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Walden University

College of Social and Behavioral Sciences

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Chase D. Wetherington

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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Walden University 2018

Abstract

Law Enforcement Formal Academic Educational Hiring Requirements and Deputy Sheriff Disciplinary Issues

by

Chase D. Wetherington

MS, Saint Leo University, 2015

BA, University of South Florida, 2011

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy
Criminal Justice

Walden University

November 2018

Abstract

There is a lack of research as to what impacts law enforcement disciplinary issues. This is important due to the recent emphasis of officer performance and accountability. In 2008, the Southeast Sheriff's Office (SSO) increased their formal academic educational hiring requirement from a high school diploma to 60 college credits. The impact of this increase has never been analyzed. The purpose of this study was to determine through the theoretical lens of Kohlberg's 6 stages of moral development if an increase in the formal academic educational requirement influenced the number of deputy sheriff disciplinary issues. A quantitative nonexperimental study was used to examine all deputy sheriffs hired at the SSO from 2008 to 2013 and compare their formal academic education levels to the number of their disciplinary issues. A negative binomial regression analysis indicated there was no significant relationship between deputy sheriff formal academic education levels and the number of disciplinary issues. The results were then compared to a previous study conducted in 2011 which analyzed deputy sheriffs hired at the SSO from 2000 to 2005. It was concluded the increase in formal academic education hiring requirements did not impact the number of deputy sheriff disciplinary issues. Race, gender, age and military service of the deputy sheriffs were also analyzed with similar results. Scholarly implications include producing research based on how different levels of education directly impact issues deputy sheriffs have. Implications for social change include studying which characteristics of a deputy sheriff impact their disciplinary issues, which if mitigated could increase public trust in law enforcement and lead to better cohesion with the community.

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Dedication

This dissertation is dedicated to my wife, Sasha. If not for all the extra diapers you changed, bottles you feed, boo boos you kissed, snuggles you gave, and sleep you missed, I would not have been able to do this. You are my Hero. To my children, Kinley, Makaila (bear), and Dalton, you were the inspiration that kept this dream alive. I love you all more than I will ever able to express in words. Although you might not remember this period, I hope by watching me that you discovered that good things in life happen to people who are patient and work as hard as they can for their dreams.

To my parents, Denny and Susie, thank you for always believing in me and being there when I needed you. Pop, thank you for the talks we had which kept me going and giving me the work ethic to achieve my dreams. Thank you for all the cold nights you were out in the fields, even though you did not want to be, so we had what we needed. Momma, thank you for the things in life you did for us and sacrificed, so that you could always be there for me growing up when I needed you, I will never forget it. To Kendall, the best sister, I mean the best editor a brother could ask for, thank you for all your help. To Tiffany, thank you for being there for emotional support, when no one else would understand what I was going through. To Granddaddy and Grammie, you are the best grandparents and role models I could have asked for. Granddaddy, if I turn out to be half the man you are one day, I will be doing pretty good. Grammie, if Kinley and Makaila turn out to be half as tough as you, the boys better watch out. To Granny Beth, although you are not here to see me complete this, you were always the best to me and I know you are watching out for me every day.

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Chapter 1: Introduction to the Study

In the last few years, an extreme amount of focus and scrutiny has been placed on law enforcement agencies and officers for using deadly force or perceived excessive force across the country. According to Carter, Corra, and Jenks (2016), the current state of race relations in the United States has been incited by an incident in Ferguson, Missouri in which a White police officer shot and killed a Black juvenile, Michael Brown, following an alleged robbery. Other recent examples of minorities being killed by law enforcement in what some believed to be excessive use of force include the deaths of Eric Gardner and Freddie Gray. Although some of these situations were later determined to be without excessive force, more effort has been placed on determining what factors contribute to the use of excessive force by law enforcement. According to Gardiner (2016), police excessive use of force is a reality, and it has become a public safety and health crisis. What is important to determine is how widespread police excessive use of force is and how it is caused. Although there is ample evidence available which shows police excessive force is not a widespread problem, even one case of excessive force is one too many. This study made an original contribution to literature by focusing on how an increase in educational hiring requirement of one particular law enforcement agency, impacted the number of deputy sheriff disciplinary issues. Positive social change resulted by determining the contributing circumstances of excessive use of force by law enforcement which could assist in reducing injury and needless loss of life and will allow for the building and strengthening of relationships between communities and law enforcement. This chapter will include the problem, a summary of what others have done

to address the problem, and the identification of how the goal of this study which was to explore how higher education can impact disciplinary problems. The research question explored in this study will be covered as well as the associated hypotheses.

Background

For over a century, members of society have called for higher education in law enforcement. August Vollmer recommended police officers have a bachelor's degree in the 1920s. It was not until the passing of the Omnibus Crime Control and Safe Streets Act of 1968 which included the Law Enforcement Education Program (LEEP), that police officers started to obtain college degrees in higher numbers. LEEP provided federal grant money to law enforcement officers to assist in earning higher degrees (Shernock, 1992). This meant for the first time, not only were recommendations made for law enforcement officers to have higher degrees, federal funding was made available to help officers pay for it. There have been numerous studies conducted in recent years, which have reviewed the relationship between higher education and law enforcement disciplinary issues. Manis, Archbold, and Hassell (2008) completed a study comparing the number of complaints, both sustained and unsustained, about law enforcement officers with a four-year degree to those without a four-year degree. Manis et al. found statistical differences in the frequency of formal complaints for officers without four-year degrees to those with four-year degrees. According to the study, those without degrees were far more likely to be the subject of citizen complaints. Minton (2011) conducted a study on law enforcement officers hired from 2000 to 2005 at a single large law enforcement agency and attempted to but failed to find a statistically significant inverse

correlation between the two variables. Chapman (2012) attempted to find a statistically significant relationship between education and experience in law enforcement and use of force in New Jersey but was unable to find one. Gardiner (2015) focused on education levels in law enforcement, specifically in California, and discussed how these levels affected professional performance. Gardiner, also discussed how California provided more incentives for officers to get higher degrees. Merkwae's (2015) asserted that the more education the officers had, the better they are at dealing with the population. Skogan (2013) examined use of force among police officers in Brazil, to see if the reform movement which focused on increasing the reputation and professionalism of the police by increasing standards was effective. Skogan found that officers who were female, older, and had higher levels of education self-reported less use of force. Fitzgerald (2013), conducted a nonexperimental quantitative study which surveyed 145 law enforcement officers to test the relationship between education and job performance in three midsized Texas cities. Fitzgerald found that there was not a statistically significant association between higher education, rank, and performance. Fitzgerald, however, did find the officers' perception was that higher education assisted in higher job performance. One can see the studies comparing law enforcement disciplinary issues and higher education have varying results. What has not been done is to complete a study which compares a particular law enforcement agency's disciplinary issues, before and after a formal academic educational hiring requirement has been implemented or increased, to see if the increase in standards impacted the number of issues. The goal of this study was to conduct this analysis, making it both crucial and necessary.

Problem Statement

The problem is there is a lack of formal academic education in law enforcement. This is significantly important due to the recent emphasis of officer performance and accountability. Although research has been conducted on the relationship between formal academic education and law enforcement, there is a significant lack of research as to how increasing the formal academic educational hiring requirement of a law enforcement agency impacts disciplinary issues and immoral actions. Although there may be many requirements a person has to surpass to become a law enforcement officer, possessing a college degree is frequently not one of them. The Bureau of Justice Statistics (2003) conducted a study of over 13,000 police departments and found 9% required a two-year college degree and only 1% of police departments required a four-year college degree (Hickman & Reaves, 2006). According to Merkwea (2015), there is currently a volatile relationship between law enforcement and minority and disabled populations; and the more education and training officers have, the better they will be able to deal with these populations. Some agencies provide higher education incentives, others do not. Researchers including Manis, Archbold, and Hassell (2008), noted police officers with four-year degrees had an averaged sustained complaint rate of one-third that of officers with two-year degrees or no degrees at all. Middlebrooks (2015), conducted a qualitative study using responses from police officers, and found those without a college degree believed higher education in some form was important to police officer success. Ramsey (2015) conducted a study in which he compared the educational levels of 1,593 law enforcement academy cadets and found a significant positive relationship between higher

education levels and basic law enforcement academy academic performance including their final overall averages.

Purpose

The purpose of this study was to test the impact of higher formal academic education and educational hiring requirements on the number of law enforcement disciplinary issues within a particular agency; as well as advance the understanding of how educational hiring requirements, or the increase of present requirements impacts deputy sheriff disciplinary issues in general. To address this understanding, the approach was a quantitative nonexperimental research inquiry. The study involved a law enforcement agency within the geographical area of Southeastern United States. It was the goal of this study to narrow down the impact of increasing formal academic educational hiring requirements in law enforcement agencies to determine how to mitigate current and future issues with the community. The Southeast Sheriff's Office (SSO), the agency being used for this study, has over 1,000 full-time and part-time sworn law enforcement deputies and over 3,000 employees total. The law enforcement deputy sheriffs, in this office, patrol in and service rural, suburban, and urban areas. The design involved gathering official data, including internal affairs records, training records, personnel files for all full-time deputies hired from the years 2008 to 2013, and testing for the relationship between the variables. It was decided that Spearman correlational analysis as well as negative binomial regression analysis using the software program SPSS 24 were the most appropriate due to being able to test for the impact of formal academic education on the number of disciplinary issues while reviewing the impact of

covariate variables such as age, military experience, sex, and race, and controlling for them as well.

The research explored the relationship between the formal academic education level of deputy sheriffs performing law enforcement duties and the number of their disciplinary issues. The results of the tests were compared to the results collected by Minton (2011) when he studied the same relationship on all deputy sheriffs hired from 2000 to 2005, prior to the creation of the 60-hour college credit formal academic educational hiring requirement. The comparison was completed to see if the increase in the formal academic educational hiring requirement decreased the number of disciplinary issues. The independent variable in this study was the formal academic education level of the law enforcement deputy sheriffs. The dependent variable in this study was the number of disciplinary issues a deputy sheriff committed after completing the academy and being sworn in. Disciplinary issues can be defined as any offense whether punitive or nonpunitive, which involves avoidable vehicle crashes, excessive use of force, complaints, and standard operating procedure (SOP) violations, which have been investigated by internal affairs and found to have been committed. The punishments for these sustained disciplinary issues ranged from a letter of counseling up to and including termination. The other variables which may impact deputy sheriff disciplinary occurrences include: age, sex, race/ethnicity and military service. Although studying the impact of these variables was not the focus of the study, it was important to note that these variables likely do impact disciplinary issues of deputy sheriffs and researchers must be aware of other variables, so they can be controlled and accounted for.

Research Question

Does an increase in a law enforcement agency's formal academic educational requirement have an inverse relationship with its deputies' disciplinary issues, while controlling for gender, age, race, and military service?

Hypotheses

 H_01 : There is no relationship between a deputy's formal academic education level and the number of disciplinary issues.

 H_1 1: A deputy sheriff's formal academic education level will significantly lower the number of disciplinary issues, while controlling for gender, race, age and military service.

 H_02 : Military service, age, sex, race/ethnicity have no impact on the number of deputy sheriff disciplinary issues.

 H_12 : Military service, age, sex, race/ethnicity have an impact on the number of deputy sheriff disciplinary issues.

 H_03 : Increasing a law enforcement agency's formal academic educational hiring requirement does not impact on the number of its deputies' disciplinary issues.

 H_13 : An increase in a law enforcement agency's formal academic educational hiring requirement will significantly lower the number of its deputies' disciplinary issues.

Theoretical Framework Analysis

Although explained in greater detail in Chapter 2, the theory analyzed in this study was Kohlberg's six stages of moral development because it has been used in similar

studies and can assist in answering the research question and help support the proposed hypotheses.

The theory used as a framework for this study was Kohlberg's six sages of moral development, which is based on the principle that the higher education one has, the higher their moral development is, and therefore such a person should engage in less conflict. Lawrence Kohlberg created the six stages of moral development, which are cognitive in nature, in 1958 to focus on the thinking process that occurs when one decides whether a behavior is right or wrong. The six stages theory was based on a similar theory, Jean Piaget's theory of moral judgment for children (1932). According to Raines (2006), during the first two preconventional stages in Kohlberg's theory, the individual makes ethical decisions based on whether they will be punished and the concept of reciprocity. In those stages, decisions rest on external concerns and not standards or norms. The next two conventional stages are marked by moral values, right and wrong, expectations of others, maintaining the social order and a sense of duty to others. The final two postconventional stages are characterized by rules, legality, duty of contract, mutual trust and respect, and utilitarianism. Nolan (2000), who did a study on police officers using Kohlberg's theory, found police officer participants had high Stage 4 scores in Kohlberg's stages of moral development. Stage 4 is characterized by making moral decisions based on rules, laws and regulations. Minton (2011) also used Kohlberg's theory in his study on law enforcement officers and the effect of higher education in law enforcement. Minton asserted that if higher education advanced moral development in law enforcement officers, it could lead to less use of excessive force, or other significant

misbehavior. This theory is even more appropriate in this particular study due to the study focusing on the impact of increasing the formal academic educational hiring requirements on disciplinary problems, and this theory utilizing a range of moral development. It also aligns with public policy administration and criminal justice because it involves law enforcement and law enforcement agencies cannot create and implement sound policies without sound judgement and moral development.

Nature of the Study

The study included numerical archival data from the SSO and tested for relationship between variables using spearman correlational analysis as well as negative binomial regression. Due to this, the methodology selected was quantitative especially as the purpose of a non-experimental research design was to collect detailed descriptions of existing variables and to use the data to justify and assess current conditions or practices (Organizing, 2018). The research design aligned with the research question, which can be answered using a quantitative non-experimental comparison study. Specifically, the study included negative binomial regression using IBM SPSS 24. The specific variables being used in this study include: the number of disciplinary issues (dependent), formal academic educational level (independent) and covariates, which include: military service, age, gender, and race.

Participants and Scope of Study

In order to conduct this study, data and an appropriate sample size were selected. All full-time deputy sheriffs hired by the SSO from 2008 to 2013 were chosen as the sample being studied. Only fulltime law enforcement deputy sheriffs hired and sworn-in

in the selected years were included in the study. Reserve deputies were not included in the study as they do not operate independently, and often work during special events such as parades or off duty security type work. During the 2008 to 2013 period, 288 employees were hired, sworn in and became certified law enforcement deputies, which was comparable to that of Minton's sample size of 313 deputy sheriffs in his study. In order to confirm the total number of deputies hired from 2008 to 2013 was a large enough sample to get appropriate results, a power analysis was completed.

A possible reliability issue or limitation might be the ability to generalize the results of the study for use across the United States. The SSO was selected due to it serving a racially and ethnically diverse population in both southern rural and urban areas and it being accredited by the Commission on Accreditation for Law Enforcement agencies (CALEA) (Gordon & Cordner, 2010). The SSO employees over 3,000 employees, fitting into the largest category, D-size (300+ personnel). The time period was chosen due to the SSO creating a two-year formal academic educational hiring requirement in 2008. Also, five years have passed since the latest deputies in this sample size have been hired, giving enough time for the gathering of data on any excessive uses of force and/or disciplinary issues to occur.

Data Collection and Instrumentation

The study included all deputies hired from 2008 to 2013, and the archival data came in the form of the deputy sheriffs' personnel files and internal affairs records.

Reviewing law enforcement officer internal affairs and formal academic educational records might bring about confidentially, reliability and related ethical concerns. As far as

accessibility was concerned, all work-related records regarding local government employees such as those who are employed by the SSO are public record as per *The Public Information Act* and obtaining them did not require special access or breach of any ethical guideline. Although no permission was required, written permission was obtained from both the SSO Colonel (Commander) of Patrol Services and Chief Deputy in December 2017, which illustrated the cooperation of the agency during this study. According to Simon (2011), reliability refers to the ability to replicate the results of the study. The archival information came directly from the SSO, so it was known the information would be reliable and the results of study would be able to be replicated. Lastly, no names were included in the data and all information was be linked to address book number (ABNs), which are assigned to each employee upon hiring, but are not known by the general public and are only available if provided by the agency. As an additional assurance confidentially would be upheld, ABNs were not included in this study and were not kept by the researcher after the completion of the study.

