2019

Police Officers' Perceptions of Changes in Their Behavior While Being Video Recorded

Steven Patrick Ufford
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Steven Patrick Ufford

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

Review Committee
Dr. Jerry Regier, Committee Chairperson,
Criminal Justice Faculty

Dr. Tony Gaskew, Committee Member,
Criminal Justice Faculty

Dr. Dianne Williams, University Reviewer,
Criminal Justice Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2019

Abstract

Police Officers' Perceptions of Changes in Their Behavior While Being Video Recorded

by

Steven Patrick Ufford

MA, Walden University, 2015

BS, Dominican University, 1999

AS, Lincoln College 1997

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Criminal Justice

Walden University

August 2019

Abstract

Body worn cameras (BWCs) are a newer piece of equipment that has been issued to police officers in efforts to increase transparency and improve relations with the community. Researchers who have just recently begun studying the effects of BWCs have observed changes in behavior of officers who wear the equipment. Some of these changes potentially have an adverse effect on citizens and the officers who wear BWCs. Lipsky's street-level bureaucracy theory was utilized to examine police officer use of discretion when conducting field activities while wearing BWCs. The research question pertained to police officers' perceptions regarding changes in behavior while being video recorded on duty. This study used generic qualitative inquiry to understand five police officers' perceptions through individual semi structured interviews complemented by the responsive interview model. Themes that emerged consisted of implementation, personal harm, privacy, and behavior modification. Notable findings under the theme of implementation included lack of initial acceptance of the equipment followed by approval of the equipment after use; and that initial training of BWCs was deemed insufficient. In the personal harm theme, participants expressed concern over functionality of BWCs and that superiors possibly would use footage for punitive reasons. Minimal privacy issues for officers were discovered; however, use of BWCs in private residences was perceived by participants as a concern for citizens. The most significant behavior modification was increased professionalism. Implications for social change include improved officer and citizen safety and the delivery of more effective police services, improving relations with the community.

Police Officers' Perceptions of Changes in Their Behavior While Being Video Recorded

by

Steven Patrick Ufford

MA, Walden University, 2015

BS, Dominican University, 1999

AS, Lincoln College 1997

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Criminal Justice

Walden University

August, 2019

Dedication

This Dissertation is dedicated to my Lord and Savior, Jesus Christ. I am so thankful to have been blessed with this journey. As a police officer, the prayer I offer every day is simply asking God to bless me with the words to say and actions to take to positively affect his people. Similarly, I would pray while crafting this dissertation that God would bless my mind and my hands so that this document would have a positive impact on his people. Lord, I am not worthy of you. Because of your unfailing love, I ask that you just say the word and through your mercy, my soul shall be healed.

Acknowledgments

I would like to first and foremost like to thank my wife Andrea and son Maddux. Without their dedicated love, support, encouragement, and patience I would not be here today. I am also very thankful for my parents Marianne and Robert. Mom, you taught me never to give up on your educational pursuits. I have sincere admiration for a woman who was turned away from higher learning during a time when the focus was on males. Your story is important for people to hear to understand education is a privilege not afforded to everyone. My mother was in the top three for a university scholarship in the 1950's. Only three candidates were awarded scholarships. Though she earned this rank, she was turned away in favor of males who scored lower than her. She took three city buses home and cried the entire way. Years later as a mother working full time, she went to school for nine years attending night classes to earn her bachelor's degree. You are the reason for my motivation to continue my education as a father working full time. Thank you for all the time and effort you put into reviewing my work. Your inspiration and help made me the writer and scholar I am today. Peer support is critical in any facet of life. This is especially true when pursuing a Doctorate. I would like to thank my colleague and friend Mark Derosia, for the countless hours of phone consultations and email exchanges throughout the coursework and Dissertation journey. I appreciate everything you have done for me. I also want to thank Dr. Gaskew for your input and insight. Most importantly, thank you for your service in law enforcement! Lastly, thank you Dr. Regier. You "swooped in" to save me during a difficult time in my graduate career and re-

inspired me. You brought my focus back, and I am so thankful for all your efforts, encouragement, and patience. I have learned so much from you!

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Introduction

In the field of law enforcement, police officers are faced with many challenges. At any given moment, the lives of the officers, their families, or the citizens they serve can change dramatically. According to the National Law Enforcement Memorial Fund (n.d.), over twenty-one thousand police officers have been killed in the line of duty since records have been kept beginning in 1791. In addition to paying the ultimate price for serving their community, there are numerous stressors that accompany putting on a badge.

New policies and equipment issued to officers is likely to have some impact on them. In the past several years, body worn cameras (BWCs) have been issued to officers primarily in efforts to increase transparency and public trust (Ariel et al., 2016b; Drover & Ariel, 2015; Gaub, Todak, and White, 2017). The first known official use of BWCs was by a constable's office in England towards the end of 2006 (Vicente & Fisher, 2007). In the United States, the first known evaluation of a BWC program was conducted in 2012 in conjunction with the Rialto Police Department in California (Ariel, Farrar, & Sutherland, 2014).

Because BWC policies and programs are relatively new, researchers are only just beginning to study their impact on police officers. Ariel et al. (2016a) argued that "at present, there is a world-wide uncontrolled experiment taking place" with BWCs (p. 745). This study examined police officers' perceptions regarding changes in their behavior while being video recorded with this technology. This study may provide police

agencies that employ the technology with the opportunity to fine tune critical facets of BWC programs, including policy and training regarding this equipment.

Chapter 1 provides an overview of the study and a background of the current problem regarding changes in officers' behavior while being video recorded utilizing BWC equipment. I discuss the purpose and nature of the study along with the supporting theoretical framework. I also highlight the research question and critical definitions. In addition, I address assumptions, scope, delimitations, and limitations. Finally, exploring the potential implications and significance for social change concludes Chapter 1.

Background

Since its inception in the United States, the delivery of police services to the community has been the focus of scrutiny by citizens, politicians, and advocacy groups. Lipsky (2010) argued "as providers of public benefits and keepers of public order, street-level bureaucrats (SLB) are the focus of political controversy" (p. 4). Because police officers oversee and dictate services provided to the public, they are considered SLBs (Lipsky, 2010). Prior to the advent of video recording cameras, smart phones with video recording capability, and social media, police officers conducted their duties with very little public exposure and scrutiny by supervisors (Lipsky, 2010). However, as the mentioned devices and tools became more accessible to the public, the actions of police officers became increasingly visible and therefore more scrutinized by the community.

Actions such as police officers' use of force has been a prime concern of the public. Newell (2014) points to the videotaped beating of motorist Rodney King by police officers as the catalyst for the evolution of citizens video recording (through

various means) of law enforcement's interactions with the public. As technology has developed, video recording of officers' actions has evolved from utilizing home video cameras (camcorders) that captured the incident with King to video recording applications on cellular phones. These recorded encounters have become more scrutinized because they are being exposed on a worldwide basis through various media platforms.

Some authors have asserted that the presence of BWCs in recent controversial use of force incidents such as the shooting of Michael Brown in Ferguson, Missouri, might have staved off nationwide protests (Pelfrey Jr. & Kenner, 2016). Ironically, in several incidents where BWCs were present during controversial use of force incidents, it could be argued the situations were magnified. Despite the presence of video, protests were held specifically under movements such as #BlackLivesMatter (Brucato, 2015).

Since the public has become more cognizant of police officers' use of force through video recording their actions, there has been a significant push by the public and politicians to equip officers with BWCs. Jennings, Fridell, and Lynch (2014) asserted that "police departments across the United States are being pressured by their communities to adopt body-worn cameras and the Ferguson Police Department implemented body-worn cameras within one month of the shooting" of Michael Brown (p. 549).

It can be argued that a rollout of such a critical and vital piece of equipment issued to police officers in a 1-month period is an extreme reaction. This could explain why researchers who have studied this phenomenon for the brief amount of time it has been employed have discovered inconsistent results pertaining to behavior changes in

officers for the variables of use of force, arrests, and complaints (Ariel, 2017; Ariel et al., 2015; Katz, Choate, Ready, & Nuňo, 2014). Though researchers have found inconsistent results in changes in officers' behavior in the described categories, the one aspect that is evident is there are changes occurring. In this study I attempted to discover why these changes in behavior occur from the perspective of police officers who are equipped with a BWC. The findings may assist in filling a gap in the research of understanding why behavior changes occur. This study was needed to determine if these behaviors present any adverse effects on citizen and officer safety, law enforcement's relationship with citizens, and the delivery of police services to the community.

Problem Statement

The problem is police officers are functioning in a new world of transparency, rage, reaction, and community distrust, and in this new world, officers' perceptions regarding changes in their behavior while being recorded by BWCs are not known. There are several contributing factors that have led to this problem. In addition, numerous side-effects of the phenomenon have been observed.

Contributing Factors

Law enforcement is an arduous profession where split-second decisions are made in often dynamic circumstances. Further complicating the task of protecting and serving is the fact the current relationship between the police and the community is strained (Brucato, 2015; Hedberg, Katz, & Choate, 2017; Jennings et al., 2014; Newell, 2014; Pelfrey Jr. & Kenner, 2016). Contributing to this labored relationship are well-publicized media reports of excessive use of force incidents that have sparked controversy and even

protests nationwide. The source of this outrage frequently is video footage of officers' encounters with citizens (Boivin, Gendron, Faubert, & Poulin, 2017a).

In response to calls for transparency and accountability, many law enforcement agencies have implemented BWC programs. In recent years, there has been a rapid expansion and adoption of BWC programs (Taylor, 2016). It has been argued that because of this increase in the adoption of this technology in such a short amount of time, we have little knowledge of the effects BWCs have on officers who are required to wear them (Taylor, 2016).

Another contributing factor is the recency of the problem. From a law enforcement perspective, officers are still getting acclimated to the technology. It could be argued that given the newness of BWC policies, officer behaviors are still evolving. From an academic standpoint, there have been mainly quantitative studies conducted focusing on the BWC effect on police officers' behavior. Researchers have quantitatively evaluated changes in behaviors including arrests, use of force, proactive self-initiated field activities, and being subjected to complaints from citizens (Ariel, 2017; Ariel et al. 2016; Ariel et al., 2015; Jennings et al., 2014; Jennings, Lynch & Fridell, 2015). Very few qualitative studies have been undertaken to understand officers' perspectives regarding why changes in behavior occur. Current researchers have expressed a need for addition qualitative research pertaining to officers' perceptions of changes in behavior when equipped with BWCs (Ariel, 2017; Gaub, Choate, Todak, Katz, & White, 2016; McClure et al., 2017; Pelfry Jr. & Keener, 2016; Smykla, Crow, Crichlow, & Snyder, 2015; Sousa, Coldren Jr., Rodriguez, & Braga, 2016)

Side Effects

Further complicating this problem, the results of the limited body of quantitative research conducted on observed behavior changes in officers varies widely (Ariel, 2017; Ariel et al., 2015; Ariel et al., 2016b; Katz et al., 2014). In addition, some results could be perceived as negative, potentially having adverse effects on officer and citizen safety, community relations with the police, and the effective delivery of police services (Ariel et al., 2016a). There also have been very few, if any, qualitative studies evaluating officers' perceptions of why changes in behavior occur.

As mentioned, researchers have also discovered potentially adverse changes in behavior when a BWC is worn by an officer. Ariel et al. (2016b) discovered an unequivocal negative change of assaults on officers increasing when they are equipped with BWCs. Another potential unfavorable change observed is fewer arrests by officers (Ariel, 2017; Ready & Young, 2015). Another detrimental concern is some officers have expressed a hesitation to act when equipped with BWCs (Hedberge et al., 2017).

Purpose of the Study

The purpose of this qualitative study was to explore and describe police officers' perceptions of and reasons for changes in behavior while wearing BWCs. Consideration was given to the previously described contributing factors and side effects of the problem. Pelfry Jr. & Kenner (2016) argued that "no published studies incorporate qualitative data, which lends to important context and depth, the interpretation of officer survey data" (p. 491). This assertion exposes an absence of thorough qualitative inquiry regarding officers' feelings, thoughts, and perspectives regarding the phenomenon. To

address this gap in the research, I explored the perceptions of police officers from the Southwestern United States who have worked in the field of law enforcement for more than 10 years and have been issued BWCs for a period of 6 months or more.

In this study I investigated officers' changes in behavior by soliciting the perceptions of police officers who are equipped with BWCs. Changes to the implementation process, BWC policy, and training of officers regarding the equipment are recommended based on the findings. The potential social change implications of this study include safeguarding officer and citizen safety, improving community relations with the police, and ensuring police services are being delivered effectively and efficiently.

Research Question

The research question for this qualitative study was the following:

RQ: What are police officers' perceptions regarding changes in their behavior while being video recorded on duty?

The research question was crafted to focus on the lived experience of police officers' while wearing BWCs and manifested in their behavioral changes. The feedback from the open-ended interview questions provides insight on potential policy and training changes that may need to be made.

Theoretical Framework

The theoretical framework that guided my study was Lipsky's (2010) street-level bureaucracy theory (SLBT). The theory implies that street level officers are the intermediary between policy makers and the communities they serve (Lipsky, 2010).

BWC programs are the policy that is being imposed upon the street level officer. Officers' reactions to this policy and its implementation in the field were a critical aspect being examined in this study. Employing this theory assisted me in understanding officers' perceptions of changes in their behavior experienced because of BWC policies and programs.

In law enforcement, officers possess a great deal of discretion. Officers can decide to give a warning, issue a citation, or place a person into physical custody for a violation. It is also within an officer's discretion as to what degree of force is necessary to appropriately address an incident. Lipsky's (2010) SLBT theory can be utilized to take into consideration police officers' discretion in field activities such as use of force and making arrests while using a BWC. Ariel et al., (2016b) argued that police use of discretion in the operation of BWCs is significant. Discretion is specifically important when officers determine if the use of force is required and what level of force is appropriate to handle the situation they encounter. Though not directly mentioned by Ariel et al. (2016b), the application of SLBT directly relates to officers' discretion in the field while wearing BWCs.

In addition, I attempted to establish a nexus between the discretion inherent in SLBT and officers' change in behavior while being video recorded. The described field activities and subsequent discretion are obviously still present in officers who are not equipped with BWCs. However, prior quantitative studies conducted on the phenomenon have revealed a relationship between these field activities (changes in behavior) and when an officer is equipped with a BWC (Ariel, 2017; Ariel et al., 2016a; Ariel et al.,

2016b; Jennings et al., 2014; Jennings et al., 2015). Employing the SLBT assisted me in establishing officers' perceptions of these changes in behavior when BWCs are used as part of their duty equipment as dictated by department policy or state law.

Nature of the Study

The methodology for this study of changes in officers' behavior while being video recorded is generic qualitative. I considered several factors to arrive at this selection. Because the phenomenon of changes in officers' behavior while being recorded with BWCs is not bound in time, phenomenology would not have been appropriate to employ in this study (Rudestam & Newton, 2015). On the other hand, Patton (2015) argued generic qualitative inquiry is effective through "skillfully asking open-ended questions of people and observing matters of interest in real-world settings to solve problems, improve programs, or develop policies" (p. 154). Thus, the choice for this study was generic qualitative.

The limited studies conducted on this topic have revealed mixed results pertaining to the extent of changes in officers' behavior. However, the one consistent finding is changes in officers' behavior are occurring (Ariel, 2017; Ariel et al. 2016; Jennings et al., 2014; Jennings et al., 2015). Understanding officers' reasons for these changes may allow the researcher to surmise if the behavior changes are detrimental to the safety of members of law enforcement and the public they serve or adversely impact the delivery of police services to the community.

According to Rudestam and Newton (2015), "the qualitative researcher usually invites the subject to participate, sometimes a formal collaborator, by contributing

knowledge about unobservable aspects of his or her experience that are not accessible to

the researcher in other ways" (p. 41). In this study, soliciting police officers' thoughts and

feelings regarding deviations in their behavior while being video recorded during

interactions with the public aided in understanding why these changes occur. The

findings from this study have the potential of bringing the field of law enforcement closer

to identifying what measures can be put in place to prevent changes deemed to be

undesirable from taking place.

Through this study I attempted to understand officers' perceptions of changes in

behavior when they are being video recorded during field activity. I also attempted to

determine if these changes were detrimental to the safety of the officers and the

community they serve. Lipsky's (2010) SLBT further supports the alignment because of

the examination of the implementation of BWC policies and its effect on police officers'

discretion and how they go about conducting field activities. Once a better understanding

of officers' perceptions of why these changes occur is achieved, efforts can be made to

address shifts in behavior that may adversely affect officers and the public, potentially in

a manner that will contribute to positive social change. This can be accomplished through

careful consideration of revisions during implementation of BWC programs, agency

policy, and training on the equipment.

