandl, S. G., & Stroshine, M. S. (2013). The role of officer attributes, job characteristics,

- and arrest activity in explaining police use of force. *Criminal Justice Policy Review*, 24(5), 551-572. DOI: 10.1177/0887403412452424
- Bureau of Justice Statistics. (n.d.). *Arrest-related deaths*. Retrieved from https://www.bjs.gov/index.cfm?tid=82&ty=tp
- Burch, A. M. (2011). Arrest-related deaths, 2003-2009 statistical tables. Arlington, VA: Bureau of Justice Statistics.
- Burlingame, D., & Baro, A. L. (2005). Women's representation and status in law enforcement: Does calea involvement make a difference? *Criminal Justice Policy Review*, *16*(4), 391-411. DOI: 10.1177/0887403405275319.
- CALEA. (n.d). Retrieved from http://www.calea.org
- CALEA. (2018). 2017 annual report. Retrieved from http://www.calea.org/content/2017-annual-report
- Campbell, B. A., Nix, J., & Maguire, E. R. (2017). Is the number of citizens fatally shot by police increasing in the post-ferguson era? *Crime & Delinquency*, 1-23. DOI: 10.1177/001128716686343.
- Carter, D. L., & Sapp, A. D. (1994). Issues and perspectives of law enforcement accreditation: A national study of police chiefs. *Journal of Criminal Justice*, 22(3), 195-204.
- Chapman, S. G., Crockett, T. S. (1963). Gunsight dilemma: Police firearms policy. *Police*, 6, 40-45.
- Cheurprakobkit, S. (1996). Law enforcement accreditation. *TELEMASP Bulletin, 3*(2), 1-7.

- Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals.

  \*Journal of Personality and Social Psychology, 83(6), 1314-1329. DOI: 10.1037//0022-3514.83.6.1314.
- Correll, J., Park, B., Judd, C. M., Wittenbrink, B., Sadler, M. S., & 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), 1006-1023. DOI: 10.1037/0022-3514.92.6.1006.
- Cotter, J. (1983). Law enforcement accreditation: A big step toward professionalism. *FBI Law Enforcement Bulletin*, 52, 19-23.
- Crotty, S., Crotty, J., & Fernandez, S. (2017). Will more black cops matter? Officer race and police-involved homicides of black citizens. *Public Administration Review*, 77(2), 206-216. DOI: 10.1111/puar.12734
- Doerner, W. G., & Doerner, W. M. (2009). The diffusion of accreditation among florida police agencies. *Policing: An International Journal of Police Strategies & Management*, 32(4), 781-798. DOI: 10.1108/13639510911000812.
- Doerner, W. M., & Doerner, W. G. (2012). Police accreditation and clearance rates.

  Policing: An International Journal of Police Strategies & Management, 35(1), 6-24. DOI: 10.1108/13639511211215423.
- DOJ. (2017). An interactive guide to the civil rights division's police reforms. Retrieved from https://www.justice.gov/crt/page/file/922456/download
- Donaghue, E. (2018 November 22). In a first, fbi to begin collecting national data on police use of force. *CBS News*. Retrieved from

- https://www.cbsnews.com/news/fbi-to-begin-collecting-national-police-use-of-force-data/
- Durose, M. R., Schmitt, E. L., & Langan, P. A. (2005). Contacts between police and the public: Findings from the 2002 national survey. Arlington, VA: Bureau of Justice Statistics.
- Durose, M. R., & Langan, P. A. (2007). Contacts between police and the public, 2005.

  Arlington, VA: Bureau of Justice Statistics.
- Dyer, D. (2005). Law Enforcement Accreditation: Is it the Answer? An administrative research paper submitted to The Bill Blackwood Law Enforcement Management Institute of Texas.
- Eith, C. & Durose, M. R. (2011). Contacts between police and the public, 2008.

  Arlington, VA: Bureau of Justice Statistics.
- Falzarano, R. J. (1999). Law enforcement accreditation: One department's experience. FBI Law Enforcement Bulletin, 68(11), 1-5.
- Fatal Encounters. (n.d.). Retrieved from http://fatalencounters.org
- Fazio, R. H., Jackson, J. R., Dunton, B. C., & Williams, C. J. (1995). Variability in automatic activation as an unobtrusive measure of racial attitudes: A bona fide pipeline? *Journal of Personality and Social Psychology*, 69(6), 1013-1027.
- Flosi, E. (2012 May 30). Use of force: Downfalls of the continuum model. *Police One*.