Definitions

The following definitions are provided to ensure the understandability of the study:

Accredited (college or university): This is a determination by regional and national accrediting agencies recognized by the U.S. Secretary of Education as reliable authorities concerning the quality of education or training offered by the institutions of higher education or higher education programs they certify (U.S. Department of Education, 2018).

Agency: An agency is defined as a law enforcement unit or other entity, whether public or private, authorized by state law to appoint a person licensed or certified by the commission.

Deputy sheriff: A fully appointed law enforcement officer, who works for a sheriff, who is an elected official not appointed. Deputy sheriffs usually patrol unincorporated areas outside municipal cities, similar to a police officer and state trooper, but does not have the same geographical boundaries.

Disciplinary issues: Although this term can have slightly different meaning from agency to agency, at the SSO, it includes any offense whether punitive or non-punitive, that involves avoidable vehicle crashes, sustained excessive use of force, complaints, and standard operating procedure (S.O.P.) violations, which have been investigated by internal affairs and found to have been committed. The punishments for these disciplinary issues range from a letter of counseling up to and including termination.

Formal academic educational hiring requirement: This is the minimum educational level an applicant can possess to be considered from employment with the agency. At SSO, the minimum is 60 college credit hours, which was implemented in 2008, however an applicant can be hired with less than 60 credit hours of college, if they have a record of military service. Starting in 2018, the 60 college credits requirement can be waived if a potential applicant has been employed for three years full time with same employer. This was not effective during the sample timeframe however, 2008 to 2013.

Excessive use of force: Willfully applying more force than necessary in a given incident. According to the SSO, Rules and Regulations Manual, "Sheriff's deputies shall

use only that degree of force which is necessary to effectively bring a subject and/or situation under control. Anything more would be considered excessive use of force or unnecessary force (Revised September 2008, p. 4.7.06)."

Higher education: Higher education refers to any degree or college credits obtained from an accredited college or university, beyond possessing a high school diploma or GED. Higher education is broken down in Chapter 3 into several levels, which include credit earned towards an associate degree, an associate degree or equivalent 60 credit hours, credit earned towards a bachelor's degree, a bachelor's degree, credits towards graduate degree, a master's degree and finally a Ph.D. degree.

Law enforcement academy: A law enforcement academy is a school operated by a governmental entity that has been licensed by a commission or state to provide basic licensing courses and continuing education for future law enforcement officers.

Sworn-in: This is the process, that involves a person who has already successfully completed a law enforcement academy and is certified to be a law enforcement officer, who is taking a verbal and written oath to protect and serve a community. This process is usually administered by an elected official (judge, sheriff, etc.). This is the point at which a person becomes an actual sworn law enforcement officer, who then begins field training.

Assumptions and Limitations

The study sought to establish if there was a relationship between deputy sheriff formal academic education levels and the number of discipline issues. Therefore, the methodology limited the conclusions that might be drawn by the resulting data. The

study, while specific, lacked a larger degree of scope, that might have contributed to an even better understanding of the relationship between deputy sheriff discipline issues and levels of formal academic education, with regards to severity of disciplinary issues. Also, other present influences shaping a deputy sheriff's behavior could have been sought out, researched and subsequently analyzed. These include social forces as well as the influence of the agency programs, the public, family and peers on deputy sheriff disciplinary issues. One variable, which was not studied was the introduction of the Sheriff's Orientation Training (SOT), which was created in 2008 and discontinued in 2018. SOT was a mandatory two-week paramilitary boot camp, which taught cadets (employees who have not started police academy) discipline and team work through a variety of stress induced drills, firearms training and team building exercises. This program, which could have impacted the decrease in the number of disciplinary issues was not studied as all deputies hired from 2008 to 2013 completed the two-week mandatory program to enter the academy and subsequently become deputy sheriffs. The impact the listed variables have upon and influence deputy sheriff discipline issues remain unknown.

There was an assumption made by using a sample of the data set of variables and displaying the information in an analytical tool, SPSS software, that the study could exact meaningful information and results from the data. Another assumption was that the hiring information provided by applicants hired from 2008 to 2013 was accurate and was verified by the assigned background investigators. Concerning the reported incidents, the researcher has no ability to determine if a deputy sheriff, who was disciplined for a

sustained disciplinary issue, actually committed the offense. SSO Professional Standards (internal affairs) was relied upon to have completed a thorough investigation on each allegation and decided on a correct outcome based on the facts and totality of the circumstances. It was also unknown if any deputy sheriff committed an act of excessive force or did anything which would have been considered a disciplinary issue, which was not reported or discovered. It can be assumed deputy sheriffs with extensive knowledge of the law and agency policies, would know how to prevent detection if they decided to cover up an act of indiscretion. An assumption was made that the data on reported incidents of excessive use of force and other miscellaneous disciplinary issues was accurate. One limitation was, the SSO did not have a policy which made it mandatory to report any changes in formal academic education during the course of a deputy sheriff's career. There is also no additional monetary incentive for deputy sheriffs after completing a bachelor's degree (currently sixty dollars a month) either. This meant, if a deputy, while being employed at the agency, obtained a master's degree or higher, they are not mandated or incentivized to inform the agency, which could lead to the current level (not level at hiring) of education on file for a deputy sheriff to be outdated and inaccurate.

Delimitations

The data for the study were derived from a single law enforcement agency; and therefore, may not be generalizable. The SSO was selected due to it serving a racially and ethnically diverse population in both southern rural and urban areas and it being accredited by the Commission on Accreditation for Law Enforcement Agencies (CALEA) (Gordon & Cordner, 2010). CALEA, which was founded in 1979, was created

to improve public safety services by maintaining a body of standards which are developed by public safety practitioners through a joint effort of several law enforcement executive associations. These include the International Association of Chiefs of Police (IACP), National Organization of Black Law Enforcement Executives (NOBLE), National Sheriffs' Association (NSA), and the Police Executive Research Forum (PERF) (CALEA, 2018). The SSO employees over 3,000 employees, fitting into the largest category, D-size (more than 300 personnel). There are smaller agencies within the United States and southeast; however, some agencies, which might only employ 10-15 officers or fewer would not be suitable for a similar study. Whether these data could be generalized to different types of law enforcement agencies, such as federal departments (agents), state patrol (troopers), police department (police officers), as opposed to sheriff's offices (deputy sheriffs) is unknown. The SSO is however a full-service law enforcement agency, which many, if not most, are in the country. To explain, there are three types of law enforcement agencies according to Minton (2011), restricted service, which provides basic services such as maintaining the jail, transporting prisoners, providing courthouse security, and other duties, *limited service*, which performs some type of traditional law enforcement function, such as, investigations and patrol, and finally full service, which provides all traditional law enforcement functions to include the countywide patrol and investigations, irrespective of municipal boundaries.

SSO deputies, the law enforcement sample population examined by this study, also receive lengthier and more formal training than many other police officers which includes academy training. During the 2008 to 2013 sample period, all SSO deputies

attended the 770-hour Florida Law Enforcement Academy, which is significantly longer than some programs around the country, such as the 408 hour Basic Mandate Law Enforcement program through the Georgia Pubic Safety Training Center, which is one of the largest centers for law enforcement academy training in Georgia (Basic, 2018).

Ethical Assurances/ Conflicts of Interest

As mentioned previously, archival data that was already collected with permission by the SSO, of the applicants hired to be law enforcement deputies from 2008 to 2013, was used for this study. No direct questioning, survey, or notification of the study was completed/conducted with any deputy sheriff, so there was no chance of any negative impact of a deputy sheriff's attitude or performance due to their disciplinary history and any other personnel history being reviewed. One conflict of interest in this study, was that the researcher was an employee (deputy sheriff) of the SSO and was hired in 2012, during the timeframe being studied (2008-2013). This was not an issue however due to only ABNs being utilized as opposed to names.

Significance

This study was difference because it utilized archival data to analyze how increasing the formal academic educational hiring requirement of a law enforcement agency impacted the number of deputy sheriff disciplinary issues. Not only was this impact analyzed, but the impact of other variables was reviewed as well. The original contribution came from analyzing the impact of several variables on the number of disciplinary issues within one single study, but also by conducting a comparative study, which had not been done recently on this subject. Although this study illustrated how law

enforcement disciplinary issues were not actually a systemic issue, even one case of sustained excessive force is arguably too many and the goal of this study was to find out ways to decrease the amount. Positive social change possibly resulted by determining what impacted disciplinary issues by law enforcement and illustrating accurate statistics on law enforcement disciplinary issues to provide greater knowledge to the general public on the subject.

Summary

The purpose of this research was to study the impact of increasing the formal academic educational hiring requirements on the number of deputy sheriff disciplinary issues. The way this was done was by doing a comparison study using Minton (2011) study of the same law enforcement agency as a base line, to see if the implementation of a 60-credit hour educational requirement decreased the number of disciplinary issues. Chapter 1 briefly introduced the proposed study and its components and Chapter 2 will provide an in-depth review of the history between education and law enforcement and how this relationship has evolved.

Chapter 2: Literature Review

Introduction

This chapter contains a review of the literature relating to the development and evolution of law enforcement in the United States from the creation of the country to present day as an academic discipline; and the development of law enforcement as a profession in general. This section explores the research explaining the strength of the

relationship between higher education and improvement in delivery and performance of police services. It was important to this study to follow the ongoing relationship between formal academic education and higher quality of law enforcement as it illustrates how important it is to analyze the impact of an increase in a law enforcement agency's formal academic educational hiring requirement on the number of disciplinary issues. The problem proposed in Chapter 1, that was verified by the literature review, was that there is a clear lack of research conducted on the direct impact of an increase in the formal academic educational hiring requirement on the number of disciplinary issues in a law enforcement agency. In the eighteenth and nineteenth centuries, many advancements were made to law enforcement, with the potential benefit of education adding to this, but nothing was substantially done to increase education until the 1970s. Since then, many studies have been conducted which either support or deny college education's involvement in mitigating law enforcement officer disciplinary issues. This research was crucial because it studied a particular agency before and after an increase in education hiring requirement was implemented to see if this had an inverse relationship or not, which most certainly corresponded to and supplemented the existing body of knowledge on the subject. Readers will note that much of the literature in this review was historical and was retrieved from ProQuest databases using keywords: police, excessive use of force, disciplinary issues, college, college education, educational hiring requirements, training, organizational development, community policing, professionalism, millennial, military, maturity, experience, annual in-service training, intelligence led policing, problem-oriented policing, officer race, and officer gender. Theoretical sources from

ProQuest Dissertation and Theses were reviewed and utilized as well. This chapter includes the history of education and law enforcement starting with the creation of law enforcement in the United States until present day. Recent studies are reviewed to illustrate the support of quantitative and qualitative research studies on the positive relationship of education on law enforcement performance. A review of judicial case law, such as Davis v. The City of Dallas (1985/1990), on the appropriateness of formal academic educational hiring requirements is discussed as well. The theoretical framework used as a basis of the study is Kohlberg's six stages of moral development. Other variables which possibly impact deputy sheriff disciplinary issues include: military service, law enforcement experience, age requirements as well as sex and gender are reviewed as well. Other professions such as nursing and fire rescue and their respective formal academic educational requirements are discussed as far as how these requirements have impacted disciplinary issues in their respective fields.

Theoretical Framework Analysis

There are many theories which can be used when analyzing the impact of higher education and, more specifically, education hiring requirements on the number of disciplinary issues. The most appropriate theory, which was analyzed in this study is Kohlberg's six stages of moral development, because it has been used in the study comparative conducted by Minton (2011) and can assist in answering the research question and help support the proposed hypotheses.

The theory used as a framework for this study is Kohlberg's six stages of moral development, which is based on the principle that the higher education one has, the

higher their moral development is, and therefore they should engage in less conflict. Lawrence Kohlberg created the six stages of moral development, which are cognitive in nature, in 1958 to focus on the thinking process that occurs when one decides whether a behavior is right or wrong. This theory was based on a similar theory, Jean Piaget's Theory of Moral Judgment for Children (1932). According to Raines (2006), during the first two pre-conventional stages of Kohlberg's theory, the individual makes ethical decisions based on whether they will be punished and the concept of reciprocity. Decisions rest on external concerns and not standards or norms. The next two conventional stages are marked by moral values, right and wrong, expectations of others, maintaining the social order and a sense of duty to others. The final two postconventional stages are characterized by rules, legality, duty of contract, mutual trust and respect, and utilitarianism. Kohlberg's stages of moral development have been validated across cultures, age, and gender (Raines, 2006). Nolan (2000), who did a study on police officers using Kohlberg's theory, found police officer participants had high Stage 4 scores in Kohlberg's stages of moral development. Stage 4 is characterized by making moral decisions based on rules, laws and regulations. Minton (2011) also used Kohlberg's theory in his study on law enforcement officers and the effect of higher education in law enforcement. Minton asserted that if higher education advanced moral development in our law enforcement officers, it could lead to less use of excessive force, or other significant misbehavior. This theory is appropriate to public policy administration because an agency cannot make sound policies without sound judgement and moral development.

Early Law Enforcement and Education Until the 1970s

In order to get a better understanding of the impact education had and potentially has on the number of law enforcement disciplinary issues, the creation of and history between the two must be reviewed. The relationship between law enforcement and education was tumultuous from the start. Law enforcement and education both advanced in the nineteenth and twentieth century, but not on the same pace or course. In England, where the first American law enforcement agencies obtained many of their traditions and policies, a legendary early law enforcement leader named Sir Robert Peel (1788-1850) made tremendous impact. Sir Peel was known for writing and publishing works on the subject of officer readiness and preparation while trying to transform policing in London in the early 1800s. Sir Peel believed in having highly educated and qualified officers, which was evident in his application of this mentality to the London police force. Within the first three years of Peel's control of law enforcement in London, there were 5,000 dismissals and 6,000 required resignations during the probationary period, the largest police turnover in history, which was clearly consistent with Peel's beliefs regarding hiring and retaining the right candidates (Germann, 1988, p.63).

In America, even after the American Revolution, law enforcement itself was non-existent in many areas and in areas where they were available, they consisted solely of volunteer watchmen who simply alerted the public of danger (Potter, 2013). Most of these volunteers drank and slept on duty and were avoiding military service. Also, according to Potter (2013), it was not until the early nineteenth century, that the idea of a centralized municipal police department first emerged in the United States. By the 1880s,

all major U.S. cities had municipal police forces in place. In the west frontier or the 'wild west' as it was more fondly known, sometimes the person with the quickest draw was made sheriff. In America in general, there were no official guidelines as to what made a qualified sheriff or lawman and thus no standards by which to judge them. According to McClellen and Gustafson (2012), in the late ninetieth century, advancements had been made in the fields of law, medicine, and architecture as far as professional associations were concerned, however no such standard had been created in the field of law enforcement. Haber (1993) concluded law enforcement standards and professional rank and structure were already found in places like Britain at the time but not the United States. At the time of the First World War (1914-1918), reports indicated that 75 percent of police personnel could not pass an Army intelligence test (Sherman Report, 1978). In the early 1900s, few had a bigger impact on advancing law enforcement standards in the United States than August Vollmer (1876-1955), whose ideas still impact law enforcement today (Paynich, 2009). Vollmer was concerned with education and law enforcement because he himself was in law enforcement, acting as the Chief of Police in Berkeley California, and was known in 1916 for creating a law enforcement training program at the University of California, Berkeley, which was one of the first in the country (Gardiner and Williams, 2014). In addition to this, Vollmer also helped create the nation's first two-year college police program at, what is currently, San Jose State University in 1930 (Gardiner and Williams, 2014). Vollmer pushed for education in law enforcement early on, even in as early as the 1920s. Although Vollmer's thoughts were forward thinking, they were not mainstream and the idea of higher education in law

enforcement was never seriously discussed or contemplated until years later in the 1960s as a part of the President's Commission on Law Enforcement and the Administration of Justice (1967) after the civil rights riots started (Gardiner, 2015). Vollmer, however pressed on and assisted on the National Commission on Law Observance and Enforcement (also called Wickersham Commission) which was established in 1929 by President Herbert Hoover. According to Paoline (2007) and Carter et al (1989), some of the findings of the commission included suggestions for increasing the standards of police officers, to include having a four-year degree to be a law enforcement officer. A point of note was, these were only suggestions not yet backed up by science or law enforcement officials in general. The Wickersham Commission reports were released during the early 1930s, the era known as the Great Depression, which meant the financial support needed to accomplish Vollmer's educational goals was not available (Paoline et al, 2015). In addition to the financial hurtles, law enforcement departments and officers themselves were resistant to the academic overhaul in law enforcement. According to Middlebrooks (2015), the vast majority of police departments in the United States did not even require a high school diploma or GED until the 1950s and 1960s. The struggle to increase education in law enforcement continued.

