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A Meta-Analysis of Higher Education on Professional Police Behavior Patterns

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Walden University
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Abstract

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Augustine S. Nugba

MS, University of Baltimore, 2016

BA, University of Baltimore, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Ph. D. Social & Behavior Science

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Abstract

Police misconduct has become an issue of concern among law enforcement officers and other stakeholders. Approximately, 10% of law enforcement officers commit 90% of misconduct problems, and as high as 45% of the misconduct generates citizen complaints. Thus, there has been an increasing debate on whether police officers should attain a college education or not. The purpose of this quantitative correlational study was to investigate the relationship between education level and the number of complaints filed against police officers for misconduct. This study was grounded on the cognitive development theory. The study was conducted by following the guidelines proposed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Four main databases were utilized to search for original research studies published from 1990 up to 2022, and these were Scopus, Science Direct, JSTOR, and Google Scholar. The primary participants/focus for this study were police officers with complaints filed against them as subjects in the research studies to be included in this systematic review. Two data collection instruments were used in this systematic review study, which includes the CASP and another instrument that I developed. The findings of this study indicate that the level of education achieved has an impact on police officers' misconduct, complaints, attitudes, and use of force. Police officers who have a college education use less force during encounters with citizens, and they performed better compared to non-college educated officers. Based on the important role played by college education, there is a need for all states to include a college education as a requirement for all officers.

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Dedication

Behind every great organization, there are moving parts that are managed by individuals whom we do not see daily. With that said, I would like to thank all the librarians, school administrators, customer care teams, student success centers, military services, financial advisors, and all the other unnamed services. Thank you for your countless effort in supporting the system that made me the man I have become. Your work and daily efforts have not gone unnoticed even when we do not communicate it. To my committee, Dr. Williams, Dr. Smith, and Dr. Henderson, thank you for your continued support through this process, and I hope your effort to impact social change continues to bear fruit.

Acknowledgments

First, I would like to thank my wife and children for sacrificing their time for me to accomplish this level of achievement. My wonderful and strong wife, I want to specifically thank you for your dedicated support, strength, motivation, and perseverance throughout this process. You stuck with me even when things did not appear to go as planned. Secondly, I want to thank my mother for giving me this opportunity because, without her, I would not have been in this position. I also would like to thank my siblings and distant family for their support. This was not an easy task, but it was possible because of your support. Above all, I would like to thank God for his love, mercy, provision, and patience toward me. May his purpose for my life continue to show in every accomplishment.

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Chapter 1: Introduction to the Study

Police behavior has become an issue of concern among law enforcement officers and other stakeholders who consider the traditional policing practices inhuman. Scholars have linked the increased usage of force among law enforcement officers to levels of education. In the past few decades, there has been an increasing debate on whether police officers should attain a college education or not. Statistics indicate that there has been an increase in the number of civilians' complaints against law enforcement officers, which can be addressed through education. The focus of this study was to investigate the relationship that exists between education and law enforcement officer's behavior. For the purpose of this study, *professional police behavior* is defined as workplace etiquette that is largely associated with polite and respectful conduct, without the use of force from police officers. Meier et al. (2018) identified a gap in the literature by calling for additional research to be conducted on the link that exists between education and police behaviors. This study addressed this gap by exploring the relationship that exists between education and police behavior. The study is of great importance because it provides valuable information that can be used to address the current literature gap by enhancing the understanding of how education correlates with police behavior. Possible implications of this study's positive social change may include:

- reducing police officers' misconduct,

- mitigating citizen-complainant settlements,

- enhancing community policing, and

- preventing unnecessary deaths among citizens.

In this section, I introduce the background information, which provides an overall overview of the study. This will be followed by the problem statement section that include a description of the problem and identification of the gap in the literature. The study purpose section will describe the study's intention and how the objective will be achieved. The next section will be questions and hypotheses, which will provide a brief overview of the study's hypothesis. The theoretical framework section will provide a discussion on cognitive-developmental theory and its application to the study. The section on the nature of the study will be used to provide a brief overview of the research methodology selected to address the selected variables. Another section includes a definition of terms, assumptions, limitations, and significance of the study. The final section will provide a summary of the chapter and offer a transition into Chapter 2.

Background

Police misconduct has become an issue of great concern among stakeholders. Researchers link the increased misconduct among police to limited skills and evidence-based strategies that can be applied to solve different problems. According to recent statistics, approximately 10% of law enforcement officers commit 90% of misconduct problems, and as high as 45% of the misconduct generate citizen complaints (Meier et al., 2018). Koster et al. (2020) argued that managing police officers becomes an important aspect that law enforcement officers should focus on. The management includes developing educational programs that seek to enhance police officer's skill capacities (Holdaway, 2017).

Several scholars have underscored that education and the attainment of a college degree are among the best ways that stakeholders can use to improve police officers' attitudes and shape their behaviors. However, there is limited research focusing on the relationship that education has with police behavior. Holdaway (2017) offered findings suggesting that police officers who have higher education certificates have different perceptions relating to police force use. Sandhu (2019) also argued that police brutality and intentions to use force were influenced by limited skills that would help them to develop evidence-based strategies to be used to solve conflicts without using force. Blumberg et al. (2020) identified excessive force among law enforcement officers as a key threat to their performance and service delivery to the public.

Not all studies have expressed a statistically significant relationship between education and police behaviors. For instance, Baylis and Matczak (2019) reported that education was not a factor influencing police behavior. According to their conclusions, behavior represents an individual's inner traits that cannot be taught formally in a school. Equally, Mummolo (2018) did not report a significant relationship between education and police misconduct; instead, 90% of the participants linked police misconduct, including abuse of power, to the challenging nature of the environment in which law enforcement officers operate. This study focused on addressing the current inconsistencies relating to the relationship between education and police officer's behavior. To achieve this, a quantitative correlational study was used to investigate the correlation that exists between law enforcement behaviors and education.

Problem Statement

With most Americans remaining at home due to the COVID-19 pandemic, there has been an increase in awareness of what is happening with citizens and police relationships (Koster et al., 2020). A video surrounding the death of George Floyd at the hand of a police officer has increased citizens, politicians, and corporate entity's demand for police reform (Baylis & Matczak, 2019). Subsequently, several other imageries displaying unprofessional behavior from police officers encountered with citizens continue to support the demand for reform (Koster et al., 2020). Protests over police brutality have increased both locally and internationally (Marciniak & Elattrache, 2020). According to Blumberg et al. (2020), there is a demand for policymakers and police entities to be held accountable for negative unprofessional behaviors. The general problem is how society, politicians, and criminal justice professionals perceive police modernization and what entails an effective police reform. Specifically, the problem is that research has not established a full understanding of the effect of higher education on police officers' conduct.

The literature review on addressing police misconduct identifies police personnel training and education to be a more appropriate approach to professional characteristics (Baylis & Matczak, 2019). Other studies recommend the inclusion of improved data collection, body-worn cameras on police officers, having a more diverse police force, offering implicit bias training, adopting and enforcing de-escalation policies, and improving the law enforcement-public relationship as a means to establish more suitable police acceptability (Patel, 2016). Research has analyzed approaches to understand and

fix police and citizens' relationships. There are lot of general studies on the positive effect higher education has on police behaviors. On the other hand, Holdaway (2017) disagreed with the idea that level of education of a police office can positively affect professional police behavior patterns. According to a study conducted by Marciniak and Elattrache (2020), college education attained did not necessarily have a positive effect but rather a learning process, interaction, and the development interpersonal skills caused positive behavior patterns. Nevertheless, there is limited research about police departments. Due to such reason, this analysis will compare officers with a college education against their counterpart with no college education.

Purpose of the Study

The purpose of this quantitative correlational study was to investigate the relationship between education level and the number of complaints filed against police officers for misconduct. Research on police misconduct has found that officers who engage in police misconduct are likely to influence an increase in misconduct by approximately 7% in a department (Quispe-Torreblanca & Steward, 2019). Another study conducted by Ouellet et al. (2019) showed that officers against whom citizens have complained were found to have partner with a similar history of misconduct. The impact of police misconduct is not just felt by peers, but also affects the police-citizen relationship (Holdaway, 2017). A study conducted by Koster et al. (2020) found that a lack of excellent police performance can cause individuals not to be corporative with law enforcement authority. Other research analyses on police misconduct also found that even when office misconduct leads to policies and police practice change, there are no

implemented checks and balances to evaluate the effectiveness of enforcement of such

practice (Mummolo, 2018).

Research Question and Hypotheses

Research Question (RQ): Based on a meta-analysis of studies on relationship

between education level and the number of complaints filed against police officers for

misconduct, does the achievement of higher levels of education impact the professional

behavior patterns of officers?

H_0: Based on a meta-analysis, there is a statistically significant relationship

between police officer professional behavior patterns and the level of education

attained.

H_1: Based on a meta-analysis, there is no statistically significant relationship

between police officer professional behavior pattern and the level of education

attained.

Theoretical Framework for the Study

Theoretical Framework

The cognitive development theory guided the study. Cognitive theory assumes

that individual decisions are influenced by moral, conceptual, ego, and faith development

(Bjorklund & Causey, 2017; Piaget & Inhelder, 2008). The key aspects of the theory that

are important in considering the creation of educational programs for law enforcement

officers are moral development and conceptual development. According to Richardson

(2019), the moral development domain relates to individuals' cognitive development and

reasons for their moral judgment and reasoning. Researchers suggest that cognitive

schemers of moral reasoning may develop hierarchically and sequentially (Nelson, 2017).

Therefore, moral reasoning as a key aspect of cognitive development theory would

influence decisions that law enforcement officers undertake to confront a crisis (McLeod,

2018).

Researchers have identified a positive relationship between the developmental

level of moral reasoning and moral action. Because moral reasoning is directly linked to

moral behavior, promoting police officers' moral development is especially relevant

because they operate in a profession that powers within the community (Nelson, 2017).

According to cognitive-developmental theory, individuals with higher levels of

conceptual complexity are more likely to have a greater ability or capacity to behave

responsibly and adapt to changes in the environment (Richardson, 2019). Cognitive

developmental theory links an individual's ability to their critical thinking skills and other

concepts individuals use to meanings of their experiences and interpersonal relationships

(McLeod, 2018). The cognitive-developmental theory was used in this study to inform

the understanding of how promoting the cognitive complexity of law enforcement

officers through education would influence their behavior.

Nature of the study

The search process was conducted by following the guidelines proposed by the

PRISMA. Four main databases were utilized to search for original research studies

published from 1990 up to 2022 and these were Scopus, Science Direct, JSTOR, and

Google Scholar. Science Direct, JSTOR, and Google Scholar are bibliographic databases

of articles from journals covering the fields of life sciences, nursing, allied health, and

biomedical information. Meanwhile, Scopus is considered as the largest abstract and citation databases of peer-reviewed articles covering a wide range of fields including medicine, technology, science, social sciences, humanities, and arts. Specific keywords were used to limit the searches on the aforementioned three databases that are germane for the study. The keywords that were utilized in the search process were *police, education level, complaints, use of force, misconduct, and attitudes*.

A set of inclusion and exclusion criteria was used to determine the research studies that would be relevant for the purpose of the project. The articles to be included for the study were all peer-reviewed articles from journals available in English and with full-text concerning police's education and complaints against them. Studies were excluded if a conference paper, editorial paper, dissertation, pilot study, or chapters in a book. Studies that did not provide satisfactory descriptions and explanations about the participants and outcomes utilized and did not present quantitative results were also excluded from further analysis.

Definitions of Terms

This section presents set of definition of key terms that were used in this study.

Professional behavior: This is a type of workplace etiquette that is largely associated with polite and respectful conduct.

Excessive force: Conduct forbidden by law stipulates that police officers must obey all authority and regulatory entities (Weisburst, 2019).

Law violations: Incongruous force, or aggravated conduct outlawed, requires that officers obey federal and states (a) felonious conduct, (b) prohibited as a Class One

Misdemeanor, or (c) criminal conduct committed on duty or under color of authority was developed by Police Department Operations Manual (Weisburst, 2019).