  Retrieved from https://www.policeone.com/use-of-force/articles/5643926-Use-of-force-Downfalls-of-the-continuum-model/
- Friedrich, R. J. (1980). Police use of force: Individuals, situations, and organizations. *The Annals of the American Academy of Political and Social Science*, 452, 82-97.

- Fyfe, J.J. (1980). Geographic correlates of police shooting: A microanalysis. *Journal* of Research in Crime and Delinquency, 17, 101-13.
- Fyfe, J. J. (1982). Blind justice: Police shooting in memphis. *Journal of Criminal Law* and Criminology, 73(2), 707-722.
- Fyfe, J. J. (1988). Police use of deadly force: Research and reform. *Justice Quarterly*, 5(2), 165-205.
- Fyfe, J. J. (2002). Too many missing cases: Holes in our knowledge about police use of force. *Justice Research and Policy*, 4(1-2), 87-102. DOI: 10.3818/JRP.4.1.2002.87.
- Garner, J. H., Hickman, M. J., Malega, R. W., & Maxwell, C. D. (2017). Progress toward national estimates of police use of force. *PLoS One*, *13*(2), 1-23. DOI: 10.1371/journal.pone.0192932
- Garner, J. H., Maxwell, C. D., & Heraux, C. G. (2002) Characteristics associated with the prevalence and severity of force used by police. *Justice Quarterly*, 19(4), 705-746.
- Geis, G. (2005). Law enforcement agency accreditation: An advocatus diabolic brief.

  Law Enforcement Executive Forum, 5(1), 39-43.
- Geller, W. A. (1982). Deadly force: What we know. *Journal of Police Science and Administration*, 10(2), 97-102.
- Geller, W. A., & Karales, J. A. (1981). Split-Second Decisions: Shootings of and by Chicago Police. Chicago, IL: Chicago Law Enforcement Study Group.
- Glaser, J. (2015). Suspect Race: Causes and Consequences of Racial Profiling. New York, NY: Oxford University Press.

- Goldstein J. (2017 April 2). Changes in policing take hold in one of the nation's most dangerous cities. *New York Times*. Retrieved on July 10, 2018 from https://www.nytimes.com/2017/04/02/nyregion/camden-nj-police-shootings.html? r=0
- Greenfield, L. A., Langan, P. A., & Smith, S. K. (1997). Police Use of Force: Collection of National Data. A report jointly published by the Bureau of Justice Statistics with the National Institute of Justice.
- Giblin, M. J. (2006). Structural elaboration and institutional isomorphism: The case of crime analysis units. *Policing: An International Journal of Police Strategies & Management*, 29(4), 643-664. DOI: 10.1108/13639510610711583
- Gingerich, T. E., & Russell, G. D. (2006). Accreditation and community policing: Are they neutral, hostile, or synergistic? An empirical test among street cops and management cops. *Justice Policy Journal*, 3(2), 1-28.
- The Guardian. (n.d.). The counted. Retrieved from https://www.theguardian.com/us-news/ng-interactive/2015/jun/01/about-the-counted
- Hougland, S. M., & Mesloh, C. (2005). Reliability of risk management data in measuring police performance: An initial empirical analysis. *Law Enforcement Executive Forum*, 5(1), 45-54.
- Hougland, S., & Wolf, R. (2017). Accreditation in police agencies: Does external quality assurance reduce citizen complaints? *The Police Journal: Theory, Practice, and Principles, 90*(1), 40-54. DOI: 10.1177/0032258X16671030
- Hughes, A. G., & Teodoro, M. P. (2012). Assessing professionalism: Street-level attitudes and agency accreditation. *State and Local Government Review, 45*(1),