In the 1960s, racial intention in the United States was extremely high in addition to the increasingly unpopular Vietnam War raging on. This meant law enforcement played a crucial role in either mitigating the issues raging on or aggravating them. The 1967 President's Commission on Law Enforcement and Administration of Justice, which began in 1965, consisted of three national conferences, five national surveys, hundreds of

meetings, and tens of thousands of individual interviews, all of which were aimed at determining what if anything could be changed in law enforcement. In the commission's report, it was noted more crime occurred than what was reported, and reform was needed as far as how crime was reported, which included creating a national emergency number "911." On page xi in the actual report, titled, The Challenge of Crime in a Free Society, in a section specifically concerning personnel requirements, it included the following "As an ultimate goal, the Commission recommends that all police personnel with general enforcement powers have baccalaureate degrees." What set this commission apart however, was that it was followed by the Omnibus Crime Control and Safe Streets Act of 1968 which included the Law Enforcement Education Program (LEEP). LEEP provided federal grant money to law enforcement officers to assist in earning higher degrees (Shernock, 1992). This meant for the first time, not only were recommendations made for law enforcement officers to have higher degrees, the act included federal funding to help officers pay for it. According to Carter (1989), the LEEP program was designed to encourage criminal justice personnel to attend college, with the hope that law enforcement officers with higher education would provide better, more responsive, and appropriate police service. In the long term, this was expected to translate into better police leaders. The success of the program can in part be observed by the number of officers who took advantage of the program in just the first few years. According to Goldstein (1977), the LEEP Program provided financial support to over 20,000 students or serving police officers seeking higher education in its first year, and over 95,000 such students by 1973. Soon after, the National Advisory Commission on Criminal Justice

Standards and Goals (1973) chartered a course of action for law enforcement formal academic educational standards and LEEP funds by "setting a rough 2-year (2 years of college work requirement), 5-year (3 years of college work requirement), and 10-year (a 4-year baccalaureate degree requirement) plan for entry-level policing employees" (Paoline & Terril, 2007). It was determined college education in criminal justice studies was needed, but the available programs in this field around the country was questioned (Roberg & Bonn, 2004). The National Advisory Commission on Higher Education for Police Officers of 1978, also known as the Sherman Report, criticized these programs as being nothing more than technical training already available at police academies. The Sherman Report referred to criminal justice programs in the 1970s as being "intellectually shallow and conceptually narrow" (Sherman, 1978). In addition to this, the commission recommended that education should cover all subjects not just focus on social sciences, giving perspective and existing law enforcement officers a better understanding of a variety of subjects, not just a repeat of what was taught in law enforcement academies (Paoline & Terril, 2007). According to Carlan (2007), although college based criminal justice education programs began to gain respect in the law enforcement community, they struggled to gain acceptance in the world of academia as a whole.

In the 1970s, as a partial impact of the creation of LEEP, researchers began to examine the impact of college education in policing more than ever before. Officers with degrees were compared to their less educated counterparts. The results from numerous studies generally concluded those with college educations had higher citizen contact

ratings, higher reviews from supervisors, were more focused on ethics, were better communicators, and got injured less (Paoline & Terril, 2007). On the other side however, some believed that college-educated officers would be less satisfied with policing and more willing to leave the field (Novak et al., 2016). In addition to this, The National Advisory Commission on Higher Education for Police Officers of 1978 found a shortage of career opportunities for educated officers was an issue in police organizations and at times new officers with higher formal academic educational qualifications were resented by senior officers with no college or university experience (Sherman, 1978, pp.185-188).

Law Enforcement and Education 1980s-Present

In the late 1980s, the Police Executive Research Forum (known commonly as PERF) conducted a national survey examining the state of police education in America, which included an extended look at all prior research on the relationship between law enforcement and education and surveyed numerous police departments including: all local police departments serving populations of 50,000 residents or more, all state police/highway patrol agencies, all countywide police departments with 100 or more employees, and all county sheriff's departments with 100 or more employees, for a total of 699 agencies surveyed (Carter & Sapp, 1990). The results of the study indicated that the invention and addition of a community policing model increased the responsibilities of patrol officers which in turn required them to be "better decision makers, more innovative, and more tolerant" (Rydberg & Terrill, 2010). The findings of this study made college education for law enforcement officers more relevant than in previous years. The PERF survey also showed increases in the education level of police officers.

Twenty three percent of the 250,000 officers surveyed held four-year degrees, up from nine percent in 1974, which was a dramatic change considering only 14 percent of departments required a college degree at all in 1988. This requirement was up from six percent in 1975. Of the 14 percent of departments who required a college degree in 1988, less than one percent required a four-year degree, while nine percent required a two-year degree (Rydberg, 2009, Carter & Sapp, 1990).

Many incidents occurred across the country, which placed law enforcement and their ability to protect their communities into question. In 1991, following a high-speed pursuit, and subsequent capture of a black male suspect, Rodney King, many issues were brought into question. King was beaten by several white officers while more stood by and watched it happen. This act, unfortunately for the officers, was videotaped, which led to the resignation of LAPD's police chief, Darryl Gates, and set in motion numerous acts of change towards reducing police brutality and corruption. Along with a mounting racial tension occurring in Los Angeles at the time, this act helped spark the LA Riots of 1992 (Cannon, 1998). These violent clashes between law enforcement and citizens sparked a need for a new type of policing. Although community centered policing was gaining traction in the 1980s, it was not until the 1990s, that this new form of policing, officially called "Community-oriented policing" or COPS was established and touted by academicians and practitioners as the appropriate response to crime and disorder issues and police-community conflict (Rosenbaum and Lurigio, 1994). The federal government, who pushed this new type of policing, supported it financially by providing incentives to agencies who agreed to participate in community policing activities. The Department of

Justice and more specifically the Office of Community Oriented Policing Services, provided money for over 100,000 new officers for COPS in the 1990s (Bureau of Justice Statistics, 2000). Prior to COPS, training and academy-based education mostly involved physical activities, "such as firearms training, physical training, defensive tactics, and driving. Traditional training also included some knowledge areas such as law, arrest procedures, traffic enforcement, and officer safety. Neglected were areas such as communications, diversity, problem solving, and police-community relations." (Chappell, 2007). In 2004, Robert Thompson authored a book titled, Beyond reason and tolerance: The purpose and practice of higher education. In his book, Thompson laid out three reasons why higher education is important for those between 18 and 25 years old who are in or are about to enter the workforce. Although not specifically about law enforcement, the three advantages of higher education are all extremely applicable to law enforcement and cannot be obtained by students who do not engage in education above the high school level. The first was "personal epistemology that reflects a sophisticated understanding of knowledge beliefs, and ways of thinking" (Thompson, 2014, p. 43). It can be concluded from this, that higher education assists one in thinking in a broader varied sense, as opposed to focusing on a specialized topic. This is commonly referred to as being "more well-rounded", versed in universal knowledge. The second component was "empathy and the capacity to understand the mental states of others" (Thompson, 2014, p. 44). A majority of law enforcement calls for service deal with having empathy and require the ability to understand the mental state of others. This is done to see if someone needs mental health treatment or just someone to vent to. Understanding a

conflicted person's mental state could reduce the chance of injury or excessive use of force. The third integral part Thompson lists, was "an integrated identity that includes values, commitments, and a sense of agency for civic and social responsibility" (Thompson, 2014, p. 44). Arguably every police agency wants to have an identity that includes values, shows commitments to the community it serves and has a focus on civic and social responsibility. According to Powers (2017), more specifically, this aligns with most police department's mission statements such as the Los Angeles Police Department (LAPD

Judicial Review of Educational Hiring Requirements and Law Enforcement Performance

Some worry that requiring college education in a variety of professions, including law enforcement, may be unconstitutional and discriminate against minorities and women. In addition to this being the case in other law enforcement employment studies, one study conducted by Schuck (2014), found that agencies with higher percentages of females employed as law enforcement officers tended to have higher education requirements than those that only required a high school diploma. Formal academic educational hiring requirements in law enforcement have been found to be constitutional by being upheld in the judicial system as well. In the court case Griggs v. Duke Power Company (1971), Duke Power Company was found by the United States Supreme Court to discriminate against minorities because it created requirements which did not pertain to the ability to perform the job in question. Inversely, the results show that if an employment practice was job related, it may be allowed as a requirement and was not considered discriminatory. In fact, data collected over the years indicated that the higher-

education requirement did not negatively impact minority police officers (Novak et al., 2016). In the court case Davis v. City of Dallas, 748 F. Supp. 1165 (N.D. Tex. 1990) the circumstances differed than with Griggs v. Duke Power Company. Cynthia Durbin, a White woman, was hired by the City of Dallas to be a police officer but was later fired because of unsatisfactory performance during field training. Brenda Davis, a Black woman, applied for a position as a City of Dallas police officer but was never hired due to the belief her application had been falsified. Durbin and Davis both sued the City of Dallas believing they were discriminated against on the grounds of being a woman (Durbin) and being Black (Davis) respectively, which would be a violation of Title VII of the Civil Rights Act of 1964. Title VII forbids an employer to "fail or refuse to hire or to discharge any individual ... because of such individual's race, color, religion, sex or national origin." In passing Title VII, Congress announced that sex, race, religion, and national origin are irrelevant to the selection, evaluation, and compensation of employees. Yet, "the statute does not purport to limit the other qualities and characteristics that employers may take into account in making employment decisions." (Justia, 2018). At first the court agreed the requirements were discriminating against blacks not females, so the plaintiffs and the City of Dallas filed injunctions on each other, and the City of Dallas reduced the number of qualifications, to a list which were all agreed upon except three, college credit, marijuana usage and traffic violation convictions (Justia, 2018). The United States District Court for the Northern District of Texas rejected the plaintiffs' argument and sided with the City of Dallas. Specifically, on the formal academic educational hiring requirement, the court said this:

Because of the responsibility given to an officer through his gun and badge, society must prepare the officer for his or her responsibility as fully as possible. College requirements are one of the tools for preparation. A policeman today is poorly equipped for his job if he does not understand the legal issues involved in his everyday work, the nature of the societal problems he constantly encounters, [and] the psychology of those people whose attitudes towards the law differ from his. Such understanding is not easy to acquire without the kind of broad general knowledge that a higher education imparts, and without such understanding a policeman's response to many of the situations he meets is likely to be impulsive or doctrinaire. Few professionals are so peculiarly charged with individual responsibility as police officers. Officers are compelled to make instantaneous decisions, often without clear cut guidance from the Legislature or departmental policy, and mistakes of judgment could cause irreparable harm to citizens or even to the community. Complexities inherent in the policing function dictate that officers possess a high degree of intelligence, education, tact, sound judgment, impartiality and honesty. (Davis v. City of Dallas, 748 F. Supp. 1165 1990 via Justia, 2018)

In the end, the court upheld the department's requirement that police applicants have at least 45 semester hours and a "C" average from an accredited university, because the requirement was associated with the job requirement, and the benefits of the requirements outweighed any discriminatory effects (Novak et al., 2017). This was a

monumental finding by the court, because not only did it uphold the formal academic education hiring requirements by law enforcement agencies as being constitutional, it also showed it was the opinion of the court that higher education (college degree) was associated with the profession and was therefore beneficial to officers.

Military Experience and Law Enforcement

Law enforcement agencies across the country struggle to find qualified applicants to fill their rank and file. Agencies need qualified willing applicants, who are able to handle the stress and exhaustion of police work. This was made all too clear on February 14th, 2018, when one of the deadliest school shootings in United States history occurred at Stoneman Douglas High School in Parkland, Florida. The school resource deputy assigned to the school was discovered on camera taking cover outside the school refusing to engage the shooter, a course of action followed by several officer deputies who arrived on scene, as the lone gunman killed 17 people inside. One way it was believed to eliminate the problem of hiring those too scared to act in stressful and life-threatening situations was to look to those currently or formerly in the military, due to their training and experience in high stress situations. The United States military, specifically the U.S. Army Reserve, even offers a Private Public Partnership (P3), which assists law enforcement agencies in recruiting soldiers, veterans, and family members free of charge (Barnes, 2017). Traditionally, those with military service, especially those who serve as military police, were thought to have the skills and knowledge to join law enforcement agencies and excel when dealing with stressful and sometimes deadly situations. Due to this, many law enforcement agencies have adopted a para-military organizational model,

but this might be a mistake as this model has little empirical evidence supporting it.

Patterson (2002) conducted a study which found more military experience did not significantly predict fewer organizational work events and lower perceptions of stress, or more field work events and greater perceptions of stress. Patterson only found more years of police experience predicted fewer negative work events. In a study conducted by Ivie and Garland (2011), the results indicated that negative exposures to demanding events influenced burnout for all officers including those from the military.

The International Association of Chiefs of Police (IACP) (2009) suggested that veterans do in fact have a unique set of skills that make them desirable for police agencies: physical abilities/conditioning familiarity with weapons training, leadership, experience in combat, respect for authority and discipline, and experience in working with diverse groups. The IACP also noted negatives associated with recruiting veterans too, including a lack of training on how to control one's reaction to certain events, which differ in law enforcement than in military warfare. The IACP (2009) also noted the high incidence of post-traumatic stress disorder (PTSD) among combat veterans as well as other behavioral issues such as attendance issues and frequent use of sick leave, inappropriate use of force, and incidents of domestic violence. Due to being exposed to situations of extreme stress and combat, which can cause physical and mental illnesses, soldiers in some instances have had to rely on medications and or illegal drugs to cope. "Overall drug use has increased within the last few years and is attributed to the misuse of prescription drugs, specifically pain medications" (Fagan, 2013). The Department of the Defense in 2008 conducted a study in which active-duty service members were asked about drug use and one in eight reported using drugs within the last 30 days (Bray et al., 2010). One in four Afghanistan and Iraq War veterans reported symptoms of a mental health disorder and one in six reported symptoms of PTSD, each of these is associated with substance abuse and dependence among veterans (Office of National Drug Control Policy, 2010). In a profession which has to enforce prescription and illegal drug abuse laws, individuals who are more prone to breaking these laws themselves have a lower chance of being hired by law enforcement agencies and enforcing these laws, if they do in fact get hired, as opposed to those who have not engaged in these activities.

Members of the armed forces, specifically military police (MPs) do get law enforcement training, however it differs from domestic law enforcement training due its specialization in investigating anti-terrorism, weapons of mass destruction and biological warfare (Fitzgerald, 2009). The military is meant to deal with external threats and only interfere in state and local law enforcement matters when necessary in order to maintain peace and order in times of social unrest and chaos. This changed a little after 9/11 when the lines blurred between law enforcement and military (Fitzgerald, 2009). Although no one is advocating the military patrolling the streets of the United States, this has not stopped 1.2 million weapons in the 1990s from being transferred from the military to law enforcement entities. Additionally, as the war in Iraq deescalates, there has been over \$2.6 billion in military equipment and over \$600 million in funds made available to law enforcement agencies for antinarcotic and terrorism enforcement activities (Lockwood, 2011). It is no wonder with access to the similar training, tactics and armament available to those previously in the military, veterans are enticed to join law enforcement agencies.