Quantitative research is inadequate to answer why behavior changes occur in

police officers who are equipped with BWCs during citizen contacts. Rather, the

qualitative method can fill this gap in the research through interviews of subjects "to

focus on understanding experiences from the point of view of those who live them"

(Rudestam & Newton, 2015, p. 38). Only police officers who have been issued BWCs know if and why changes in their behavior occur when they are interacting with the public. In addition, only officers would know if these changes are detrimental to the safety of citizens, officer safety, or the delivery of police services.

Definitions

Most of the terms utilized in this dissertation are common. However, there are a few words and phrases unique to the field of law enforcement that are defined for clarification purposes. Many of the terms presented below are subjective and do not have agreed upon definitions. The meaning intended in this study is provided below.

Use of force: The amount of force necessary to effectively and safely address an incident an officer is handling.

Excessive use of force: Use of force by a police officer that goes beyond the scope of the incident the officer is handling and could be considered criminal.

Unnecessary force: Use of force by a police officer that is not appropriate given the circumstances.

Self-initiated field activity: Any law enforcement action taken by a police officer that does not originate from a call for service for which the officer is dispatched. Examples would include traffic and person stops, property checks, or general contact with citizens.

Call for service: Any incident that is generated by a citizen calling into police dispatch resulting in an officer being sent to a respective location.

Officer discretion: The officer's decision on whether to take law enforcement action in each situation or how to conclude a call for service resulting in a warning, citation, arrest, or warrant written.

Specialized unit: Any law enforcement position outside of a patrol officer to include detective, investigator, internal affairs, undercover, and so forth.

BWC terminology: The following are terms used by other researchers and authors cited in this dissertation to interchangeably describe body-worn cameras: on-officer camera, on officer video, police worn body camera, body worn video, on-officer wearable cameras, officer-mounted wearable cameras, and officer-initiated recordings.

Crime scene briefing: A briefing conducted during a major case such as homicide, attempted homicide, robbery, or other violent crimes. The briefing will consist of various bureaus of a police agency consisting of patrol, investigations, crime scene technicians, or other specialized units (e.g., gang unit). Information pertaining to the case was investigated by the various bureaus is shared for investigative purposes.

Assumptions

Based on the qualitative nature of this study, the main assumption was that the participants answered the interview questions truthfully (Rudestam & Newton, 2015). Integrity and honesty are cornerstones in the field of law enforcement. It is assumed that considering the participants are active law enforcement officers, their responses were accurate and truthful.

Scope and Delimitations

In this study I attempted to understand why changes in officers' behavior occur while they are equipped with BWCs as examined through their lived experience. I made inquiries with the participants to understand from the officer's perspective what effects the changes may have on officer and citizen safety, delivery of police services, and law enforcement's relationship with the community. Participants were solicited from police departments in the Southwestern United States. A region was selected versus a specific city or state in an effort to protect the anonymity of the participants. However, because the study was confined geographically, the findings may or may not reflect other regions throughout the country. Additionally, participants from other regions of the United States were not sought out because it would not have been feasible to travel extensively. Finally, saturation may have been difficult to achieve if findings in other regions varied.

Limitations

One of the main limitations of the study was embedded in its qualitative nature. There is a tradeoff between numbers of participants and richness of the data compiled (Rudestam & Newton, 2015). Because there were only five participants, exposure to a wide range of officers' perspectives was prohibited by the design of the methodology. Rather, I relied upon the richness of the data (Rudstam & Newton, 2015) to fill the current gap in the research as established earlier. An explanation of how I arrived at the selected number of participants is expanded upon in Chapter 3.

Because I am an active duty police officer who has worn BWCs as part of my issued equipment, potential for personal bias exists. However, information reported was

solely from the participants' viewpoint, not mine, and I ensured their responses were objectively analyzed. In contrast, my firsthand knowledge of BWCs assisted in interpretation of the data, specifically the lived experiences that were described by the police officers sampled.

A final limitation was the geographical area from which participants were solicited. Perceptions of officers from the Southwestern United States may not be consistent with other regions of the country.

<div style="text-align:center">Significance</div>

Limited research has revealed observable changes in behavior in police officers who wear BWCs (Ariel, 2017; Ariel et al., 2016b; Ariel et al., 2015; Katz et al., 2014). Because an officer's behavior relies heavily on discretion, it is important to understand from a member of law enforcement's perspective whether these changes are detrimental. Changes in behavior have the potential to place the officers and the citizens they serve at risk for injury or death. Also, police services provided to the community could be adversely impacted, further straining law enforcement's relationship with the public.

The significance of this study is that it was an attempt to understand officers' perceptions of these changes and to determine if these changes in behavior are detrimental. The findings of the study may lead to adjustments in implementation, policy, and training of officers who are issued BWCs in the law enforcement community. Thus, this study could have a positive impact on ensuring the safety of citizens and officers. It also could contribute to positive social change through improved relationships between

law enforcement and the community they serve. In addition, enhancements can be made to ensure more effective and efficient delivery of police services.

Summary

In this introductory chapter, I provided an overview of the study and a background of the current problem regarding changes in officers' behavior while being video recorded using BWC equipment. I highlighted the purpose and nature of the study along with the theoretical framework used to describe the phenomenon. I outlined the research question, nature of the study, and critical definitions. I also explained assumptions, scope delimitations, and limitations, and I discussed the significance of the study and its potential implications for social change.

Chapter 2: Literature Review

Introduction

In the United States, there has been a long-standing outcry for transparency and efficiency in the various bureaucracies comprising society (Lipsky, 2010). The field of law enforcement is no exception. Throughout the history of law enforcement, public pressure, landmark court decisions, and media reporting of police officers' interactions with the public have resulted in a demand for transparency and efficiency. This pressure has spurred the call for a rapid rollout of BWC programs in the nation's police agencies. Nationwide there has been a significant increase in local agencies adopting BWC programs. According to the DOJ, Office of Justice Programs (2013), approximately 32% of an estimated 13,000 local police agencies have implemented BWC programs. Currently, we do not know what police officers' perceptions are regarding changes in behavior while being video recorded by BWCs. Furthermore, it is unknown by scholars if these changes are detrimental. The purpose of this qualitative study was to explore and describe police officers' perceptions and reasons for behavior and decision-making changes while wearing BWCs.

In Chapter 2, I review literature pertaining to the phenomenon. I also list research sources used and highlight key search terms. I describe how I undertook the literature search process and explain the iterative search process. I revisit the SLBT and explore literature based on analysis of previous theoretical application. I explain the relationship of the SLBT to the current study.

In addition, I conduct a literature review pertaining to integral variables and concepts. Variables and concepts examined include (a) motivations for BWC implementation; (b) evolution of BWCs, which includes an examination of studies conducted on similar pieces of equipment issued to police officers in the past such as dash cameras and closed-circuit television cameras (CCTV); (c) BWC program implementation, policy, and training; (d) officer and citizen concerns; and (e) observed changes in behavior in officers who are equipped with BWCs. Chapter 2 concludes with a summary of key elements highlighting the criticalness of understanding officers' perceptions.

Literature Search Strategy

Initially, the focus of the literature review pertained to officers' changes in behavior when equipped with BWCs. As the review progressed, the focus was finetuned to officers' use of discretion regarding behavior changes when equipped with BWCs in alliance with the SLB theoretical framework.

List of Research Sources

The literature review included peer-reviewed articles and journals researched in the Walden University Library. Online databases searched included Thoreau Multi-Database, Criminal Justice, and the ProQuest Central databases. I also examined websites specific to BWCs. I reviewed government websites such as the DOJ to determine nationwide statistics related to BWCs. The investigated statistics consisted of the percentage of police agencies that use BWCs and other useful information pertaining to BWC program implementation and use. Finally, I examined the Las Vegas Metropolitan

Police Department's (LVMPD) policy regarding BWCs . The LVMPD's policy was chosen to be reviewed because it is one of the largest agencies that uses BWCs in the geographical area studied.

List of Key Search Terms

The following terms guided the literature search: *body worn cameras, on officer cameras, on officer video, police worn body camera, body worn video, on-officer wearable cameras, police dash cameras, closed circuit television (CCTV), officer perceptions, changes in behavior, use of force, excessive force, excessive use of force,* and *street-level bureaucracy.* Initially, the term *body worn camera* was used in the described databases while conducting searches. The other terms highlighted above were observed in the articles and references as used by researchers. Numerous different acronyms were used in various studies about BWCs. I conducted an updated search utilizing the new terms and acronyms of BWC discovered in the described databases, which yielded additional articles for review.

Description of Iterative Search Process

I developed a guide consisting of an outline for the literature review. Following this outline, I searched a history of the involvement and use of cameras by law enforcement. I discovered articles highlighting the use of CCTV and in-car video recording systems (dash cameras) leading up to BWC programs. Similarly, I discovered articles regarding the use of recording devices by citizens and members of the media to document police activity. I conducted a search to examine the perceived motivation for BWC program implementation. Motivations discovered for BWC program

implementation included transparency, improved community relations, officer and citizen safety, and police accountability. I uncovered articles describing changes in behavior in officers who are equipped with BWCs. The behaviors were mainly examined quantitatively and consisted of the variables use of force, complaints, and self-initiated field actives such as arrests. As the search continued, other concepts of assaults committed on officers who were equipped with BWCs and officer concerns regarding BWC programs surfaced. I discovered topics related to BWC implementation, policy, and related laws. I sought and examined articles pertaining to police use of discretion and utilizing the theoretical framework of Lipsky's (2010) Street Level Bureaucracy.

Theoretical Framework

The theoretical framework utilized for this study was Lipsky's (2010) SLBT. Lipsky (2010) initially developed the SLBT in the late 1970s and the theory was updated in the most recent version in 2010. Police officers are SLBs, and the respective agencies are the bureaucracies (Lipsky, 2010). The term police officer is interchangeable with SLB (Lipsky, 2010). Similarly, police agencies or departments are equivalent to a bureaucracy. The theory implies street-level officers are the intermediary between policy makers and the community they serve (Lipsky, 2010). BWC programs are the policy that is being imposed upon the street-level officer by the bureaucracies in which they are employed. Officers' reaction to this policy and its implementation in the field is a critical aspect examined in this study. Employing the tenants of the SLBT assisted me in understanding the phenomenon of changes in behavior experienced by officers because of BWC policies and programs.

Lipsky (2010) recognized the strained relationship between street-level bureaucrats and the community they serve. Members of law enforcement are frequently scrutinized for their performance, decision making, and interaction with the public (Lipsky, 2010). As such, "clients of street-level bureaucrats respond angrily to real or perceived injustices" (Lipsky, 2010, p. 9). A recent example of this response was the highly publicized Black Lives Matter movement, which consisted of nationwide protests and demonstrations. Examples of the real or perceived injustices included incidents such as the highly publicized officer involved deaths of Michael Brown in Ferguson, Eric Garner in New York City, Tamir Rice in Cleveland, Walter Scott in North Charleston, and Freddie Gray in Baltimore (Hedberg et al., 2017).

In law enforcement, officers possess "substantial discretion" (Lipsky, 2010. p. 3). In situations not specifically stipulated by law (i.e. mandatory arrest for perpetrators of domestic violence), officers can decide to issue a warning or citation or place a person into physical custody for a violation. It is also within an officer's discretion as to what level of force is necessary to appropriately address an incident. Lipsky's (2010) SLBT takes into consideration police officers' discretion in relationship to officer behaviors such as use of force, arrests, and other self-initiated field activities while using a BWC.

In addition, the SLBT helped in understanding the relationship between discretion and officers' change in behavior while being video recorded. These field activities and subsequent discretion are obviously still present without the use of BWCs. However, prior quantitative study has revealed a relationship between these field activities (changes in behavior) when a BWC is present and activated (Ariel, 2017; Ariel et al., 2016a; Ariel

et al., 2016b; Jennings et al., 2014; Jennings et al., 2015). Lipsky (2010) argues it is not uncommon for SLBs to develop coping mechanisms to work around policies implemented agency wide. As mentioned previously, a BWC program is a policy being implemented by police managers and executive staff to improve transparency, community relations, and officer accountability. Employing the SLBT assisted me in establishing officers' perceptions of changes in behavior when BWCs are used and whether the deviations are a coping mechanism as described by Lipsky (2010).

Literature Based Analysis of Previous Theoretical Application

Due to the recency of the release of Lipsky's (2010) SLB, there have been few published studies in criminal justice utilizing it as a framework. Another mitigating factor is SLBT considers more actors than police officers in the theory. Teachers, welfare workers, attorneys, nurses, doctors, and judges are all considered "street-level bureaucrats [who] have considerable discretion in determining the nature, amount, and quality of benefits and sanctions provided by their agency" (Lipsky, 2010. p. 13). Though all are SLBs, their professions are extremely diverse, ranging from the fields of education, law, medicine, and social work. The SLBT is undoubtedly considered by researchers in these wide-ranging professions and disciplines. However, perhaps unknown to many researchers in the field of criminal justice, they may have employed several tenants of the SLBT in their rationalization and explanation of findings.

Buvik (2014) conducted one of the studies that specifically employed SLBT to investigate law enforcement related activities. Buvik utilized SLBT to investigate police officers' use of discretion during enforcement activities by police in Norway. In the

findings, the author argued that "decisions at street level are influenced by how officers adapt to their working context (situational and system variables), the individuals that they relate to (offender variables) and the characteristic of individual officers" (Buvik, 2014, p. 785). When applying SLBT, Buvik found officers' attitudes, experience, and background directly influenced their use of discretion when handling calls for service. This finding can be directly translated to SLBT regarding officers' change in behavior when equipped with BWCs. I considered and evaluated results of this study with this theory in mind.

As alluded to previously in this section, researchers have employed tenants of SLBT in their findings without specifically utilizing the theory. For example, Ariel et al., (2016b) argued police use of discretion is significant in police officer behaviors such as determining whether to use force and what level of force is appropriate to handle an incident officers encounter. Though not directly mentioned by Ariel et al. (2016b), the application of SLBT directly relates to officers' use of discretion in the field while wearing BWCs. This is critical because use of force is one of the variables (behaviors) studied by researchers such as Ariel in relationship to BWC programs

Other researchers have made assertions that the requirement for manual activation of BWCs by officers also considers discretion (Joh, 2016). Joh 2016 argues "if a camera is only subject to manual control, key discretionary decisions about when and why to record are left up to the individual officer" (p. 134). This argument strongly aligns with SLBT due to discretion by SLBs as to determining when BWCs should be activated. It is possible that in part, the discretion concerning initiation of a BWC recording is because

of concerns over data storage costs to maintain the footage created (Joh, 2016). In department policy, there is also a high degree of discretion maintained by officers regarding BWC activation.

McClure et al. (2017) examine policy as it relates to officer discretion and BWCs. Lipsky (2010) discussed how SLBs create and carry out policy during their duties serving the public. McClure et al. (2017) points out that "discretion for BWC use can apply to both how often an officer independently chooses to activate the BWC and the circumstances under which officers are required to activate them" (p. 6). Much of this discretion is written into police departments' policy and procedure manuals during the implementation process.

For example, the LVMPD recently implemented a BWC program. In several areas of LVMPD BWC policy, officer use of discretion is apparent. Regarding activation, LVMPD officers are directed to begin recording "as early as possible at the beginning of any self-initiated police action when it is safe and practical to do so" (LVMPD, 2018, p. 731). Evaluating this directive with SLBT, the subjectivity in the language can be immediately translated to officer discretion. The phrases "as early as possible" and "when it is safe and practical to do so" (LVMPD, 2018, p. 731) allow for significant officer discretion when making on-scene decisions, including BWC activation. Discretion, enforcement action, and officer behavior all directly correlate and have significant impact on each other (Ariel, Sutherland, Henstock, Young, Drover, Sykes, Megicks, & Henderson, 2016).

Relationship of Theory to Current Study

Officers' change in behavior directly correlates with studied variables of use of force, complaints, and self-initiated field activities such as arrests. These changes in behavior are dictated primarily by officer discretion. An officer ultimately utilizes their discretion on whether to use force and what level of force is appropriate given the circumstances presented in an incident. Additionally, an officer can exercise discretion when conducting self-initiated field activity. An officer can determine if they should investigate a suspicious situation or conduct a traffic stop on a vehicle that ran a red light. If an officer does conduct a vehicle stop for a traffic violation, they will utilize their discretion to issue a warning or traffic citation. Other than calls for service, officers make arrests via self-initiated field activity. If officers are using their discretion not to initiate field activity, officer arrest statistics are likely to decline. Current studies on officers' change in behavior when they are equipped with BWCs yield varying results. However, despite the varying results, there are changes in behavior occurring. This study utilizes the SLBT as a vehicle to assist in determining why these changes are occurring.