Police misconduct: A criminal active, corruption, and abuse of power (Baylis & Matczak, 2019).

College Educated: A police officer who bagged at least a bachelor's degree from a college or university.

Assumptions

Assumptions refer to factors that a researcher considers to be true and yet cannot be validated (Shadish et al., 2002). Identifying assumptions in a study plays an important role in providing researchers with a clear picture of how the study was conducted for replicability purposes. First, I assumed that the secondary data to be used in the study was complete and correct. Second, it is assumed that the selected quantitative correlating research methodology effectively addressed the research questions.

Scope and Delimitations

Delimitations refer to a set of boundaries that a researcher designs to guide the scope of the study (Shadish et al., 2002). The focus was to limit the study to a given topic or area for concise analysis. The study was delimited to the selected population and included law enforcement officers from police department. The study was also delimited by the sampling technique that was used to sample participants. The study was delimited to the select topic. In this case, the study only focused on the relationship between education and police officers' behavior.

Limitations

The current research population is law enforcement officers, and with current unstable police and citizen relations, there is some expectation of resistance to release of police data. Some of the expected justification for resistance toward releasing police misconduct is the fact that the case might still be under investigation. Another resistance is due to protection of officers' privacy. Obstacles surrounding access to selected officers' misconduct records might have impacted the feasibility of the study. Ethically, a challenge concerning this study was the expectation of benefit from the police department. One must not oversell the research because there are limits or no benefits to participants in research (Thompson & Panacek, 2007).

Significance

Information gathered from the comparative analysis of this research analysis on police officers' highest levels of education compared to the number of complaints brought against them due to misconduct while performing official police duties may assist criminal justice professionals and policymakers to reevaluate the minimum education requirement needed to improve officers and community's relations. With that said, the findings of this study can also inform police departments on reform approaches required to adequately improve the level of professionalism needed to reduce or even eliminate police misconduct (Marciniak & Elattrache, 2020). Identification of the effect higher education plays on how officers carry themselves when conducting official police business can assist with providing supportive resources on why police departments should incorporate higher education requirements as a prerequisite to becoming law

enforcement officers (Mummolo, 2018). Based on a quantitative analysis conducted by Sibandze and Scafide (2017), the researchers found that registered nurses with a bachelor or higher education qualification were more susceptible to a greater understanding and application of professional standards than nurses with lower levels or no education. Sibandze and Scafide (2017) found that nurses who achieved a higher level of education incorporated professional standards as basic requirements for nursing. This speaks to the impact that achieving higher levels of education can have on professional behavior.

Identifying the effect higher education has on police behavior can provide a better understanding of how to effectively reform police officers and departments to improve police and citizens' relationships (Baylis & Matczak, 2019). Incorporating higher education as a prerequisite for police officers can also develop awareness and an integration of professional values in how officers carry out their daily activities. The need for higher education amongst officers is essential because, as research has shown, a higher level of education promotes professional standards (Scafide, 2017). According to Baylis and Matczak (2109), there is an association that exists between education and law enforcement officers' professionalization. The objective surrounding police reform is to ensure that officers are maintaining a professional standard when interacting with citizens. Incorporating higher education as a basic requirement to become a police officer can encourage a more professional environment that affects conduct when interacting with citizens.

Summary

The purpose of this study was to investigate the relationship that exists between education and law enforcement officer's behavior. In this chapter, I showed how conflicting information is known regarding the role education correlates with police officer's behavior. To address this gap in the literature, I conducted a quantitative correlational study that assessed the nature of the relationship existing between education and police behavior. The main areas discussed in this chapter included the background information, purpose of the study, problem statement, theoretical framework, research questions, the study's significance, and a summary. The next chapter includes a discussion of the literature review on the topic.

Chapter 2: Literature Review

Police misconduct has become an issue of concern in the United States in the past 2 decades. Institutional racism has permitted the criminal justice system to make it increasingly challenging for civilians of different races to achieve justice (Ouellet et al., 2019). Of great importance to emphasize is that police brutality and the use of force, particularly among minorities, have become an issue of concern in the United States since 2000 (Sandhu, 2019).

Police brutality is characterized by victims suffering that would otherwise be avoided if necessary steps were undertaken to avoid unnecessary confrontations with the suspects by police. The study was informed by the literature gap relating to little information being known about how education influences police behavior (Mummolo, 2018). Researchers such as Ouellet et al. (2019) have linked education to positive police behaviors. To address this gap in the literature, the focus of this study was to use a quantitative correlational approach to investigate the relationship that exists between education and police behavior. In this chapter, I discuss the theoretical framework guiding the study and review key themes related to the study based on the analysis conducted. The chapter concludes with a summary and a transition into Chapter 3.

Literature Search Strategy

To conduct an informative analysis on a phenomenon, researchers are advised to perform a comprehensive literature search on the topic being investigated. The purpose is to ensure that relevant information as informed by current literature is provided to inform the research process. In this study, I conducted an existing literature search to valuable

abstract information to conceptualize the relationship between education and police behavior. Different databases were searched. The main databases that were searched include: PubMed Central, Database of Abstracts of Reviews of Effects, PsycINFO, UpToDate, PubMed, Psycharticles, ProQuest, PsychoInfo, Academic Premier, Sage, JSTOR, ResaearchGate, EMBASE, ScienceDirect, Google Scholar, Cochrane Library, Emerald, EBSCO, and Elsevier.

To search the databases identified above, different keywords of search terms were used. In particular, the following search terms were used: *Black Americans attitudes towards police, police misconduct, education and police reforms, education and police behaviors, civilian complaints, a misconduct toward citizens,* and *perceptions of police on higher education*.

In compliance with Walden University guidelines, all articles abstracted and reviewed were limited to a 5-year gap since its publication compared to my anticipated completion of the study. The purpose was to ensure that at least 80% of sources used to conduct literature analysis present the current phenomenon. To comply with these requirements, I ensured that all articles used in the literature review analysis were published no earlier than 2017. To be included in the study,

- The article was supposed to be published from 2017.

- The article addressed education and police behavior.

- The article was a peer-reviewed article.

Articles were excluded from the literature review analysis if

- they were published before 2017,

- the article did not discuss police behavior and education, or

- the article was not peer reviewed.

Using the above strategy, I ensured that all sources used were reputable and capable of addressing the identified problem.

Theoretical Framework

The primary issue that this research addressed was whether or not higher education has any impact on the way police officers operate and interact with citizens as they go about their day-to-day duties. Therefore, this research mainly relied on the cognitive development theory in explaining why tertiary education is or is not important for law enforcement authorities. The theory regards the development of cognitive abilities from childhood to adulthood. Cognitive abilities can be classified under different groups. The first category of cognitive abilities is the fluid intelligence/reasoning, which involves people's abilities to reach solutions by applying rules and premises (Richardson, 2019). That is, how people are able to detect and understand the underlying characteristics that govern problems.

Second, cognitive skills also entail quantitative reasoning abilities, which regard people's mathematical knowledge (Richardson, 2019). In other words, quantitative reasoning involves people's ability to use mathematical concepts, properties, and relations when reasoning, either inductively or deductively. Finally, cognitive skills also comprise of crystallized intelligence. These skills regard the size and how sophisticated one's vocabularies are (Richardson, 2019). It also regards the ease at which people can comprehend, communicate orally, and employ communication skills fluently. All of the

skills described above are essentials for police officers since they apply directly to their day-to-day execution of duties.

To understand why education is significant for the acquisition and development of these skills, the research relied on Jean Piaget's four stages of cognitive development. The theory states that people undergo four stages of cognitive development in their entire life and these stages play a significant role in increasing the sophistication of people's thoughts. The first stage in Piaget's theory is the sensorimotor stage that starts at birth and lasts up to between 18 and 24 months (McLeod, 2018). During this stage, a person starts to learn about the existence of objects, including those that are always hidden. As a result, the stage requires people to be able to form mental representations of the objects that they come across. The second stage is the preoperational stage that starts at 2 years and ends at 7 (McLeod, 2018). During this time people start to think about things symbolically. That is, being able to make one thing stand for another. However, at this stage, the person is still egocentric and unable to acknowledge other people's viewpoints.

The third stage, which Piaget marked as the most significant, is the concrete operational stage, which starts at 7 years and lasts to 11 years (McLeod, 2018). This is the point where a person starts to reason logically and start having operational thoughts. At this stage, a person begins to work out things in their heads, other than doing them physically as in the earlier stages. Finally, the last stage in Piaget's four stage theory is the formal operations stage that starts at 11 and lasts through adulthood (McLeod, 2018). At this stage, people can now think about abstract concepts and also test hypotheses logically.

Although Piaget did not relate the theory explicitly to education, researchers that came afterwards did, with the theory playing a significant role in influencing the development of educational policies and teaching practices (Bjorklund & Causey, 2017). Additionally, further studies have proven that the development of cognitive skills and abilities depend highly on influence and environment. Most of the initial policies and teaching practices concentrated mainly in the development of cognitive skills in children, thereby focusing most of the activities in elementary programs. However, with further review of Piaget's theory, especially the fourth stage—formal operations stage, more studies have proven that the cognitive abilities keep developing through adulthood.

Tertiary education thus plays a significant role not only in the development of the skills but also in providing an environment where people can practice those skills. It is the first stage where people start experiencing the real meaning of being independent and acclimatizing with existing conditions (Nelson, 2017). From learning institutions, people learn about different cultures, skills, and life lessons that then help to shape their reasoning (Meier et al., 2018). It is for these reasons that this research hypothesizes that having higher education impacts police officers' actions since they go through further development, unlike their counterparts who do not go through higher education. According to Holdaway (2017), it is a crucial part of Piaget's four stages of cognitive development theory and failing to attend higher education is, therefore, like failing to completely develop one's cognitive abilities. Proving this hypothesis was the key focus of this research; hence the quantitative design of comparing police with higher education against those without.

Literature Review Related to Key Variables and/or Concepts

Background and History of College Education and Policing

      The practice of hiring educated police officers with a college education has been the focus of discussion since the early 1900s, when the need for professional policing was conceptualized (Mummolo, 2018). In 1900s, policing requirements in the United States did not pay particular attention to law enforcement officers' training and accountability standards (Aaronson, 2020). During this error, as elucidated by Alang et al. (2020), law enforcement officers had fewer responsibilities that required limited formal training. Cordner (2017) also maintained that most of the tasks assigned to police officers was less formal and highly manual, requiring no formal training. In such instances, the law enforcement officers would use tactics that are informed by brutality instead of reflective judgment or critical thinking that would improve their job performance (Alang et al., 2017).

      The limited focus on education was given to different areas such as criminology, sociology, and psychological theory that influenced contemporary policing. Meier et al. (2018), argued that with the gradual change and evolution of this theory, stakeholders considered it increasingly important to continue integrating education in policing, particularly criminal justice policymaking (Mummolo, 2018). The focus was to ensure that training integrated different theories that influenced policing and police behavior. According to Ouellet et al. (2019), college education was considered an instrument that stakeholders would use to formally train officers on criminology,

motives, and crime, which was not judged how to combat it as previously conceptualized (Todak & James, 2018).

Education in policing can also be traced back to a colonial error in the United States. During this time, security guards and loyal individuals were given the responsibilities of protecting individual settlements from intruders (Weisburst, 2019). The individuals contracted were eventually formalized as local sheriffs. As argued by Meier et al. (2018), sheriff was the highest position of authority in law enforcement (Cordner, 2017). However, law enforcement training was overlooked because protection was more important than education. The practice of ignoring formal training for police officers spread across the United States in the mid-1800.

The advent of the second revolution prevented a unique aspect that required education. According to Weisburst (2019), security guards and watchmen who were employed in flourishing businesses, required members to have formal training to handle clients. In response to the need for formal training among security guards, recommendations were made to improve law enforcement officers' skills to adapt to the changing needs in the external environment (Meier et al., 2018). One of the strategies used was to integrate education and formal training in law enforcement programs to boost their skill set (Ouellet et al., 2019). Other scholars such as Vollmer theorized the insignificance of equipping officers with a new skill set that would support their capability to respond to the criminal justice system's external problem (Weisburst, 2019). The study's suggestion provided a blueprint for the formalization of training and

education in policing. By the 1950s, general education development (GED) was

established to help law enforcement officers attain the required skills (Cordner, 2017).