Sometimes, criminals and gangs declare war on the police, much like what enemy combatants do on military personnel. What is different however, is that police officers must meet these threats with professionalism and appropriate temperament.

"Police officers may not have to respect criminal values, but must respect the life of their enemy, the criminal, in order to remain truly ethical and effective protectors of the public. Soldiers rarely lack the capacity for aggression, so being ethical in policing could be inconsistent with agencies seeking officers who can be tough on crime" (Fitzgerald, 2013).

Job Performance and Higher Education

Although the purpose of this study was to analyze the impact of higher formal academic educational hiring requirements on the number of law enforcement disciplinary issues, this does not mean there is a systemic disciplinary problem among law enforcement officers. Law enforcement officers (LEO) around the country are seemingly suffering from either unfair and bias media coverage or from the missteps of a small portion of LEOs who break the law. According to a Pew Research Center survey, about eight-in-ten officers (81%) who work in departments with 100 or more sworn officers say the media generally treat the police unfairly (Gramlich & Parker, 2017). This has been shown to make the officers who believe this become more frustrated and angry as a result. The study also revealed that the same officers who have a negative view towards how they are portrayed by the media also are more likely than their fellow officers to see

a disconnect between themselves and the public, which could result in a decrease in professionalism. Does this mean the media coverage of specific officer wrongdoing is able to be generalized for all officers? The answer is no. According to the United States Justice Department (2015), from 2002 to 2011, an annual average of 44 million persons age 16 or older had at least one or more interactions with police. Of those, there were 715,000 cases where force was threatened or used (1.6%) and 535,300 (1.2%) times where excessive force was used. Of the ones who experienced use of force, almost half had two or more contacts with police. 1,129 people in 2017 were killed by U.S. police officers out of a total United States population of 325.7 million. In 2016 (most recent FBI statistics), there were approximately 900,000 law enforcement officers serving in the United States, of which, 66 police officers were feloniously killed (FBI, 2017). This means based on the most current statistics, .0003% of United States citizens were killed by police and .007% of officers were killed by citizens in 2017 and 2016 respectively, illustrating that proportionally, it is almost 20 times more likely a police officer will be killed by a citizen than a citizen being killed by a police officer. In 2015 alone, there were between 14,703 and 9,704 known deadly weapon assaults on law enforcements officers, of which 990 resulted in police using deadly force. This means depending on the statistic used, even when an officer was justified in using deadly force, one citizen out of between 10-15 wielding deadly weapon attacks were killed. This illustrates how law enforcement officers across the nation are using the appropriate amount of restraint and de-escalation techniques, which results in deaths of only 7-10% of the situations where lethal force may have been legally justified (Johnson, 2016). Even after all of this, law enforcement

officers were still effective in performing their duties and made an estimated 10,662,252 arrests in 2016 (FBI, 2017). 45.6% of violent crimes and 18.3% of property crimes were cleared by arrest or exceptional means. In 2015, 59.4% of murder offenses, 53.3% of aggravated assault offenses, 40.9% of rape offenses, 36.5% of rape offenses and 29.6 percent of robbery offenses were cleared (Federal Bureau of Investigation [FBI], 2017).

Although the number of excessive uses of force cases by law enforcement officers is comparatively low, the ultimate goal is to have none. One way to decrease this figure is to review law enforcement standards and educational levels to find shortcomings. This is to make sure law enforcement officers are as skilled, trained and knowledgeable as possible. There are few professions other than law enforcement that require the diversity of skills and knowledge needed as a part of the everyday service required. One second an officer could be called upon to perform CPR on a person experiencing cardiac arrest and another might be forced to stop a robbery, which might lead to the officer having to take someone's life in order to save others. Although this is the case, law enforcement in general still does not get the respect it deserves compared to other professions. According to Baro & Burlingame (1999), even the U.S. Census Bureau doesn't categorize police officers as professionals. One reason for this might be because, educationally speaking, law enforcement is currently behind other professions that provide help as a service. Souryal, a professor of criminal justice and police administration, provides a definition of a profession which reaffirms the role of higher education, within the designation. Specifically, he defines a profession as, "an organized association in which specialized knowledge and learning is used for the welfare of a population in accordance with

advanced standards of technical performance, ethics, and experience" (Souryal, 1977, p. 397). According to Mayo (2006), the professions of nursing/health, social work/psychology, and teaching/education all require various types of college degrees as an entry requirement. Although law enforcement officers are not medical professionals, their duties often require them to be psychologists, sociologists, counselors, therapists as well as teachers, and lawyers on a daily basis depending on the situation. It is well documented that law enforcement agencies struggle to fill vacant positions, which leads to excessive stress, earlier burnout for officers, or possibly additional disciplinary issues as a result of depression, anger or fatigue of the officers. One might think that if an agency increased their formal academic educational hiring requirement like so many other listed professions have, filling vacant positions would be harder, but this might not be the case. It would not be wise to lower standards to increase the workforce, which has shown to reduce professionalism and increase problems, but rather to maintain or increase the requirements to attract the best possible candidates, who previously might have not looked into law enforcement as a profession due to the negative 'dumb fat cop' connotation associated with law enforcement. An example of this is found in federal law enforcement agencies. Unlike the majority of most state, county, and local law enforcement agencies, federal law enforcement agencies typically require a bachelor's degree as a standard for their formal academic educational minimum requirement of employment (Careers, 2018). The Federal Bureau of Investigation (FBI), U.S. Secret Service, Drug Enforcement Administration (DEA), and Bureau of Alcohol Tobacco Firearms and Explosives (ATF) are included in this. These agencies consistently have

waiting lists to apply for the agencies, despite the fact that the physical and educational requirements are higher than the majority of law enforcement agencies, while not paying any higher salaries for new agents. This can be "attributed to the prestige of these agencies in the professional world and the higher formal academic educational requirements it's hard to dispute that these agencies attract the best candidates" (Ramsey, 2015). This is the case in other professions as well. In Ontario, Canada one reason higher education has been made a requirement virtually systematically across the profession of nursing, was that it has been pushed by a governing body, the Ministry of Health's Nursing Task Force and the College of Nurses of Ontario, whereas policing has no such group to push for increasing higher education requirements across the board (Hussein, 2008). This is similar in the United States as well, where although higher education has been suggested for decades, no policies have been implemented to enforce this by any state government or the federal government at all. In corrections, the debate for higher education requirements for its officers is ongoing as well. According to Stinchcomb (2004), there is no standard education hiring requirement in corrections, with most departments requiring just a high school diploma or GED, however, individuals with associate degrees or higher were more frequently employed at correctional facilities. As a result of the riots in the 1970s and 1980s, the Michigan Corrections Officer Training Council in 1983 required 15 college-credit hours for employment (Amboyer 1991; Bynum 2009). Palmer (2016) found that after studying state-level correctional officers in the State of Minnesota, officers without college degrees tended to have a longer length of employment and those with college degrees tended to have fewer infractions. As of 2018, the SSO requires all applicants for the position of detention deputy (corrections) to be 19 years of age or order with a high school diploma. Also, interesting is that detention deputies at SSO make the same salary (parity pay) as law enforcement deputies, who have to be 21 years of age or order and have 60 credit hours (two years) of study from an accredited college or university. These requirements alone would lead people to conclude SSO command staff believes higher education and an older starting age to be more crucial in law enforcement as opposed to detention (corrections).

Firefighting and emergency aid workers, historically, have not been thought of as a career in which college is necessary, due to them being more technically driven than intellectually. In 1970, approximately two percent of firefighters had bachelor's degrees or higher. In 2010, this jumped up to 15 percent (Vedder, Denhart & Robe, 2013). In 2008, the Higher Education Opportunity Act of 2008 was passed, which allowed federal, state and local fire rescue workers to have student loan forgiveness similar to other public servants. According to the U.S. Bureau of Labor Statistics, in 2013, 78% of firefighters ages 25 to 44 have pursued college education to some degree, a higher number possibly as a result of the passing of the Higher Education Opportunity Act of 2008. Although college is not a requirement for a majority of fire rescue departments, college education can assist firefighters transitioning into positions of management, which firefighting experience might not prepare them for. In 2008, Pierce College in Washington (state), teamed up with Bates Technical College to create an associate degree program to assist firefighters in reaching positions of leadership. The Fire Command and Administration program is a two-year degree program that provides fire service and rescue personnel the

business and administrative skills they need to take leading administrative positions in their departments (US Fed News Service, 2008). Programs specifically for fire rescue personnel which exceed basic fire rescue and medic training are rare. There is a significant lack of research pertaining to firefighters and college education, even though firefighters are utilized on more medically focused calls, where a wider variety of skills and knowledge are required, than ever before. This is similar to the current situation in law enforcement, where the job itself has become harder, but there is a lack of research as to how to help police officers accomplish their jobs in the most effective and efficient way as possible.

Age, Experience, Race, Sex, and Generation

In addition to formal academic educational hiring requirements being a factor which could impact the number of law enforcement disciplinary issues, the age at which a person is allowed to become an officer is another. Although a person is considered to be an adult at 18 years old, 18 years old adults are restricted from doing certain things such as purchasing alcoholic beverages or certain firearms like handguns. After the Parkland High School shooting which occurred on February 14th, 2018, many have called for the minimum age to purchase any weapon be elevated to 21 years old. In addition to this, it has been concluded by scientists that the human brain is not fully developed by the age of 18 (Johnson, Blum & Giedd 2009; Powers, 2017). After 18, the brain still can advance in not just physiological development, but personal, moral and behavioral development which are associated with psychological growth (Powers, 2017). With all of this in mind, many law enforcement agencies hire individuals to become police officers as young as 18

years old, which often times allows them to carry and shoot a weapon (handgun) three years before they are legally allowed to purchase it. According to Decker & Huckabee (2002), there has been limited research conducted on how a person's age at the time of hire impacts their ability to be an effective law enforcement officer. Higher age requirements do allow the agency the ability to review a longer work and personal history. In 1997, the Chicago Police Department found it necessary to increase their age hiring requirement from 21 to 23, but at the same time, in Wisconsin, their state law required agencies in the state to consider applicants as young as 18 for employment (Decker & Huckabee, 2002). Due to a lack of applicants, some agencies in the past have even lowered their age requirements. Montana Highway Patrol lowered their age requirement from 20 to 18 in the early 2000s and the Washington State Patrol lowered the age requirement from 20 1/2 years to 19 1/2 years in 2006 to target a bigger pool of applicants. (Mulick, 2006). Although the age requirements are low, a statement put out my Washington State Patrol explained "officials will be looking closely at the maturity of applicants. The hiring process, including a thorough background investigation and psychological exam, helps commanders evaluate the candidates" (Mulick, 2006). In the agency used in this study, the SSO, the minimum age requirement is currently 21 years old (as of 2018) and was so during the timeframe of the current study 2008 to 2013 and the comparative study timeframe, 2000 to 2005. This means the minimum age requirement was not be a variable which impacted the study, but the age at which the new employees become sworn deputy sheriffs will be reviewed to see if age alone impacted the number of disciplinary issues. Although it is debated whether a person under 21 is

mature enough to handle the work of a law enforcement officer, the generation in which officers are born in, and therefore associated with, might be worth reviewing as well. Now, research has been coming out about Generation Y, also known as "the millennials." Although the exact years are debated, millennials, is a term used to classify all those born roughly between the beginning of the 1980s and the mid-1990s. Millennials have been described as being lazy, less motivated and ungrateful. It is important to study this generation when discussing law enforcement performance and disciplinary issues, because as of 2018, this generation is between the ages of 23 and 38 years old, which covers the majority of all those applying and being hired by law enforcement agencies. Over the next decade, approximately 700,000 active-duty, sworn law enforcement officers across the country will be eligible to retire (FBI, 2011). This means, not only are millennials the main generation being hired, the number of millennials ascending the ranks of law enforcement agencies and becoming supervisors and leaders is increasing every year, which could change agency dynamics drastically. Middlebrooks (2015) conducted a qualitative study of law enforcement officers and determined that although millennials are the most educated generation thus far and are savvier with technology, they lack patience. They are constantly connected via smart phones or social media and seek instant gratification. Millennials also lack a long-term attention span and are constantly looking for the next thrill. If these individuals do enter the field of law enforcement, they may expect to have more advance opportunities and shorter wait times to gain positions of authority than what policing can offer (Wilson & Grammich, 2009; Wilson, 2012). Due to this, these employees are less dependable because they are more

likely to jump from job to job whether inside or outside of police work (Middlebrooks, 2015). This means, when looking at hiring millennials, law enforcement agencies must be upfront with these individuals about career expectations and incentives to make sure a career in law enforcement is for them.

In contrast to a young age when starting a career in law enforcement, is there an age that is too old to start or continue a career in law enforcement? There might come a time when an officer's age becomes arguably too high to perform the job adequately, which might cause the officer to use excessive force, in the way of weapons, due to decreased physical ability. According to the Federal Bureau of Investigation (FBI), there should be a maximum age requirement. In order to be considered to be hired as an FBI agent, the applicant must be within the ages of 21 and 37. 37 years old is the oldest you can be hired, due to FBI possessing a 20-year retirement system, with a mandatory retirement age of 57 (FBI, 2018). This age requirement is shared by the Drug Enforcement Agency (DEA) as well (DEA, 2018). On the other hand, one must consider that with age comes experience, and more experience could reduce problems that might result in excessive force. McElvain & Kposowa (2004) conducted a study which utilized personnel files of officers in the Riverside County Sheriff's Department in California from 1996-2000 with the intention of studying how experience impacted the number of law enforcement disciplinary issues. McElvain & Kposowa hypothesized in their study that officers with more patrol experience would be investigated at a lower rate than those with less experience; which in turn meant older officers would be investigated at a lower rate than younger officers. 409 cases where officers were investigated by internal affairs

were reviewed, which was compared to 512 officers who were not investigated. The study found that patrol officers with twenty plus years of experience were four times less likely to be investigated for excessive use of force than officers with under five years of experience; and officers with twenty plus years of experience eight times less likely to be investigated for excessive force than those officers with five to nine years of experience. These results confirmed McElvain & Kposowa's hypothesis. Williams & Hester (2003) found similar results in a sample of approximately 500 law enforcement officers employed with Polk County Sheriff's Office, located in Central Florida, which suggested that officers who were young, white, male, and had fewer than 145 hours of service were much more likely to resort to the use of force than their older more experienced counterparts. Studies conducted by Paoline & Terrill (2007) and Rydberg & Terrill (2010) looked at how higher education and experience impacted use of force. Although the impact of experience much like higher education reduced excessive use of force, the benefits of experience did not take effect until an officer reached 10 years of service. This impact differs from the impact of higher education, which materializes the moment the officer began his career, assuming the education was obtained prior to starting the academy. These results allow one to argue higher education has a greater impact than experience in reducing use of force issues (Paoline & Terrill, 2007; Rydberg & Terrill, 2010; Middlebrooks, 2015). In this study, law enforcement experience was not a variable used in the analysis, due to the study analyzing the number of disciplinary issues of deputy sheriffs hired from 2008 to 2013, during which time no applicant with prior law enforcement experience was hired by the SSO. This meant the deputy sheriffs included in the study only had a range of five to ten years of experience total by the time the data was collected and analyzed in 2018.