Literature Review Pertaining to Integral Variables and Concepts

The literature review will begin by highlighting motivations for BWC implementation. The evolution of BWCs will then be examined. Next, BWC implementation and training will be discussed. Officer and citizen concerns will be highlighted. Finally, there are several variables that will be evaluated in this literature review. Many of the described variables will also be examined qualitatively in this study.

The variables of use of force, arrests, complaints, officer productivity, and assaults on officers will be discussed.

Motivations for Body Worn Cameras implementation

BWC implementation is multifaceted, and motivations have been frequently referenced. These motivations include transparency, accountability, reduction in the frequency of the use of force and lowering excessive force (Ariel et al. 2016b). Also, the DOJ (n.d.) "recognizes that body-worn cameras are one law enforcement strategy aimed at improving public safety, reducing crime, and improving public trust between the police and the citizens they serve" (para. 2). Katz et al. (2014) assert that additional motivations for implementation of BWCs include assisting with investigations by documenting statements, behaviors, and as an evidence collection tool. Enhanced officer and citizen safety are also a significant motivation of BWC implementation (Ariel et al. 2016b). In the publication *Final Report of the President's Task Force on Policing in the 21st Century* (2015) spearheaded by the Obama administration, it is argued that BWCs can also assist in sustaining or disproving citizen allegations of misconduct allegedly committed by the police. Finally, a motivation for implementation is to enhance training by having officers watch BWC footage of various incidents to learn from mistakes and build upon successes in the field documented in the video (Coudert, Butin, & Metayer, 2015).

A very tragic example of utilizing BWCs for training purposes was the One October mass shooting that occurred in Las Vegas, NV. Several hundred officers responded to the incident, many of whom were wearing BWCs (Federal Emergency Management Administration [FEMA], 2018). The Federal Emergency Management

Agency (FEMA) released an after-action report that detailed ways future mass casualty

events could be more effectively mitigated. One major contributor to this effort was the

review of BWC footage recorded during the tragedy (FEMA, 2018). This not only

benefits law enforcement, but fire departments and private ambulance services whose

response was also captured on the video

Evolution of Body Worn Cameras

Mateescu, Rosenblat, and Boyd (2016) argue that "even prior to the widespread

adoption of police-worn body cameras, video has played a role in illuminating evidence

of policing misconduct and fatal shootings including bystanders' cell phone cameras,

dashboard-mounted cameras, and CCTV surveillance" (p. 122). This section will discuss

the evolution of BWC, briefly examining CCTV, patrol car dash cameras, mobile

cameras (camcorders and television cameras), and cellular phone video.

Closed-circuit television (CCTV). Many municipalities, businesses and even

private residences utilize CCTV for security purposes. Since calls for service are

frequently responded to by officers in areas that are covered by CCTV surveillance, their

behaviors are often captured either with or without their knowledge. As noted, CCTV is

primarily used as a deterrence for criminal activity, but the system has been used in the

past by municipalities to track officers' movements (Menichelli, 2013).

In the past, footage of officers' behavior has been recorded on CCTV and released

to the media and observed by vast audiences. A recent high-profile example of this is the

shooting of Tamir Rice by Cleveland, OH police officers. The entire incident was not

captured by CCTV, but the moments leading up to the fatal shooting was captured on

video (Pelfry Jr. & Keener, 2016). CCTV was effective in showing the officers' actions in the most critical moment of the described incident. However, the recording did not capture the entire incident which is crucial for perspective.

Dash cameras. In 2001, the DOJ awarded the International Association of Chiefs of Police (IACP) a grant to conduct a study on the effectiveness of in-car dash cameras for patrol vehicles. In the study, the IACP (2001) outlined a history of in-car cameras that began with the Connecticut State Police in the 1960s. Due to limitations in the technology of the time, coupled with the sheer size of the cameras, efforts to place recording devices in police cars was tabled until the 1980s (Association of Chiefs of Police [IACP], 2001). In the 1980s and 1990s, in-car cameras were the most common equipment utilized to record police activities. Ironically, in-car cameras were initially adopted for reasons other than transparency. For example, in the 1980s, cameras were mainly utilized to document driving patterns of impaired motorists. In the 1990s, law enforcement found in-car cameras useful to document narcotic interdiction vehicle stops (IACP, 2001).

It was not until the late 1990s when significant tension between the community and the police due to allegations of racial profiling emerged as the primary motivation to incorporate more cameras in patrol cars (IACP, 2001). There are many parallels between in-car cameras and BWCs. Like in-car cameras, motivation for agencies to adopt BWCs resulted from incidents where bias and excessive use of force were alleged (IACP, 2001). In addition, researchers studying BWCs are finding similar results to previous research conducted on in-car cameras (IACP, 2001). Similar to BWC research today, studies were

conducted to determine the effectiveness of in-car cameras, their influence on police and citizen behavior, and officer and citizens' perceptions of the equipment (IACP, 2001). It is important to take into consideration results from dash camera studies related to changes in officer behavior leading up to reviewing similar variables examined in BWC research discussed later in this chapter.

Some results from research conducted on in-car cameras closely mirror preliminary studies on BWCs. For example, in a study conducted by the International Association of Chiefs of Police, researchers argued "while officers are aware that the in-car camera provides additional scrutiny of their performance, the questions of whether or not it impacts their performance remains" (IACP, 2001, p. 22). However, researchers did discover through qualitative investigation that 89 percent of respondents indicated the in-car cameras had no effect on their decision to use force. Perceptions on officer safety varied more dramatically. Many respondents (64%) reported they believed the camera would have no effect on their safety. Only 33 percent felt it would have a positive impact on officer safety.

Another notable finding that provides a correlation between dash cameras and BWCs was complaints. Researchers found that 93 percent of complaints filed against officers who had in-car cameras were exonerated of the complaint made against them based on the video footage from the incident (IACP, 2001) Today, researchers are finding mixed results as to how BWCs effect officer behavior (Ariel et al. 2016b) and very few studies have been conducted on officer perceptions on the equipment. Mateescu, Rosenblat, and Boyde (2016) further this argument by asserting "… body-worn cameras

have already been at the center of the same protracted disputes over interpretation and authoritativeness as the dashboard camera and citizen video recording footage that have been capturing police incidents for decades" (p. 125). Described results of current BWC studies will be discussed in greater detail later in this chapter.

Mobile cameras. In the late 1980s the popular television show COPS commercialized police behaviors to a worldwide audience (Brucato, 2015). Some authors made arguments that these television programs potentially violated individual's privacy and potentially even presented Fourth Amendment violations. Worrall (2000) argues when a citizen's life is made public in such a display (on national television), privacy concerns begin to emerge. Specifically, when members of the media accompany law enforcement performing their duties in an official capacity in a private residence, Constitutional issues become debated. These concerns parallel privacy issues currently being argued in the BWC arena.

In the early 1990s, events such as the well-documented home video recording by a citizen of the beating of motorist Rodney King by members of the Los Angeles Police Department made national news (Brucato, 2015). It could be argued this incident set the stage for "smartphone journalism" and citizens recording police behaviors and then transmitting them via media outlets and social media (Newell, 2014, p. 2). This is because "images of controversial police interventions regularly 'go viral', circulating rapidly and widely across various media" (Boivin et al., 2017b, p. 366).

Cellular phones. Sites such as Facebook, YouTube and Dailymotion allow for average citizens to record police behaviors on cell phone recording applications and then

quickly disseminate the video on free platforms to a worldwide audience (Boivin et al.,

2017b). Both the video recording and uploading to the described sites can easily be

accomplished through smart phone applications (Coudert, Butin, & Metayer, 2015). The

media coverage of police behaviors and scrutiny over use of force incidents have

accelerated and arguably culminated with several well-documented cases of alleged racial

bias and use of excessive force against minorities. Hedberg et al. (2017) argued that "over

the past year the high-profile deaths of Michael Brown in Ferguson, Eric Garner in New

York City, Tamir Rice in Cleveland, and Freddie Gray in Baltimore have resulted in

protests against the police" (p. 628).

Transition to BWC. In response to this scrutiny and outcry by the public, "…

BWCs quickly emerged as a tool that many believe can enhance transparency, build trust

among citizens, and provide an important police accountability tool" (Gaub et al., 2017,

p. 1). As a result, today there are over 18,000 agencies in the United States that have

equipped officers with BWCs, and the DOJ (2017) has spent tens of millions of dollars

over the past several years on equipment, "… guidance, oversight, training, data

collection, research analysis, and performance management to grantees and non-

grantees" (para 4).

Implementation and Training

Implementation. After the highly publicized incidents described in the previous

section, the Obama Administration in conjunction with the DOJ launched a campaign to

implement BWC programs in police agencies throughout the United States. In efforts to

encourage agencies nationwide to implement BWCs, The Obama Administration touted

the advantages of the equipment in the previously mentioned publication *Policing in the 21st Century* (2015) to promote transparency and improve law enforcement's relationship with the communities it serves. The publication also acknowledged the potential for unintentional consequences caused by BWC implementation. These unintentional consequences will be discussed in greater detail in the upcoming observed changes in behavior section of Chapter 2.

In conjunction with this publication, the DOJ developed a toolkit for agencies interested in implementing a BWC program. The DOJ website describes the toolkit as "an online resource for stakeholders that includes lessons learned for implementation, model policies and procedures, and research materials" (DOJ, 2017, para 5). Specifically, one of the tenets of this toolkit is achieving buy-in from the community and members of the respective agency. Engaging vested parties in the process of implementing a BWC program is vital. This discussion informs stakeholders of advantages and potential pitfalls of a BWC program (DOJ, 2017).

Also embodied in the toolkit is a frequently asked question section that informs citizens, officers, and police executives of a range of topics. This includes BWC capabilities, functionality, cost, and recommendations on policy issues such as when to activate recordings, privacy, and storage of data etc. (DOJ, 2017). The toolkit also offers an interactive map that displays relevant studies, laws, and department policies pertaining to BWCs (DOJ, 2017). For example, when the State of Nevada is selected, hyperlinks are provided to LVMPD's BWC policy, a recent study conducted on a BWC program implemented in LVMPD, and Nevada laws pertaining to BWC programs (DOJ, 2017).

To put it simply, the toolkit is an unenforceable guideline for agencies on how to implement a BWC program in their jurisdiction. This unenforceable guideline is noteworthy when it comes to evaluating recent studies on BWCs.

The Bureau of Justice Assistance (BJA) which is a section of the DOJ, actively solicits agencies employing BWC programs and researchers to partner together to conduct studies on several key factors regarding changes in the behavior of officers who wear the equipment. On its website, the BJA describes the solicitation process as follows:

> Building on previous activities conducted through the BJA Smart Policing Initiative, the FY15 Smart Policing Initiative Body-Worn Camera Problem-Solving Demonstration Program will provide up to $2 million to law enforcement agencies interested in partnering with a research partner to examine the impact of implementation of body-worn cameras on citizen complaints, the process and outcome of internal investigations, privacy issues, community relationships, and the cost-benefit ratio of implementing a body-worn camera program. (BJA, para. 6)

The solicitation of participating agencies and partnering researchers will be a significant point of consideration regarding the review of recent BWC studies described in the upcoming section of this chapter.

For accountability purposes, BWC "implementation means that the police are no longer impervious to scrutiny and exposing police brutality and prejudicial profiling will no longer solely rely on fortuitous videoing by bystanders" (Taylor, 2016, p. 132). Brucato (2015) argued this concept replaces a previous culture of the media, public, and

criminal justice system accepting an officer's account of an incident without question. With BWCs, there is a sense of objectivity that was not present in the past, and on-officer video recordings ideally will protect citizens from unreasonable/excessive force and shield the officers from false complaints (Brucato, 2015).

Training. Few studies address pre or in-service training of BWC equipment received by stakeholders to include officers, first-line supervisors, command staff, civilian employees (records, court processors, etc.), members of the judicial system (district attorneys, defense attorneys, and magistrates), and citizens (Braga, Coldren Jr., Sousa, Rodriguez, & Alper, 2017). It could be argued this is a significant gap in the research that could potentially affect the outcome of studies and have an impact on variables that are currently more intensely examined pertaining to BWCs. Sousa et al. (2017) point to the rapid rollout of BWCs contributing to lack of training protocols. Since training on BWC equipment in some agencies is minimal (or non-existent), and may consist only of set-up, operation, troubleshooting, and department policy regarding the equipment, lack of understanding of the technology may result in paucity in buy-in from officers (Gaub et al., 2016).

Revisiting the IACP (2001) study on in-car cameras regarding implementation, researchers argued that "as with any new technology, failure to properly train officers in the use, operation, and legal implications of improper use can result in disaster" (p. 19). Officers are subjected to countless hours of pre-service training on issued equipment (firearm, baton, handcuffs, pepper spray, and Taser). This is often followed by (yearly and state mandated) in-service training on the described equipment. To treat BWCs any

different as far as training would certainly prove to be a disservice to officers and other stakeholders, and potentially could be a "disaster" (IACP, 2001, p. 19).

Officer and Citizen Concerns

Studies and evaluations of BWC programs have revealed numerous concerns maintained by officers and citizens. These studies satisfy the suggestion made in the publication *Policing in the 21st Century* to evaluate unintentional consequences of BWC programs. The concerns of officers and citizens range from safety issues, to non-safety related issues such as conflicting or unclear policy directions, and privacy.

Safety concerns. The most notable study concerning personal safety is where Ariel et al. (2016b) found a 14 percent increase in assaults committed against officers who wear the equipment. In support of this discovery, Katz et al. (2014) found "camera-wearing officers experienced a 130.4% increase in any form of resistance from pre to post deployment and comparison officers experienced a 135.7% increase" (p. 31). These findings appear to be consistent with overall trends of increased assaults occurring against officers.

In a different study, Nix, Wolfe, and Campbell (2017) discovered that "… on average, respondents tended to argue that citizens have become less compliant, more resistant, and more likely to assault police officers in the last two years" (p. 44). To be completely transparent, however, the definition of assault can vary from jurisdiction to jurisdiction and can be either verbal or physical. The findings do align with responses from officers surveyed who generally do not believe BWCs improve officer safety (Jennings et al., 2014; Pelfrey Jr. & Keener, 2016).

These findings are disturbing considering one of the main arguments for BWC program implementation is enhanced officer and citizen safety (Ariel et al. 2016b). If officers are being assaulted at higher rates, there could potentially be more unintended consequences. For example, if an officer is assaulted by a suspect who was involved in a violent crime, that same suspect could pose a significant ongoing safety threat to the community causing a chain reaction of individuals being injured (or worse) until the subject is placed into custody.

Another safety concern pertains to public access to video. Police officers attend hundreds of hours of pre-service training at a police academy learning safety, self-defense, and other tactics. There is disquiet on the part of officers regarding citizens viewing BWC video and observing police tactics when responding to calls for service as someone with ill-intent could potentially study the videos to counteract officer tactics if confronted by the police, creating a significant safety concern for law enforcement and the community (Gaub et al., 2017)

Uninformed policy changes. Though the DOJ has recommendations for policy considerations, there is no enforceable national standard established. Therefore, agency policies on BWCs vary greatly from jurisdiction to jurisdiction. This leaves opportunities for members of advocacy groups and academics with limited (if any) law enforcement experience to make recommendations on policy, but. This is evident because some of the suggestions pose significant safety concerns to officers. For example, some have suggested officers be outfitted with blinking lights that are affixed to their BWC to alert citizens they are being recorded (Joh, 2016; Stanley, 2015). An active blinking light on a

responding officer can give away their position and making them a target to someone who is intent on bringing harm. A blinking light could also notify a suspect the police are in the area and give them advanced warning to flee. Since police officers work 24 hours a day, a blinking light on their uniform at night would be detrimental and present a significant safety concern.

Other researchers have proposed officers verbally announce they are recording when they arrive on scene of a call for service or self-initiated field activity (Ariel et al. 2016b; Ariel et al., 2015). Though this suggestion is more reasonable then a visible blinking light, officers primary concern when arriving on the scene of any call for service is safety and controlling the situation. It is not always safe, nor practical to require an officer to announce they are recording when initially arriving on scene. Officers have significant pressure placed on them with handling dangerous and sometimes deadly situations. Placing another requirement on them making it mandatory to announce they are video recording is concerning on multiple levels.

It has also been suggested that officers be outfitted with a button or patch that informs citizens video recording is in progress (Ariel et al. 2016b). In dynamic situations, involved parties likely would not be able to stop and read informational patches or buttons on officers' uniforms relaying to them video recording in progress. Unless the button or patch on an officer's uniform is a liability waiving formality, the suggestion is counterintuitive and would be ineffective.

Another example of an alarming suggestion is BWCs constantly recording while the officer is on duty (Taylor, 2016). This recommendation is concerning on many levels.

Logistically, the cameras have limited battery life (Hung, Babin, and Coberly, 2016).