Since the GED establishment in early 1959, the need for police reforms pervaded

the 20th century. The focus in this period was to formalize college education as a primary

requirement for police officers (Todak & James, 2018). The contention that college

educated officers are well-positioned to adapt and respond to the varying needs of the

society has widely been popularized by *the president commission on law enforcement*

and the administrational justice 1967, *the national advisory commission and criminal*

justice standards and goals, and the *Sherman and the national advisory commission on*

higher education for police officers (1978).

20 years later, the local police department continued to displayed reluctance in

advocating for educational reforms when recruiting law enforcement officers (Weisburst,

2019). However, growing socioeconomic trends proved the need for education among

law informant officers (Vespucci, 2020). In early 2000, 24% of Americans aged 25 and

older reported that they earned a baccalaureate degree (Meier et al., 2018). By 2010,

statistics suggested that the percentage increased to 29% and reached an all-time high in

2015 at 32% (Weisburst, 2019). Since 2015, police officers' requirements to match with

society's educational needs have become foundational in promoting professionals in the

criminal justice system (Cordner, 2017).

Criminal justice and law enforcement reforms have continued to emphasize

education among law enforcement (Todak & James, 2018). Currently, as Vespucci

(2020) expounded, police officers are encouraged to earn a college degree to improve

their skill set in handling or responding to social and economic challenges within their

working environment. Research has shown that college education supports police officers

to address different problems within society strategically (Meier et al., 2018),

Influencers on the Use of Force among Law Enforcement Officers

Literature document a considerable amount of research examining the use of force

in law enforcement and documented the causes or influences (Vespucci, 2020). The

spectrum of influences of force among law enforcement officers has been a debate over

the past 2 decades. Research by Chanin and Sheats (2018), identified individual

characteristics as the primary influence use of police by police officers. A comparison of

comparative thoughts was reported by Cordner (2017) who argued that personal

characteristics that have negotiating skills and listening skills could help law enforcement

officers strategically handle different situations with minimum force. Vespucci (2020)

further reported that personal traits, such as empathy, also influenced the level of force

that a law enforcement officer would use when responding to a crisis or threat in the

environment.

Vespucci (2020) also explored factors influencing the use of force among law

enforcement in the United States. The study finding suggested that individual

characteristics, including perceptions, stereotypes, and view toward a given activity

influence the level of force used by police officers. For instance, stereotypes against

minorities among officers have been the major cause of excessive force among law

enforcement officers when handling African Americans (Todak & James, 2018).

Comparable thoughts were explained by Chanin and Sheats (2018) who also argued that

the use of force against people by law enforcement officers was influenced by personal traits, such as the views that a law enforcement officer has towards a given population.

Thus, it can be concluded that the use of excessive force among law enforcement officers is determined by their personal characteristics, including beliefs, perceptions, empathy, and stereotypes that they have towards a given group of people. Moderate perceptions that a given group of people are less hostile will result in minimum force being used by law enforcement officers to tackle the individuals (Donner et al., 2017). On the contrary, when law enforcement officers have negative attitude toward a given population characterized by racial prejudice, the chances of using excessive force is high even when the individuals being handled are less hostile (Cunha & Gonçalves, 2017).

Work experience has also been linked to the use of excessive force in the law enforcement system. Chanin and Sheats (2018) reported that the number of years a law enforcement officer has in service plays a significant role in determining the level of force they are likely to use when managing a threat within the environment. As explained by Donner et al. (2017), it is essential to note that police officers who have more years in service usually gain a unique set of important skills required to address unique crime scenes within the environment. In contrast, when law enforcement officers are young with minimum experience on the job, they prefer the use of force in handling different conditions, which could be avoidable (Cunha & Gonçalves, 2017). Similar findings were reported by Kanvinde (2021) who found limited use of excessive force among experienced police officers who had served for more than 5 years.

Compared to Kanvinde (2021), Donohue Jr. (2020) established that junior police officers who have no work experience in handling offenders might resort to the use of excessive force as the main form of neutralizing threats. Related results were reported by Kramer and Remster (2018) who also argued that excessive use of force among law enforcement officers against civilians was directly linked to the number of years that law enforcement officers have been serving. According to the findings, it was established that law enforcement officers who had served for more than 6 years use minimum force against civilians compared to junior police officers with less than 3 years of service (Chanin & Sheats, 2018). In sum, it can be concluded that excessive force among law enforcement officers is directly influenced by the number of years that police officers have served.

The more years a law enforcement officer has in service, the higher probability that the knowledge gained in managing different situations will result in minimal force (Hallenberg & Cockcroft, 2017). Conversely, junior law enforcement officers who have limited experience handling other crime scenes will resort to brutality and excessive force when responding to a crime scene (Heumann et al., 2018). Therefore, it can be summarized that the experience that a law enforcement officer has directly influence the amount of force used to neutralize a threat in their environment.

Several studies have also established significant differences in the use of force among law enforcement officers across gender. For instance, Ashlock (2019) claimed that excessive force was rampant among male law enforcement officers than in female police officers. Similar findings by Ashlock (2019) also claimed that men's law

enforcement officers' masculinity played a significant role in making them more aggressive in responding to a given problem than females. As supported by Bartkowiak-Théron (2019), the researchers concluded that female law enforcement officers were three times less likely to use excessive force when neutralizing a threat in the environment than male counterparts.

Complexity of Law Enforcement Environment

Law enforcement environment is considered one of the stressful environments in the world. As explained by Homer and Fisher (2020), police officers work in an environment that is highly violent. Bartkowiak-Théron (2019) posited that the violent nature of the law enforcement environment could trigger them to use excessive force. Some of the complexities in the law enforcement environment include technology that have shifted society's needs. Hallenberg and Cockcroft (2017) maintained that the advancement in communication has revolutionized the manner in which criminal activities are perpetuated.

Scholars have also argued that technology has increased the number of threats facing their community by introducing highly sophisticated threats (Carr & Maxwell, 2018, Heumann et al., 2018). In response to crime complexities, law enforcement officers have considered education as the primary source of competence that would help them overcome work-related challenges. A study conducted by Chanin and Sheats (2018) found out that law enforcement officers consider education as an important tool for empowering them to handle society's changing needs.

The Relationship Between Education and Policing Skill Sets

College education and its potentials benefits in policing have been studied over the past 3 decades. The studies' focus has been on how college education influences police behavior which results in the use of excessive force (Carr & Maxwell, 2018). As supported by Schnabel (2018), law enforcement officers should have a different set of skills that will help them to be adaptable to the changing needs in the social environment. Literature suggests that the relationship between education and policing has primary focused on:

1. The propensity to use excessive force

2. The professionalism of law enforcement officers

3. Acceptance of diversity in the workplace

4. Conceptual skills

5. Communication skills

Responsibilities among police officers and the need to integrate education in policing emerged in early 2000. The terror attack in 2000 positioned police officers at the frontline of combating terror activities (Bartkowiak-Théron, 2019). Technological advancement and cybercrimes have also facilitated the need for law enforcement officers to use education as a tool to combat different sets of crimes (Boe et al., 2020). Contrary to the past, majority of the crime being committed in the 21st century is technology-based and the need for law enforcement officers to have the required level of education that will help them identify different levels of crime and creatively initiate strategies that can be used to mitigate the occurrences of such crimes in the society (Carr & Maxwell, 2018).

Referring to drastic change in the nature of crime and the skill set required to handle different criminal activities (Kanvinde, 2021), law enforcement officers have increasingly become important to gain formal training that will help them address different crimes (Hallenberg & Cockcroft, 2017).

Communication Skills

Communication skills are a key skillset that law enforcement officers must have in responding to criminal activities that are significantly harmful to society. As explained by Homer and Fisher (2020), poor communication skills could lead to miscommunication between law enforcement officers and suspects, which could lead to the use of force. A study conducted by Kramer and Remster (2018) established that college-educated law enforcement officers had strong communication skills that would support them to address different situations that require negotiation actively.

In a different study, Boe et al. (2020) reported that the use of excessive force among police officers was linked to poor communication skills among police officers that made it difficult for them to engage victims and offenders civilly. Strategically Hallenberg and Cockcroft (2017) reported that excessive force among law enforcement officers is influenced by the inability of law enforcement officers to strike consultative communication or dialogue with the suspect to understand the factors that compelled them to commit a crime other than resorting to the use of excessive force.

College-educated officers have positive behaviors and performance targets than those who do not have a college certificate (Griffin & Sun, 2018). With formal training in communication skills, Graham et al. (2020) found that law enforcement officers were

well-positioned to engage the public civilly and avoid an unnecessary confrontation that would result in brutality. Supporting evidence was reported by Gutshall et al. (2017) who found out that college-educated police officers had strong communication skills that would result in their promotion and gain trust from the public.

A study conducted by Edwards (2019) suggested that civilians consider engaging law enforcement officers who show a willingness to communicate and consider their story than resorting to violence. The implication, as supported by Homer and Fisher (2020) is that communication skills taught to law enforcement officers in college helped them improve their attitudes and skills by adopting positive behaviors that create a strong relationship with civilians. According to Carr and Maxwell (2018) positive behaviors characterized by positive communication skills among college-educated police have been linked to minimum complaints from the public. Fekjær and Petersson (2018) argued that law enforcement officers' failure to engage in communications with victim or offenders would most likely result in violence or unnecessary use of force, which increased police complaints from the public.

Higher Education and Police Behavior and Attitudes

Research has consistently documented the impact that higher education has on police behavior (Boe et al., 2020; Busey & Coleman-King, 2020; Donohue, 2020). Current research suggests that higher education significantly influences behaviors by informing them of the possible cause of crimes and how they should relate with offenders or victims (Boe et al., 2020). College education has a significant impact on police officer's behavior, including attitude, perception, and views regarding a given

phenomenon (Busey & Coleman-King, 2020). The implication is that education shapes law enforcement officer's perceptions, thoughts, attitudes, and overall behavior in policing (Donohue Jr., 2020). Although there are inconsistent results to education and police behavior, a considerable part of the literature has established a strong relationship between higher education and police behavior.

As an illustration, police behavior was different among law enforcement officers who had attained a college certificate than their counterparts without a college certificate. According to the findings, researchers concluded that college-educated police officers had positive behaviors with minimum misconduct because desirable behavior was learned in school. The implication, as supported by Graham et al. (2020) is that police officers can attain new behaviors to offset their negative ones through formal learn. Carr and Maxwell (2018) emphasized that undesirable police behaviors relating to tolerating a given community's perception could be addressed through training and other forms of formal learning. The articles reviewed, thus far, suggest that there is a strong relationship between education and police behaviors. The findings indicate that educated police officers with at least a college degree are more likely to have positive behaviors than their counterparts, who will display aggression and use of force in most cases.

Research relating to college education, police behavior, and the use of force has primarily focused on the effect of education and attitudes regarding the abuse of police authority. Busey and Coleman-King (2020) reported a positive relationship between police attitudes on the use of force and education. The study findings, which were supported by Edwards (2019) revealed that college-educated law enforcement officers

would, in most cases, resolve disputes in a civil way and less likely resort to the use of force. Donohue Jr. (2020) warned that lack of education among law enforcement officers increased their vulnerability of using excessive force to achieve their strategic goals. Edwards (2019) also reported that police officers who are not educated or have not secured a college certificate are more likely to engage in undesirable behaviors that are brutal. The findings were supported by Busey and Coleman-King (2020) who contended that police brutality and excessive force against civilians were tied to education.

Based on a study results consisting of 210 police officers, 78% of them linked the use of force to limited skills attained through formal learning (Carr & Maxwell, 2018), participants underscored that learning and further training, including college education, played a significant role in influencing the perceptions that law enforcement had toward using force (Busey & Coleman-King, 2020). Similar findings were reported by Brown (2020) who argued that excessive use of force and brutal acts were linked to police officers' inability to use evidence-based strategies to solve different crimes. Further evidence by Hu et al. (2017) established that college-educated law enforcement officers considered excessive force as a traditional way of managing threats and creating positive relations among parties. Conclusively, the articles reviewed revealed that higher education has a positive impact because it influences police behavior and perception toward the use of force among police officers.