- 36-45. DOI: 10.1177/0160323X12466417
- IACP. (n.d.). Law enforcement code of ethics. Retrieved from https://www.theiacp.org/resources/law-enforcement-code-of-ethics
- IACP. (2001). Police Use of Force in America.
- IACP. (2017). National Consensus Policy on Use of Force.
- Jacobs, D., & Britt, D. (1979). Inequality and police use of deadly force: An empirical assessment of a conflict hypothesis. *Social Problems*, 26(4), 403-412.
- Jacobs, D., & O'Brien, R. M. (1998). The determinants of deadly force: A structural analysis of police violence. *American Journal of Sociology*, 103(4), 837-862.
- James, L., Fridell, L., Straub, F. (2016 February). Psychosocial factors impacting officers' decisions to use deadly force. *The Police Chief*.
- Jennings, J. T., & Rubado, M. E. (2017). Preventing the use of deadly force: The relationship between police agency policies and rate of officer-involved gun deaths. *Public Administration Review*, 77(2), 217-226. DOI: 10.1111/puar.12738
- Johnson, R. R. (2015). Examining the effects of agency accreditation on police officer behavior. *Public Organization Review*, *15*, 139-155. DOI: 10.1007/s11115-013-0265-4.
- Johnson, J. P. (n.d.). A hippocratic oath for policing. Retrieved from https://www.policefoundation.org/a-hippocratic-oath-for-policing/
- Kelling, G. L., & Moore, M. H. (1988). The evolving strategy of policing. *Perspectives in Policing*, 4, 1-15.
- Klinger, D. A. (2012). On the problems and promise of research on lethal police violence:

- A research note. *Homicide Studies*, *16*(1), 78-96. DOI: 10.1177/1088767911430861.
- Klinger, D. A., Rosenfeld, R., Isom, D., & Deckard, M. (2016). Race, crime, and the micro-ecology of deadly force. *Criminology and Public Policy*, 15(1), 193-222. DOI:10.1111/1745-9133.12174
- Krieger, N., Chen, J. T., Waterman, P.D., Kiang, M.V., & Feldman, J. (2015). Police killings and police deaths are public health data and can be counted. *PLoS Medicine*, 12(12), 1-7. DOI: 10.1371/journal.pmed.1001915
- Kurz, D. L., & Kelly, S. F. (2005). Accreditation and the smaller police agency. *Law Enforcement Executive Forum*, *5*(1), 33-38.
- Leible, R. J. (2003). Accreditation: Sacred Cow or Still Misunderstood? An administrative research paper submitted to The Bill Blackwood Law Enforcement Management Institute of Texas.
- Loftin, C., McDowall, D., & Xie, M. (2017). Underreporting of homicides by police in the united states, 1976-2013. *Homicide studies, 21*(2), 159-174. DOI: 10.1177/1088767917693358
- 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), 1117-1121.
- Maguire, E. (2003). Organizational Structure in American Police Agencies: Context, Complexity, and Control. Albany, NY: SUNY Press.
- Mastrofski, S. D. (1986). Police agency accreditation: The prospects of reform. *American Journal of Police*, *5*, 45-81.

- McCabe, B. C., Ponomariov, B., & Estrada, F. (2017). Professional cities: Accredited agencies, government structure, and rational choice. *Public Administration Review*, 78(2), 295-304. DOI: 10.1111/puar.12806.
- McCabe, K. A., & Fajardo, R. G. (2001). Law enforcement accreditation: A national comparison of accredited vs. nonaccredited agencies. *Journal of Criminal Justice*, 29, 127-131.
- McCarthy, T. (2015 March 8). The uncounted: Why the us can't keep track of people killed by police. The Guardian. Retrieved from https://www.theguardian.com/us-news/2015/mar/18/police-killings-government-data-count
- McElvain, J. P. (2009). *Police Shootings and Citizen Behavior*. El Paso, TX: LFB Scholarly Publishing LLC.
- McElvain, J. P., & Kposowa, A. J. (2008). Police officer characteristics and the likelihood of using deadly force. *Criminal Justice and Behavior*, 35(4), 505-521.DOI: 10.1177/0093854807313995.
- Miller, L. (2015). Why cops kill: The psychology of police deadly force encounters.

  \*Aggression and Violent Behavior, 22, 97-111. DOI: 10.1016/j.avb.2015.04.007
- Morin, R., Parker, K., Stepler, R., & Mercer, A. (2017). Behind the badge: Amid protests and calls for reform, how police view their jobs, key issues, and recent fatal encounters between blacks and police. *Pew Research Center*. Retrieved from http://assets.pewresearch.org/wp-content/uploads/sites/3/2017/01/06171402/ Police-Report FINAL web.pdf
- Muir, William K. (1977). *Police: Streetcorner Politicians*. Chicago, IL: University of Chicago Press.

- National Institute of Justice. (1999). Use of force by police: Overview of national and local data. A report jointly published with the Bureau of Justice Statistics.
- Nix, J., Campbell, B., Byers, E. H., & Alpert, G. P. (2017). A bird's eye view of civilians killed by police in 2015. *Criminology & Public Policy*, 16(1), 309-340.