Officers frequently work more than the average eight-hour shift. Constant recording

would clearly be an issue with battery life given the current technology. Secondly, the

author does not consider obvious life-related situations such as the officer using the

restroom, changing, or breaks (lunch etc.). These suggestions show many special interest

group members and academics with little experience in the field in law enforcement may

not be the most appropriate authority on establishing parameters for BWC operation,

policy, or laws. They do not have the training or experience to accurately determine

issues regarding officer and citizen safety, practicality, and feasibility of BWC use.

Non-safety related concerns. There are several non-safety related concerns

officers have pertaining to BWCs. In this category, the most notable concern repeatedly

echoed by officers is the use of BWC footage for discipline by supervisors (Ariel, 2017;

Braga, Coldren Jr. Drover & Ariel, 2015; Goetschel & Peha; Headly, Guerette, &

Shariati, 2017; Katz et al., 2014; Pelfry Jr. & Keener, 2016; Sousa, Rodriguez, & Alper,

2017; Stanley, 2015). The primary facet of this concern by officers is supervisors would

randomly review BWC footage to find minor violations to discipline officers in a

retaliatory manner (Stanley, 2015).

Another concern is how the footage of the video that is released to requesting

members of the public or media would be interpreted. Gaub et al. (2017) argue that law

enforcement tactics can appear sadistic to the "untrained eye" (p. 7) of the public. This

appearance could be the case even when the action is performed within the prescribed

framework of department policy and the law. Without explanation of tactics, laws

dictating use of force, or officer training, the "release of video depicting aggressive police behaviors, even if justified, can do significant harm to police – community relations" (Gaub et al., 2017, p. 6). This contradicts one of the primary motivators for BWC policy implementation regarding fostering trust and a positive bond with the community.

An additional concern of officers is the manner and method in which BWC programs are implemented within their agency. Pelfrey Jr. and Keener (2016) found some officers felt they were only told about implementation of BWC programs in their agency and were not included in the program development process. As discussed previously regarding training during the implementation process of BWC programs, for any agenda to be effective, buy-in is imperative. Police executive staff should consider that "a variety of factors affect officer perceptions of BWCs including their agency's planning and implementation process, administrative policy regarding use of BWCs, the experience of their colleagues and neighboring departments, and their own experiences in the field" (Gaub et al., 2016, p. 276). All these factors should be carefully weighed when implementing a BWC program. If they are not and a BWC program is hastily implemented, it could result in resistance by line officers and lawsuits and injunctions by police unions in attempts to prevent it from occurring (Goetschel & Peha, 2017). Achieving buy-in and approval from all stakeholders, including members of the community, officers, first-line supervisors, and politicians is essential for the successful implementation and operation of a BWC program within an agency (Drover & Ariel, 2015).

There are administrative concerns related to individual department policy regarding the technology, as well as state law. It can be argued that BWCs are now completely embedded in the culture of law enforcement. Now, "the question 'how should police use body-worn cameras?' has become more relevant than 'should police use body-worn cameras" (McClure et al., 2017. p. 1). Because there is not an enforceable national standard for BWCs, law enforcement leaders and law makers have the responsibility of determining how and when BWCs should be utilized by the police. While leadership is determining how to craft policy and laws relative to BWC, questions remain pertaining to data storage, release of video, officer discretion over operation of BWCs, (McClure et al., 2017), and disciplinary actions against officers who do not activate BWCs when appropriate or required (Crosby, 2018).

Because agencies vary in size and focus, another significant concern is that "… it is nearly impossible for uniform policies to be imposed upon such a large number of distinct police departments" regarding BWC technology (Joh, 2016. p. 135). This arguably has the potential to lead to dissention within the public due to lack of clarity over expectations which defies one of the tenants of BWC implementation of transparency.

Finally, a concept related to officer concerns pertaining to BWC programs is the perceived "war on cops" and de-policing investigated by Nix, Wolfe, and Campbell (2017). De-policing involves the conscious reduction in self-initiated field activities conducted by police officers during their shift (Nix, Wolfe, & Campbell, 2017). The authors argue that "…it is apparent that recent criticism of their profession has adversely

affected police officers' perceptions" and "officers appear to be feeling strain related to national-level challenges to their legitimacy and may believe de-policing is common" (Nix, Wolfe, & Campbell, 2017, p. 40). As discussed throughout this Dissertation researchers have found changes (though inconsistent) in officers' behavior who are equipped with BWCs (Ariel, 2016b), and the link between the perceived "war on cops", de-policing, and officers' changes in behavior while equipped with BWCs is worth exploring in a separate study.

Privacy. Another significant concern regarding BWC programs shared by police officers and citizens alike is privacy. Coudert, Butin, and Metayer (2015) argue "…its use is thus highly intrusive into the privacy of both citizens who see their encounters with the police documented, and police officers, who are being placed under (constant) monitoring during the performance of their tasks" (p. 754). Perhaps ahead of their time prior to the widespread implementation of BWC programs, Nuth (2008) predicted this concern when he asserted "as surveillance equipment becomes more sophisticated and available in many public spaces, concerns over individual privacy and freedom, as well as the legitimate use of surveillance data, are also emerging" (p. 444).

Nuth (2008) eerily foresaw the very privacy concerns expressed by citizens and advocacy groups years later in studies conducted on BWC programs. Because BWCs are affixed to the officer's uniform, they obviously go wherever the officer goes. This includes businesses, private residences, and medical facilities. This clearly brings up the potential for legal concerns including potential 4th Amendment and the Health Insurance Portability and Accountability (HIPAA) violations (Stanley, 2015). It could be argued

that due to the rapid roll-out of BWC programs, potential legal ramifications and implications were not considered in-depth.

Sousa, Choate, Rady, and Nuno (2014) posed a critical question: "…should officers wearing BWCs deactivate them when encountering victims in vulnerable situations, confidential informants, juveniles, or individuals in emotionally stressful situations or mental health crisis" (p. 367)? What about when dealing with "vulnerable populations like undocumented immigrants [and] homeless individuals…" and others (Mateescu, Rosenblat, & Boyd, 2016)? If the answer to these questions is yes, it is imperative to consider these scenarios encompass the vast majority of an officer's time while on duty.

The privacy concern is evident as the disparity in a national standard for BWC policy and laws continues to come into question. As more incidents occur involving BWCs this concern continues to grow and expand. Municipalities are looking to the courts to settle controversies surrounding BWC programs, specifically regarding privacy and the release of footage.

A tragic example of this is the highly publicized mass shooting that occurred in Las Vegas, NV on October 1st, 2017 (the 1 October shooting). The primary agency that responded to the shooting was the LVMPD. Many of the officers who responded to this incident had body-worn cameras. In the months after the shooting, the media petitioned to receive BWC footage of the incident (Crosby, 2018). LVMPD initially declined to release the footage citing privacy concerns for the victims and those that were adversely

affected by the shooting. The department also indicated the cost to produce the footage would be cumbersome (Crosby, 2018).

Members of the media contested the decision to not release footage under the Nevada Public Records Act (Crosby, 2018). Because of "the absence of clear data control policies [this resulted] in confusion, both for the police and the public, about who has access to see, share, and delete data produced from body worn cameras" (Joh, 2016. p. 133). Therefore, the judicial system was forced to intervene, and the court sided with the media ordering the footage to be released. A decision by the court was required in this incident because there is no clear law dictating privacy issues related to BWC footage (Crosby, 2018).

Observed Variables Regarding Changes in Officers' Behavior

Since BWCs are a recent technological phenomenon, there have been relatively few studies conducted on this emerging topic. As mentioned in a previous section of this chapter, the DOJ has provided incentives to researchers and agencies willing to embark on studies to investigate BWCs effect on variables pertaining to officers' behavior such as use of force, complaints received by the public (DOJ, 2017), and arrests. As a result, many of the researchers whose studies are highlighted in this section explored these variables.

Use-of force. It could be argued the groundbreaking study on BWCs was the "Rialto Experiment" conducted by Ariel et al. (2015). Farrar was the chief of the Rialto (CA) Police Department and spearheaded the study. The authors conducted the first

randomized control trial (RTC) conducted on a police department studying BWCs (Sutherland, Ariel, Farrar, & De Anda, 2017).

Ariel et al. (2015) investigated changes in officers' behavior who were equipped with BWCs. The behavior changes studied included use of force and complaints against officers received by citizens. The authors argued "… the study provides law enforcement agencies with a methodology that may substantially reduce force responses, as well as reducing the incidence of complaints" (Ariel et al., 2015, p. 525). This assertion was supported by a finding of a reduction in complaints by an average of 91.3 percent over the three years prior to BWC implementation. Slightly less impressive was the reduction in use of force. After BWC implementation at the Rialto Police Department, the instances of reported use of force declined by approximately 50% compared to the three years prior to deployment (Ariel et al., 2015, p. 525).

This landmark study was not without its critics. Brucato (2015) made compelling arguments regarding significant concerns pertaining to the parameters and facets of the "Rialto Experiment." The author took exception to the fact research was conducted in part by the chief of police of the department at the time (Farrar). Brucato (2015) argued Farrar took over the helm of the police department amid financial and corruption related controversies surrounding the agency. It was argued Farrar had a vested interest in manifesting improvements in the levels and frequency of force used by officers, as well as complaints received by the community they served.

From a law enforcement perspective, another concern regarding the study is a disclosure made by the researchers that they "normally defined use of force, both

unnecessary/excessive and reasonable, as a non-desirable response in police-public

encounters" (Ariel et al., 2015, p. 525). This perhaps exposes a lack of knowledge with

regards to the use of force continuum utilized by law enforcement agencies.

Based on the continuum, an officer's use of force can range from officer presence, to

verbal commands, handcuffing, all the way up to deadly force. According to the DOJ, an

officer directing a person to turn around and place their hands behind the back and then

placing handcuffs on them is considered a use of force. In contrast, if an officer gives the

same direction and the citizen either verbally or physically resists, a higher level of force

may likely be required by the officer to effectively place the citizen into custody. It is a

department level decision regarding what rises to the level of reportable use of force. In

this reviewed study, the authors defined use of force as any action taken by the officer

beyond compliance or basic control (Ariel et al., 2015). Presumably, basic control would

entail a compliant suspect being placed into handcuffs by an officer.

Not only are these levels of force commonly used by officers daily, but it is also

important to consider the amount of force is dictated by the suspects actions (DOJ, 2017).

It would be ideal if an officer never was required to use force during their shift.

Unfortunately, use of force is built into the framework of policing. Justified use of force

is not undesirable, it is necessary. This misclassification could lead to confusion with

interpretations of the results of the study. This is especially true for those currently

working in the field of law enforcement who are very familiar with the concept of force

because they have likely been required to use it on countless occasions, dictated by the actions of the suspects they have encountered.

In 2017, a follow-up study was conducted on the "Rialto Experiment" by Sutherland et al. In the study, researchers investigated if the original findings of reduction in use of force and citizen complaints continued or experienced fade-out. It was discovered that the decline in these behaviors remained consistent over the course of three years following the initial study (Sutherland et al., 2017). The researchers did disclose they were unsure of the reason for the consistency in the decline of the described behaviors but speculated it could be a result of citizens and officers being more circumspect regarding the presence of the equipment (Sutherland et al., 2017).

As a solo researcher, Ariel conducted a mixed-method study on BWCs in several large police departments. Admittedly, the Rialto Experiment was conducted at what could be classified as a middle to small sized agency and effected the limitations on the study's result (Ariel, 2017). Deviating from the results found in the Rialto Experiment and other BWCs studies conducted in partnership with Ariel, in this study the researcher found no discernable effect on use of force by officers who wore BWCs (Ariel, 2017). Ariel (2017) argued the finding may be because "the very definition [of use of force] can be subjective, memory prone, and generally unclear" (p. 757). However, subjectivity becomes less of a concern when force is dictated by department policy, state and federal law, and U.S. Supreme Court decision.

As mentioned in a previous section of Chapter 2, the LVMPD implemented a BWC program which was evaluated by Braga, Coldren Jr., Sousa, Rodriguez, and Alper

(2017). The researchers conducted a randomized controlled trial (RCT) and found a

reduction in reports of use of force and complaints against officers who were equipped

with BWCs. Initially, there were several logistic issues that researchers faced that

potentially compromised the number of participants that could participate in the RCT.

Available equipment space, officer attrition, and participant geographic location within

the LVMPD jurisdiction were some of the issues faced by researchers. These obstacles

were overcome by the researchers working in conjunction with LVMPD executive staff.

(Braga et al., 2017). In this study, researchers found complaints dropped by 16.5 percent

and there was an approximately 40 percent drop in incidents of use of force observed

with officers who wore BWCs compared to those that did not (Braga et al., 2017). The

researchers believe "the findings of this study suggest that BWCs have strong potential to

benefit police agencies and communities alike" (Braga et al., 2017, p. 58). As highlighted

earlier, the LVMPD policy has a great deal of discretion dictating activation and BWC

use. Discretion can greatly affect the outcome of studies as argued by Ariel et al. (2016b).

Perhaps unbeknownst to Ariel et al. (2016b), the researchers used facets of SLB

to study the effects of officer discretion on use of force. In the study, the authors

discovered "BWCs can reduce police use of force when [the] officers' discretion to turn

cameras on or off is minimized – in terms of both case types as well as individual

incidents" (Ariel et al., 2016b, p. 454). In contrast, the researchers found that when

officers had more flexibility in discretion, use of force increased. The authors efforts to

examine officer discretion as a variable were possibly in attempts to unravel the

"puzzling and disturbing" (p. 454) inconsistent results of prior studies conducted that evaluated the effects of BWCs on officers' use of force.

Unfortunately, there are many factors that influence an officer's discretion which may include on-scene dynamics, safety concerns, privacy issues, department policy and prevailing law pertaining to BWC activation and use which may muddy this evaluation process. The previously mentioned factor of lack of consistency in BWC policy from agency to agency also further complicates researchers' efforts to study the phenomenon (Taylor, 2016).

Citizen complaints. Another officer behavior considered is complaints received by citizens. A complaint is generated when an officer's behavior or actions are contrary to what the citizen expects and can range from improper behavior (rudeness/general discourteousness) to criminal. In the event the citizen's complaint is inaccurate, or even fallacious, BWC footage can be used to exonerate the officer (Katz et al., 2014). Drover and Ariel (2015) argue that "the theme of officer protection is a powerful one and of relevance for BWV, which can offer officers corroboration in instances of complaints or contested accounts" (p. 83).

Like use of force, research conducted on the variable of complaints has yielded mixed results. In an earlier study conducted on officers' perceptions, Jennings et al. (2014) observed 31 percent of officers believed BWCs would reduce complaints. Pelfry Jr. and Keener (2016) found contrasting results in a focus group of patrol officers who thought BWCs would aid in "refuting citizen complaints" (p. 501). In a more recent study conducted on Pittsburgh (PA) Police Department officers, Goetschel and Peha (2017)

surmised that officers who have experience using BWCs are more likely to have

favorable views of the equipment. The researchers also found that "officers who used the

cameras believed that BWCs can decrease citizen complaints" (Goetschel & Peha, 2017,

p. 719).

Researchers also investigated if BWCs statistically reduced complaints. Many

researchers observed a reduction in complaints when BWCs are introduced as a piece of

duty equipment for officers. The most optimistic result was observed by Ariel et al.

(2015) who found a 90 percent reduction in complaints filed compared to three years

prior to BWC implementation after conducting a randomized control trial. More modest

reductions were observed by other researchers. Katz et al. (2014) recorded a 23 percent

decrease in complaints made against officers with BWCs. In several subsequent studies,

researchers observed a decrease in overall complaints as well as complaints specifically

generated from use of force incidents (Ariel, 2017; Jennings et al., 2015).

It is important to note that some studies conducted did not differentiate between

complaints filed and sustained presenting a potential limitation in the findings (Ariel,

2017). In most police agencies, the disposition of citizen complaints may either be

exonerated or sustained. Typically, when an officer is cleared from a complaint it is

because the citizen filing the charges may have been misinformed, incorrect, or malicious

in their allegation. If a complaint is deemed sustained, the officer's actions reported by

the citizen were found to violate department policy, State, or Federal law. Therefore,

researchers distinguishing between the dichotomy of findings can be extremely critical in

interpreting the results of a study.

Arrests. Another variable studied by researchers is arrests. Arrests can be made due to a dispatched call for service or self-initiated officer activity. In most cases, officers can exercise discretion on whether to arrest, issue a citation, or warn an individual for a violation. Like use of force, researchers' findings have been inconsistent with regards to arrests. Early studies conducted on arrests made by officers equipped with BWCs immediately observed this inconsistent dichotomy. For example, Katz et al. (2014) observed arrests increased by 17 percent BWCs. During that same time frame, other researchers found that officers "conducted significantly fewer stop-and-frisks and arrests than officers who were not wearing the technology" (Ready & Young, 2015. P, 454). The same researchers observed that BWC wearing officers self-initiated field activities were higher than officers who were not wearing the equipment.