Carr & Maxwell (2018) also established a strong relationship between police behavior to use force and college education. In a different study consisting of 712 officers from different departments, Boe et al. (2020) found that college-educated officers had

varying attitudes toward the use of force. As informed by the study finding, officers considered the use of force as less effective in building positive relationships that would support the attainment of their desired goals. Conflicting results were reported by Bolger et al. (2019) whose findings suggested that law enforcement officers who had not attained a college-education found it challenging to engage in positive behaviors that support amicable conflict resolution. Instead, faced with limited communication skills, negotiation skills, and listening skills, as well as evidence-based strategies to manage the crisis, law enforcement officers without a college certificate resorted to brutal behaviors that were characterized by the use of force against civilians (Intravia et al., 2018). College-educated officers with more experience in law enforcement also reported that education influences how an individual can use force or cordial ways of solving conflicts within the workplace. According to Bolger et al. (2019), law enforcement officers without college certificates would engage in uncivilized and brutal behaviors in nature juxtaposed with those who have college certificates.

Fekjær and Petersson (2018) established that law enforcement officers with a college degree displayed positive attitudes toward legal restrictions against use of force. According to the findings, participants noted that the use of force could be solved by college education whereby officers were trained on professionalism in their work (Javdani, 2019). The training entailed helping law enforcement officers understand instances requiring police force and those circumstances where brutality must be minimized. Comparable thoughts were reported by Graham et al. (2020) who surveyed over 1300 police officers regarding the attitudes that law enforcement officers had toward

college education and the use of force. According to the findings, which were supported by Bolger et al. (2019), education enlightens police officers on instances that police officers should use force and less cohesive means than their counterparts with an approach to crime is characterized by force and brutality.

Further studies have investigated how education affects police officers' attitudes and beliefs relating to use of force. For instance, Kramer and Remster (2018) surveyed 119 officers and found that those with a college degree were less dogmatic and highly open-minded to finding ways of solving a conflict in a less coercive manner. Similar findings were reported by Jennings and Rubado (2017) who established that less punitive ways to solve conflicts and use of force were rampant among law enforcement officers without college certificates. A comparison reported by Javdani (2019) suggested that college-educated officers were less likely to engage in a punitive and brutal mechanism to solve conflict because their responses were case-based and empirically informed by validated means of conflict resolution.

Bolger et al. (2019) also explained that basing conflict resolution strategies on empirically tested strategies taught in higher education limits law enforcement officers' brutal behaviors. The implication is that education changes behavior allowing law enforcement officers to learn new positive behaviors of solving conflicts instead of brutal practices (Jetelina et al., 2017). The study findings above are consistent with the previously held assertions that authorities or dogmatism significantly reduces when an individual attains a college certificate (Kanvinde, 2021).

Education creates open mind scenarios among police officers. While one-mindedness may not directly reflect a police officer's likelihood of abusing authority, it is more likely to comply with departmental rules and policies that support professionalism within law enforcement (Jennings & Rubado, 2017). Nonetheless, education level is insignificantly correlated with police officers' intolerance to misconduct conducted by the offender (Javdani, 2019).

Not all researchers have found a positive relationship between education and police behavior. Brown (2020) surveyed 398 officers on their perceptions of how education impacted their attitude toward the use of force. The study findings suggested no statistically significant relationship between education level and police attitudes or behaviors (Brown, 2020). The researchers established that police officers who had college education were less tolerant than other officers. The assumption was based on the fact that education could not impact an individual's behavior because attitudes toward work are embedded in police culture that encourages brutality when neutralizing a threat (Javdani, 2019).

Jennings and Rubado (2017) also found out that education was statistically insignificant to the views and perceptions that law enforcement officers had toward the use of force and other forms of misconduct. The college educated law enforcement officers could have a varying attitudes in behaviors because they may be influenced by policies to attain a given level of education to be employed. The implication is that they may be less likely to consider education as important in helping them change their behavior relating to force when relating to civilians. Brown (2020) reported that force is

influenced by individuals' traits that cannot be taught formally. The implication is that education may fail to impart the required level of police officers' skills that would help them change their perception towards the use of force.

Compared to the amount of literature on the impacts of higher education on law enforcement performance, research focusing on police officers' overall perceptions on link that exists between education and behavior is limited. According to Johnson et al. (2019), perceptions of law enforcement officers toward education is important because it informs stakeholders of the role that education has in the law enforcement environment. A survey of 600 police officers from Illinois established that police officers did not perceive education as a behavior change agent. Nonetheless, they reported that education level influences their overall job performance (Jetelina et al., 2017).

Similar findings were reported by Kubyshko et al. (2018) who established that education level influences police officers' attitudes towards excessive force and the need for civil ways of addressing conflict. Comparable thoughts were reported by Bolger et al. (2019) who established that law enforcement officers trained about racism and police violence resorted to limited use of brutality among police officers. The findings were reported by Brown (2020) who argued that police officers with a college education were more likely to arrest an individual if the issue could be deliberated and a solution established.

Summary of Literature on the Effect of Education on Police Behavior

Since the early 1960s, few researchers have investigated the link that exists between education and police behavior. However, the limited research on the topic

suggests that education level affects different practices within law enforcement. For instance, education affects police officers' behavior relating to race, age, searches, and force use.

Propensity for Police Arrest

Current research suggests that education significantly influences arrest behaviors among police officers differently. For instance, Marciniak and Elattrache (2020) explored 36 police officers from the Arizona police department. The researchers hypothesized that education would lower arrests made by police officers because it influenced their behaviors to engage with people before making an arrest. More dissatisfied police officers were more likely to make an arrest than officers with a college education. Johnson et al. (2019) also found that college-educated officers were three times less likely to arrest individuals than their counterparts without a college education.

On the contrary, Kubyshko et al. (2018) established that junior police officers with a college education were more likely to arrest individuals because they wanted to prove themselves rather than solve a problem. Kanvinde (2021) also found that junior officers with higher education levels made more arrests than senior officers with less education. The study findings demonstrate that education plays an important role in police officers' arrest behavior. Equally, it is important to emphasize that age mediates the relationship between equitation and police arrest behavior. Although education would reduce the number of police arrests, junior police officers with minimum experience in law enforcement are more likely to have the highest number of arrests despite their education level. Trinkner et al. (2018), however, also found that college education among

police significantly led to a reduced number of arrests made by police officers. In a study by Johnson et al. (2019), it was established that police officers with a college education coupled with more years of experience were five times less likely to arrest individuals compared to junior staff who are limited by experience.

In sum, education is directly related to police officers' arrest behavior. As supported by Mullinix et al. (2020), the analysis conducted above suggests that the level of education an officer has will determine the number of arrests made. Officers who have college education and have gained experience in a law enforcement environment are likely to record a significantly low number of arrests. A comparison reported by McGinley et al. (2020) argued that age mediated the relationship between education and police arrest behavior. In particular, Marciniak and Elattrache (2020) argued that while education significantly reduces the number of arrests made by police officers, age mediated such relationships whereby older police officers with higher education levels would report a minimum number of arrests.

On the other hand, junior officers with a college education would prefer arresting individuals as they fear possible consequences when they do not arrest a suspect (Mullinix et al., 2020). Despite the inconsistencies in studies, it can be concluded that there is a statistically significant relationship between police officer's education level and their propensity to arrest (Marciniak & Elattrache, 2020). Law enforcement officers who have attained a minimum of college education have low tendency to arrest than the less educated officers who may resort to punitive measures that are academically and empirically invalidated (McGinley et al., 2020).

Likelihood of Initiating Police Searches

Several studies have investigated the relationship that exists between law enforcement education level and searches made. Studies show that officers who have a college education are less likely to search for those who do not have a college education. A study by Powers (2017) established that law enforcement officers who conducted most of the searches while on traffic duty had not attained a college education. The presumption was that law enforcement officers' inability to engage in more positive behaviors could be used to assess different behaviors that would not lead to police searches (Mullinix et al., 2020).

Additional findings were reported by Trinkner et al. (2018) who argued that traffic police officers who performed most of the searches were less likely to be trained formally. The implication is that education would help police officers assess an intent for crime before making traffic searches. McGinley et al. (2020) also cautioned that the number of searches conducted by police officers, which resulted in an avoidable arrest, were linked to police officers' inability to assess a certain crime before searching for the person.

Use of Excessive Force

One of the widely studied police behaviors is the use of force, which has been linked to law enforcement officers' educational level for decades (Powers, 2017). The capacity to use force is important in policing because policing is the only profession that allows individuals the legal rights to limit other people's liberties by the use of excessive force (Mullinix et al., 2020). Nonetheless, Mourtgos and Adams (2020) cautioned that

use of force among law enforcement officers had become a controversial issue in the criminal justice system. For instance, activists argue that once police officers have used excessive force against an individual, there is no possibility that such force will be reversed because the victim usually has experienced the consequences of force (Miles-Johnson & Pickering, 2018). Comparable thoughts were explained by McGinley et al. (2020) who found that excessive use of force among police officers violated their code of ethics founded on the assumption that an individual is innocent until proved guilty. In such instances, the person has to ensure that minimum force is used to manage victims or suspects (Mourtgos & Adams, 2020).

The use of excessive force among law enforcement officers is conceptualized as a negative aspect that must be regulated. As an illustration, Pryor et al. (2020) argued that law enforcement officers who legitimately use excessive force might not be acknowledged. However, Powers (2017) argued that there are several instances where law enforcement officers publicly overstretch their mandate by using excessive force to handle different situations. Although the use of excessive force is an expectation in the law enforcement environment (Miles-Johnson & Pickering, 2018), it is not right for law enforcement officers to overstretch their mandate and use excessive force in situations that do not warrant excessive force (Trinkner et al. (2018).

Research has documented that factors that influence law enforcement officers' use of excessive force, including their capability to assess or de-escalate threats, can directly be linked to their training level (Pryor et al., 2020). Teaching law enforcement officers the type of force to apply in different conditions is the primary goal of police training

(Meier et al., 2018). Mourtgos and Adams (2020) argued for caution because most of the training approaches used do not prepare officers on how to respond to different situations, particularly violent criminal fields that require the use of physical force (Miles-Johnson & Pickering, 2018). As explained by Trinkner et al. (2018), the training program must focus on equipping law enforcement officers with the necessary level of skills that will support them to gauge the amount of force required to respond to threats in the workplace or crime scenes.

The use of excessive police force can be addressed through training. Studies such as Pryor et al. (2020) have reported a positive correlation between higher education and law enforcement officers' use of force. According to douglas (2015), college educated law enforcement officers have a considerably reduced probability of using excessive force in a different situation. As an illustration, Rosenbaum and Lawrence (2017) survey over 186 officers involved in the different shootings and found out that law enforcement officers who had attained college experience were three times more likely to fire a weapon at offenders by 41%. Equally, Mourtgos and Adams (2020) established that the use of force in over 3000 police suspect encounters surveyed in 2013 was linked to education and work experience levels.

The above studies' findings suggest that there may be a statistical difference between college education and police behavior when it comes to policing. Equally, it can also be concluded that college education helps police officers reshape their thinking and beliefs towards individuals and practices. As an illustration, Ridgeway (2020) reported that police officers with a college education were less authoritative than their counterparts

who were not college educated. Comparable findings were reported by Schnabel (2018) who established that college educated police officers who had strong communication skills would help them civilly engage victims compared to their counterparts who would resort to violence or brutality. In like manner, Pryor et al. (2020) reported that college-educated police officers received minimum complaints from the public relating to the use of excessive force than their counterparts who had not attained college certificates.

One way of reducing the use of excessive force among law enforcement officers is through training. Training equips law enforcement officers with the required skills to manage different situations based on facts and not force or brutality (Miles-Johnson & Pickering, 2018). Mourtgos and Adams (2020) also reported that the use of force among law enforcement officers is linked to limited skill sets acquired through formal training. College education improved law enforcement skillsets by informing them how to use different forces to respond to a crime in a civil manner other than using excessive force that would be detrimental to their survival (Rosenfeld et al., 2020).