  DOI:10.1111/1745-9133.12269.
- Nowacki, J. S. (2015). Organizational-level police discretion: An application for police use of lethal force. *Crime & Delinquency*, *61*(5), 643-668. DOI: 10.1177/0011128711421857.
- Ortiz, E. (2016 August 9). Justice department wants to track all 'arrest-related' deaths in u.s. *NBC News*. Retrieved from https://www.nbcnews.com/news/us-news/justice-department-wants-track-all-arrest-related-deaths-u-s-n626751
- Ozkan, T., Worrall, J. L., & Zettler, H. (2017). Validating media-driven and crowdsourced police shooting data: A research note. *Journal of Criminal Justice*. DOI: 10.1080/0735648X.2017.1326831
- Paoline III, E. A., & Terrill, W. (2011). Listen to me! Police officers' views of appropriate use of force. *Journal of Crime and Justice*, *34*(3), 178-189. DOI: 10.1080/0735648X.2011.609740.
- Payne, B. K. (2001). Prejudice and perception: The role of automatic and controlled processes in misperceiving a weapon. *Journal of Personality and Social Psychology*, 81(2), 181-192. DOI: 10.1037//0022-3514.81.2.181.
- Pinchevsky, G. M., & Nix, J. (2018). Domestic disturbances and fatal police shootings:

  An analysis of the washington post's data. *Police Quarterly*, 21(1), 53-76. DOI:

  10.1177/1098611117735657

- Plant, E. A., & Peruche, B. M. (2005). The consequences of race for police officers' responses to criminal suspects. *Psychological Science*, *16*, 180-183.
- Planty, M., Burch, A. M., Banks, D., Couzens, L., Blanton, C., & Cribb, D. (2015).

  Arrest-related deaths program: Data quality profile. Arlington, VA: Bureau of Justice Statistics.
- President's Commission on Law Enforcement and Administration of Justice. (1967a).

  The Challenge of Crime in a Free Society. United States Department of Justice.
- President's Commission on Law Enforcement and Administration of Justice. (1967b).

  \*Task Force Report: The Police. United States Department of Justice.
- President's Task Force on 21st Century Policing. (2015). Final Report of the President's

  Task Force on 21st Century Policing. Washington, DC: Office of Community

  Oriented Policing Services.
- Riksheim, E. C., & Chermak, S. M. (1993). Causes of police behavior revisited. *Journal of Criminal Justice*, 21, 353-382.
- Robin, G. D. (1963). Justifiable homicide by police officers. *The Journal of Criminal Law, Criminology, and Police Science*, *54*(2), 225-231.
- Sandel, C. (1992). A Survey of Law Enforcement Agencies that are Accredited or in the Self-Assessment Phase of the Accreditation Process, as provided by the Commission on Accreditation for Law Enforcement Agencies Inc. An administrative research paper submitted to The Bill Blackwood Law Enforcement Management Institute of Texas.
- Schatmeier, E. H. (2013). Reforming police use-of-force practices: A case study of the cincinnati police department. *Columbia Journal of Law and Social Problems*,

- *46*(4), 539-586.
- Schmalleger, F., & Worrall, J. L. (2010). *Policing Today*. Upper Saddle River, NJ: Prentice Hall.
- Shane, J. M. (2018). Improving police use of force: A policy essay on national data collection. *Criminal Justice Policy Review*, 29(2), 128-148. DOI: 10.1177/0887403416662504
- Shane, J. M., Lawton, B., & Swenson, Z. (2017). The prevalence of fatal police shootings by u.s. police, 2015-2016: Patterns and answers from a new data set. *Journal of Criminal Justice*, *52*, 101-111. DOI: 10.1016/j.jcrimjus.2017.05.001
- Sherman, L. W. (1980). Causes of police behavior: The current state of quantitative research. *Journal of Research in Crime and Delinquency*, 17(1), 69-100. DOI: 10.1177/002242788001700106
- Sherman, L. W. (2017). Reducing fatal police shootings as system crashes: Research, theory, and practice. *Annual Review of Criminology*, *1*, 421-449. DOI: 10.1146/annurev-criminol-032317-092409
- Sherman, L.W., & Langworthy, R. (1979). Measuring homicide by police officers. *Journal of Criminal Law and Criminology*, 70, 546-60.
- Shjarback, J. A., & White, M. D. (2016). Departmental professionalism and its impact on indicators of violence in police-citizen encounters. *Police Quarterly*, 19(1), 32-62.
   DOI: DOI: 10.1177/1098611115604449.
- Smith, M. R., & Alpert, G. P. (2007). Explaining police bias: A theory of social conditioning and illusory correlation. *Criminal Justice & Behavior*, 34(10), 1262-1283. DOI: 10.1177/0093854807304484.