More recent studies on the variable of arrests made by officers with BWCs continue the trend of inconsistent findings. Braga et al. (2017) observed a moderate increase in arrests made and citations issued by officers wearing the equipment. However, McClure et al. (2017) found officers who wore BWCs made fewer arrests. The findings of decrease in arrests made by officers wearing BWCs was supported by Ariel (2017) who observed an 18 percent lower rate in officers with the equipment compared to their colleagues who did not have BWCs. To round out the recent studies investigating arrests as a variable, Hedberg et al. (2017) found that BWCs did not influence arrests made by officers. The researchers postulated BWCs do not change activities conducted by officers, just how they go about them.

Researchers have surmised the discordant findings may be a result of officer discretion (Ariel, 2017). This argument further supports the SLB framework when considering changes in the behavior of officers who wear BWCs. Another concern expressed regarding the findings is arrests varying by jurisdiction (Ariel, 2017). For example, officers in Las Vegas, NV likely would have more demand for time than their counterparts in the smaller jurisdiction of Mesquite, NV. This is due to the calls for service volume and crime rate being significantly higher in the larger metropolitan area of Las Vegas. Higher call volume and crime rates leave less time for officers to be taken out of the field for arrests; arguably requiring the officer to use their enforcement discretion to issue citations or warnings. It could be surmised that this could result in skewed arrest numbers for BWC officers depending on the jurisdiction. Also, some researchers only considered calls for service and did not differentiate between arrests made on self-initiated field activities. Officers are obligated to respond to calls for service, but contrary to popular belief, they are not required to conduct self-initiated field activities in the form of an arrest or ticket quota.

Perceptions

Based on the results of the limited quantitative studies conducted on officer behavior changes and BWCs, it is plausible that the results of the even fewer qualitative studies conducted on the phenomenon vary greatly. This section specifically examines qualitative results pertaining to perceptions of officers and citizens regarding BWC influence on changes in both party's behavior.

Officer perceptions. Jennings et al. (2015) conducted a survey of Orlando (FL) Police Department officers who were equipped with BWCs. The researchers found that "30-40% of officers were in agreement that BWCs had impacted citizen behavior, de-escalated confrontations with citizens and themselves in the community, and had impacted behavior of their fellow officers" (Jennings et al., 2015, p. 485). They also observed one in four officers participating in the survey believed their behaviors changed in interactions with the public when they were equipped with BWCs.

They also argued that the described results "all point towards the effectiveness of BWCs for improving police-community relations and reducing a host of tragic events that can result from negative police-citizen encounters" (p. 485). However, this assertion may require more in-depth study. As recently as 2018, two Sacramento (CA) police officers equipped with BWCs shot and killed an unarmed man in the backyard of a family member's house (Nestel, 2018). Even though officers had BWCs activated at the time of the incident, they still shot an unarmed man sparking massive days-long protests led by members of the Black Lives Matter movement (Nestel, 2018). This reinforces the argument that there may not be a "silver bullet" to improve community relations by employing BWCS (McClure et al. 2017).

In another recent study on officer perceptions, Gaub et al. (2016) surveyed officers from three police departments of varying sizes located in the cities of Phoenix (AZ), Tempe (AZ), and Spokane (WA). The authors investigated officers' perceptions of the effects of BWCs prior to deployment and post-deployment. They found that officers from different agencies differed greatly on their thoughts and feelings regarding the

equipment. Even the contiguous agencies of Tempe and Phoenix presented a stark

dichotomy of responses. For example, one of the more dramatic differences found in pre-

deployment surveys pertained to self-initiated field activities (citizen contacts).

Researchers discovered approximately 65 percent of respondents from the Phoenix Police

Department believed BWCs would make officers more "passive" resulting in less citizen

contacts compared to roughly 24 percent of Tempe officers (Gaub et al., 2016, p. 286).

Gaub et al. (2016) also discovered an even more contrasting result in that less

than 9 percent of Phoenix officers believed BWCs should be adopted department-wide

compared to just over 66 percent of Tempe officers. Surveyed Spokane officers'

responses were found to be in-between the two Arizona agencies officers, and responses

were relatively consistent from agency to agency in both the pre and post deployment

surveys (Gaub et al., 2016). None of the reviewed qualitative studies investigated

officers' perceptions on their behavior changes and why they occur while equipped with

BWCs.

Citizen perceptions. Several studies also investigated citizens' perceptions of

BWC programs. De Angelis and Wolf (2016) surmised that their "… findings suggest

that when the public believes that reasonable efforts are being taken to control the

conduct of officers, it significantly influences their evaluation of the police department"

(p. 246). This assertion was supported by McClure et al. (2017) who conducted a survey

of citizens who interacted with officers equipped with BWCs. The researchers found that

members of the public generally did not remember if the officer they interacted with was

equipped with a BWC, often noting the application of procedural justice through

providing general customer service was more important (McClure et al. 2017). However, respondents did have a relatively positive view of officers being outfitted with BWCs and could be interpreted as a facet of improving police, community relations (McClure et al. 2017). Other factors such as an officer providing customer service, exhibiting professionalism, being polite, showing empathy, and acting with fairness were arguably more salient than an officer being equipped with BWCs (McClure et al. 2017).

Summary of What is Known and Not Known Regarding Body Worn Cameras

What is known. What is known regarding the phenomenon of BWCs is there are changes in officers' behavior because of the equipment. Specifically, aspects of officer behavior changes leading to the variables studied such as use of force, complaints, and field activities such as making arrests (Ariel, 2017; Ariel et al., 2016b; Ariel et al., 2015; Jennings, Jennings Fridell, & Lynch, 2014; Lynch & Fridell, 2015;). Privacy is also a highly debated facet of BWC use. Officer concerns over BWC programs is also a notable consideration. Since results from limited current studies vary wildly, additional study is required to further narrow these findings. Qualitative study is needed to understand from an officer's perspective why these changes occur and what effects they may have on officer and citizen safety, community relations, and the delivery of police services.

Use of force. Researchers have discovered both reductions and no change in use of force in officers who are equipped with BWCs. Early studies revealed a significant reduction in use of force (Ariel et al., 2015). More recent results of studies conducted by some of the same researchers suggested no discernable change in use of force (Ariel, 2017, Ariel et al., 2016a). In contrast, some researchers argued use of force may only

decrease under certain circumstances such as limiting or removing officer discretion as to when they are required to activate cameras (Ariel et al., 2016b).

Complaints. Contrary to fluctuating findings on use-of force, results pertaining to citizen complaints are observed by researchers as being more consistent. Researchers have universally found there are reductions in complaints against officers who are equipped with BWCs. The only exception to the findings is to what extent complaints were reduced. Ariel et al. (2015) observed complaints reduced by 90%. Whereas more conservative results were noted by other researchers. Katz et al. (2014) only observed a 23 percent reduction in complaints with officers who wore the equipment.

Arrests. Like use of force, researchers have discovered disproportionate findings with arrests. Some researchers recorded an increase in arrests by officers who are equipped with BWCs (Braga et al., 2017; Katz et al., 2014). The highest mark was observed by Katz et al. (2014) who noted a 17 percent increase in arrests. Other researchers observed a decrease in arrests by officers equipped with BWCs (Ariel, 2017; Ready & Young, 2015). Ariel (2017) discovered the most significant reduction in arrests at 18 percent. Other researchers found there was no influence by BWCs on arrests (Hedberg et al., 2017).

Privacy. Several concerns over privacy were raised by researchers. Most privacy disquiets were regarding members of the public. Potential Fourth Amendment and HIPAA violations because of BWC usage was argued by Stanley (2015). Other researchers expressed concern over the recording of vulnerable individuals such as: victims, children, those in crisis (Sousa et al., 2014), illegal aliens, and the unsheltered

(Rosenblat & Boyd, 2016). Recording at active crime scenes was a concept postulated by this researcher that could potentially poise privacy concerns. Courdert, Butin and Metayer (2015) pointed out privacy concerns not only pertain to citizens, but officers who wear them. Being constantly recorded while providing police services may have privacy consequences for officers (Courdert, et al., 2015).

Officer concerns. Many of the officer concerns pertain to safety. One of the most significant officer safety concerns is an increase in assaults committed against officers who are equipped with BWCs (Ariel et al., 2016b). Similar trends were observed with citizens resisting officers (Katz et al., 2014). Nix, Wolfe, & Campbell (2017) argued citizens are becoming increasingly less compliant with officers and more likely to resist or assault them. These findings were supported qualitatively with officers generally not believing BWCs would improve officer safety. Officers also expressed concern over public release of BWC footage. This is due to fear that citizens would have direct access to view and possibly prepare for police tactics. A non-safety related concern by officers is the use of footage by supervisors to examine for discipline violations (Drover & Ariel, 2015; Goetschel & Peha, 2017; Headly, Guerette, & Shariati, 2017; Katz et al., 2014; Pelfry Jr. & Keener, 2016; Sousa, Rodriguez, & Alper, 2017, Stanley, 2015).

What is not known. We currently do not understand why behavior changes occur in officers who are equipped with BWCs. To better understand these changes, the perspectives and perceptions of officers who are equipped with BWCs must be researched.

Summary and Conclusion

In Chapter 2, I discussed the literature search strategy. Encompassed in the search strategy was a list of research sources, key search terms, and a description of the iterative search process. Also, the theoretical framework was highlighted and literature-based analysis of previous studies utilizing SLBT were outlined. The relationship of SLBT to the current study was described in detail. Additionally, a literature review pertaining to integral variables and concepts pertaining to BWCs was examined and included: motivations for BWC implementation, evolution of BWCs, a description of the implementation process, policy, and training pertaining to BWCs, officer and citizen concerns regarding BWC programs, observed changes in behavior in officers who are equipped with BWCs, and officer and citizen perceptions of BWCs.

Paramount Themes in the Literature

One of the major themes discovered regarding BWCs parallels the gap in the literature. BWC programs have been in use for less than a decade. The recency is reflected in the lack of current studies on the topic. BWC effects on officers' behavior and law enforcement's relationship with the community remains an enigma (Gaub et al., 2016; Jennings et al., 2014; McClure et al., 2017; Pelfrey Jr. & Keener, 2016; Smykla et al., 2017; Sousa, Couldren Jr., Rodriguez, & Braga). The few current studies available expose a paradox of findings and continued study may be needed. This is supported by McClure et al. (2017) who argued that "as cameras continue to proliferate, it will become even more important to understand the specific effects and contexts of how BWCs are used if departments – and the community at large – are to gain the full benefits of this

technology" (p. 9). As Ariel (2016b), asserted, the law enforcement community is embarking on a worldwide uncontrolled experiment of BWC programs.

Another significant theme is officers' use of discretion as it relates to changes in behavior while equipped with BWCs. As the research continues to develop, officer discretion clearly plays a significant role in evaluating BWC officer behavior variables (Drover & Ariel, 2015; Gaub et al. 2016; Sousa, et al., 2016; Ariel et al. 2016b; Ariel, 2015Joh, 2016; Lippert & Newell, 2016; McClure et al., 2017). Officers use of discretion can range from deciding whether to conduct self-initiated field activities, issue a warning, citation, or make a physical arrest, and under what circumstances to activate the BWC. All of these discretionary behaviors directly impact the studied variables described in this chapter.

Gaps in the Literature Filled through this Study

As discussed in this chapter, the DOJ has numerous programs through the Bureau of Justice Assistance offering financial assistance and support to police agencies willing to participate with partnering researchers to study facets of BWCs. (Bureau of Justice Assistance, 2018). Notwithstanding efforts being made, the need for additional study on this phenomenon is great. Katz, et al. (2014) argue that "despite the exponential growth in the number of agencies purchasing and deploying BWC, there is still little empirical evidence to support the claims of their supporters or understand their unintended consequences" (p. 5). This is abetted by the fact that there are approximately 12 existing and 30 current studies being conducted on BWCs (Crow Snyder, Crichlow & Smykla, 2017).

Further exacerbating the need for study is "no published studies incorporate qualitative data, which lends to important context and depth, the interpretation of officer survey data" (Pelfry Jr. & Kenner, 2016, P 491). This study attempts to fill the gap in the literature related to perceptions of officers concerning BWCs, and specifically the even more narrowed absence of a qualitative study. Chapter 3 will elaborate the study's generic qualitative methodology, the selection process of the participants to include numbers, data collection method, and the role of the researcher.

Chapter 3: Research Method

Introduction

The purpose of this qualitative study was to explore, investigate, and document police officers' perceptions of and reasons for changes in behavior while wearing BWCs. BWC programs have been implemented in response to demands for transparency by members of the public, media, and political organizations (Ariel et al. 2016a; DOJ, 2018; Drover & Ariel, 2015; Gaub et al., 2017; Pelfry Jr. & Keener, 2016). In this study, I described the perceptions of the participants regarding changes in behavior while being video recorded on duty.

In Chapter 3, I explain the research design and rational for the study. This includes describing central concepts, research tradition and approach, and rationale. Also, I highlight the role of the researcher. Included in this section is a description of personal and professional relationships, researcher bias, and ethical issues. I also discuss the methodology of the study. This applies to facets of the study including participant selection, instrumentation, data collection procedures, and data analysis. Finally, I describe issues of trustworthiness including credibility, transferability, dependability, confirmability, and ethical procedures. I also discuss important ethical concerns such as treatment of the participants and data.

Research Design and Rationale

The research question for this qualitative study was the following:

RQ: What are Police officers' perceptions regarding changes in their behavior while being video recorded on duty?

Central Concepts

The central concept of this study was changes in officer behavior while using BWC equipment. Lipsky's (2010) SLB provided a theoretical framework that included consideration of officers' use of discretion while using BWCs and was expanded in this study to better understand the phenomenon of changes in officers' behavior.

The theoretical framework was built around the concept that police officers wield a great deal of discretion while carrying out their duties (Lipsky, 2010). Discretion directly impacts officers' decision-making and behavior (Lipsky, 2010). As noted, Ariel et al. (2016b) first made the connection between discretion and its effect on studied variables pertaining to BWC usage such as changes in use of force, arrests, and complaints received as well as when officers activate their BWCs. This discretion was further explored via examination of the LVMPD policy. It was discovered in the policy that discretion was built-in to the verbiage dictating when an officer should or is required to activate their BWC, which is arguably subjective.

Research Tradition and Approach

The research tradition for this study was generic qualitative. I conducted semi structured interviews with participants to illicit perceptions of why changes in behavior occur in officers who wear BWCs. More specifically, I used the responsive interviewing model as proposed by Rubin and Rubin (2015).

Rationale

Generic qualitative. Law enforcement is a convoluted field where variables are difficult to measure, in part due to officer discretion (Rubin & Rubin, 2015) as explained

via the SLBT. Qualitative inquiry was invaluable for studying changes in officers'

behavior when equipped with BWCs because naturalists consider a range of factors that

have melded together over time to cause the current phenomenon being experienced

(Rubin & Rubin, 2015).

The specific branch of the inquiry used for this study was generic qualitative.

Patton (2015) argued generic qualitative inquiry is effective through "skillfully asking

open-ended questions of people and observing matters of interest in real-world settings to

solve problems, improve programs, or develop policies" (p. 154). Generic qualitative

inquiry is essential to employ when the phenomenon being studied is chiefly invisible

(Rubin & Rubin, 2015). For purposes of this study, officers' perceptions of behavior

changes when equipped with BWCs is imperceptible, making generic qualitative inquiry

a logical choice. Merriam (2009) further argued that generic qualitative studies

investigate "(1) how people interpret their experiences, (2) how they construct their

worlds, and (3) what meaning they attribute to their experiences" (p. 23). Because law

enforcement is such a complicated field, comprising thousands of individuals from

varying backgrounds, cultures, and races who all have unique professional experiences

and training, generic qualitative inquiry could be used to answer the three questions

posed by Merriam (2009) in relationship to the phenomenon in the study.

It is also important to be cognizant of the fact there are not just two or three

variables in law enforcement that can be studied to come to an accurate conclusion

regarding changes in behavior in officers who are equipped with BWCs (Rubin & Rubin,

2015). As discussed in Chapter 2, quantitative results on the phenomenon have varied

dramatically, which contradicts the positivist paradigm of reaching the same conclusion as previous researchers. Rudestam and Newton (2015) further argued that the positivist approach of randomly selecting participants would also be ineffective because it would preclude the researcher from choosing those who may potentially make a significant contribution to the study based on their background and experience with BWCs.