Rui-Hsin and Lin (2018) argued that force among police officers was dependent on different aspects, including education. Several studies have investigated the nature of the relationship between education and the use of force among police officers. Sandhu (2019) argued that 186 officers who were involved in California's shooting had no college certificate. Comparable thoughts were presented by Ridgeway (2020) who reported that education would improve the amount of knowledge that an individual has and their capacity to respond to a given problem.

Citizen Complaints

Citizen complaints have been considered as one of the most important tools that police officers use to assess performance over time. Rui-Hsin and Lin (2018) established that there are benefits of education on citizen complaints number. By utilizing internal personal files from different police officers in the US, Rosenbaum and Lawrence (2017) established that there were more formal citizen complaints relating to police officers without a four-year degree education than those who had attained a four-year education. The implication, as reported by Ridgeway (2020) is that formal citizen complaints may be lower among law enforcement officers who may consider the use of force and brutality to attain their goals. Most importantly, it is emphasized that official complaints against police officers are influenced by the degree to which police officers tactfully use their formal learning skills to engage citizens.

In a different study, Schnabel (2018) investigated the relationship between citizen complaints against the level of education among police officers. The study findings revealed that officers who had attained at least a college education were more likely to have a reduced number of complaints levied against them by the public. Of the 213 citizens' complaints analyzed by Rosenfeld et al. (2020), it was established that 65% of them were linked to lack of a four-year degree program among police officers. According to the study findings, participants noted that formal training in higher learning institutions provided an opportunity for police officers to learn evidence-based strategies that would help them manage conflict and other unnecessary arrest behaviors (Sandhu, 2019). By focusing on the use of empirically validated techniques to solve disputes, Weisburst

(2019) argued those police officers would reduce unnecessary arrests that would result in complaints of misconducts being reported against them.

Vespucci (2020) also reported that education level influenced police behaviors relating to searches and propensity to arrest. Police officers who considered arrest more frequently may find themselves engaging in practices that would compromise their professionalism and integrity. Rosenfeld et al. (2020) argued that training acquired in high education equipped law enforcement officers with skills and capabilities that can be used to avoid possible arrest that would result in complaints against them. As explained by Sandhu (2019), a college education also equip police officers with skills that can be used to engage and handle suspects during arrests with no entrenchment on their human rights.

Findings by Rui-Hsin and Lin (2018) suggested that police officers without a college education would most likely interpret a crime scene and use excessive force to achieve compliance, resulting in a violation of the suspect's rights. Supported by higher education level, law enforcement officers can understand crime scene and offender's psychology, giving them the competitive age to understand offenders' mindset and tactfully seek compliance with minimum force (Schnabel, 2018). The use of minimum force to seek compliance from offenders reduces the likelihood of law enforcement officers violating their rights during an arrest that would constitute a formal complaint against them by citizens (Vespucci, 2020).

Summary and Conclusion

The purpose of this study was to analyze the relationship between education level and the number of complaints filed against police officers for misconduct. The analysis conducted revealed several gaps in the literature that the current study addressed. For instance, the analysis discovered that literature relating to education and police officers' conduct was limited. The current study concluded a need to address this literature gap by conducting a qualitative, correlational study to investigate the relationship that education has on police behavior.

The analysis conducted in this section informs the following conclusions. First, there is a statistical relationship between education and police behaviors. The amount of education gained by police officers would positively influence their attitudes, perceptions, and overall behaviors towards using force. Second, the analysis suggested that education empowers police officers to use empirically based strategies to achieve compliance from suspects in a less cohesive way. Achieving compliance from suspects by understanding their psychology taught in learning institutions empowers police officers to limit the excessive force that is likely to result in citizens' complaints. Coupled with work experience, the analysis establishes that the amount of knowledge that individuals to manage different crime scenes is influenced by the formal training knowledge they acquire in higher institutions. Therefore, it can be concluded that education level affects police behavior. This becomes the main aspect of this study: establishing a relationship between education and police behaviors, including propensity to arrest, do searches, and use violence.

As supported by the analysis conducted, most police behaviors that are influenced by education include force, police searches, and arrests made by police officers. The analysis revealed that college-educated law enforcement officers are likely to make fewer arrests, fewer searches, and law willing to use excessive force. Therefore, it was concluded that there is a relationship between education and police behavior in view of the analysis conducted. Chapter 3 includes a detailed discussion of research methods used to conduct the study. This includes research designs, research methodology, sampling and sample size, research instruments, data collection procedures, and data analysis procedures.

Chapter 3: Research Method

The purpose of this systematic review was to investigate the relationship between education level and the number of complaints filed against police officers for misconduct. This chapter provides information about the methodology of the study. The data collection method is discussed in detail including research studies eligibility criteria, participants or unit of analysis, outcomes, information sources, search strategies, and materials. Meta-analysis procedures, including the effect size, meta-influence analysis, and publication bias, is discussed thereafter. A summary of the methodology concludes the chapter.

Systematic Review Procedures

Research Studies Eligibility Criteria

Prior to selecting studies for the systematic review, approval was obtained from the Walden University Institutional Review Board (IRB). The IRB approval number is 07-09-21-0977455. One of the most important aspects that must be thoroughly considered in systematic reviews is the list of eligibility criteria for studies. These eligibility criteria enable a researcher to effectively analyze studies that have a direct contribution on the idea or phenomenon under study, and thus minimize extraneous information that can affect the results and insights to be gathered (Pucher et al., 2013). Setting eligibility criteria provides scoping of the topic and ensures the relevance of each study to the purpose of the study. As such, the following were the eligibility criteria for the research studies: (a) the study must involve police officers as a subject, (b) the study should have implemented quantitative analysis on quantitative data gathered from a

survey, archives, or documents, (c) the study must have data on the educational level and number complaints filed against police officers, and (d) it should be written in English.

Participants or Unit of Analysis

The study examined the relationship between education level and the number of complaints filed against police officers for misconduct. The primary participants/focus for this study are police officers who have complaints filed against them as subjects in the research studies to be included for this systematic review. As such the unit of analysis was the police officers.

Outcomes

The primary outcome measure to be included in this systematic review is the complaints against the police officers and their education level. There's no limitation to what complaints are to be included as long as it is a legitimate complaint against a police officer. On the other hand, the education level is presumed to be anywhere from some high school to bachelor's degree. The number of complaints was considered on a continuous scale while the education level was measured on categorical scale.

Study Design

The design of this study is a systematic review of a specific number of existing studies on the subject. A quantitative analysis was conducted to determine if there was a relationship between education level and police professional behavior defined as (a) the number of complaints filed against police officers, (b) engagement in misconduct, and (c) complaints of excessive use of force. For the systematic review study design, I used the PRISMA guidelines and Critical Appraisal Skills Programme (CASP) Checklist (see

Appendix B). The PRISMA guidelines were used in the selection of the studies to be

included in the systematic review while the CASP Checklist was used to appraise the

quality of the included studies (Joshi et al., 2014). Both were used to have a better cohort

of studies included the systematic review.

Information Sources

The search strategy for studies to be included in the systematic review involved

the use of multidisciplinary databases: Scopus, Science Direct, JSTOR, and Google

Scholar. These databases are popularly known as multidisciplinary databases that contain

journals across different fields such as education, healthcare, social science, and

economics, among others. The search for studies to be included in this systematic review

did not have any timeline thus all studies that met the inclusion criteria were included.

Furthermore, only peer-reviewed studies or studies included in established and

recognized databases were included in the search; thus conference papers, technical

papers, editorials, unpublished manuscripts, and book chapters were not be included.

Study Selection

The selection of studies to be included in the systematic review was done in

accordance to the inclusion and exclusion set for the study using CASP checklist and the

guidelines set forth by PRISMA. The PRISMA flow diagram was used to show the

results of the evaluation and analysis of individual pieces of scientific literature of the

systematic review. The diagram was used to report the number of studies that were

screened and kept or omitted from the review based on the inclusion and exclusion

criteria. The first part of the search selection process was to identify sources for potential

studies related to the study. The second part was to screen abstracts of the potential

studies using the inclusion and exclusion criteria established. The third part, which is the

eligibility process, included thoroughly screening the studies to be reviewed using the full

text of the study. The last part of the inclusion process was to finalize which of the

studies to include for further analysis. The inclusion and exclusion criteria discussed

below were used to determine which of the studies were included or excluded.

Data Collection Process

Data collection started by searching research studies that focus on the relationship

between education level and the number of complaints filed against police officers for

misconduct and are therefore eligible for analysis as part of the systematic review. There

were four main databases that I used in searching for eligible research studies and these

are Scopus, Science Direct, JSTOR, and Google Scholar. The search keywords and

eligibility criteria that I used in selecting appropriate research studies are outlined in the

preceding section. The retrieved research studies were then appraised to ensure its

eligibility and quality for the systematic review. The screening process mainly focused on

reviewing the abstract first and afterwards the full-text of the research studies. Once all

research studies have been reviewed and appraised for eligibility and quality, I finalized

the list of included research studies for the systematic review. The final list of research

studies was subjected to a through full-text analysis and information related to the

objective of the study was retrieved individually for each of the research study.

Data Extraction Forms/Instruments

Two data collection instruments were used in this systematic review study. The CASP (see Appendix B) was used to evaluate the quality of each study in terms of worthiness to be included in the study. CASP was developed in 1993 to meet the needs of health staff in assessing evidence-based medicine; and although it was designed for medical professionals, its use has expanded to include teachers, content developers, students, researchers and others who want to use research evidence to make professional decision making and policy guidelines development (CASP, 2014).

A creative commons license grants permission for the CASP to be used if being used for non-commercial reasons. There are 10 screening questions on the CASP checklist that are designed to systematically help users think about research issues. If the first two questions on the checklist can be answered "no" then the study is automatically rejected from further consideration to be included in the study. Each study was evaluated for bias and validity for inclusion or exclusion by answers to the 10 questions on the CASP. In order to be included in the study, the report or study must have a yes response to 9 or 10 of the CASP questions.

The second data extraction instrument was a data extraction form created by me (see Appendix C) that was used to summarize data from the individual studies related to the data needed to answer the research questions and other pertinent information about the study. This extraction form was designed to provide information about the database searched, type of research/source (journal article, report, database), purpose of the study,

duration of the study, key interventions used, data analysis methods, data collection procedures, timing of intervention strategies, and outcomes of the study reviewed.

Meta-Analysis Procedures

Meta-analysis is a statistical procedure that combines data from relevant research studies in the hope of establishing valid conclusions about the effectiveness of a treatment. The central research question to be investigated was: Does the professional behavior pattern of officers differ based on the level of education attained? The following are the information needed to conduct the meta-analysis:

Effect Size

An effect size refers to the magnitude or degree of difference between two groups (Ferguson, 2009). The quantitative measure of the difference between two groups is usually measured in different ways and these include: odds ratio, risk ratio, standardized mean difference, correlation coefficient, and coefficient of determination among others (Cumming, 2012). In fact, according to Eisend (2015) there are about 50 to 100 different measures of effect sizes. For the purposes of this study, standardized mean difference was chosen as the effect size measure. The choice of standardized mean difference as the measure for the effect size was based on the idea that almost if not all of the studies included in this meta-analyses focused on the difference between the average score of subjects in educational groups. That is, most studies compared the aforementioned outcomes (complaints, attitudes, etc.) of different subjects belonging to the different educational groups.

A computational model must be identified in the determination of effect size for meta-analyses. Computational model can either be a fixed effects model or a random effect model (Ahn & Garner, 2015). A fixed effects model assumes that all studies included in the meta-analyses are functionally identical which has the primary purpose of determining a common effect size that can be generalizable to the specific popuation under study. In constrast, a random effects model assumes that all studies included in the meta-analyses are not functionally identical and the determiniation of effect size is usually applicable to a range of populations. Given that it is more reasonable to assume that all studies are different from each other because of the different researchers who performed the studies, different experimental methods used, and different modalities utilized then it appropriate to conduct a random effects model. The computation of effect size was done using the Comprehensive Meta-Analysis (CMA) software that was designed to compute effect sizes regardless of the data type used by a certain study.