- Smith, M. R., Kaminski, R. J., Alpert, G. P., Fridell, L. A., MacDonald, J., & Kubu, B. (2009). A multi-method evaluation of police of use force outcomes: Final report to the national institute of justice. Alexandria, VA: National Institute of Justice.
- Taylor, B., Alpert, G., Kuba, B., Woods, D., & Dunham, R. (2011). Changes in officer use of force over time: A descriptive analysis of a national survey. *Policing: An International Journal of Police Strategies & Management*, 34(2), 211-232. DOI: 10.1108/13639511111131058
- Tate, J., Jenkins, J., Rich, S., Muyskens, J., Elliot, K., Mellnik, T., & Williams, A. (2016). How the washington post is examining police shootings in the united states. *The Washington Post*. Retrieved from https://www.washingtonpost.com/national/how-the-washington-post-is-examining-police-shootings-in-the-united-states/2016/07/07/d9c52238-43ad-11e6-8856-f26de2537a9d\_story.html?utm\_term=.0a9e75e24986
- Teodoro, M. P., & Hughes, A. G. (2012). Socializer or signal? How agency accreditation affects organizational culture. *Public Administration Review*, 72(4), 583-591. DOI: 10.111/j.1540-6210.2012.02531.x.
- Terrill, W., Leinfelt, F. H., & Kwak, D. H. (2006). Examining police use of force: A smaller agency perspective. *Policing: An International Journal of Police Strategies & Management, 31*(1), 57-76. DOI: 10.1108/13639510810852576.
- Terrill, W., Paoline III, E. A., & Ingram, J. (2012). Final Technical Report

  Draft: Assessing Police Use of Force Policy and Outcomes. National Institute of
  Justice.
- Terrill, W., Paoline III, E. A., & Ingram, J. (2018). Beyond the final report: A research

- note on the assessing police use of force policy and outcomes project. *Policing: An International Journal of Police Strategies & Management.* DOI:

  10.1108/PIJPSM-04-2017-0047
- Terrill, W., & Paoline III, E. A. (2013a). Examining less lethal force policy and the force continuum: Results from a national use-of-force study. *Police Quarterly*, *16*(1), 38-65. DOI: 10.1177/1098611112451262.
- Terrill, W., & Paoline III, E. A. (2013b). Less lethal force policy and police officer perceptions: A multisite examination. *Criminal Justice & Behavior*, 40(10), 1109-1130. DOI: 10.1177/0093854813485074.
- Terrill, W., & Paoline III, E. A. (2017). Police use of less lethal force: Does administrative policy matter? *Justice Quarterly*, *34*(2), 193-216. DOI: 10.1080/07418825.2016.1147593
- Terrill, W., & Mastrofski, S. D. (2002). Situational and officer-based determinants of police coercion. *Justice Quarterly*, 19(2), 215-248. DOI: 10.1080/07418820200095221.
- United States Civil Rights Commission. (1981). Who is Guarding the Guardians? A

  Report on Police Practices. Retrieved from

  https://babel.hathitrust.org/cgi/pt?id=pur1.32754062657204;view=1up;seq=7
- United States Civil Rights Commission. (2000). Revisiting Who is Guarding the Guardians? A Report on Police Practices and Civil Rights in America.
- United States Constitution. (n.d.). Retrieved from http://hrlibrary.umn.edu/education/all\_amendments\_usconst.htm
- Van Ness, J. (2013). The Effects of Professional Standards Accreditation Programs on

- Law Enforcement. An administrative research paper submitted to The Bill Blackwood Law Enforcement Management Institute of Texas.
- Walker, S., & Archbold, C. A. (2013). *The New World of Police Accountability*.