Based on what is observed in the media, one would think white police officers have a higher chance of using excessive force or being subjected to disciplinary treatment, especially when it comes to minority citizens encounters. How does race and gender impact disciplinary issues? According to Johnson (2016), the amount of death of African-Americans and Hispanics at the hands of police deadly force are similar or even lower than the proportion these racial or ethnic groups kill police officers. This fact alone is contradictory to the national perceived trend that there a systemic racial bias when it comes to the application of deadly force used by the police. (Johnson, 2016). A study conducted by a team of research psychologists from Rice University, University of Virginia, University of Connecticut, and the University of Pennsylvania, found there is overwhelming evidence that there is little or no relationship between one's implicit bias score on racism and any actual prejudicial behavior. The study reviewed 46 other studies (involving more than 5,600 participants) which tested whether possibly prejudicial behavior against people of a different race by a person can be predicted by their implicit racial bias. While they found that one's overt racism predicted prejudicial behavior, implicit bias test scores rarely did (Johnson, 2016). Some have called for more diversity in law enforcement, believing that this will reduce police excessive use of force. According to the U.S. Justice Department using the most recent statistics in 2010, 12.2% of law enforcement officers are African-American, 11.6% are Hispanic, and 3.5% are other non-white races. According to the 2010 U.S. Census, African-Americans made up

12.6% of the population, and 16.3% of the U.S. population was Hispanic, which shows African-Americans and Hispanics are already represented proportionally in law enforcement. Several U.S. cities, such as Detroit, Baltimore, Atlanta, and Washington already have majority non-white police forces. Criminologist Brad Smith of Wayne State University examined a nationwide sample of hundreds of police departments and found that the violence level of the city impacts deadly shootings by police, not agency racial diversity (Johnson, 2016). This means, the severity and type of a crime occurring has a greater impact on the use of force, than the race of the officer applying it.

Skogan (2013), conducted a study on disciplinary issues on Brazilian Police, by conducting interviews with officers who were serving in 26 of the country's 27 federal states and 1,938 different municipalities. The results of the study found that officers who were older, more educated and female had fewer disciplinary issues. Although women were found to be less aggressive, make less arrests, and issue fewer citations, they were able to perform police functions as well as men, and were less likely to be questioned for excessive use of force (Paoline & Terrill, 2004). Research has also shown women are more skilled when it comes to de-escalating violence in encounters with citizens, due to better verbal communication skills (Paoline & Terrill, 2004). A study by The Christopher Commission of the LAPD in the early 2000s, determined male officers were found to be 23 times more liable for officer payouts in cases of brutality and misconduct than their female counterpart (Sandifer, 2006; Lonsway et al., 2002). From 1990 to1999, the City of Los Angeles paid under \$3 million in lawsuits resulting from excessive force, sexual assault and domestic violence by its female officers, compared to over \$63 million paid

out for its male officers in similar lawsuits (Sandifer, 2006; Spillar, 2000). In another study conducted on use of force statistics in the early 2000s, "female officers accounted for only 1.6 percent of the use of force reports filed while the male officers accounted for 98.4 percent" (Terrill, 2003). Shuck & Rabe-Hemp (2005) conducted another study where, along with most studies, it was determined women were involved in less excessive use of force than their male counterparts; which led to their conclusion that hiring more women as police officers may help to reduce excessive force in some police departments.

Recent Studies

Within the last decade, there have been numerous studies conducted to test for the relationship, or lack thereof, between higher education, educational hiring requirements and law enforcement performance. In 2009, Matthew Summers studied how police administrators viewed the effectiveness of higher education in police officers in Ohio. The results from the study found the majority of the police administrators agreed on the following: college educated officers communicated better with the community, wrote better reports, and were more sensitive to racial/ethnic groups. The study also found higher education had a positive effect on the quality and effectiveness of law enforcement and promoted more effective law enforcement. In 2009, Manis, Archbold & Hassell conducted an analysis on different types of degrees (criminal justice and non-criminal justice) possessed by officers to see if the subject matter of the degree predicted officer performance. The study focused on a mid-western, municipal police agency that employs 129 sworn police officers that had 105 complaints. The study revealed that there are no

statistical differences between patrol officers with criminal justice degrees and those with non-criminal justice degrees when it came to the type and frequency of complaints filed against them (Manis, Archbold & Hassell, 2009). Rydberg and Terrill (2010) studied the effect of officer education on three aspects of policing: arrest, search, and use of force. Rydberg and Terrill identified two mid-size cities, Indianapolis, Indiana and St. Petersburg, Missouri and compiled a sample of 3,356 officers from 12 patrol areas within each. The results indicated a significant relationship between education and use of force, but non-significant findings with the relationship between education and arrests and/or searches (Rydberg & Terrill, 2010). Minton (2011) also studied the relationship between education and law enforcement complainants and excessive use of force. Minton's study had a sample of 313 law enforcement deputy sheriffs, who were hired from 2000 to 2005 at the SSO and attempted to see if there was an inverse correlation between the deputy sheriff's formal academic education and the number of their disciplinary issues. Minton did not find a statistically significant correlation during his test. In 2008, the SSO increased their formal academic educational hiring requirement, but this was not analyzed in the study. It was the goal of this study to analyze if the increase in the formal academic educational hiring requirement in this agency reduced the number of disciplinary issues. Skogan (2013) examined use of force among police officers in Brazil, which was conducted to see if the reform movement, of increasing the reputation and professionalism of the police by increasing standards, was effective. Skogan found that officers who were either female, older or higher education, or a combination, had cases of use of force less frequently. Fitzgerald (2013) conducted a nonexperimental quantitative

study which surveyed 145 law enforcement officers to test the relationship between education and job performance in three mid-sized Texas cities. Fitzgerald found that there was not a statistically significant association between higher education and rank and performance, but he did however find officers' perception was that higher education assisted in higher job performance. Schuck (2014) found, while studying hiring requirements and incentives in law enforcement, that agencies with higher formal academic educational hiring requirements actually employed more females than agencies that only required a high school diploma. This is a significant find considering popular belief has been that higher formal academic educational hiring requirements were discriminatory against minorities and females. Gardner (2015) conducted a study concerning law enforcement officers from 162 law enforcement agencies (sheriff's offices and police departments) in California, who completed a 32-question electronic survey about police education and training. The point of the study was to explore the percentage of officers who had higher education degrees, what the average formal academic educational hiring requirement was and did the policies tend to exclude a particular sex or race and did the policies impact disciplinary issues. The study revealed the vast majority agencies, 84%, did not require higher than a high school diploma, and those that did tended to have more female officers employed, which illustrated how a higher education hiring requirement did not negatively impact female officer hiring and employment. The study did not find that higher education necessarily made officers better at conducting their police duties, other than those with higher education being considered better report writers. It must be noted however the study was conducted using

the opinions of the officers themselves in the form of survey responses, not a result of a quantitative study of actual police conduct compared directly to their education levels. Ramsey (2015) conducted a study in which he compared the formal academic educational levels of 1,593 law enforcement academy cadets from 2008 to 2014 in Kentucky to their academy academic performances to see if there was a relationship or not. Mr. Ramsey found a significant positive relationship between higher education levels and basic law enforcement academy academic performance including their final overall averages. This clearly illustrated that those with higher education levels outperformed those without. In a legit regression study based on the responses of 2,109 officers by Paoline III, Terrill & Rossler (2015), collectively, the effects of formal academic educational level on officers' occupational outlooks were either negative or had no effect. In addition to this, officers with a higher educated were less satisfied with their career and those with any college held less favorable views towards their agency's command staff compared to their high school educated peers. Middlebrooks (2015) conducted a qualitative study using the responses from 15 police officers, who ranged from officer to police chief. In the study, older police officers and police officers of higher rank placed a greater value on college coursework than younger officers of non-supervisory rank. Second, all police officers without a college degree believed higher education in some form was important to police officer success. Conversely, of the nine participants who held a bachelor's degree, four believed no college coursework was necessary for police officer success, which contradicted other similar studies. Merkae (2015), after studying school resource law enforcement officers, and their ability to assist in schools with minority and disabled

students, found officers with higher education levels were able to deal with these populations better than those who did not. Hernandez (2016) conducted a regression analysis using the Law Enforcement Management and Administrative Statistics (LEMAS) 2007 data set. LEMAS is a federally funded and nationally representative sample of law enforcement agencies across the United States (in this case 2,618 agencies). The data is cross-sectional, involving the collection of data at one period of time. Hernandez determined in his study that a department's higher education requirement did not significantly predict whether there would be some sustained complaints on their officers.

Summary

The recent studies have found mixed results when it comes to the positive impact higher education has on disciplinary issues. Some studies have shown higher education helped, others did not. No study showed that higher education increased disciplinary issues however; and the only negative effect higher education was shown to have, in one study, was an impact on attitude for those with higher education if advancement was not possible. What the prior research, including recent studies, on higher education and law enforcement have failed to research and explain was how does an increase in formal academic hiring requirement impact the number of disciplinary issues. To the researcher's knowledge, there has not been a single study conducted on this topic that studied a particular geographical area, region, or agency before and after an implementation or alteration of a formal academic educational hiring requirement to find out if the number of disciplinary issues of the law enforcement officers was impacted.

There have been many studies which looked at the potential impact on additional education on disciplinary issues but never one that actually studied the direct impact. This is the reason this study and its results are significant and should have a profound impact on the body of literature on the subject. The proposed study utilized a study conducted Minton (2011) which studied the disciplinary issues of all deputies hired by the SSO from 2000 to 2005 and compared the statistics to those hired from 2008 to 2013, after a two-year education hiring requirement was implemented at the beginning of 2008. This allowed for the study of the direct impact of the increase in the formal academic educational hiring requirement on the number of deputy disciplinary issues.

Chapter 3: Research Method

There is not a consistent law enforcement formal academic educational hiring requirement across the country and there is a lack of research as to how increasing a formal academic educational requirement directly impacts the number of deputy sheriff disciplinary issues. This chapter establishes the methodology for the study by reviewing the statement of the problem, the purpose of the study, the research question, and identifying the hypotheses. This chapter reviews the quantitative nonexperimental comparative research design that was used to examine the research question and test the hypotheses. In addition, it offers explanation on the selected sampling frame for participants as well. The remainder of the chapter addresses data processing, limitations, delimitations of the methodology, and ethical assurances.

The purpose of this study was to test the impact of higher education and formal academic educational hiring requirements on the number of law enforcement disciplinary

issues within a particular agency. The Southeast Sheriff's Office, the agency being used for this study, has over 1,000 full-time and part-time sworn law enforcement deputies and over 3,000 employees total. The law enforcement deputy sheriffs, in this office, patrol in and service rural and urban areas. The research design was quantitative in nature. The design involved gathering official data, including internal affairs records, training records, and personnel files for all full-time deputies hired from the years of 2008 to 2013, and testing for an inverse relationship between the variables. It was decided negative binomial regression analysis using the software program SPSS Version 24 was the most appropriate due to its ability to test for the impact of education levels on the number of disciplinary issues (count variable) which both happened to be skewed, while controlling for the impact of covariate variables such as age, military experience, sex and race.

The research explored the relationship between the formal academic education level of deputy sheriffs performing law enforcement duties and the number of their disciplinary issues. The results of the tests would then be compared to the results obtained by Minton (2011) when he studied the same relationship on all deputy sheriffs hired from 2000 to 2005, prior to the implementation of the 60-hour formal academic educational hiring requirement. This comparison was completed to see if the increase in the formal academic educational hiring requirement deceased the number of disciplinary issues. This design choice was the most appropriate as it studied a 5-year period, similar to that of Minton, and also studied the same agency, which yielded the most accurate and

consistent results, which could also be useful in advancing the knowledge in this discipline.

Research Question

Does an increase in a law enforcement agency's formal academic educational requirement have an inverse relationship with its deputies' disciplinary issues, while controlling for gender, age, race, and military service?

Hypotheses

 H_01 : There is no relationship between a deputy's formal academic education level and the number of disciplinary issues.

 H_11 : A deputy sheriff's formal academic education level will significantly lower the number of disciplinary issues, while controlling for gender, race, age and military service.

 H_02 : Military service, age, sex, race/ethnicity have no impact on the number of deputy sheriff disciplinary issues.

 H_12 : Military service, age, sex, race/ethnicity have an impact on the number of deputy sheriff disciplinary issues.

 H_03 : Increasing a law enforcement agency's formal academic educational hiring requirement does not impact on the number of its deputies' disciplinary issues.

 H_1 3: An increase in a law enforcement agency's formal academic educational hiring requirement will significantly lower the number of its deputies' disciplinary issues.

Variables

Independent Variable

The independent variable in this study was the formal academic education level of the law enforcement deputy sheriff. There are definitions for education levels. 1 denotes a high school diploma/GED with no college. 2 denotes credit earned towards an associate's degree, 3 denotes an associate's degree, 4 denotes credit earned towards a bachelor's degree, 5 denotes a bachelor's degree, 6 for master's degree, and 7 for Ph.D. degree.

Dependent Variable

The dependent variable in this study was the number of disciplinary issues a deputy sheriff has committed after completing the academy and being sworn in.

Disciplinary issues can be defined as any offense whether punitive or non-punitive, which involved avoidable vehicle crashes, excessive use of force, complaints, and standard operating procedure (SOP) violations, which have been investigated by internal affairs and found to have been committed. The punishments for these disciplinary issues range from a letter of counseling up to and including termination. There will be no separation of degree for disciplinary issues used in the actual analytical study, as every offense is different, and the assigned punishments given being based on numerous factors including the deputy's experience, history of disciplinary issues, particular offense circumstances, etc.

Covariate Variables

The other variables which may impact the number of deputy sheriff disciplinary issues include: age, sex, race/ethnicity and military service. Although studying the impact

of these variables was not the focus of the study, it was important to note these variables likely do impact the number of disciplinary issues of deputy sheriffs and researchers have to be aware of other variables, so they can be controlled and accounted for. Coding for the variables was as follows:

-Race: 0 for white, 1 for minority.

-Sex: 0 for male, 1 for female.

-Military service (veteran, active or reserve status): 0 for non-military service, 1 for military service.

-Age: numbered in years. This variable was presented as continuous scale data.

Participants and Sampling Size

In order to conduct this study, data and an appropriate sample size must be selected. This was important as the results of this study were meant to present the target population, which consisted of law enforcement officers employed by the SSO, over 1,000. All full-time deputy sheriffs hired and sworn-in by the SSO from 2008 to 2013 were chosen as the sample. The time period was chosen due to the SSO creating a two-year formal academic educational hiring requirement in 2008. Also, five years have passed since the latest deputies in this sample size have been hired, giving enough time for the gathering of data on any excessive uses of force/disciplinary issues to occur. Only full-time law enforcement deputy sheriffs, hired and sworn-in in the selected years, were included in the study. The number of employees who actually made it through the academy and were sworn in as law enforcement deputies, was used with the understanding that if someone did not make it through the academy, whether for physical

or academic reasons, they could restart in a subsequent class if they chose to as long as there were no associated disciplinary issues. Using the total number of hired employees at the beginning of the academy could lead to skewed or inaccurate numbers as some employees could have been counted twice due to, technically, being in several academy classes. Reserve deputies were also not included in the study, since they do not operate independently, and often only work during special events such as parades or off duty security type work. In order to confirm the total number of deputies hired from 2008 to 2013 was a large enough sample to get appropriate results, a priori power analysis was completed using G*Power version 3.1. Assuming there would be a medium to large effect and using the following figures: Effect size f-squared=.15 to .35, error probability=.05, Power= .80, and number of predictors = 5 (education, gender, military service, age, race), the power analysis concluded a total number of participants needed to make the results of this study valid would be between 43 and 77. The power of the study was defined as the probability of correctly rejecting a false null hypothesis and is usually specified as 0.80 to enable a researcher the ability to reject the null hypothesis (Faul et al., 2009, Fitzgerald, 2013). The effect size of the study is defined as the magnitude of the relationship between the independent and dependent variables in the analysis (Fitzgerald, 2013). The sample size will be 288 in this study, which far exceeded the number needed according to power analysis (43-77) and was comparable to Minton's sample size of 313 in his 2011 study, this study used for comparison purposes.