Aside from the results of the fixed effects model, a forest plot of the effect sizes for all the included studies was developed. A forest plot is generally a graphical representation of the meta-analysis conducted (Sedgwick, 2015). Each line represents one study in the meta-analysis plotted according to the standardized mean difference measure which is the difference between the outcomes of subjects belonging to the educational level groups.

The interpretation of the forest plot involves two steps. The first step is for the determination of the effect size (Sedgwick, 2015). Each line represents the computed effect size with the associated upper and lower bound limit of each study. Effect sizes

are categorized into three: small, medium, and large effect sizes. The common

interpretation of a small effect size is if the value of effect of the size measure is 0.2 and

below, a large effect size if the value is 0.8 and above, and a medium effect size if the

value is in between 0.2 and 0.8. The second step is for assessing the heterogeneity (or the

difference) among the studies (Sedgwick, 2015). To test whether the differences among

the studies is caused by random chance or there is something else involved, the I^2 should

be examined. Computed I^2 values above 50% indicate that the differences among studies

is caused by random chance and thus has a high heterogeneity.

Meta-Influence Analysis

Meta-influence analysis is some sort of sensitivity analysis that has the objective

of assessing the impact of each study on the combined effect (Menke, 2014). In order to

do this, CMA allows for the "one study removed" function that allows dropping one

study at a time. Specifically, the CMA ran the analysis with all the studies except the first

one, and then another analysis was conducted with all the studies except the second one,

and so on.

Risk of Bias

One of the potential biases of systematic reviews is publication bias. Publication

bias is bias that exists with regard to what is likely to be published out of what is

available to be published. A funnel plot was conducted in order to determine if

publication bias does exist in the cohort of studies that were included for the systematic

review. The analysis for the publication bias was conducted in both the outcome and

study level to determine the sources of biases. In order to limit researcher bias, I used

critical self-reflection about my potential biases and predispositions and purposely searched for studies that disconfirm preconceived expectations about the relationship between education level and the number of complaints filed against police officers for misconduct.

Publication Bias

Publication bias is the term used in meta-analysis to denote the situation where research studies with statistically significant results, well designed and conducted are more likely to be published compared to research studies with non-significant results, badly design and conducted (Dalton et al., 2016). As a result, combining only published studies can skew the results of a meta-analysis. To identify the potential effect of publication bias, a funnel plot was developed. If points in the plot exhibit an asymmetrical funnel with a large gap at the bottom of the plot, then indicates that there is bias – there were research studies with statistically significant effects remain unpublished. It must be noted that the more pronounced the asymmetry is the funnel plot, the more likely it is that the amount of bias was substantial (Jin et al., 2015). However, such identification of asymmetry is subjective to the person reading the plot.

Summary

The purpose of this chapter was to provide a detailed analysis of the research methods that was used in the data collection and analysis procedures. I presented the rationale for suggesting the use of a quantitative systematic review. Other sections that were discussed include systematic review procedures, meta-analysis procedures (effect

size, meta-influence analysis, and publication bias). The next section is chapter 4, which

includes a presentation of the study results.

Chapter 4: Results

The purpose of this quantitative correlational study was to investigate the relationship between education level and the number of complaints filed against police officers for misconduct. The following research question and corresponding hypotheses guided this study:

RQ: Based on a meta-analysis of studies on the relationship between education level and the number of complaints filed against police officers for misconduct, does the achievement of higher levels of education impact the professional behavior patterns of officers?

H_0: Based on a meta-analysis, there is a statistically significant relationship between police officer professional behavior patterns and the level of education attained.

H_1: Based on a meta-analysis, there is no statistically significant relationship between police officer professional behavior pattern and the level of education attained.

In this chapter, the results of the data analysis are presented. What follows is a description of search strategy used to generate the sample of sources to be included for this study, along with the inclusion and exclusion criteria. The description of studies included is discussed next. The results of the meta-analysis are presented thereafter. A summary and a transition to Chapter 5, where discussions, conclusions, and recommendations for future studies are provided, concludes the chapter.

Search Strategy

The search process was conducted by following the guidelines proposed by PRISMA (see Moher et al., 2009). Four main databases were utilized to search for original research studies published from 1990 up to 2021 and these were Scopus, Science Direct, JSTOR, and Google Scholar. These databases are popularly known as multidisciplinary databases that contain journals across different fields such as education, healthcare, social science, and economics among others. Specific keywords were used to limit the searches on the aforementioned four databases that are germane for the study. The keywords utilized in the search process were *education, education level, police officers, patrol officers, misconduct, complaints, attitudes,* and *use of force*.

Inclusion and Exclusion Criteria

A set of inclusion and exclusion criteria were used to determine the research studies that were relevant for the purpose of the study. The articles included for the study were all peer-reviewed articles from journals with available English full-text concerning the impact of education level of police officers on misconduct, complaints, attitudes, and/or use of force. Studies were excluded if it was a conference paper, editorial paper, dissertation, pilot study, or chapters in a book. Studies that did not provide satisfactory descriptions and explanations about the study design, dependent variables analyzed, and did not present quantitative results were also excluded from further analysis. Last, duplicated articles and articles published before 1990 were not included for the final group of articles to be studied.

General Description of Included Studies

A total of eight peer-reviewed articles satisfied the inclusion criteria set forth for the study and thus were analyzed. The details of the search and retrieval process conducted for the study is shown in Figure 1. The majority of the articles (five out of eight, 62.5%) were published before 2010. All studies were conducted in the United States and all except one (seven out of eight, 87.5%) used state-level data in their analysis. The studies either used correlational design (three out of eight, 37.5%), comparative design (three out of eight, 37.5%), or both (two out of eight, 25%) to analyze the impact of predictive relationship of education level to police officers' misconduct, complaints, attitudes, and use of force. The summary of the details of the eight peer-reviewed articles are shown in Table 1.
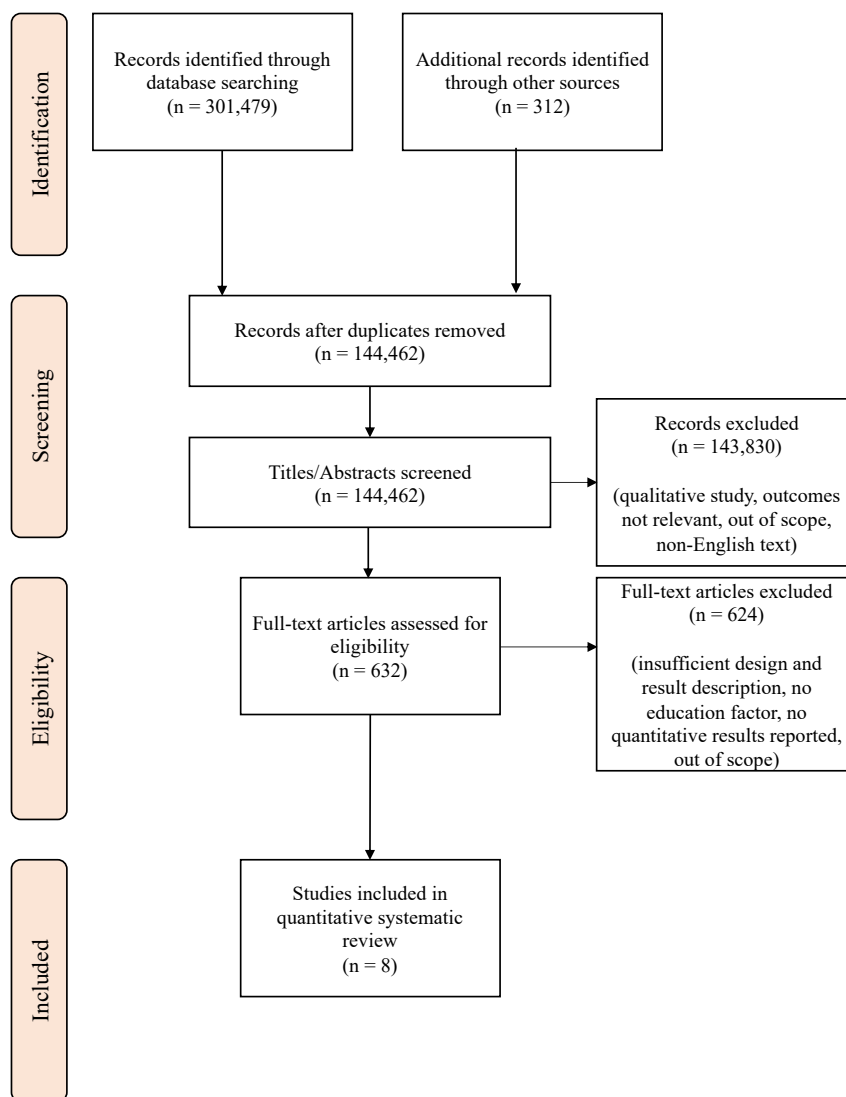
Figure 1

Search and Retrieval Process From PRISMA

Table 1

*Included Studies (*N = 8)

Author	Country/State	Participants	Study Type	Results
Kappeler et al., 1992	Michigan	120 police officers	Quantitative comparative and correlational design	While the findings of this study cannot be generalized to the entire American police population, they suggest that there may be identifiable levels of higher education with unique and differing contributions to police officer performance. Earlier research shows that officers with two years of college perform better in these selected areas of complaints and courtesy than do officers without college. Within its limitations, this study suggests that police officers who have completed a four-year college degree perform better in those selected areas than do the officers with two years of college.
Brandl et al., 2001	Wisconsin	800 police officers	Quantitative comparative design	The results show that arrest activity, officer age, and officer gender are most strongly related to the receipt of citizen's complaints about excessive force and differentiate high-complaint officers from low-complaint officers. Notably, education is not significantly correlated with assignment, patrol area, arrests made, or complaints received.
Kunzman, 2001	South Florida	231 deputies	Quantitative comparative design	Significant relationships were found between education level and the number of misconduct allegations, administrative referrals, and sustained allegations. While some college exposure may be beneficial for job performance, a four-year degree might not yield the anticipated benefits.
Paoline & Terrill, 2007	Indiana and Florida	398 patrol officers (Indiana); 246 patrol officers (Florida)	Quantitative comparative design	The findings indicate that varying levels of education and experience are related to differences in the use of coercion in encounters with citizens. Encounters involving officers with any college education result in significantly less verbal force compared to those with a high school education. However, only those encounters involving officers with a 4-year degree result in significantly less physical force.

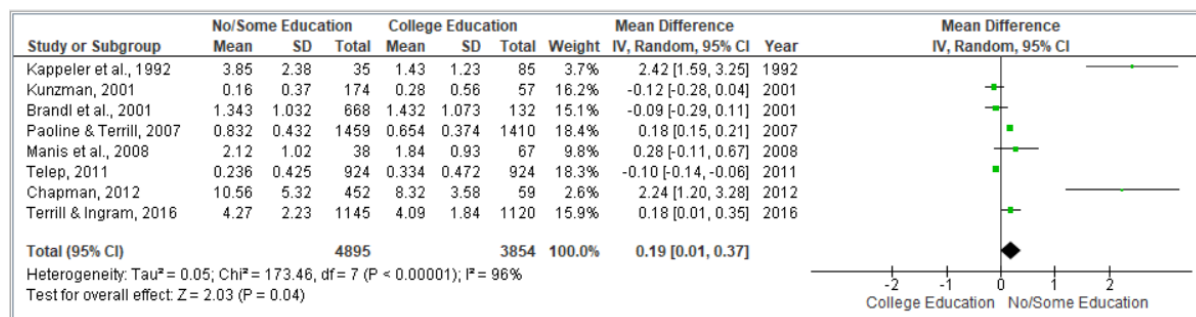| Author	Country/State	Participants	Study Type	Results
Manis et al., 2008	North Dakota	105 patrol officers	Quantitative comparative and correlational design	This study is the first of its kind to examine the impact of the type of degree (Criminal Justice (CJ) degree versus non-CJ degrees) earned by police officers on both informal and formal complaints filed against them. The findings of this study reveal that there are no statistical differences between patrol officers with CJ degrees and patrol officers with non-CJ degrees in regard to the frequency and type of complaints that are filed against them by citizens and police supervisors.
Telep, 2011	USA	925 police officers	Quantitative correlational design	The study finds that officers with a pre-service bachelor's degree hold attitudes that are less supportive of abuse of authority, although the effect is fairly small in magnitude. These effects remain regardless of when officers receive their degree and across varying levels of higher education (i.e., associate's degree, attending some college). These findings suggest that higher education has a beneficial impact related to police officer abuse of authority attitudes.
Chapman, 2012	New Jersey	511 police officers	Quantitative correlational design	Among patrol officers only, education predicted less frequent force and lower levels of force use. Across all duties, including patrol officers, detectives and other, younger officers used more force, but with age controlled, more experienced officers used more force. Those who reported greater use of force were less accepting of use of force in general.
Terrill & Ingram, 2016	Indiana, Ohio, Colorado, Florida, Tennessee, North Carolina, Oregon, and New Mexico	2,265 police officers	Quantitative correlational design	The authors found that a small percentage of officers accounted for a disproportionate percentage of total complaints, excessive force and discourtesy were often the most common allegations lodged, and younger= officers and those with less experience generally received a greater number of complaints. Furthermore, education was not found to have significant effects on complaint allegations or sustained dispositions.