  Thousand Oaks, CA: SAGE Publications
- Walker, S. (2018). "Not dead yet": The national police crisis, a new conversation about policing, and the prospects for accountability-related police reform. *University of Illinois Law Review*.
- Weisheit, R. A., Falcone, D. N., & Wells, L. E. (1999). *Crime and Policing in Rural and Small-Town America* (2nd Ed). Prospect Heights, IL: Waveland Press, Inc.
- White, M. D. (2001). Controlling police decisions to use deadly force: Reexamining the importance of administrative policy. *Crime & Delinquency*, 47(1), 131-151.
- White, M. D. (2015). Transactional encounters, crisis-driven reform, and the potential for a national police deadly force database. *Criminology & Public Policy*, 15(1), 223-235. DOI:10.1111/1745-9133.12180.
- Wilson, T. D., Lindsey, S., & Schooler, T. Y. (2000). A model of dual attitudes.

  \*Psychological Review, 107, 101-126.
- Williams, G. L. (1989). *Making the Grade: The Benefits of Law Enforcement Accreditation*. Police Executive Research Forum.
- Williams, H. E., Bowman, S. W., & Jung, J. T. (2016). The limitations of government databases for analyzing fatal officer-involved shootings in the united states.

  \*Criminal Justice Policy Review. DOI: 10.1177/0887403416650927.
- Willits, D. W., & Nowack, J. S. (2014). Police organisation and deadly force: An examination of variation across large and small cities. *Policing & Society*, 24(1),

- 63-80. DOI: 10.1080/10439463.2013.784314
- Worrall, J. L., & Schmalleger, F. (2013). *Policing*. Upper Saddle River, NJ: Pearson.
- Worrall, J. L., Bishopp, S. A., Zinser, S. C., Wheeler, A. P., & Phillips, S. W. (2018). Exploring bias in police shooting decisions with real shoot/don't shoot cases.

  Crime & Delinquency, 64(9), 1171-1192. DOI: 10.1177/0011128718756038
- Zimring, F. E. (2016). How many killings by police? *University of Chicago Legal Forum*, 691-710.
- Zimring, F. E. (2017). When Police Kill. Cambridge, MA: Harvard Univ. Press
- Zimring, F. E., & Arsiniega, B. (2015). Trends in killings of and by police: A preliminary analysis. *Ohio State Journal of Criminal Law, 13*, 247-264.

#### **VITA**

## Francis R. Benton

EDUCATION	
2019	M.A., <i>Criminal Justice and Criminology</i> , Sam Houston State University (Huntsville, TX)
2016	B.S., <i>Criminology</i> (Honors), University of Central Arkansas (Conway, AR)
2016	B.A., Sociology, University of Central Arkansas (Conway, AR)
RESEARCH I	EXPERIENCE
2017 – 2019	Graduate Research Assistant, Department of Criminal Justice & Criminology, Sam Houston State University

## RESEARCH INTERESTS

Policing, Police use of force, Police organizational behaviors, Police accreditation, Geospatial analyses of policing outcomes

## **PUBLICATIONS**

#### **Peer-Reviewed Journal Articles**

- Zhang, Y., Shadwick, J., **Benton, F.**, & Vaughn, M. (2019). Big data and hate crimes motivated by race and ethnicity: A google correlate based analysis. Manuscript currently under review.
- Zhang, Y., Zhang, L., & **Benton, F**. (2019). Hate crime against asian americans. 'Manuscript currently under review.

#### **Non-Peer-Reviewed Journal Articles**

- **Benton, F.** (2016). Within reason: An analysis of department use of force polices in most populated u.s. cities. *CLA Journal*, 4, 1-41. University of Central Arkansas.
- **Benton, F**. (2015). Getting a bad rap: Misogynistic themes in youtube's top 100 most viewed pop and hip hop/rap music videos by artists' gender. *CLA Journal*, 3, 11-35. University of Central Arkansas.

#### CURRENT PROJECTS

- **Benton, F.**, Shadwick, J., & Zhang, Y. An examination of officer-involved shootings in Houston, TX.
- **Benton, F.,** & Zhang, Y. Do police have 'one trigger for trigger finger for whites and another for blacks?' Revisiting racial disparities and significance in police officer-involved shootings.
- Zhang, Y., & Benton, F. Macrostructural analysis of racially motivated hate crimes.

## CONFERENCE PRESENTATIONS

### National Conferences

- Ingram, J., & **Benton**, F. (2019). Characteristics of Police Use of Force Encounters that Lead to Excessive Force Complaints. Paper to be presented at the American Society of Criminology conference (San Francisco, CA).
- **Benton, F.**, Shadwick, J., & Zhang, Y. (2019). Understanding the Spatial Distribution of Officer-Involved Shootings. Paper presented at the 56th Annual Academy of Criminal Justice Sciences conference (Baltimore, MD).