Data Collection and Instrumentation

The study included all deputies hired from 2008 to 2013, and the archival data came in the form of the deputy sheriffs' personnel and internal affairs files. Reviewing law enforcement officer internal affairs and educational records might bring about confidentially, reliability and related ethical concerns. As far as accessibility was concerned, all work-related records regarding local government employees such as those who are employed by the SSO are public record as per *The Public Information Act*. Obtaining these records would not have required special access or breach of any ethical guideline. Although no permission was required, written permission was obtained from both the SSO Colonel (Commander) of Patrol Services and Chief Deputy in December 2017, which illustrated the cooperation of the agency during this study. According to Simon (2011), reliability refers to the ability to replicate the results of the study. The archival information came directly from the SSO, so it was known the information would be reliable and the results of study would be able to be replicated. Lastly, no names were included in the data and all information was linked to address book number (ABNs), which are assigned to each employee upon hiring, but not known by the general public and are only available if provided by the agency. As an additional assurance confidentially was upheld, ABNs were not included in this study and were not kept by the researcher after the completion of the study.

Assumptions and Limitations

There was an assumption made by using a sample of the data set of variables and displaying the information in an analytical tool, SPSS software, that the study could exact meaningful information and results from the data. Another assumption was that the hiring

information provided by applicants hired from 2008 to 2013 was accurate and verified by the assigned background investigators. Concerning the reported incidents, the researcher had no ability to determine if a deputy sheriff, who was disciplined for a sustained disciplinary issue, actually committed the offense. SSO Professional Standards (internal affairs) was relied upon to have completed a thorough investigation on each allegation and reached the correct outcome based on the evidence and totality of the circumstances. It was also unknown if any deputy sheriff committed an act of excessive force or did anything which would have been considered a disciplinary issue, which was not reported or discovered. It could be assumed, deputies with extensive knowledge of the law and agency policies, would know how to prevent detection if they decided to cover up an act of indiscretion. An assumption was made that the data on reported incidents of excessive use of force and other miscellaneous disciplinary issues was accurate. One limitation was, the SSO did not have a policy which made it mandatory to report any changes in formal academic education level during the course of a deputy sheriff's career. There was also no additional monetary incentive after completing a bachelor's degree (currently sixty dollars a month) either. This meant, if a deputy, while being employed at the agency, obtained a master's degree or even a Ph.D. degree, they are not mandated or incentivized to inform the agency, which could lead to the current level (not level at hiring) of education on file for a deputy to be outdated and inaccurate.

Delimitations

The data for the study was derived from a single law enforcement agency; and therefore, may not be generalizable. The SSO was selected due to it serving a racially and

ethnically diverse population in both southern rural and urban areas and it being accredited by the Commission on Accreditation for Law Enforcement agencies (CALEA) (Gordon and Cordner, 2010). The SSO employees over 3,000 employees, fitting into the largest category, D-size (300+ personnel). There are smaller agencies within the United States and southeast, however some agencies, which might only employee 10-15 officers or less would not be suitable for a similar study. Whether this data could be generalized to different types of law enforcement agencies, such as federal departments (agents), state patrol (troopers), police department (police officers), as opposed to sheriff's offices (deputy sheriffs) is unknown. The SSO is however a full-service law enforcement agency, which many, if not most, are in the country. To explain, there are three types of law enforcement agencies according to Minton (2011), restricted service, which provides basic services such as maintaining the jail, transporting prisoners, providing courthouse security, and other duties, *limited service*, which performs some type of traditional law enforcement function, such as, investigations and patrol, and finally <u>full</u> service, which provides all traditional law enforcement functions to include the countywide patrol and investigations, irrespective of municipal boundaries.

Ethical Assurances/ Conflicts of Interest

As mentioned previously, archival data that was already collected with permission by the SSO, of the applicants hired to be law enforcement deputies from 2008 to 2013, was used for this study. No direct questioning, survey, or notification of the study will be completed/conducted with any deputy sheriff, so there was no chance of any negative impact of a deputy sheriff's attitude or performance due to their disciplinary history and

any other personnel history being reviewed. One conflict of interest in this study, was that the researcher was an employee (deputy sheriff) of the SSO and was hired in 2012, during the timeframe being studied (2008 to 2013). This was not an issue however due to only ABNs being utilized as opposed to names.

Summary

The purpose of this study was to study the impact of increasing law enforcement formal academic educational hiring requirements on the number of deputy sheriff disciplinary issues. The way this was done was by doing a comparison study using Minton's study in 2011 of the same law enforcement agency as a base line, to see if the implementation of a sixty-credit hour requirement decreased the number of disciplinary issues. Chapter 3 reviewed the research question and the hypotheses used in this study, which will be analyzed using spearman correctional analysis as well as negative binomial regression analysis using SPSS 24. There are limitations, assumptions and delimitations in this study, but they have been addressed and accounted for as much as possible. Chapter 4 will illustrate how the study was actually performed and the associated data which came as a result.

Chapter 4: Findings

Introduction

The purpose of this study was to test the impact of higher formal academic education and educational hiring requirements on the number of law enforcement disciplinary issues within a particular agency; as well as advance the understanding of

how educational hiring requirements, or the increase of present requirements, impacts officer use of force issues. To address this, a quantitative nonexperimental research inquiry was conducted. The study involved a law enforcement agency within the geographical area of Southeastern United States. It was the goal of this study to narrow down the impact of increasing formal academic educational hiring requirements in law enforcement agencies to determine how to mitigate current and future issues within the community. Chapter 4 begins with the restatement of the research question and three hypotheses, and includes a discussion of the data collection methods, demographics, the descriptive statistics and the results. The analysis results are separated and presented according to which hypothesis was tested to illustrate the results of each and their individual role in answering the research question. A review of the sample studied in this research was provided as a framework for understanding the test results and how they will improve the body of knowledge on the subject and impact social change.

Research Question

Does an increase in a law enforcement agency's formal academic educational requirement have an inverse relationship with its deputies' disciplinary issues, while controlling for gender, age, race, and military service?

Hypotheses

 H_1 1: A deputy sheriff's formal academic education level will significantly lower the number of disciplinary issues, while controlling for gender, race, age and military service.

- H_12 : Military service, age, sex, race/ethnicity have an impact on the number of deputy sheriff disciplinary issues.
- H_13 : An increase in a law enforcement agency's formal academic educational hiring requirement will significantly lower the number of its deputies' disciplinary issues.

Data Collection

Data collection for this study involved collecting archival data for all law enforcement deputies hired from 2008 to 2013 by the SSO, 288 in total, using personnel and internal affairs files as previously planned and reported. The data was collected from July 2018 to August 2018 and compiled on an Excel spreadsheet with the assistance of a human resource researcher and an internal affairs supervisor at the SSO at no additional cost to the organization or researcher. The data was collected following Walden IRB protocol and was accessed by the researcher only after receiving Walden University IRB approval on August 29, 2018 (IRB approval number 08-29-18-0600191). Due to an extensive records system being utilized by the SSO, there was no missing data in this dataset, which helped to mitigate any unforeseen variables which might have impacted the validity of the test results and outcomes. It was discovered at the onset of exploration of this research topic, SSO had accurate records of the education levels of all deputy sheriffs at the time of their hire date. However, due to a lack of mandatory reporting policy and possibly due to a lack of financial incentive to possess a master's degree or higher, the records for the current education levels for deputy sheriffs at the time the data was collected could not be verified. This did not change the research design plan previously established as this was known at the onset, however it could be useful in

studies, in which a researcher could analyze how the increase of formal academic education levels of deputy sheriffs over the course of their careers impacted their disciplinary issues and possibly performance as well. This will be discussed further in Chapter 5, specifically concerning future research recommendations.

The sample for this study consisted of all law enforcement deputy sheriffs hired from 2008 to 2013, which totaled 288 for the SSO. According to the priori power analysis completed (G*Power version 3.1), using the following parameters: size f-squared=.15 to .35, error probability=.05, Power= .80, and number of predictors=5 (education, gender, military service, age, race), the total number of participants needed to make the results of this study or any specific analysis valid would be between 43 and 77. Due to the sample being 288, the results of the analysis using the entire sample would be valid as the sample far exceeds the required amount. In addition to this, the total number of law enforcement deputies currently employed at the SSO is approximately 1,000-1,300, meaning the sample size makes up approximately one quarter of the population.

Variable Recoding

Prior to conducting any analysis or collecting descriptive statistics, some of the data in the dataset had to be recoded for use in SPSS to product valid responses based on the results of the power analysis. One variable, race, had to be recategorized as every category except *White*, did not exceed the minimum number of deputies according to the power analysis to produce valid results if the potential relationship was significant (p<.001). Of the sample of 288 deputy sheriffs, 218 (75.7%) were *White*, 31 (10.8%)

were Hispanic, 27 (9.4%) were black, 8 (2.8%) were two or more Races, and 4 (1.4%) were other (one American Indian, one Hawaiian and two Asian). As a result, race was recoded into two racial groups, White and Minority. Also, the formal academic education data originally contained both numeral values, such as the total number of credit hours earned, and alphabetic values, such as bachelor's degree. In order for this variable to be analyzed correctly in SPSS, all results with credit hours ranging from 1-59, were placed into a category titled, credits towards associate's degree (CTAD), and all results with credit hours ranging from 60-138 (one deputy had 138 credits, but had not technically earned a bachelor's degree), were placed into a category titled *credits towards bachelor's* degree (CTBD). If a deputy was listed as having earned two degrees such as an associate's degree (CTAD) and a bachelor's degree (BD), the higher degree was used as the education level of that particular deputy sheriff. One deputy sheriff who possessed a juris doctorate (J.D.) degree, was entered into the master's level degree (MD) category, which was consistent with other studies such as Fitzgerald (2013), as J.D. degrees are more in line with advanced and professional level degrees as opposed to a terminal degree (Ph.D).

Table 1.

Summary and Coding of Variables

Variable Name	Variable Coding
Number of Disciplinary Issues	Count
Level of Formal Academic Education	1=HS, 2=CTAD, 3=AD, 4=CTBD, 5=BD, 6=MD
Deputy Sheriff Age	Continuous Scale

Deputy Sheriff Gender	0=Male, 1=Female
Deputy Sheriff Race	0=White, 1=Minority
Deputy Sheriff Military Service	0=No, 1=Active Military or Veteran

Descriptive Statistics

Table 2 provides a summary of all variables and descriptive results. The table contains the formal academic education level of each deputy sheriff at the time of their hire date. The reason there were deputies hired from 2008 to 2013 who had not earned an associate's degree, which was the minimum formal academic education requirement, was because there was a military service exemption, which allowed new hires to join the SSO with a high school diploma as long as they served for at least three years in the military. This exemption was only used by 33 (11.5%) of all newly hired deputies during this time period.

Table 2 Summary of Descriptive Statistics for the Study Sample (N = 288)

Variables	Frequency	Percentage
Education Levels		
HS/GED	19	6.6%
CTAD	14	4.9%
AD	44	15.3%
CTBD	19	6.6%
BD	181	62.8%

MD	11	3.8%		
Race				
White	218	75.7%		
Minority	70	24.3%		
Gender				
Male	248	86.1%		
Female	40	13.9%		
Military				
No	221	76.7%		
Yes	67	23.3%		
Variables	M	SD	Low	High
Disciplinary Issues	.98	1.118	0	5
Age	27.50	5.548	21	55

Data Analysis

This study utilized the IBM Statistical Package for Social Sciences (SPSS)

Version 24 to analyze the collected and recoded data.

Hypothesis 1

 H_01 : There is no relationship between a deputy's formal academic education level and the number of disciplinary issues.

 H_1 1: A deputy sheriff's formal academic education level will significantly lower the number of disciplinary issues, while controlling for gender, race, age and military service.

Prior to conducting any correlational or regression analysis, a scatter plot (Figure 1) was produced using SPSS. The scatter plot showed a lack of any relationship, whether it be linear or monotonic, between sustained cases (number of disciplinary issues) and formal academic education levels. Based on the histogram in Figure 2, it appears the number of disciplinary issues were independently positively skewed in this dataset, with the majority of the deputy sheriffs having no cases of disciplinary issues. Based on the histogram in figure 3, it appears the levels of formal academic education were independently negatively skewed in this dataset, with the majority of the deputy sheriffs having higher levels of education. These measures are important for testing assumptions for the analysis and subsequently determining the correct analytical model to use based on the data characteristics.

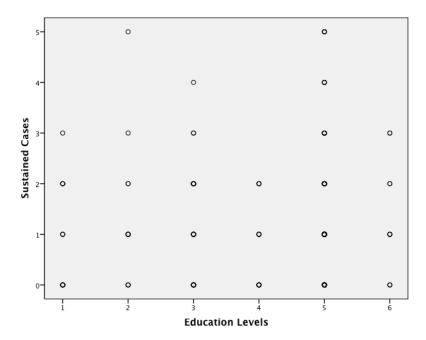


Figure 1. Scatterplot for determination of relationship between formal academic education level and disciplinary issues.

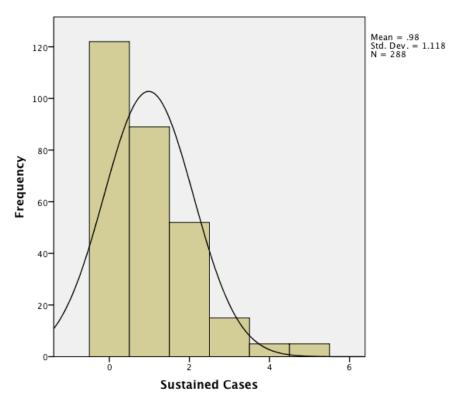


Figure 2. Histogram of data distribution of sustained cases.

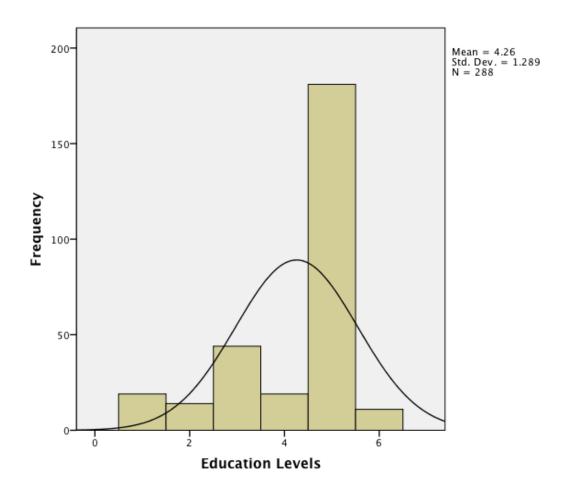


Figure 3. Histogram of data distribution of education levels.

Once nonnormality was visually observed, a test for statistical skewness test for normality were conducted to determine the statistical significance of the deviation from normal distribution. The results of these tests were consistent with the results of the histograms, which were that the number of disciplinary issues are positively (1.314) skewed and the formal academic education levels are negatively (-1.265) skewed as they both are outside the -1 to 1 range of normal distribution. These levels are statistically significant according to the Shapiro-Wilk's test, as their p-values are less than .05 (p < .001).

Although nonnormality was found in the distribution of both formal academic education levels and the number of disciplinary issues, spearman's rho correlation analysis (Table 3) was chosen as a model of analysis, as it is less susceptible to invalid output and results due to skewed data. The initial goal of analysis in regard to Hypothesis 1 was to test whether or not a statistically significant relationship existed between the formal academic education levels of law enforcement deputy sheriffs and the number of sustained disciplinary issues. The results from the nonparametric correlation analysis indicated that a significant relationship did not exist between deputy sheriffs' level of formal academic education at hire and the number of disciplinary issues (Spearman's rs [288] = .038 p = .522, two-tailed). The p-value was p > .05 and was therefore not statistically significant.