The final rationale to justify generic qualitative inquiry was argued by Patton (2015), who asserted that the methodology is effective for pinpointing unintended consequences and potential side effects of a program. In this study, qualitative inquiry assisted in determining if the changes in behavior observed in previous quantitative research present any unintended consequences. An example of an unintended consequence was discovered by Ariel et al. (2016b) who found an increase in assaults on officers equipped with BWCs. Qualitative inquiry has the potential to determine if officers believe this phenomenon is a root cause of this unintended side effect.

Responsive interviewing model. Using semi structured interviews provided the opportunity to see the world from a perspective other than my own regarding officers' perceptions of changes in behavior when equipped with BWCs. The responsive interviewing model developed by Rubin and Rubin (2015) was conceived to complement and work in conjunction with other qualitative research tools. Because the rationale was such a critical component of this study, it is imperative to specifically define the responsive interview model's parameters. The model is defined by four characteristics identified by Rubin & Rubin (2015:

1. Responsive interviewing emphasizes searching for context and richness while accepting the complexity and ambiguity of real life.

2. The personalities of both interviewer and conversational partner impact the questioning. Because interviewers contribute actively to the conversation, they need to be aware of how their own opinions, experiences, cultural definitions and even prejudices influence what they ask and what they understand, and they should use caution about how they react emotionally to challenging, threatening, or disturbing material.

3. Interviewing is an exchange that occurs within a meaningful (albeit sometimes temporary) relationship between interviewer and interviewee. The interviewee is treated not as a research subject but as a partner in the research whose ideas impact subsequent questioning. Interviewing is usually conducted in a supportive, nonconfrontational, and gentle manner. This personal relationship carries obligations for reciprocity. The interviewer is imposing on the time, energy, emotion, and creativity of the conversational partner and owes loyalty and protection in return.

4. In responsive interviewing, the design remains flexible from the first formulation of the research topic to the last bit of analysis of the data. In response to what you hear, you can change the question you ask, the people you talk to, the research sites or conditions and the concepts and themes you are working with. The issues that you explore in depth evolve as you find more evidence for one or another of your themes or sets of themes.

(p. 38).

Responsive interviewing allowed for a flexible interview that complemented the semi structured inquiry approach because it was amenable to further discussion based on responses provided by participants. This is critical because each person views a phenomenon differently based on their prior experience, training, knowledge, and expectations (Rubin & Rubin, 2015). Each officer who participated in the study had a different background and experience than their fellow colleagues.

The model also fosters a non-adversarial and encouraging environment for the participants. Richness and depth of participant responses were elicited and were balanced by the fact I have extensive, living knowledge of their world. Therefore, participants responded based on the understanding that superficial answers would not benefit research efforts (see Rubin and Rubin, 2015). I was disciplined when using my experience to interpret the data and took special care not to interject subjective thought processes. Clarifying questions ensured profundity of the responses offered by participants. The model also promotes future contact with participants with the understanding of clarifying answers or confirming themes to ensure accuracy (Rubin & Rubin, 2015). I requested and received permission from all five participants to correspond via e-mail to verify the accuracy of my transcription and note taking of the interviews. I also solicited feedback for additional thoughts regarding the research topic that may have arisen after the interview.

A final facet of responsive interviewing that made the method conducive for this study is the relationship between the interviewer and the participant. Responsive

interviewing embraces rapport-building versus detachment with the participant in the study (Rubin & Rubin, 2015). From experience, positive relationships and strong bonds between officers is a major characteristic of the field of law enforcement. Responsive interviewing fosters a relationship based on trust between the interviewer and the participant (Rubin & Rubin, 2015). My background in law enforcement was critical in establishing a baseline of trust with the participant. The model emphasizes that the participants are more like partners than subjects, which parallels the field of law enforcement in which close working relationships are common. The researcher works collaboratively with the participant to examine components of the research problem (Rubin & Rubin, 2015).

Role of the Researcher

I have served and protected communities in two different states spanning over 20 years as a certified police officer. Throughout my career, I have worked on both traditional and nontraditional police agencies. I currently maintain an advanced Police Officers Standards and Training certificate through the State of Nevada. I am also an intermediate instructor certified through the State of Nevada and have trained hundreds of officers from various agencies in the field and in classroom settings. I have experience as a use of force and defensive tactics instructor, which are heavily studied areas with regards to BWCs and officers' behaviors as detailed in Chapter 2. In addition, my agency was one of the first in the state to employ BWCs and was the initial school-based police agency to initiate a program.

Due to my background, coupled with the fact my agency is county based, I have interacted with and developed relationships with officers throughout Southern Nevada. This history will create an environment conducive for building effective rapport with participants from the Southwestern United States. This rapport appeared to establish trust and an open line of communication with participants. It also added credence to interpretations of data as reported in Chapter 2 and findings of this study that will be described in Chapter 4 of this dissertation.

Finally, though I do not currently have a background in qualitative inquiry, my extensive experience in conducting in-depth interviews of victims and witnesses, and interrogations of suspects will support the quality of interview conducted in this study.

Personal and Professional Relationships

Based on my background as a police officer and trainer, I have built relationships with officers from multiple agencies throughout Southern Nevada and the Southwestern United States. As a certified instructor, the potential exists that I have taught in-service to the participants in the past. However, in this study I did not interview officers I have been assigned to work with on a long-term basis or field trained. I am aware of several barriers that may have presented themselves in this study. Due to the current climate in law enforcement and perceptions of police corruption maintained by some in the public and media, participants may have been hesitant to fully answer questions. I believe my experience as a police officer, reinforcing anonymity, and conveying the potential for positive social change because of the study encouraged participants to answer openly in the data collection phase.

Researcher Bias

As a current police officer who utilizes BWCs, an argument could be made for perspective bias. Due to my law enforcement background, experience with BWC equipment in the field and my history as a department trainer in the areas of use of force and defensive tactics, there are limited credibility concerns as a researcher. However, because of my background potential bias could come into question. My acknowledgement and openness regarding this concern should quell this threat. The responsive interviewing model recognizes the potential for this to occur and encourages the researcher to exercise caution when sharing experience and not to lead the participant (Rubin & Rubin, 2015).

However, this experience, coupled with the fact I have acted in the capacity of use of force and defensive tactics instructor does add credibility to the interpretation of the data. Achieving saturation of the data through triangulation will also alleviate concerns over bias (Patton, 2015). I serve to gain nothing through perspective bias. My goal is to enhance citizen and officer safety and improve delivery of police services to the community the officers serve and protect.

Objectivity is critical to maintain during inquiry. Though I do have a background as a police officer who is equipped with BWCs, each officer's lived experience is likely very different. My experience can serve as a baseline to understand the varying perspectives and multiple interpretations of the phenomenon of changes in officers' behavior when utilizing BWCs (Rubin & Rubin, 2015). Because officers come from different backgrounds and have varying levels of experience and training, their

perspectives lead to unique points of view regarding the phenomenon. The previously discussed responsive interviewing model facilitated adaptation in interview questions that elicited new and fresh information regarding the phenomenon (Rubin & Rubin, 2015). The responsive interview model afforded the researcher flexibility to shift questions based on responses from the participants.

For example, it is possible a participant may have offered a response which concept is contrary to what I believe or have experienced. The responsive interview model allows for the researcher to adjust the interview questions focusing on the participant's perspective in attempts to illicit why they have experienced the phenomenon the way they have which may be directly influenced by their background and experience. It is imperative to focus on the phenomenon through the lens of the participant, based on their unique life and professional experience in efforts to alleviate any concern over researcher bias.

Ethical Issues

Ethical issues in this study pertain to the anonymity of participants. Though police officers are public servants, they are entitled to a personal life as well as having their identities protected. In this study, participants will be referred to in the third person and not their actual name. Participants were described as participant 1 and participant 2 etc. Establishing the participants experience for credibility purposes is imperative. However, in the "tight nit" law enforcement community, it is possible other officers could determine a participant's identity based on the length of service and positions they have held. Therefore, only a general description of their service time and positions held were

described. The identity protection was implemented to create an environment where participants feel they can answer freely and without concern over public and media scrutiny or facing potential repercussion by their current agency.

Methodology

The geographical area for this study is the Southwestern United States. The size of the region ensured anonymity of participants. Participants ranged from traditional agencies such as municipal police officers, sheriff deputies, highway patrol troopers/state police, to non-traditional agency officers (park police, university and school-based police, etc.).

Participant Selection Logic

Participants were solicited via the snowball recruitment method (Patton, 2015). Personal contacts in the field of law enforcement made recommendations on participants based on time of service, training and experience. The participants were provided a description of the study and outline the potential benefits including healthier community relations, improved citizen and officer safety, improved delivery of police services, enhanced training on BWC equipment, and refining of department policy and implementation of the program. Exclusionary factors are extremely important to identify prior to selecting participants. Purposeful sampling was conducted to ensure only officers who have worked in the field for a minimum of ten years prior to their agency implementing a BWC program were solicited. Purposeful sampling ensured participants were properly vetted based on their experience and the data collected from them was valuable to the study (Patton, 2015). This criterion was based on the fact officers with a

significant law enforcement background can describe their experience prior to being

equipped with BWCs and how the program effected their behavior as well as the

behaviors of their fellow colleagues. Officers with less than ten years' experience have

the potential of being equipped with BWCs since they began their law enforcement

careers.

The aim of the study was to conduct responsive interviewing on five participants.

Determining an effective sample size in qualitative inquiry can be arduous because there

are no specific guidelines (Patton, 2015). It is a subjective process that must be

considered by the individual researcher (Patton, 2015). Because there is no universal

standard, the number selected was a result of a desire to obtain in-depth and elaborate

responses from participants (Patton, 2015). However, I reserved the option of

interviewing more participants if new themes continue to develop. After receiving

Institutional Review Board (IRB) approval, the participants were recruited as described

previously utilizing the snowball recruitment method. Once potential participants were

recommended to me, I reached out to them via personal email with the attachments of the

invitation letter and consent form. After responses were received from interested

participants, a list of subjects was be generated. The selection process was not random.

Rather, five candidates were vetted based on their prior service (before BWC

implementation), training, and experience. This selection process was in efforts to solicit

contextual answers from participants. The remaining candidates were placed on a reserve

list in the event one of the selected participants was unable to fulfill their commitment or

additional participants were required on a discretionary basis in attempts to achieve

saturation. A consent form was be provided to the selected participants to review, sign, and date.

Instrumentation

As the researcher, I am considered the instrumentation due to the qualitative nature of inquiry, (Patton, 2015; Rudestam & Newton, 2015). The literature review guided the responsive interviewing (discussed in Chapter 3) conducted with the participants. Because law enforcement is a complicated and multifaceted profession, responsive interviewing allowed for flexibility during the interview process (Rubin & Rubin, 2016). Each officer interviewed had variations in their background and experience. Flexibility was critical component of the interview, allowing me to adjust the line of questioning based on participant's responses (Rubin & Rubin, 2016). Because of my experience as a veteran police officer who has significant experience with BWCs in the field, I was able to actively engage with the participant and was placed in a position to build rapport with them with the goal of eliciting comprehensive and rich responses (Rubin & Rubin, 2016).

Data Collection Procedures

Several recording platforms were reviewed to determine which one will be the most reliable to effectively and efficiently capture the data. Based on the sensitivity surrounding the protection of participant identity, video recording was not conducted. Though the video data would be confidential, the presence of a video camera may cause the participant to feel uncomfortable, potentially making them less likely to provide detailed answers. Therefore, interviews will be recorded via audio platforms only. Due to

the fact cellular phones can be compromised, utilizing this device as an audio recording platform was not considered. Once a desired a platform was selected, it was tested in several locations in settings similar to where the interviews will take place to ensure it is effective in capturing data. Any necessary adjustments were made prior to the interviews to ensure the quality of the recording. In addition to the audio recording, handwritten notes were taken in a journal notebook as a data backup record.

Utilizing a set number of desired interview locations, appointments were made with participants. For privacy concerns, an attempt was made to limit the interview locations to private residences or secluded conference rooms in a public building such as a library. If the interview was to take place at the described public location, the room would be reserved well in advance. If space was not reservable, I would arrive at the designated interview location several hours prior to occupy the space and prepare the room. The interviews were no longer than three hours in duration. One of the participants wished to meet for the interview at their private residence and the remainder chose to be interviewed in their office.

Following the responsive interviewing model described by Rubin and Rubin (2016), I began the interview by establishing a rapport with the participant. I briefly shared my background in law enforcement and training. I did not include any personal feelings regarding BWC equipment to avoid potentially contaminating participant's' responses. There were several questions predetermined in a semi-structured method. Utilizing my experience as a foundation, I actively altered the questions and the direction of the interview based on the participant's unique experience with BWCs (Rubin &

Rubin, 2016). As noted, if the participant was comfortable with exchanging emails, I

followed up with an electronic correspondence regarding any clarification needed with

the data collected. Email was likely was the most effective method of follow-up due to

officers' shift work and personal schedules.

Data Analysis

The data analyzed was the spoken response of the participants as recorded on the

selected audio device. Initially, it was proposed the audio will be sent to a certified

transcriber in the Las Vegas Valley to ensure accuracy of the data recorded. After

reflecting on this further, I determined it would not be appropriate based on the sensitive

nature of the responses provided by participants which may include names and previous

cases investigated. Out of an abundance of caution for the privacy of the participants,

data was reviewed and analyzed by hand only. Themes were noted and grouped based on

their significance (Patton, 2015). Themes and patterns were then carefully considered and

interpreted based on the literature review and my experience (as discussed earlier).

<div align="center">

Issues of Trustworthiness

</div>

Both the arenas of law enforcement and academia gauge performance and

reliability based on the importance of trustworthiness. In both fields, the steps necessary

to ensure trustworthiness parallel. Patton (2015) argues one of the most important ways to

establish trustworthiness in research is through rapport building with participants and

time spent interviewing them. These actions increase the likelihood the participant will be

candid and detailed with their responses, providing rich and vivid descriptions of the

phenomenon being studied (Patton, 2015). This process is like police officers gaining the

trust of the citizens they serve. Officers must build a rapport with victims, witnesses, and even suspects to elicit the most factual and accurate account of an incident.

Other ways Patton (2012) suggests establishing trustworthiness is through balance, independence, and neutrality of the researcher. This can be accomplished through acknowledgment and constant self-reflection of perspective bias. However, the time-tested standard for safeguarding trustworthiness was proposed by Lincoln and Guba (1986). The authors argued the importance of researchers adhering to a several-pronged test to ensure trustworthiness of the data is established including credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1986).

Credibility

As the instrument of the research, I gathered the data from the participants. Any potential bias was suppressed due to the accurate transcription and documentation of the in-depth interviews of the participants (Patton, 2015). All the participants selected have been vetted based on their law enforcement field experience prior to BWC program implementation, as well as after the equipment was issued. Noting their background further establishes the participant's credibility (Patton, 2105). The participant's background allowed for an accurate and vivid description of changes in their behavior. Despite my background as a police officer who has utilized BWC equipment, the reporting of the data directly reflected the participant's perceptions of the phenomenon, and not my own.

Credibility was also be established through the amount of time spent interviewing the participant (Patton, 2015). Due to the qualitive nature of the inquiry, in-depth

interviews not only presented a vivid and rich description of the phenomenon, but it also

elicited detailed, individual perspectives of changes in behavior when equipped with

BWCs. Triangulation is another important facet of establishing credibility. Multiple

participants revealing communal themes cement reliability (Rudestam & Newton, 2015).

Reflexivity is another critical component in establishing credibility. Reflecting on

my knowledge and experience as a police officer who utilizes BWC equipment, and how

that history may impact the interpretation is essential (Patton, 2015). Another argument

about silencing the concern over researcher bias was made by Holliday (2002) who

asserted "the presence of the researcher in the research setting is unavoidable and must be

treated as a resource" (p. 163). Reflexivity ultimately provided a way of addressing

concerns surfacing from the concept that much of what the researcher envisions is a

direct outcome of their existence in the study (Holliday, 2002).

Member-checking is another element that was considered to ensure credibility

was established. This component was attempted after the interviews were completed.

Rudestam and Newton (2015) argue member checks are a way of clarifying

interpretations of the data by the researcher through confirmation by participants. This

enabled the researcher to ensure the findings are accurate and credible. It is critical to be

circumspect of the possibility these efforts could place the participant in a position of a

"coresearcher" (Rudestam & Newton, 2015. p. 134). Member checks are contingent upon

the participants being willing to provide contact information so that follow-ups can be

made. Peer de-briefing is another possibility. I have extensive contacts with colleagues in

the field of law enforcement, ranging from line officers to executive staff. I can reach out

to them to review the data and findings to "play devil's advocate" (Rudestam & Newton, 2015. p. 134) to ensure credibility is maintained. The data will not be altered because of the peer-debriefing. However, different interpretations of the data can be considered from perspectives in law enforcement different from my own.