Results

All eight studies reported, in one way or another, the impact of level of educational achievement on police officers' misconduct, complaints, attitudes, and use of excessive force. Studies used either correlational or comparative design to determine the effect of education level on their respective dependent variables. All studies used statistical tests to determine such effect such as regression analysis (Brandl et al., 2001; Chapman, 2012; Kappeler et al., 1992; Manis et al., 2008; Telep, 2011; Terrill & Ingram, 2016), correlation analysis (Chapman, 2012; Kappeler et al., 1992; Telep, 2011), *t*-test (Brandl et al., 2001; Kunzman, 2001; Manis et al., 2008), analysis of variance (Chapman, 2012; Paoline & Terrill, 2007), and chi-square (Kappeler et al., 1992; Paoline & Terrill, 2007).

An effect size refers to the magnitude or degree of difference between groups. The quantitative measure of the difference between groups are usually measured in different ways and these include: odds ratio, risk ratio, standardized mean difference, correlation coefficient, and coefficient of determination among others. In fact, according to Cohen (2007) there about 50 to 100 different measures of effect sizes. For the purposes of this study, standardized mean difference was chosen as the effect size measure. The choice of standardized mean difference as the measure for the effect size was based on the idea that almost if not all of the studies included in this meta-analysis focuses on the difference on the number of complaints, misconduct, or use of force of police officers of immigrants between those who have college degree and those who do not have.

A computational model must be identified in the determination of effect size for meta-analyses. Computational model can either be a fixed effects model or a random effect model. A fixed effects model assumes that all studies included in the meta-analyses are functionally identical which has the primary purpose of determining a common effect size that can be generalizable to the specific population under study. In contrast, a random effects model assumes that all studies included in the meta-analyses are not functionally identical and the determination of effect size is usually applicable to a range of populations. Given that it is more reasonable to assume that all studies are different from each other because of the different researchers who performed the studies, different experimental methods were used, and different modalities utilized then it was appropriate to conduct a random effects model.

The computation of effect size was done using the RevMan software that is designed to compute effect sizes regardless of the data type used by a certain study. The most common reported information among the studies was means and standard deviations of complaints, misconducts, or use of force of police officers. Figure 2 presents the results of the random effects model alongside with the forest plot of the effect sizes for all the eight studies. A forest plot is generally a graphical representation of the meta-analysis conducted. Each line represents one study in the meta-analysis plotted according to the standardized mean difference measure, which is the difference on the number of complaints, misconduct, or use of force of police officers of immigrants between those who have college degree and those who do not have.

Figure 2

Random Effects Model With Forest Plot

Study or Subgroup	No/Some Education			College Education			Weight	Mean Difference IV, Random, 95% CI	Year	Mean Difference IV, Random, 95% CI
	Mean	SD	Total	Mean	SD	Total				
Kappeler et al., 1992	3.85	2.38	35	1.43	1.23	85	3.7%	2.42 [1.59, 3.25]	1992	
Kunzman, 2001	0.16	0.37	174	0.28	0.56	57	16.2%	-0.12 [-0.28, 0.04]	2001	
Brandl et al., 2001	1.343	1.032	668	1.432	1.073	132	15.1%	-0.09 [-0.29, 0.11]	2001	
Paoline & Terrill, 2007	0.832	0.432	1459	0.654	0.374	1410	18.4%	0.18 [0.15, 0.21]	2007	
Manis et al., 2008	2.12	1.02	38	1.84	0.93	67	9.8%	0.28 [-0.11, 0.67]	2008	
Telep, 2011	0.236	0.425	924	0.334	0.472	924	18.3%	-0.10 [-0.14, -0.06]	2011	
Chapman, 2012	10.56	5.32	452	8.32	3.58	59	2.6%	2.24 [1.20, 3.28]	2012	
Terrill & Ingram, 2016	4.27	2.23	1145	4.09	1.84	1120	15.9%	0.18 [0.01, 0.35]	2016	
Total (95% CI)			4895			3854	100.0%	0.19 [0.01, 0.37]		

Heterogeneity: Tau² = 0.05; Chi² = 173.46, df = 7 (P < 0.00001); I² = 96%
Test for overall effect: Z = 2.03 (P = 0.04)

College Education   No/Some Education

The interpretation of the forest plot involves two steps. The first step is for the determination of the effect size. Each line represents the computed effect size with the associated upper and lower bound limit of each study. As can be seen in Figure 2, five out of the eight lines (or studies) lies on the right-hand side of the graph indicating that police officers who no do not have college degree reported more complaints, misconduct, or use of force compared to those police officers who have college degree. The change specifically is in negative direction which indicates that the number of reported complaints, misconduct, or use of force decreases as the education level of police officers becomes higher. More so, the overall effect size (the line in the row shaded in yellow) falls in fairly in between 0.0 and 0.25, more specifically 0.19, which indicates that the overall effect size is small.

Effect sizes are categorized into three: small, medium, and large effect sizes. The common interpretation of a small effect size is if the value of effect the size measure is 0.2 and below, a large effect size if the value is 0.8 and above, and a medium effect size if the value is in between 0.2 and 0.8. Given that the overall effect size is 0.19 then this

suggest that on average, the impact of education had a low effect size, that is, education has a low impact in decreasing the number of the complaints, misconduct, or use of force of police officers.

The second step is for assessing the heterogeneity (or the difference) among the studies. To test whether the differences among the studies is caused by random chance or there is something else involved, the I^2 was examined. The computed I^2 statistic was 96% which is above the 50% threshold to consider that the differences among studies is caused by random chance and thus has a high heterogeneity. This only means that the effects of education has a low effect size (0.19) should be taken as accurate which means that there is a sufficient evidence that the impact of education in decreasing the number of the complaints, misconduct, or use of force of police officers is very low.

Figure 3

Forest Plot
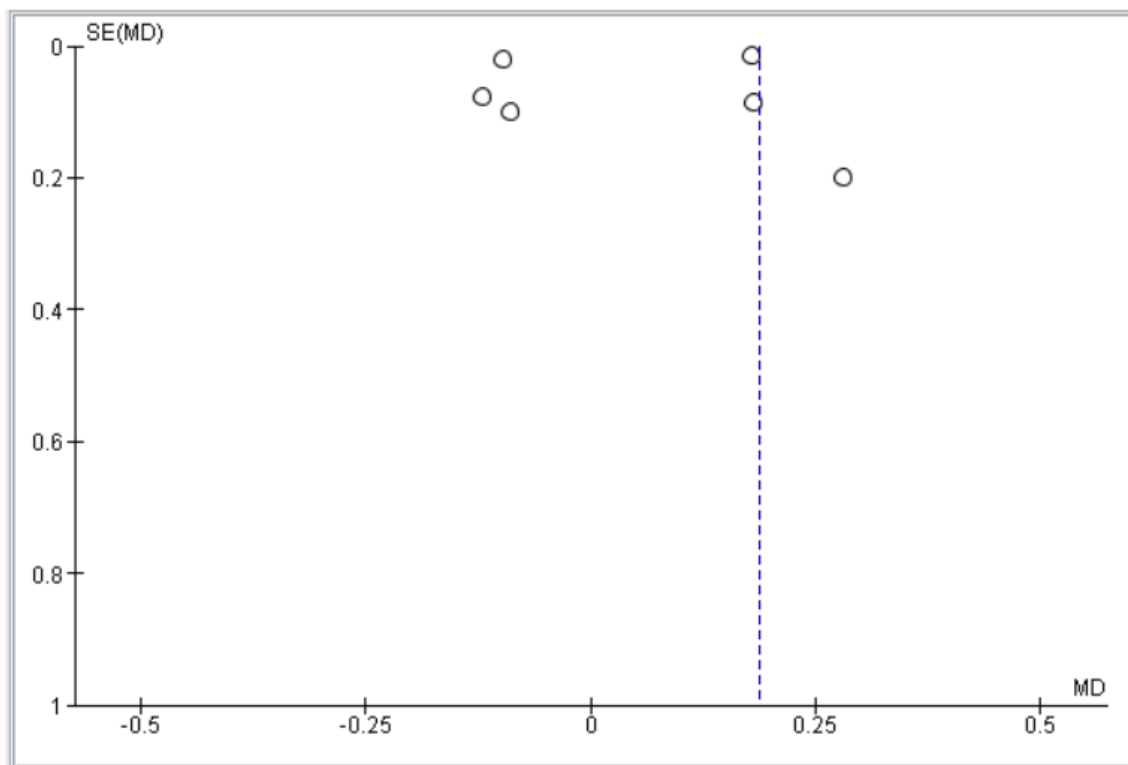
The results of the meta-analysis showed that education has a small negative effect on the number of complaints, likelihood of engaging in misconduct, or use of excessive force of police officers. Individually, five (Chapman, 2012; Kappeler et al., 1992; Manis et al., 2008; Paoline & Terrill, 2007; Terrill & Ingram, 2016) out of the eight studies have reported that the mean number of complaints, misconduct, or use of force of police officers who do not have college degree was higher than their counterparts. However, of each these studies reported a statistically insignificant effect of education which is consistent with the findings of the meta-analysis. This indicates that based on the

empirical evidence presented across the eight studies that have been included and

analyzed, it is arguable that having a higher level of education have a small inverse

impact on the number of complaints, likelihood of engaging in misconduct, or excessive

use of force of police officers.

Chapter 5: Discussion, Conclusions, and Recommendations

The search process was conducted by following the guidelines proposed by PRISMA. The purpose of this quantitative correlational study was to investigate the relationship between education level and the number of complaints filed against police officers for misconduct. This chapter includes a discussion of major findings as related to the literature on the absence of police professionalism, which has been an issue of concern in the United States in the past 2 decades. This chapter concludes with a discussion of the limitations of the study, recommendations, areas for future research, and a brief summary. The chapter contains discussion and future research possibilities to help answer the research questions:

RQ: Based on a meta-analysis of studies on the relationship between education level and the number of complaints filed against police officers for misconduct, does the achievement of higher levels of education impact the professional behavior patterns of officers?

H_0: Based on a meta-analysis, there is a statistically significant relationship between police officer professional behavior patterns and the level of education attained.

H_1: Based on a meta-analysis, there is no statistically significant relationship between police officer professional behavior pattern and the level of education attained.

Summary of the Findings

All eight studies reported in one way or another the effect of education level on

police officers' misconduct, complaints, attitudes, and use of excessive force. Studies

used either a correlational or comparative design or both to determine the effect of

education level on their respective dependent variables. An effect size refers to the

magnitude or degree of difference between groups. The quantitative measure of the

difference between groups are usually measured in different ways and these include odds

ratio, risk ratio, standardized mean difference, correlation coefficient, and coefficient of

determination, among others.