Table 3

Spearman Correlation Summary between Disciplinary Issues and Education Levels (N=288)

			Disciplinary Issues	Education Levels
Spearman's	Disciplinary	Correlation Coefficient	1.000	.038
rho	Issues	Sig. (2-tailed)		.522
		N	288	288
	Education	Correlation Coefficient	.038	1.000
	Levels	Sig. (2-tailed)	.522	
		N	288	288

Although there was a lack of statistical correlation between formal academic education levels and the number of deputy sheriff disciplinary issues, this did not rule out possible causation between the two variables, while controlling for the covariates. Due to

the skewed nature of the dependent variable (Osgood, 2000), several types of count models, such as the poisson distribution, negative binomial and their zero-inflated variations, were considered. Negative binomial regression was chosen for several reasons, primarily due to several assumptions of poisson regression not being met. One of the assumptions of using a poisson regression analysis, is that the mean (.98) and variance of the model (1.118) of the dependent variable must be equal and, in this analysis, they were not. Also, the poisson regression model assumes the data follows the poisson distribution, which is not the case in this dataset, as the negative binomial beta value was b = .259. A poisson distribution would require this figure to be 0. The negative binomial regression model provided the best fit also, due to the dependent variable being over-dispersed and the negative binomial having a deviance value divided by degrees of freedom, which was closer to one (Value/df = 1.124) compared to that of the poisson (Value/df=1.360). The zero-inflated variant of the negative binomial regression was not utilized due to not having to account for and explain certain zeros in the dependent variable, which were not present in this dataset (zero-inflated, 2018).

The results of the negative binomial regression analysis (Table 4) indicated this model was not statistically significant in determining the variance of the dependent variable compared to the intercept only model, which contained no predictors using the Likelihood Ratio Chi-Square significant value of being greater than .05 (p=.519).

Table 4

Negative Binomial Regression Fit Test (Omnibus Test)

Likelihood				
Ratio Chi-				
Square	Df		Sig.	
4.212	-	5		.519

Dependent Variable: Disciplinary Issues Model: (Intercept), Education Levels

a. Compares the fitted model against the intercept-only

model.

Formal academic educational levels had no greater impact on the number of disciplinary issues than the mean of disciplinary issues had on itself. These results also indicate there was no need to control for the covariates, age, gender, race and military service, as there is no statistical way these variables would lower the statistical relationship beyond where it already was. This means the formal academic education level of a deputy sheriff did not impact the number of disciplinary issues from 2008 to 2013 and cannot be used as a predictor for the number of disciplinary issues in the future based on this dataset. Due to these results, the null hypothesis could not be rejected in favor of the alternative hypothesis.

Hypothesis 2

 H_02 : Military service, age, sex, race/ethnicity have no impact on the number of deputy sheriff disciplinary issues.

 H_12 : Military service, age, sex, race/ethnicity have an impact on the number of deputy sheriff disciplinary issues.

Prior to conducting any correlational or regression analysis to test this hypothesis, a scatter plot matrix was produced using SPSS, to determine if there was a visual

relationship (linear or monotonic), between the predictor variables (age, gender, race and military service) and the dependent variable (number of disciplinary issues). A histogram was produced for age, gender, race, and military service variables to visually determine possible skew. These measures are important for testing assumptions for analyses and subsequently determining the correct analysis to use based on the data characteristics. As observed in Figure 4, the scatter plot matrix shows a lack of any relationship, whether it be linear or monotonic, between sustained cases (number of disciplinary issues) and age, gender, race, and military service. Based on the histograms, it appears race, age, gender and military service datasets were all positively skewed in this dataset. Once nonnormality was visually observed, a test for normality was conducted to determine the statistical significance of the deviation from normal distribution.

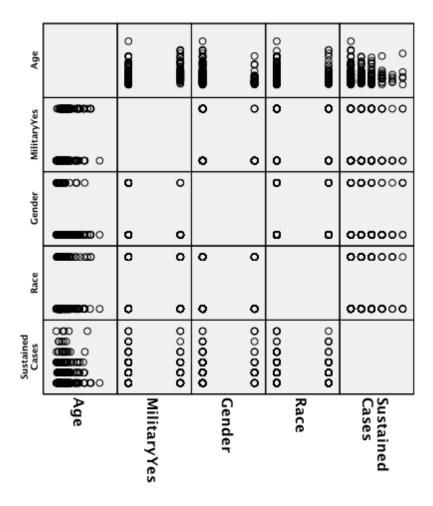


Figure 4. Scatter plot matrix output for age, gender, race, military service, and disciplinary issues.

The results of the normality and skewness tests were consistent with the results of the histograms, which are that race, gender, military service and age are all positively skewed (1.204, 2.099, 1.272, and 1.841 respectively), as they are all outside the -1 to 1 range of normal distribution. These levels are statistically significant according to the Shapiro-Wilk's test conducted, as their p-values are less than .05 (p<.001). Using the three standard deviation model rule to locate potential outliers (99.7% of data is contained within the first three standard deviations from the mean), five deputy sheriffs

have an age higher than 44.176 = ((Mean = 27.49) + (3 + (SD = 5.562))), ranging from 45 to 55, which exceeds the z-score of 3. This outlier identification technique is based on the assumption that the data has normal distribution and is mainly used to help detect errors in data collection and computing. Due to this, the ages for these five deputies were kept within the dataset during the analysis.

Although non-normality was found in the distribution of both formal academic education levels and the number of disciplinary issues, spearman's rho correlation analysis was chosen as a model of analysis, as it is less susceptible to invalid output and results due to skewed data. The initial goal of analysis in regard to Hypothesis 2 was to test whether or not a statistically significant relationship existed between the number of disciplinary issues and deputy sheriffs' age, gender, race and military service.

The results from the nonparametric correlation analysis in Table 5 indicated that a significant relationship did not exist between the number of deputy sheriff disciplinary issues and age, gender, race, and military service individually.

Age = (Spearman's rs [288] = -.037, p = .527, two-tailed).

Gender = (Spearman's rs [288] = .085, p = .149, two-tailed).

Race = (Spearman's rs [288] = .025 p = .675, two-tailed).

Military service = (Spearman's rs [288] = -.012, p = .840, two-tailed).

Table 5

Correlation Summary for Disciplinary Issues with Race, Gender, Age and Military Service

			Disciplinary				Military
			Issues	Race	Gender	Age	Service
Spearman's	Disciplinary	Correlation	1.000	.025	.085	037	012
rho	Issues	Coefficient					
		Sig. (2-tailed)		.675	.149	.527	.840
		N	288	288	288	288	288
	Race	Correlation	.025	1.000	.053	.063	.071
		Coefficient					
		Sig. (2-tailed)	.675		.367	.283	.228
		N	288	288	288	288	288
	Gender	Correlation	.085	.053	1.000	164**	150*
		Coefficient					
		Sig. (2-tailed)	.149	.367		.005	.011
		N	288	288	288	288	288
	Age	Correlation	037	.063	164**	1.000	.388**
		Coefficient					
		Sig. (2-tailed)	.527	.283	.005		.000
		N	288	288	288	288	288
	Military	Correlation	012	.071	150*	.388**	1.000
	Service	Coefficient					
		Sig. (2-tailed)	.840	.228	.011	.000	
		N	288	288	288	288	288

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Due to the p-value being p > .05 on all correlations related to the number of disciplinary issues, I failed to reject the null hypothesis. This meant, no correlation was found between deputy sheriffs' age, gender, race, military service, and the number of disciplinary issues. Statistical correlations were observed between age and gender, and

^{*.} Correlation is significant at the 0.05 level (2-tailed).

also gender and military service, but the results were expected and not valuable for this study.

Although there was a lack of statistical correlation between age, gender, race, military service and the number of disciplinary issues, this does not rule out causation between the dependent variable and the covariates being studied. Negative binomial regression was chosen for the causation analysis of Hypothesis 2 as well as Hypothesis 1, for the same reasons, which include the deviance value divided by degrees of freedom being closer to one (Value/df = .584) compared to that of the poisson (Value/df = .519) and the mean (.98) and variance of the model (1.118) not being equal either, which is an assumption of the poisson regression.

The negative binomial regression analysis indicated this model was statistically significant (p < .001) in determining the variance of the dependent variable compared to the intercept only model, which contained no predictors, according to the Omnibus Test in Table 6. Due to this, the Wald Chi-Square significance p-values for each individual variable were reviewed in Table 7. It was concluded however each variable had no significant impact on the variance of the number of disciplinary issues, with all p-values being p > .05.

Table 6

Negative Binom	ial Regressi	on Fitness Test (Omnibus Test)	
Likelihood			
Ratio Chi-			
Square	df	Sig.	
375.821	278	.00	0

Dependent Variable: Sustained Cases

Model: (Intercept), Age, Military Service, Gender, Race

a. Compares the fitted model against the intercept-only model.

Negative Binomial Tests of Model Effects

	Type III			
	Wald Chi-			
Source	Square	df	Sig.	
(Intercept)	1.081	1	.298	
Age	82.293	159	1.000	
Military Service	.320	1	.571	
Gender	.489	1	.484	
Race	,a			

Dependent Variable: Sustained Cases

Model: (Intercept), Age, Military Service, Gender,

Race

Table 7

a. Unable to compute due to numerical problems

Although the results of the goodness of fit test and omnibus test indicated negative binomial regression was the best model for predicting the number of disciplinary issues using age, gender, military service and race, no correlation, impact and predictability have been detected at a statistically significant level. Due to this, I failed to reject the null hypothesis in favor of the alternative.

Hypothesis 3

 H_03 : Increasing a law enforcement agency's formal academic educational hiring requirement does not impact on the number of its deputies' disciplinary issues.

 H_1 3: An increase in a law enforcement agency's formal academic educational hiring requirement will significantly lower the number of its deputies' disciplinary issues.

According to the comparative study conducted by Minton (2011) of the 313 deputies hired from 2000 to 2005, 157 (50%) had a *high school diploma/GED*, 105 (33.4%) had a *bachelor's degree or higher*, and 51 (16.2%) had an *associate's degree*. Using the same measures for this study for comparison purposes from 2008 to 2013, 19 (6.6%) deputy sheriffs had a *high school diploma/GED*, 225 (78.1%) had a *bachelor's degree or higher*, and 44 (15.3%) had an *associate's degree*. This means from 2000-2005 to 2008-2013, the total percentage of deputies being hired with a bachelor's degree or higher increased from 33.4% to 78.1%, even though the highest requirement was an associate's degree.

During the comparison period of 2000 to 2005, deputies were investigated for 313 cases of misconduct and 51 cases of significant misbehavior which resulted in dismissal or resignation, 364 cases of disciplinary issues in total. According to this study, the law enforcement deputy sheriffs hired from 2008 to 2013 had 283 cases of disciplinary issues, which also ranged from sustained complaints to dismissal or resignation. The total number of law enforcement deputy sheriff disciplinary issues decreased by 81(22%) between the two study periods, while noting slightly more deputies were hired during 2000-2005 (313) compared to 2008-2013 (288). This data illustrated the number of disciplinary issues did in fact decrease, however which variables were responsible for this variance are the focus of this hypothesis and if this decrease can be contributed to the level of formal academic education.

Based on the results from Hypothesis 1, it has been determined the formal academic education levels of deputy sheriffs in this sample did not significantly impact the number of disciplinary issues, with or without controlling for other covariates which included age, gender, race, and military service. In the comparative study completed by Minton (2011), the formal academic education level of deputy sheriffs did not significantly impact the number of disciplinary issues either. It is recognized that the absence of a significant correlation does not necessarily indicate the absence of a causeand-effect relationship. However, this research design allowed for the expression of the homogeneity or heterogeneity of the given variable set, analysis of the correlation coefficient between variables which was determined to be non-significant, and regression results with interpretations, which was used to lend meaning to the resulting data (Leedy & Ormrod, 2005). Due to these collective results, it cannot be concluded the increase in formal academic educational hiring requirement significantly lowered the number of disciplinary issues, thereby not allowing for the rejection of the null hypothesis in favor of the alternative hypothesis.

Summary

Hypothesis 1 was first tested using a spearman correlational analysis to determine if formal academic education levels had a relationship with the number of disciplinary issues. It was determined this relationship was not statistically significant. In order to not rule out formal academic education levels causing a variance in the number of disciplinary issues, while controlling for age, gender, race and military service, a negative binomial regression was utilized. It was determined formal academic education levels did

not account of a statistically significant variance on the number of disciplinary issues, which negated the need to control for age, gender, race and military service. This led to the failure of rejecting the null hypothesis in favor of the alternative hypothesis.

Hypothesis 2 was first tested using a spearman correlational analysis to determine if age, gender, race and military service had individual or confounding relationships with the number of disciplinary issues. It was determined these relationships were not statistically significant. In order to not rule out age, gender, race and military service causing a variance in the number of disciplinary issues, a negative binomial regression was utilized. It was determined age, gender, race, and military service did not account for a statistically significant variance on the number of disciplinary issues. This led to the failure of rejecting the null hypothesis in favor of the alternative hypothesis.

Hypothesis 3 was analyzed by first reviewing the results of the comparison study conducted by Minton (2011) and comparing them to the results of the analysis for Hypothesis 1. Formal academic education levels in either study did not have a statistically significant relationship with the number of disciplinary issues. Education levels of newly hired deputies did increase from 2000-2005 to 2008-2013 and the number of disciplinary issues did decrease, however, variables other than formal academic education levels, age and military service are responsible based on the lack of statistical results in both tests. This led to the failure of rejecting the null hypothesis in favor of the alternative hypothesis.

In Chapter 5, the results of this study will be interpreted in the scope of the body of literature on the subject using other similar studies and the theoretical framework.

Limitations of the study will also be reviewed as well as recommendations for future studies and implications of this study as far as its impact on social change.

Chapter 5: Interpretation, Recommendations, Implications and Conclusions

Introduction

The purpose of this study was to test the impact of higher formal academic education and educational hiring requirements on the number of law enforcement disciplinary issues within a particular agency; as well as advance the understanding of how educational hiring requirements, or the increase of present requirements impacts the number of deputy sheriff disciplinary issues. To address this, the approach used was a quantitative non-experimental research inquiry. The study involved a single law enforcement agency within the geographical area of the Southeastern United States. The particular agency was chosen due to its large size, which services both rural and urban areas. It was the goal of this study to analyze the impact of increasing formal academic educational hiring requirements in law enforcement agencies in order to determine how to mitigate current and future issues between law enforcement agencies and the public.

Correlation and regressions analyses were performed, and it was determined in this sample, the formal academic education levels as well as age, gender, race and military service of deputy sheriffs did not have a relationship with or impact the number of disciplinary issues to a level which was statistically significant.

Interpretation of Results

The results of this study were similar to the results found by Minton (2011) in his study, used for comparison purposes. The lack of causation and correlation between formal academic education levels and the number of disciplinary issues in each of the two studies led to the apparent conclusion that an increase in the formal academic educational hiring requirement did not lower the number of disciplinary issues. The results of this study were also in line with other studies which studied the impact of education on excessive use of force and disciplinary issues. Hernandez (2016) analyzing the Law Enforcement Management and Administrative Statistics (LEMAS) 2007 data set using regression analysis, found a department's higher education requirement did not significantly predict whether there would be sustained complaints on their officers. Jung (2012) conducted a correlation and regression analysis on state trooper disciplinary issues and education levels using a sample of 582 Florida State Troopers from 1989-2010. Jung found a trooper's education level did not have a significant impact on the number of disciplinary issues but did however impact the severity of the offenses each trooper committed. Gerding (2007) analyzed the impact of the formal academic education levels of New Jersey police officers from 2003 to 2007 and concluded that in his sample population, there were no significant differences in the rates of substantiated allegations between officers having a baccalaureate degree or higher and those without a degree. Concerning age, race and gender, no significant correlation existed between these variables and the number of disciplinary issues in this study. Jung (2012) also concluded that age, race and gender when considered along with education levels were not

predictive of the number of committed disciplinary offenses. Although not statistically significant, the characteristic of deputy sheriffs which showed to have the greatest impact on of the number of disciplinary issues in this study was gender, specifically, those who were female. This was consistent with the results of other studies which focused on law enforcement disciplinary issues and gender. Shuck & Rabe-Hemp (2005) determined women were involved in less excessive use of force issues than their male counterparts. Research has also shown women are more skilled when it comes to de-escalating violence in encounters with citizens, due to better verbal communication skills (Paoline & Terrill, 2004); and according to a study by The Christopher Commission of the LAPD in the early 2000s, male officers were found to be more liable for officer payouts in cases of brutality and misconduct than their female counterparts (Sandifer, 2006; Lonsway et al., 2002). In this sample of 288 deputies, only 40 were female, which was slightly lower than the estimated required sample size (44-73) according to the power analysis conducted at the onset of the study. This small percentage of female deputies in the sample might have impacted the results of the relationship analyses with the number of disciplinary issues, in terms of statistical significance. This will be further discussed in the recommendations section of this chapter.