Transferability

Concerns pertaining to transferability involve the potential for participants to hesitate providing full and complete descriptions of the phenomenon being study. This potentially could be caused by the current climate of public scrutiny of law enforcement officials. In addition, there may have been concern by the participant regarding how members of their agency, such as colleagues, supervisors, or internal affairs, may view responses. These concerns were quelled with guarantees of anonymity.

Also, threats to transferability could include participants having limited background in the field of law enforcement or not having experience with BWCs. This threat was silenced through snowball recruitment and purposeful sampling (Patton, 2015). Criteria set forth during snowball recruitment addressed these issues by only soliciting officers who have worked in the field of law enforcement for over ten years, have experience prior to BWC programs being implemented, and who currently are equipped with BWC equipment. This concern was also quelled via the vetting process when selecting participants as described previously. The participants selected were senior officers who have experience in law enforcement with and without the equipment.

Dependability

Concerns over dependability were addressed in several ways. In addition to the Responsive Interviewing method which will be employed, a list of questions used as a general guideline were submitted. As discussed previously, The Responsive Interview Model specifically calls for flexibility in the data collection process which may fluctuate based on the participants experience with the phenomenon. However, the questions served as a general guideline to the interview. Ensuring consistency with the interview protocol supported the dependability of the data. As noted, an audio recording was made of each interview safeguarding the precision of the data. It was initially suggested in my proposal this threat would further be alleviated by utilizing an outside certified firm that would transcribe the audio data taken during each interview. However, several participants discussed case specific examples that should not be released to the general public. I did not feel comfortable utilizing an outside company to transcribe the data which has the potential to place the participant at risk of being discovered.

Confirmability

Confirmability was addressed in several ways. Purposeful sampling solicited veteran police officers who currently are equipped with BWCs, and who have experience in the field prior to program implementation (Patton, 2015). Because the participant recruitment process is going to be conducted via snowball recruitment methods, only active officers were considered. Participants were made aware via personal emails from snowball recruitment contacts of my status as not only a researcher, but a current police officer. With this knowledge, participants appeared to be more open to inquiries. From

this commonality, a rapport was created which will aided in the interview process. Due to my background, there was a high likelihood of participant responses being rich and elaborate because of the trust established between the researcher and participant.

In addition to my background assisting in the establishment of credibility with the participants, it also conveyed to them I have a sincere and vested interest in affecting positive social change in the field of law enforcement. The participants were made aware of the stated goals of improving relationships with the community, officer and citizen safety, and delivery of police services. Due to my law enforcement and training experience, coupled with connection as an officer who utilizes BWC equipment, I was in a position to elicit deep and rich responses from the participants. Because of my background, potential canned responses from participants would be recognized and addressed through asking clarifying questions (Rubin & Rubin, 2016).

Ethical Procedures

IRB approval for this dissertation was granted after submission (reference # 02-04-19-0499384). Consent agreements for each participant were signed and presented during the data collection process. It was reiterated to the participants their information will remain completely anonymous. Special attention was placed on ensuring Walden University IRB and American Psychological Association guidelines were strictly adhered to.

As an additional measure to ensure anonymity, participants' years of service and positions held were generically described to establish credibility only. Also, a correlation was not made between the participants' training and experience and the analysis of the

data described in Chapter 4. Since law enforcement is such a close community, the potential exists for a participant's identity to be determined based on exact years of service and a specific description of a participants training and experience (to include positions held). Taking these measures ensured there would be no way to determine their identity or know how individual participants responded to questions.

Treatment of the Participants. The participants were chosen based on their background as current police officers. Other criteria included experience as a police officer with and without BWC equipment. This criterion was critical because officers offered a thick and rich response pertaining to changes in behavior after the equipment was issued. My described experience seemingly kept the dropout rate minimal due to the established rapport with participants. As set forth through the IRB approval and consent process, participants were advised in writing and verbally during the interview that their identities and responses will be confidential.

Treatment of the data. The data collected from participants was secured on my personal laptop computer which is password protected. The data was further backed up on a thumb drive style memory stick. Both the laptop and thumb drive where on my person or secure at my residence at all times. I currently have the sole responsibility of protecting access to the data collected. I am the only one who has access to the data. Data collected will be retained for five years. Both the thumb drive and my handwritten transcription and notes will be stored in a secured safe located in my residence. Upon the completion of the five years, the data will be destroyed per University regulations.

Summary

During this chapter, the research design and rationale for the study was explained which included: describing central concepts, research tradition and approach, and rationale. Also, the role of the researcher was highlighted. Included in this section was a description of personal and professional relationships, researcher bias, and ethical issues. The methodology of the study was also discussed including facets of the study such as participant selection, instrumentation, data collection procedures, and data analysis. Finally, issues of trustworthiness were described. Factors such as credibility, transferability, dependability, confirmability and ethical procedures were considered. Important ethical concerns such as treatment of the participants and data were also discussed.

Chapter 4: Results

Introduction

The purpose of this qualitative study was to explore and describe police officers'

perceptions of and reasons for changes in behavior while wearing BWCs. I used snowball

recruitment methods to recruit officers with 10 or more years of law enforcement service

and who have significant training and experience to support their responses. I employed

purposeful sampling to further narrow the qualified participants down to five from the

geographical area of the Southwestern United States. I used a generic qualitative research

methodology to investigate the phenomenon of interest (Patton, 2015). I employed the

responsive interview model created by Rubin and Rubin (2015) to complement the

generic qualitative methodology. I examined the selected participants' responses through

the responsive interview model. The participants' data was carefully reviewed and coded

for emerging themes.

After receiving each participants' permission, I recorded the interviews using a

voice dictation device. I also took handwritten notes in a journal regarding my thoughts

on the participants' responses. I saved the audio interviews on my password protected

personal laptop. I reviewed each audio file and hand transcribed each participant's

response. After the interview was complete, I requested permission to contact the

participants via their personal e-mail for follow-up. All participants voluntarily provided

me with the requested information. I conducted member checking by sending the

transcription and written notes (typed into a Word document) taken during the interview

to ensure accuracy to the e-mail address provided by the participant. It was initially

proposed to consider peer-debriefing to verify data received from participants. Because the member checking process was successful and no changes or discrepancies were noted by participants, this step was deemed unnecessary.

Setting

For purposes of this study, the Southwestern United States is a region comprising the states of California, Arizona, Nevada, and New Mexico. These states have both large, sprawling metropolitan areas as well as sparsely populated, rural sections. The climate in this region varies from high desert to tropical/subtropical (U.S. Census Bureau, 2019). Southwestern states such as Nevada and Arizona have experienced rapid population growth over the past several years. According to the U.S. Census Bureau (2019), the studied regions' population has soared by over 14 million residents. This growth brings the need for expanded police services to protect growing communities in the selected region.

Demographics

The participants had varying levels of time of service, training, and experience in the field of law enforcement. The time of service ranged from 20 years to over 30 years of law enforcement experience with a mean of 31.6. The participants have held various positions including supervisor, investigator, and patrol officer. The participants have experience with large police departments with staffing of over 30,000 and smaller agencies with fewer than 100 officers. The agencies the officers have experience with span four states. All five participants were males. In addition, the participants were from diverse racial and ethnic backgrounds. There was one African American, one West

Indian, and the remainder were Caucasian. The median age of the participants was 57.5.

One participant declined to provide his age, so the median is derived from the four who

did disclose. All participants met the criteria set forth in the selection standards and are

currently serving in various capacities as a police officer. All participants are currently

equipped with BWCs in the field.

Table 1

Demographics

	Range	Number of participants	Percentage
Age (M, SD)	21-55 and above	5	57.5
	21-34	0	0%
	34-45	1	20%
	45-55	1	20%
	55-above	2	40%
	Non-disclosed	1	20%
Ethnicity	African American	1	20%
	West Indian	1	20%
	Caucasian	3	60%
Years of service (M, SD)		32.0	
	0-10	0	0%
	10-20	0	0%
	20-30	2	40%
	30-above	3	60%
Positions held LE experience	Patrol Officer	5	100%
	Supervisor	3	60%
	*Special Unit	4	80%

*Special unit includes positions such as detective, internal affairs, or undercover.

Data Collection

After receiving approval from the IRB, I began the process of seeking participants. Using the snowball recruitment method, I contacted members of the law enforcement community to seek out participants who met the criteria set forth in the introduction of this chapter. Additional vetting took place through soliciting participants with extensive training and experience in various duty assignments in law enforcement. The recruitment process took several weeks. The process took longer than expected because some candidates did not return phone calls or e-mails after initial contact. At the completion of the recruitment, five participants were selected. The process of scheduling interviews and meeting with participants at the location of their choosing consumed approximately two additional weeks with the last participant being interviewed on March 7, 2019.

A semi structured interview complemented by the responsive interviewing model developed by Rubin and Rubin (2016) was used. This allowed for a free flow of ideas from the participant and allowed me to follow-up with questions or thoughts when appropriate. The interviews ranged in duration from just over 1 hour to 2 hours and forty minutes. A list of 15 main questions was used during the interview process as a template. Several of the main questions were accompanied by several probing sub questions.

The questions were categorized under four main areas: (a) warm-up, (b) literature based, (c) framework, and (d) methodology. The warm-up questions established the participants training and experience and attempted to solicit a broad overview of their experience and perceptions regarding BWCs. The literature-based questions inquired

about variables studied mainly in prior quantitative research such as use of force,

complaints, and arrests. The theoretical framework section made inquiries based on

Lipsky's (2010) SLBT and officer's use of discretion and BWCs. The methodological

section encompassed a question that mirrored the research question asking participants

what their perceptions were regarding changes in behavior while being video recorded

with BWCs while on duty.

Data Analysis

I conducted the analysis of the data by using the responsive interview model as a

foundation. In qualitative study, transparency is essential to ensure trustworthiness. In

that spirit, the method of analyzing data collected using the responsive interview model is

described in detail below by Rubin and Rubin (2016):

1. Transcribe and summarize each interview.

2. Define, find, and mark in the text (that is code) excerpts that have relevant

   concepts, themes, events, examples, names, places, or dates.

3. From across your interviews, and the excepts marked with the same code, and

   sort them into a single data file; then summarize the contents of each file.

4. Sort and resort the material within each file, comparing the excepts between

   different subgroups, and then summarize the results of each sorting.

5. After weighing different versions, integrate the descriptions from different

   interviews to create a complete picture.

6. Combine concepts and themes to generate your own theory to explain the descriptions you have presented. While doing so, constantly test your ideas in light of the interviews.

7. See how far your results generalize beyond the individuals and cases studied. (p. 190)

Following this model, the audio recordings were saved to my laptop and played individually. I began the process of transcribing the data by hand to a word document. I opted to manually transcribe the data because "you can do what a computer program cannot do—that is, recognize and give extra weight to a comment because the interviewee had more experience or had thought a lot about the subject" (Rubin & Rubin, 2016. p. 192). This concept rings especially true given my experience in law enforcement that gave me the ability to recognize police jargon when referenced by participants. In addition, a written document was far more conducive to textually refer to while analyzing data than continually reviewing audio segments of the recorded interview. The written transcript also circumvents confusion with various interviewees' statements (Rubin & Rubin, 2016).

Attempting to recall a participant's statement accurately without use of a written transcript can be cumbersome and open the researcher to potential bias. Utilizing a written transcript of audio data ensures accuracy (Rubin & Rubin, 2016). For purposes of quoting participants, the written transcript was complemented by member-checking, ensuring the quotes accurately reflected what the participant exactly said. Transcribing audio data is not always exact. There were instances in which the participants' response

was inaudible. In these situations, the written transcription was left blank and I reached out to the participant for clarification or to restate the point made. As suggested by Rubin and Rubin (2016), I kept a separate log of my thoughts while transcribing the audio data. In addition to my thoughts, this log also contained notable quotes made by participants that supported emerging codes. The separate log also served to complement the freehand notes taken during each interview. This log was cross-referenced with the notes taken at the time of the interview to view the differences in my interpretation in person versus when listening to and transcribing the audio data. Due to this method, there were several pieces of data that I observed that were not included in my interview notes.

I then used Microsoft Excel to enter coded data for each individual interview so I could easily locate where a participant discussed a specific thought or provided an example. I analyzed and then reanalyzed the data for accuracy. Once each individual interview was preliminarily analyzed in this manner, I sued systematic coding to allow for viewing a collaborative representation of the view of BWCs which "suggests the complexity and richness of the real world" as reflected through the participants' perspective (Rubin & Rubin, 2016. p. 192).

Admittedly, I had a preconceived notion regarding how the data analysis would proceed. When it did not follow the course I had anticipated, I reflected upon the words of Holliday (2007) who argued that analysis "hardly ever comes out as ordered as the researcher would like, it is her own organized construction, and will be different to what other researchers would do with the same data" (p. 91).

Through the analysis process, hundreds of concepts were uncovered. I discarded many as irrelevant to the study. I coded and examined the more noteworthy concepts for potential themes. I examined interviewee concepts, notable quotes, and research based on published literature on BWCs. As a result of this examination, four main themes emerged and became the foundation for the data discussion area (see Holliday, 2007) in an upcoming section in Chapter 4.

Evidence of Trustworthiness

In Chapter 3, the varying facets of trustworthiness described by Lincoln and Gaub (1986) were discussed as they pertained to this study. Measures were highlighted to ensure trustworthiness was achieved. Credibility was realized through accurate transcription of the audio data and note taking during interviews. An additional effort towards credibility was member checking. Participants were asked to review my notes and findings which were sent to them via the personal email address they voluntarily provided. No participants expressed concern over the documentation provided, nor were any exceptions noted.

Transferability was achieved through taking steps to alleviate concerns by participants of their identity being revealed by assuring anonymity. By conforming to consistency with interview protocol, coupled with taking audio and hand notes during data collection, dependability was achieved. Confirmability was accomplished through utilizing the snowball recruitment method and purposeful sampling to ensure all participants possessed the required time of service and had extensive training and experience in the field of law enforcement. As suggested by Patton (2015) a rapport was

established with each participant to encourage openness and solicit elaborate responses.

Finally, neutrality was embraced through not sharing my perceptions of BWCs with the

participants or asking any leading questions that would have prevented a free exchange of

thought (Patton, 2012).

<div align="center">**Emerging Themes and Participant Accounts**</div>

In Chapters 2 and 3, it was noted participants would be completely anonymous.

As mentioned previously, since law enforcement is a very close community, a

participant's identity could potentially be revealed based on their years of experience,

training, and positions held. Out of a profusion of caution, these variables were

mentioned only generically to establish the credibility of the participants. In addition to

these efforts, the responses were not linked to a specific participant. Instead, the data was

joined to form a collective narrative of the phenomenon. There were 4 total themes that

emerged from analyzing the data: implementation, personal harm, confidentiality, and

behavior modification. I will now discuss these themes.

Implementation

Dozens of concepts were isolated and merged into five main codes comprising the

theme of implementation. The five codes comprising the theme of concerns pertaining to

implementation of BWCs include initial acceptance, current acceptance (acceptance

now), policy, training, and functionality. Speaking in generalities regarding

implementation, all five participants indicated they were not aware of any officer

participation in the implementation process ranging from equipment selection (for

purchase) or development of policy pertaining to BWCs.

\Table 2

Theme 1: Concerns Pertaining to Implementation

Associated codes	Initial acceptance	Current acceptance	Support policy	Support training	Approve of functionality
Participant 1	X	X	X		X
Participant 2		X	X		X
Participant 3		X	X		
Participant 4					
Participant 5	X	X	X		X
Total	2	4	4	0	3

Initial acceptance. Out of the five participants, two initially embraced BWCs. The remaining three participants had varying degrees of objection to the equipment. One of the participants who initially accepted BWCs described widespread opposition by fellow officers and the police union. The participant drew a comparison to BWCs and a mandatory survey that was imposed on officers early in his career. He stated officers were required to complete a "scantron" form for every traffic or person stop conducted to provide the reason for stop, whether or not the person was handcuffed, the person's race, gender, and disposition of the stop. Officers would refuse to conduct stops so they did not have to complete the mandatory form. I asked the participant if he noticed the same level of lack of acceptance with BWCs. In response, the participant simply replied, "Yes." The participant elaborated saying that he knew of officers who intentionally muted sound on the camera so interactions could not be audibly be recorded. Officers would also turn the camera upside-down, so the footage was inverted in attempts to "fight the machine."

Similarly, another participant who initially accepted the equipment also noted that a vast majority of officers he worked with had significant reservations. This was

exemplified with the participant arguing "At first, I listened to officers bitch and whine, but I thought to myself the camera is either going to sink me or save me, and I control that." This quote pointed to an interesting concept that the individual officer controls their level of acceptance (and change in behavior – discussed later). The participant further described his initial acceptance by stating, "I don't think I gave myself the luxury of saying I don't like it and figured I can either go with the department's plan or I can quit, so that's it."