#### State Conferences

- **Benton, F.** (2016). Within Reason: An Analysis of Department Use of Force Polices in Most Populated U.S. Cities. Paper presented at the undergraduate symposium of the Arkansas Sociological and Anthropological Association (Russellville, AR).
- **Benton, F.** (2015). Getting a Bad Rap: Misogynistic Themes in YouTube's Top 100 Most Viewed Pop and Hip Hop/Rap Music Videos by Artists' Gender. Paper presented at the undergraduate symposium of the Arkansas Sociological and Anthropological Association (Conway, AR).

## **Local Conferences**

- **Benton, F**. (2016). Within Reason: An Analysis of Department Use of Force Polices in Most Populated U.S. Cities. Paper presented at the undergraduate symposium of the University of Central Arkansas' College of Liberal Arts (Conway, AR).
- **Benton, F.** (2015). Getting a Bad Rap: Misogynistic Themes in YouTube's Top 100 Most Viewed Pop and Hip Hop/Rap Music Videos by Artists' Gender. Paper presented at the undergraduate symposium of the University of Central Arkansas' College of Liberal Arts (Conway, AR).

## GRANTS AND SPONSORED RESEARCH

2019 Characteristics of police use of force encounters that lead to

excessive force complaints. PI: Dr. Jason Ingram. Role: Research Assistant. Funded by Sam Houston State University Office of

Research & Sponsored Programs. \$5,000.

## ACADEMIC SEMINARS

2015 Forensic Psychology, The Washington Center for Internships and

Academic Seminars (Washington, D.C.)

### TEACHING EXPERIENCE

## **Teaching Assistantships (Sam Houston State University)**

CRIJ 6365	Community Theory of Administration of Justice, Dr. Jurg Gerber
CRIJ 5383	Family Violence, Dr. Kathleen Latz
CRIJ 5370	Elder Abuse and Victimization, Dr. Victoria Titterington
CRIJ 5368	Human Sex Trafficking, Dr. Kathleen Latz
CRIJ 5364	Seminar in Victimology, Dr. Victoria Titterington
CRIJ 3350	Victimology, Dr. Victoria Titterington
CRIJ 3341	Aging, Crime and Victimization, Dr. Victoria Titterington
CRIJ 2394	Courts and Criminal Procedures, Dr. Travis Franklin

#### **Teaching Assistantships (University of Central Arkansas)**

SOC 2321 Social Statistics, Drs. Gordon Shepherd & Sherry Skaggs

## PROFESSIONAL EXPERIENCE

## 2019 Criminal Justice Camp Counselor

Sam Houston State University College of Criminal Justice Oversaw student participation in guest speaker engagements and hands-on activities in forensic technology, martial arts, law and law enforcement, and team building.

## 2016 – 2017 **911 Dispatcher**

University of Central Arkansas Police Department (Conway, AR) Received & responded to emergency and non-emergency telephone and radio communications.

## 2015 **Judicial Security Division Intern**

United States Marshals Service (Washington, DC) Contributed to intake and processing of all documentation related to federal court security officers.

# HONORS, AWARDS, AND SCHOLARSHIPS

SP 2019	<b>Graduate Travel Award</b> , \$1,000, The Graduate School, Sam Houston State University
FA 2018	<b>Graduate Studies Award</b> , \$1000, The Graduate School, Sam Houston State University
FA 2017	Criminal Justice GSO Member of the Month Award, Department of Criminal Justice and Criminology, Sam Houston State University
SP 2016	President's Medallion, University of Central Arkansas
SP 2016	College of Liberal Arts 2015–2016 Outstanding Student Award, University of Central Arkansas
SP 2016	Edwin Sutherland Outstanding Criminology Student Award, Department of Sociology, Criminology, and Anthropology, University of Central Arkansas

## PROFESSIONAL ORGANIZATION MEMBERSHIP

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American Society of Criminology

Division of Policing

Academy of Criminal Justice Sciences

Police Section

# HONORARY ORGANIZATION MEMBERSHIP

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Alpha Chi National College Honor Society Alpha Phi Sigma National Criminal Justice Honor Society Alpha Kappa Delta International Honor Society of Sociology