Although the three proposed alternative hypotheses were rejected in favor of the null hypotheses, the study did extend knowledge in the criminal justice discipline for a variety of reasons. This study set out to determine the potential impact of an increase in the formal academic educational hiring requirement on the number of disciplinary issues within the same agency. The SSO increased the formal academic educational hiring

requirement in 2008, but the impact of this increase had not been studied up to this point. This analysis required the review of the statistical results of a previous study conducted by Minton (2011) and comparison to the results of the current study. The results indicated the increase in the formal academic education level requirement did not impact the number of disciplinary issues. This type of comparative analysis on the subject of education and law enforcement issues had not been previously to the researcher's knowledge.

Also, in addition to studying how age, gender, and race impacted the number of disciplinary issues, this study also reviewed the prior and active military service of the deputy sheriffs in the study sample. This could be extremely valuable as law enforcement agencies around the country are either currently or transitioning into para-military organizations, many of which are putting a large emphasis on recruiting citizens with a military background for the perceived benefits. The United States Army Reserve, even offers a Private Public Partnership (P3), which assists law enforcement agencies in recruiting soldiers, veterans, and family members free of charge (Barnes, 2017). Traditionally, those with military service, especially those who serve as military police, were thought to have the skills and knowledge to join law enforcement agencies and excel when dealing with stressful and sometimes deadly situations, although this model has little empirical evidence supporting it. Patterson (2002) conducted a study which found more military experience did not significantly predict fewer organizational work events and lower perceptions of stress, or more field work events and greater perceptions of stress. Patterson only found more years of police experience predicted fewer negative

work events. In a study conducted by Ivie & Garland (2011), the results indicated that negative exposures to demanding events influenced burnout for all officers including those from the military. The International Association of Chiefs of Police (IACP) (2009) suggests that veterans, do in fact, have a unique set of skills that make them desirable for police agencies, but also noted negatives associated with recruiting veterans too, including a lack of training on how to control one's reaction to certain events, which differ in law enforcement than in military warfare. The results of this study indicated military service did not impact the number of disciplinary issues.

The theory used as a framework for this study was Kohlberg's six stages of moral development, which is based on the principle that the higher education one has, the higher their moral development is, and therefore such a person should engage in less conflict. The results of the study found the number of disciplinary issues did decrease from 2000-2005 to 2008-2013, and conversely the levels of formal academic education for deputy sheriffs increased. The analysis did not however find a statistical relationship between the observed decrease in the number of disciplinary issues and the level of formal academic education. This does not mean this theory is invalid, it only means the results of this study using a certain sample did not support the main principle of this theory. There are other factors and characteristics possessed by many who enter the field of law enforcement, which could impact their propensity to engage in acts of misconduct and subsequently be disciplined. As previously mentioned and reviewed further in the recommendations section in this chapter, it was still possible for higher levels of formal

academic education to impact the severity of disciplinary issues. This was found to be the case in Jung's study in 2012.

Limitations

The study sought to establish if there was a relationship between deputy sheriffs' level of formal academic education and the number of disciplinary issues. Therefore, the methodology limited the conclusions that might be drawn by the resulting data. The study, while specific, lacked a larger degree of scope, that might have contributed to an even better understanding of the relationship between deputy sheriff discipline issues and levels of formal academic education, with regards to severity of disciplinary issues. Also, other present influences shaping a deputy sheriff's behavior could have been sought out, researched and subsequently analyzed. These include social forces as well as the influence of agency programs, the public, family and peers on the number of deputy sheriff disciplinary issues. One variable, which was not studied was the introduction of the Sheriff's Orientation Training (SOT), which was created in 2008 and discontinued in 2018. SOT was a mandatory two-week para-military "boot camp", which taught cadets (employees who have not yet started the police academy) discipline and team work through a variety of stress induced drills, firearms training, and team building exercises. This program, which could have impacted the decrease in the number of disciplinary issues, was not studied as all deputies hired from 2008 to 2013 had to complete the twoweek program prior to entering the academy and subsequently become deputy sheriffs, so it could not be controlled for. The impact and influence the listed variables have upon deputy discipline issues remain unknown.

The SSO was selected due to it serving a racially and ethnically diverse population in both southern rural and urban areas as well as it being accredited by the Commission on Accreditation for Law Enforcement Agencies (CALEA) (Gordon and Cordner, 2010). The SSO employs over 3,000 employees, fitting into the largest category, D-size (300+ personnel). There are smaller agencies within the United States and southeast, however, some agencies, which might only employee 10-15 officers or less would not be suitable for a similar study. Whether this data could be generalized to different types of law enforcement agencies, such as federal departments (agents), state patrol (troopers), police department (police officers), as opposed to sheriff's offices (deputy sheriffs) is also unknown. Also, SSO deputies, the law enforcement population examined by this study, receive lengthier and more formal training than many other law enforcement officers which includes academy training. SSO deputy sheriffs from 2008 to 2013 all attended the 770 hours of the Florida Law Enforcement Academy, which is significantly longer than some programs around the country; such as the 408 hour law enforcement program through the Georgia Pubic Safety Training Center, which is one of the largest centers for academy training in Georgia (Basic, 2018).

Another limitation to the study, was the assumption that information provided by applicants hired from 2008 to 2013 was accurate and verified by the assigned background investigators. Also, SSO Professional Standards (internal affairs) was relied upon to have completed a thorough investigation on each allegation and reached the correct outcome based on the evidence and totality of the circumstances. It is also unknown if any deputy sheriff committed an act of excessive force or did anything which would have been

considered a disciplinary issue, which was not reported or discovered. It could be assumed, deputy sheriffs with extensive knowledge of the law and agency policies, would know how to prevent detection if they decided to cover up an act of indiscretion. Another limitation was, the SSO currently does not have a policy which makes it mandatory to report any changes in college level achievement during the course of a deputy's career. There is also no additional monetary incentive after completing a bachelor's degree (currently sixty dollars a month) either. This means, if a deputy, while being employed at the agency, obtains a master's degree or higher, they are not mandated or incentivized to inform the agency. This could lead to the current level (not level at hiring) of formal academic education on file for a deputy to be outdated and inaccurate. Due to this, the deputy sheriffs' current formal academic education levels were not used in the analysis process.

Recommendations for Future Studies

Although the primary goal of this study was to explore and analyze how an increase of law enforcement formal academic educational hiring requirements impacted the number of disciplinary issues, there are many related topics which could be explored. As mentioned previously, the impact of law enforcement formal academic education on the severity of disciplinary issues could be analyzed using this dataset, if disciplinary issues were collected and analyzed by severity level as opposed to number of incidents. This was conducted by Jung (2012) and a statistically significant relationship was found. Related to this, in the comparative study, Minton (2011) separated a portion of the disciplinary issues in his 2000-2005 dataset, into those which were considered

significant misconduct, which led to resignation or termination. A comparative study could be completed using the dataset of this study (2008-2013), to determine the impact of the increase in education hiring requirements on the propensity of a deputy sheriff to commit acts of significant misconduct and as a result be terminated or forced to resign. Another study which could be performed specifically using the SSO as the focus, would be comparing deputies who went through the aforementioned Sheriff's Orientation Training (SOT) program, which was created in 2008 and discontinued in 2018, and those who did not. This could be done as a comparative study using 2003-2013 as the timeframe focused as 2003-2008 was pre-SOT and 2008-2013 was post implementation. This study could reveal how a para-military "boot camp" impacted deputy sheriffs' disciplinary issues, performance and morale, if a questionnaire was utilized. In 2018, the SSO created a new exemption for the 60-college credit hour requirement, which can be waived if a potential applicant has been employed for three years full time with same employer. This was not effective during the sample timeframe however, 2008 to 2013, so it did not impact the study, but the disciplinary issues and performance of the deputies hired under this exemption could be compared to those who met the college credit hour requirement or utilized the military service exemption to see if this hiring requirement modification impacted these variables.

The relationship of formal academic education levels and other aspects of law enforcement including performance and perceived impact of education on performance can be compared as well. Although disciplinary issues in law enforcement are an

important topic, especially now with added media attention and scrutiny, job performance, is arguably more important to the success of the deputies themselves and the agency as a whole. Due to this, it is recommended to study the impact of formal academic educations on job performance, in the form of annual ratings, to determine if an increase in education has a correlation and effect on performance. This would assist in knowing if education incentives are cost effective ways of increasing performance for the agency and could assist in determining future hiring requirements. The formal academic education level of deputy sheriffs should also be compared to their achieved rank after a period of time in order to test for correlation and possible causation. The Bureau of Labor and Statistics (BLS, 2012) examined education requirements for police officers and detectives. The study examined police officer education ranging from those with a high school diploma to a college degree or higher and found no correlation between education and rank. Fitzgerald (2013) also found no correlation between education levels and rank achieved. This subject needs more analysis however as findings by Wyatt-Nichol and Franks (2009, 2010) and Summers (2009) noted that police chiefs shared opinions among the value of police training and education, labeling them as needed and a subject that should be required throughout police careers, regardless of rank. The advancements in training and education can only result in becoming better at achieving the organizational mission, adhering to policies and procedures, and enhancing officer morale, emotional intelligence, and problem-solving skills (Fitzgerald, 2013; Thomas, 2011) and this warrants further study.

Although the number of racial minorities and females being hired by SSO has increased from 2000-2005 to 2008-2013, the percentage of many of those in the dataset, did not allow for confident statistical analysis and conclusion as to the impact of these deputy sheriff characteristics on disciplinary issues. Due to this, a larger timeframe, possibly a ten period (2005-2015), would be recommended. This study was not able to do so due to the implementation of the educational hiring beginning in 2008 and the perceived need to use a similar time period similar to the comparison study, five years. Military service was found to not have a significant relationship with the number of disciplinary issues, but further investigation can be justified. Due to active military personnel and veterans generally being viewed as more disciplined, the impact of military service on the severity of disciplinary issues is recommended as well. This analysis of military service could go deeper and the branches of the military, rank and even particular military operational specialties (M.O.S.) could be separated and analyzed to determine if a certain portion of the military a deputy sheriff is, or was, a part of what impacts their disciplinary issues. Concerning the impact of law enforcement experience, according to studies conducted by Paoline & Terrill (2007) and Rydberg & Terrill (2010), the benefits of law enforcement experience do not take effect until an officer reached 10 years of service. This means experience of deputy sheriffs can analyzed as well to determine if the experience of a deputy impacts their disciplinary issues.

Still within the field of criminal justice and the scope of law enforcement agencies, similar studies can be constructed for the detention and correction side. At the Southeast Sheriff's Office (SSO), detention deputies are responsible for dealing with the

inmate populations in the two county jails as well as in the two county courthouses. SSO employees over one thousand sworn detention personnel, who work with convicted criminals and a significant arrested population awaiting trial. Similar to the patrol aspect of law enforcement, there are occasions which require detention deputies to use force to gain control and compliance and as a result, cases of excessive use of force and other disciplinary issues can arise. As of 2018, the SSO requires all applicants for the position of detention deputy (corrections) to be 19 years of age or order with a high school diploma. Also of note, is that detention deputies at SSO make the same salary (parity pay) as law enforcement deputies, who have to be 21 years of age or order and have 60 credit hours of study from an accredited college or university, prior military service, or three years full time employment. Due to the SSO compensating detention deputies at the same rate as their law enforcement counterparts, standards must be set and kept high. The debate for higher education requirements for detention and correctional officers is ongoing. According to Stinchcomb (2004), there is no standard education hiring requirement in corrections, with most departments requiring just a high school diploma or GED, however, individuals with associate degrees or higher were more frequently employed at correctional facilities. Palmer (2016) found that after studying state-level correctional officers in the State of Minnesota, officers without college degrees tended to have a longer length of employment and those with college degrees tended to have fewer infractions. The education levels, experience, military service, age, gender and race of detention deputies compared to disciplinary issues and performance can be analyzed, to

determine if any of the variables are significant predictors in reducing problems while increasing productivity and performance.

Implications for Social Change

Walden University requires its doctoral students to explore how their research can impact positive social change. It was the goal of this study to have a positive impact on social change by contributing context and empirical evidence to the discussion of how formal academic education levels as well as gender, age, race and military service, impact law enforcement disciplinary issues. The goal was not to change a system which has been arguably categorized as systematically racist and corrupt, but rather to determine the cause of the few examples of law enforcement misconduct, and work towards a solution, with the end result being better harmony between law enforcement agencies and the communities they serve. The contribution to social change stems from the analysis of the impact of an increase in educational hiring requirements of a single agency on the number of disciplinary issues, which has not been done, and studying characteristics of previously hired deputy sheriffs such as military service to assist agencies in selecting the best possible applicants now and in the future. Although education levels, age, gender, race and military service did not significantly impact the number of disciplinary issues, this does not mean this analysis did not have a positive impact on social change. The results of this data illustrated how a variety of factors should be considered when hiring, and that eliminating applicants due to a lower level of education or lack of military service, would be an unwise chose if decreasing the quantity of disciplinary issues were one of the main focuses. This does not mean however, it is the recommendation of this

study to lower educational hiring requirements, which have been shown to boost agency prestige and help attract higher qualified applicants. The results simply mean applicants should be considered through a variety of different measures, which reviewed in unison could provide valuable insight to their potential for high performance and the propensity to engage in disciplinary issues.

The study also provides valuable feedback to law enforcement agencies, as far as the need for current personnel records, specifically employee education records, which can be used to perform valuable data analysis. Specifically, for the SSO, this study provided the first analysis of the impact of the increased law enforcement formal academic educational hiring requirement established in 2008, on the number of disciplinary issues. Although this impact was not significant, it was determined through the study that the number of disciplinary issues did in fact decrease, which leads to the search for variables which caused the decrease. Along these lines, it provides the opportunity to build on this study by assessing the impact of increased formal academic education levels on the severity of disciplinary issues and deputy performance, which would be valuable to the agency and the citizens it serves.

Conclusions

This study was conducted to address potential limitations in the existing body of literature regarding the relationship between formal academic education levels of law enforcement officers and the number of disciplinary issues, specifically the implementation or increase of educational hiring requirements. A good portion of the current and emerging body of literature reviewed supports the added value a college

education offers toward reducing disciplinary issues (Mayo, 2006). Although the researcher agrees that formal academic education can have positive impacts in other aspects of the job, an increasing portion of the body of literature has indicated that a college degree might not entirely be the best prerequisite for modern professional policing, if and when the major concern is disciplinary issues. According to White & Escobar (2008), minimum college degree requirements for police officers might unnecessarily limit the police hiring pool. Notably, there may be some merit to these concerns that agencies must consider when recruiting, hiring, and developing their officers. In situations, where agencies are understaffed, they might not have the luxury of implementing or maintaining high educational hiring requirements, if the focus was decreasing the number of disciplinary issues, as the individual impact of formal academic education on the number of disciplinary issues in this study were found to be insignificant. Research into the contributing factors of law enforcement disciplinary issues must continue, in order to mitigate them as much as possible, as even one instance of misconduct is too many. In a profession, such as law enforcement, where deputy sheriffs are trusted by the people to "serve and protect", the stakes are too great to fail.

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