A computational model must be identified in the determination of effect size for

meta-analyses. Computational model can either be a fixed effects model or a random

effect model. The computation of effect size was done using the RevMan software that is

designed to compute effect sizes regardless of the data type used by a certain study. The

most common reported information among the studies was means and standard

deviations of complaints, misconducts, or use of force of police officers. Effect sizes are

categorized into three: small, medium, and large effect sizes. The common interpretation

of a small effect size is if the value of the effect size measure is 0.2 and below, a large

effect size if the value is 0.8 and above, and a medium effect size if the value is in

between 0.2 and 0.8.

Interpretation of the Findings

The findings of this study indicate that the level of education achieved has an

impact on police officers' misconduct, complaints, attitudes, and use of force. According

to Chanin and Sheats (2018), the use of excessive police force in minority groups is related to the education, experience, ethnicity, and age of police. Police officers who are college-educated may use less force. Education can be used to predict the likelihood of use of excessive force. The use of excessive force is an area in which police officers must use discretion. Suspects must be aware that they may be subjected to forceful control, but the point at which force crosses the line from reasonable to excessive is inherently difficult to define and fraught with controversy. The finding is consistent with that of Alang et al. (2017) who argue that African American police officers who have been reported for using excessive force have low levels of education. Further, the annual evaluations of police officers with college degrees reflect better job performances therefore, greater opportunities for advancement (Kappeler et al., 1992; Paoline & Terrill, 2007; Telep, 2011). College education among police officers is important because officers are involved in many interpersonal and non-enforcement activities (Busey & Coleman-King, 2020). Other than law enforcement, officers are also required to ensure social and order maintenance. While performing their roles, police officers need to be able to adjust to the various personalities, personal differences, and different backgrounds with whom they come into contact. According to existing research, a high level of education is important to achieve this (Kappeler et al., 1992). In fact, research indicates that higher levels of education foster a greater likelihood of this type of behavior in police officers (Paoline & Terrill, 2007).

There are no agreed criteria of what constitutes an effective police officer; however, Goldstein (1977) provides a potential list of what behavior reflects those of a

good officer. As highlighted by Goldstein, an effective officer must be intelligent, tolerant, value police support controls, show self-discipline, and can control his or her emotions. For officers to be effective, they need to understand the psychological and sociological make-up of the communities within which they operate. Donohue (2020) agrees that college education has an effect on Goldstein's qualities of an effective police officer in that it enhances the strengths and professionalism of police officers. Moreover, research shows that college education levels increase police performance (Telep, 2011). This Meta Analysis found that college education plays a key role in developing traits that reflect Goldstein's qualities of an effective police officer. Additionally, according to Brandl et al. (2001) police officers with college education tend to be less authoritarian, very flexible, and more positive in their thinking. Furthermore, individuals with degrees are better communicators as compared to those without degrees (Brandl et al. 2001). Police officers with high levels of education are positive regarding enforcing policies within the community (Paoline & Terrill, 2007).

It can be concluded that college education level promotes the ability of officers to think independently and enhance their confidence in executing their duties. Highly educated people are generally more motivated and intelligent. Officers with college education have high chances of experiencing job satisfaction and are likely to achieve self-actualization (Kunzman, 2001).

In this study, individually, five (Chapman, 2012; Kappeler et al., 1992; Manis et al., 2008; Paoline & Terrill, 2007; Terrill & Ingram, 2016) out of the eight studies have reported that the mean number of complaints, misconduct, or use of excessive force of

police officers who do not have college degree was higher than their counterpart who had college degrees. Many studies have been conducted to examine the question of whether a college degree is directly related to performance of police officers and the number of misconduct cases and use of excessive force reported against them. According to Edwards (2019), police officers with higher levels of education performed better compared to non-college educated officers. Officers with a college education also performed better and recorded few injuries as compared to their counterparts. Additionally, studies show that there is a positive relationship between academic performance, low police misconduct, and critical thinking ability and education (Chapman, 2012). However, the studies do show that education has the greatest impact on police performance only after officers have gained experience.

Police field experience and education level have also been associated with different policing outcomes. Police officers with college level education are less likely to use excessive force compared to less educated officers. In line with this study, Graham et al. (2020) stipulated that officers who have four-year degrees tend to use less physical force, especially when interacting with minority groups. Furthermore, officers with high field experience are less likely to use verbal and physical force.

The push for more education in policing has always been predicated on the assumption that college education would result in a "better" police officer (Kappeler et al., 1992). This was particularly true during the period of police professional reform, when much emphasis was placed on corrupt and inefficient officers. It is not surprising, therefore, that college-educated police officers tend to enjoy high rankings from their

superiors. Many positive policing attributes are associated with the achievement of higher education.

More attention has been focused on the need for police departments to make college education a formal requirement for hiring police officers. In expanding the impact of college education and experience on police performance, researchers have suggested rigorous explorations of education and other factors such as behavior and attitude. However, Heumann et al. (2018) argued that college education is not important for police officers because of the way most police departments operate. Heumann et al. (2018) stated that per-service and in-service trainings were more important for officers than college education. Moreover, college-educated officers are more likely to become bored with their job duties and face a lot of hostility from their non-educated senior officers. This clearly indicates that the argument regarding the importance of college education among police officers still require more studies.

The counterargument to college education among police officers is that experience is actually what officers need (Paoline & Terrill, 2007). The proponents of experience argue that repetitive exposure to real world situations improve officers' capabilities to perform well (Lersch & Mieczkowski, 2000; Terrill & Ingram, 2016). According to Manis et al. (2008), situational characteristics of encounters between police officers and citizens speak more directly to police behavior. Therefore, different levels of situational experiences will lead to different results of how officers handle their encounters. Generally, policing cannot be taught in classrooms but can be learned through training. Gutshall et al. (2017) agreed that experienced officers were reported as

the most skilled by their peers, especially in handling conflicts between citizens. Police departments across the US have taken the initiative to teach their officers how to handle conflicts and violence. However, what proponents of policing experience need to do is to explore the extent to which experience plus college education can help improve police performance.

As established by this study, one of the biggest factors that affect police performance is education (Terrill & Ingram, 2016; Rosenfeld et al., 2020). "College education facilitates the development of traits that coincide with Goldstein's essential five qualities' of police—intelligence, tolerance and (cultural) understanding, values favoring controls on police conduct, self-discipline, and the ability to control one's emotions" (Alang et al., 2017, p. 8). Understanding the importance of college education will play a key role in increasing the recognition of officers and interpretation of their job instructions. Education affects the approaches and strategies that officers use when they encounter citizens in situations that require use of force. Homer et al. (2020) examined the effect of college education on police encounter with citizens and established that there is a significant difference between level of education and use of force. Additionally, high levels of education are important in improving the relationships between police and citizens. Furthermore, as suggested by this study, police handle mental disorder cases differently depending on their education level. In the US, there are options available for police officers to use when handling an individual with psychiatric problems, which include informal resolution, making an arrest, and psychiatric referral.

Findings indicate that achieving a college education will have a small impact on decreasing the number of complaints, instances of misconduct, or use of excessive force of police officers. In line with the finding of this study, Hu et al. (2020) argued that although police departments have been instructed to include education as a key requirement during recruitments, many states have not fully implemented it. Police departments are more concerned with ensuring officers represent the communities they serve. Moreover, instituting a minimum college level requirement might be discriminatory towards minorities and women because some college requirements have negative effects on the hiring of minority candidates (Richard & Donohue, 2021). College graduates tend to be more salient, therefore, additional recruiting background checks might be required for officers with college education. Moreover, police departments have been reluctant to implement college education requirement because there are few studies showing that college education improves police performance.

Regardless, there is a connection between level of educational achievement and the number of arrests that officers make (Rosenfeld et al., 2020). This study has shown that police officers without college education tend to have a large number of arrests. Officers without college education are also more satisfied with their duties and hence make many arrests as compared to those with college education who are less satisfied with their duties.

Implications

Given the results of this study, it can be argued that there is a need to include college education as a requirement for all police officers across the country. Police

officers without college education tend to use excessive force when handing encounters with citizens, especially in minority communities. According to Gutshall et al. (2017), officers with college degrees are less likely to discharge their firearms. College educated officers use less force. College-educated officers were significantly more likely to use reasonable force in suspect encounters. In-service and pre-service police training can be used to reduce excessive use of force among officers.

The findings of this study have also shown that training can be an appropriate alternative to education and reducing officer use of force. Heumann et al. (2018) reiterated that per-service and in-service trainings are, perhaps, more important for officer behavior than college education. Moreover, college-educated officers are more likely to become bored with their job duties and face a lot of hostility from their non-college educated senior officers. In keeping with these findings, the Police Education Delivery System (PEDS) integrates the learning outcomes of academic Criminal Justice courses and police basic training courses. Throughout the United States, police officer standards and training (POST) boards require similar learning outcomes in their basic training curriculum units. Repetitive exposure of officers to real world situations improve their experience and ability to perform well. This is critical since research shows that experienced officers use less force when encountering citizens (Paoline & Terrill, 2007).

Recommendations

This study has established that education plays a significant role on the number of complaints, engagement in misconduct, or use of excessive force by police officers. One recommendation for a future study is conducting a mixed-method study. Quantitative

research is typically defined as research that is evaluated using questionnaires and surveys (Creswell & Creswell, 2017). This type of research is also typically numerical. The information gathered through multiple means while conducting the research is quantified in quantitative research to make it more meaningful. The qualitative approach, on the other hand, is best suited to gathering exploratory, descriptive data (Creswell & Creswell, 2017). Furthermore, qualitative data deal with perceptions and opinions, and a future study could look further into participants' attitudes and individual opinions. As a result, a mixed method approach has the potential to reveal the impact of college education on the number of complaints, misconduct, or use of excessive force of police officers.

Another recommendation is for future researchers to investigate the impact of racism on police use of excessive force among African Americans. Years of education and experience have a significant impact on complaints recorded by people with regard to police brutality. The findings of this study inform police departments on reform approaches required to adequately improve the level of professionalism needed to reduce or even eliminate police misconduct. Additionally, police officers who achieve a college education were more likely to incorporate professional behavior as a basic requirement for law enforcement execution of duties. This speaks to the impact that achieving a college education can have on the professional behavior of police officers.

Limitations

The current research population is law enforcement officers, and with current unstable police and citizen relations, there is some expectation of resistance to the release

of police data. Some of the expected justifications for resistance toward releasing data on police misconduct is the fact that the case might still be under investigation. Another cause of resistance was to protect officers' privacy. Obstacles surrounding access to selected officers' misconduct records impacted the feasibility of the study. Ethically, a challenge concerning this study was the expectation of some benefits from the police department. One must not oversell the research because there are limits or no benefits to participants in research (Thompson & Panacek, 2007).

Conclusion

The purpose of this quantitative correlational study was to investigate the relationship between education level and the number of complaints filed against police officers for misconduct, the likelihood of an officer engaging in misconduct and the likelihood of officer use of excessive force. With Americans remaining at home due to the COVID-19 epidemic, there has been an increase in awareness of what is happening with citizens and police relationships. The results of this meta-analysis showed that education has a small negative effect on the number of complaints, issues of misconduct, or use of excessive force by police officers. Individually, five (Chapman, 2012; Kappeler et al., 1992; Manis et al., 2008; Paoline & Terrill, 2007; Terrill & Ingram, 2016) out of the eight studies have reported that the mean number of complaints, misconduct, or use of force of police officers who do not have college degree was higher than their counterpart.

In the final analysis, the meta-analysis showed that police officers with college education use less force during encounters with citizens. Additionally, it is clear that officers who had achieved college education performed better and recorded fewer injuries

compared to their counterparts. Therefore, understanding the importance of college education will play a key role in increasing the recognition of officers and interpretation of their job instructions.

Based on the important role played by college education, there is need for all states to include college education as a requirement for all officers. For future researchers, it is recommended that this study should be conducted using a mixed-methods study and compare the results. In recent years, cases of police brutality among African Americans and other minority groups have increased. Therefore, more research is needed to understand the relationship of racism and police's use of excessive force among African Americans. Just like education, racism affects the approaches and strategies that officers use when they encounter citizens in situations that require use of force.

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