The other three participants all expressed lack of initial acceptance. One of the three simply stated "it sucked." When asked to elaborate, the participant explained that "they don't trust us anymore" and asserted that persons of authority such as teachers, police officers, and others should be taken at their word. The participant felt that "because of a few bad apples, everything went awry" with regards to the community trusting the police. Officers felt it was because of this deteriorating trust that BWC programs were forced out into the field of law enforcement. He felt this sentiment was reflected by the majority of officers on his department. A second participant echoed the same sentiment regarding concern over trust. The participant noted there has been a shift in the paradigm where in years prior to BWCs (in court or internal affairs) "an officer's word meant something." The participant went on to say "now, BWCs have replaced an officer's word as a presumptive test in court for truthfulness." The remaining two participants also felt the equipment was forced on them by their agency with no input on the officers' part. One participant stated he was opposed because he felt it represented the concept that "big brother is watching you all the time."

Current Acceptance. Four out of five participants currently accept BWCs. One of the participants who initially accepted the equipment but noted other officers did not, stated he believes there is now general acceptance. He noted this is due to several factors. The first factor is his agency has offered a financial incentive to veteran officers who opt to wear the equipment. In addition, the participant stated all newly hired officers are required to wear them. Interestingly, the participant surmised in less than 10 years, BWCs will become the "new normalcy." He argued this is due to the fact "the new generation of officers will have no dog in the fight because when you hire on, it is required equipment just like a firearm or taser." This presented an interesting concept that will be explored further in Chapter 5.

One of the participants who initially did not accept BWCs described his current level of acceptance by quipping, "I love them [BWCs] and I would rather you hear me dropping an 'f bomb' than not have it and be accused of something I didn't do." The same participant also stated he believes BWC footage "shows the world what we do in real time and it adds credibility to our word" and he believes "it protects you more than it hurts you." Another participant who initially opposed BWCs simply said "its mandatory, and there it is" regarding his current level of acceptance. Only one participant was completely opposed both during initial rollout and currently.

Policy in general. Overall, the majority of participants (4) maintained varying levels of acceptance and approval of their departments' policy pertaining to BWCs. Some of the key words and phrases used by the participants to exemplify this: "it's pretty good", "I have no issue and assume it's consistent with other agencies", "very fair", and

"I am in agreement." As mentioned in the acceptance section, one participant described officers manipulating the cameras by muting sound and inverting cameras to "fight the machine." The same participant described policy as being "fluid and ever morphing." The participant stated that after these incidents began to occur, policy was amended to require different equipment that does not have the feature to be audibly muted while recording.

The participant also provided an example of how policy changed regarding placement of the equipment on an officer's uniform. He described an officer involved shooting (OIS) that occurred in his agency that was recorded on BWC. The only issue was the officer's "pig tail" earpiece for their radio. The participant explained this piece of equipment allows officers to hear dispatch traffic discretely in their ear. In this incident, the earpiece was blocking the view of the camera during the OIS. In response to this incident, as well as the previously mentioned situation of officers inverting the camera, policy was amended to reflect how and where an officer is to wear their camera.

The only other noteworthy comment regarding policy made by another participant in support of this facet indicated "the department is pretty fair about deleting accidental recordings." There was only one participant who viewed their department policy as being negative. They passionately answered saying "policy can be used as a tool to screw officers in the form of a witch hunt." The participant indicated he has not directly experienced this but provided an example of what he was describing. He told me about a conversation he had with a friend who is a sergeant with an agency in a different state from where he works. The sergeant told the participant that supervisors are mandated to randomly review at least 5 officers' BWC footage for compliance with policy. The

participant explained this supports his assertion that administration can use the policy as a tool to use against officers. Another participant who indicated support for their department policy had a differing view than this participant when he asserted "I do not think policy (BWC policy) is set up to harm officers, it's more for the protection of officers and their department." These perspectives presented a contrasting dichotomy of perceptions of the intent of BWC policy and is worth noting.

Policy as it pertains to officer discretion (SLB - theoretical framework). In this study, policy was also examined from a theoretical framework aspect utilizing SLBT. Participants were asked about their perceptions regarding officer's use of discretion pertaining to department policy and activating BWCs. A majority of participants (3) indicated that their department policy is clear and directly tells an officer when they should and should not record. One participant indicated they were "not sure" regarding how much discretion is built into their department policy. The remaining participant did not offer a perspective on discretion and BWC policy.

The participants did share several concerns pertaining to their department policy and BWCs. However, some of the concerns were reflective of discretion and policy, as well as functionality of the equipment. For example, one participant expressed concern that officers are required to activate cameras in all field contact with certain exceptions. However, officers can dictate how long they actually record. Currently, the policy does not dictate how long an officer should record, or when specifically, they can cease recording during an incident which makes the choice subjective to the individual officer. Currently, the technology allows for manual recording activation and deactivation. The

participant did note his department policy mandates an 80% compliance with BWC

activation during calls for service. Supervisors are required to ensure adherence to this

policy. The participant also indicated the department's computer automated dispatching

system (CAD) is automatically linked to BWC recording numbers. In addition to

supervisor review (of the 80% compliance), the linking of the CAD to BWC recording

numbers creates a layer of officer accountability.

      One participant expressed the need for policy to clearly reflect applicable state

and federal laws pertaining to release of BWC footage to the media and public. He

surmised that because BWCs is such a new phenomenon, many agencies are "struggling

to keep up with procedures to determine under what circumstances video should be

released." The participant argued that BWCs "are one dimensional and do not show

circumstances leading up to the officer responding, or emotions of the involved parties."

He suggested policy be amended to reflect BWC footage be released with context, so the

requesting parties have the "entire picture and totality" of an incident. The participant

noted that he feels the media will frequently release only a few seconds or a "snippet" of

BWC footage, and either do not release specific details involving the entire incident or

they will place their own "spin" on what occurred. The participant asserted this unfairly

promotes distrust or animosity between the public and the police. Two participants shared

a concern related to release of footage and policy. One of these participants stated footage

should not be released to the public until after a case has been fully investigated. The

participant provided an example of an officer who is walking through or near a crime

scene. Sensitive information could be revealed in the background that could potentially jeopardize the investigation.

A different participant echoed similar concerns that have both policy and functionality implications. The participant expressed concern that officers have the power to erase footage, despite what their agency's policy dictates. The participant also shared concerns that agencies in his area are not consistent with BWC policy. He cited the fact that some agencies allow the officer to take the BWC equipment home with them while neighboring agencies mandate officers check out a different camera rig at the department prior to their shift beginning. Another participant indicated he believes his department policy regarding BWCs should be amended to allow officers more discretion on when to record and when not to record. The participant went on to argue that officers should have the same discretion with recordings that should be uploaded into the system or deleted.

An example was provided by another participant pertaining to how discretion and BWC policy can be beneficial. The participant described an incident they recently responded to involving a juvenile who was the victim of a sexual attack. A suspect in a vehicle attempted to abduct and forcibly assault a female juvenile. Fortunately, the juvenile was able to escape and call police. The participant described the call as being " very unique" and the crime as "egregious." Upon the participant's arrival, he observed the juvenile was in crisis. He used his discretion not to write anything down and show empathy for the girl until paramedics could arrive to assist. The participant's department policy dictates that officers should not record victims of certain crimes such as (in this case, attempted) sexual assault. The participant explained that because of the "very

unique" nature of the call and he perceived the call as being "egregious", he had a "feeling" he should record the encounter. When the participant asked the juvenile what happened, the girl provided an accurate suspect and vehicle description while hysterically responding to the participant's initial inquiry. Paramedics arrived shortly after the participant spoke to the victim and she was transported to an area hospital for evaluation. Detectives responded to the hospital and the victim was unable to produce an accurate description of the suspect and vehicle because of her emotional state.

Because the participant recorded the conversation with the victim, he was able to review the footage and quickly disseminate the description to area law enforcement. Because of this action, the suspect was quickly apprehended (within 3 hours) of broadcasting the information. The participant explained when crimes go unsolved for a period of longer than 24 hours typically the suspect is not caught for quite some time. This allows the suspect for more time and opportunity to commit similar crimes. The participant also explained he was concerned with what supervisors might say about him using discretion to deviate from policy. Regardless, the participant strongly pronounced he was confident he "did the right thing for the right reasons." After review, his supervisor not only deemed his actions acceptable, but also praised the participant for "quick thinking in a dynamic situation." The participant also provided another example of an officer inadvertently not following policy. He described responding to assist another officer for a fight in progress call. The initial officer on scene observed a fight in progress occur in his presence and immediately reacted to intervene. Force was used to stop the combatants. When the participant arrived on scene, he asked the initial officer if

he recorded the incident. The officer stated he did, but later discovered he did not activate his camera. The participant noted when responding to in-progress calls that occur in front of an officer, the most important thing is handling the situation safely, not activating a recording on the BWC, even if it does violate department policy.

   Training. All 5 participants did not support the training offered by their department pertaining to BWCs. Every participant reported their initial training was brief and only covered their department policy regarding BWCs and the equipment's functionality. One participant noted the training class was very large and they did not feel comfortable asking questions regarding functionality. He also stated, "I left the class not wanting to touch the thing because I don't know how to use it." Three participants indicated the majority of their understanding of the functionality of BWCs was self-taught through trial and error. All 5 officers also indicated they do not currently have annual in-service training on BWCs.

   Two other participants stated they would have benefited from more hands-on training with the equipment. One participant suggested a representative or vendor from the company where the BWCs were purchased provide equipment functionality training. The participant stated a person who works for the company would have intimate knowledge of the equipment and would be able to better train officers. Another participant suggested supervisors (sergeants) participate in a train-the-trainer course so they could be proficient in instructing functionality to officers. The participant believed this would allow for smaller group instruction to a squad of officers or even individual training to officers the sergeant supervises.

Three participants indicated they would have benefited from training that exemplifies how BWCs can benefit and protect the officer. Two of the officers suggested showing actual BWC footage where the video cleared an officer of an unjustified complaint. One of the two indicated they heard supervisors and command staff talking about how BWCs will benefit officers and protect them from frivolous complaints prior to implementation. The participant thought it would be beneficial if describing these benefits would be officially incorporated during initial training to achieve more wide-spread "buy-in" from officers. Another participant noted BWC footage could be used to train officers to improve their skill sets. The participant elaborated by saying "officers come across unique situations all the time." He stated, "actually viewing how officers handled situations, good or bad, can benefit other police personnel."

Functionality. Three out of the five participants approved of the functionality of the equipment. Based on the responses from participants, functionality and training have many parallels. However, there were some specific points discussed by participants that affect operational aspects of the equipment pertaining to functionality. For example, one officer mentioned that if they worked a busy shift or overtime event, it is not uncommon for the camera's memory to be full. The participant noted this happens frequently on shifts where there was lengthy calls for service involving in-depth investigation. He indicated the camera will not record additional footage if the memory is full.

Another functionality concern brought up by a participant was the officer has the ability to delete the recording if they choose. Similarly, another participant expressed concern that an officer can dictate how long to record an incident. An additional concern

pertaining to functionality described by a participate was in regard to the battery life of

the camera. The participant noted working long shifts that may continue into overtime on

a call increase the risk of the BWC battery power diminishing. Once the battery power

falls below a certain threshold, it will no longer record. A final concern discussed by a

participant was in regard to the vantage point of the camera. The participant noted the

camera has no peripheral vision. Therefore, the viewer does not have a clear picture of

what occurred around the officer. The participant also expressed concern over the quality

of audio footage captures.

Personal Harm

Table 3

Theme 2: Concerns Regarding Personal Harm

Associated codes	Officer safety	Punitive actions taken against officers
Participant 1	X	
Participant 2	X	
Participant 3	X	
Participant 4	X	X
Participant 5	X	
Total	5	1

Officer safety. All five participants express concerns over officer safety

pertaining to BWCs. The participants had varying perspectives on officer safety related

issues. Four of the five participants shared officer safety concerns pertaining to

functionality of the camera. One participant noted there is a blinking light affixed to the

battery pack. The participant had his BWC with them and described the nomenclature of

the equipment. He showed me the battery pack and pointed out the blinking light. The

battery pack is about the size of a pack of cigarettes. In addition to the blinking light, there is also a circular button that manually initiates and ends the recording. The participant then showed me the thin cord that connects the battery pack to the camera. The participant explained the blinking light is an officer safety issue because "it is fairly easy for a bad guy to track if they know what they are looking for." The participant stated they alleviate this safety issue by placing the battery pack inside their uniform shirt pocket.

A second participant also shared an officer safety related concern related to functionality. The participant stated placement of the battery pack is a concern. They explained that when responding to a critical incident, an officer may be more focused on activating a recording versus the situation in front of them. Physical harm may occur to the officer or others because they are focused on the camera. Similarly, a third participant expressed an officer safety concern related to functionality. The participant noted that components of the camera "get in the way." He elaborated saying the cord will frequently get tangled or get in the way. The participant also shared a concern similar to a previous participant when he asserted officers can become distracted on a call for service because they are more concerned about losing the camera during an altercation (because of being responsible for the cost of replacement). The participant also expressed concern of their attention being diverted to ensuring a recording is activated.

A fourth participant paused in reflection for several minutes after being asked about officer safety issues related to BWCs. He initially stated he could not think of any. After pausing for several minutes, the participant expressed concern over responding to

an in-progress call and having his attention deviated to focusing on ensuring he starts recording as opposed to the incident. Interestingly, the participant quickly added if it is a safety issue "… I control that, it is the officers' own creation if it is a safety issue because they should be familiar with all of their duty equipment." The participant equated this to an officer deploying their firearm and noted they do not need to look down to the holster to see where it is prior to drawing it. The participant described it as "muscle memory" stating it is a result of years of training and practice.

The participant also commented on issues surrounding the equipment itself presenting an officer safety issue. Regarding responding to a call for service and remembering to record, he stated, "I don't worry about it, I just react" to the incident. The participant also noted he checks the wire connecting the battery pack to the camera several times per shift to ensure it is not too tight or too loose. This way he is confident it will not become tangled or present a safety issue during a call for service.

One of the participants expressed an officer safety concern regarding BWC footage. He had reservations about releasing BWC footage to the media and public. The participant explained that if not properly redacted, the footage could be studied by individuals considering doing harm against police officers or who may be looking for a way to escape if confronted by law enforcement. He quipped, "the one thing I have an issue with is tactics, news agencies showing the movements and behaviors of police officers." The participant concluded by saying, "bad guys will observe footage and learn from our flaws and tactics." This presented a concept previously unstudied. Another participant answered questions regarding officer safety by talking about officers

hesitating to act. This was coded as a behavior change and will be discussed in an upcoming section in this chapter.

Punitive actions taken against officers. The use of BWC footage for discipline was discussed by all of the participants. For purposes of this study, the two forms of disciplinary investigations are conducted at the supervisory level or referred to an internal affairs division within an agency. The majority (4) participants spoke favorably about the use of BWC footage to investigate complaints. Three out of the five participants indicated they believe BWC footage serves to expedite investigations when allegations are made against officers. One participant described BWC footage as being a "quick reference" for an investigation. The participant said, "investigators can quickly determine if an officer was wrong." The participant explained in his department; the internal affairs bureau allows the officer to view the video prior to responding to a complaint. The participant stressed BWC footage is not "hidden" from officers as a leverage tool. Rather, it is used in conjunction with the officer's verbal description of the incident.

The participant indicated in their experience, "99% of the time, the BWC discrepancies come when the officer's written report where there are usually only minor discrepancies." The participant elaborated by saying these discrepancies arise from the officer's interpretation of an incident which may differ from the footage as perceived by the "watcher" (person investigating allegation). The participant noted "this is where spoken word conflicts with video."

Another participant stated despite officers being equipped with BWCs, complaints sill occur. However, he indicated that "a lot of nonsense complaints to make a quick buck

have gone to the wayside." This participant concurred with the assertion that complaints are resolved in a more expeditious manner than prior to officers being equipped with BWCs. The participant stated complaints can now be resolved in a matter of hours versus weeks or even months in some cases. This is primarily due to the fact "there is no more 'he said, she said', because video is worth a thousand words. The participant provided an example of a recent citizen complaint made against him that his supervisor investigated. The complaint was for discourteous interaction with a citizen. He quipped, " I was extremely thankful for the BWC because it proved immediately upon review I acted correctly." The participant added that without the footage, the investigation may have been drawn out unnecessarily.

When asked about their perceptions on punitive actions related to BWCs, another participant referred to citizens changing their behavior because of the presence of BWCs. This assertion was made in reference to citizen complaints. Citizens are more likely to recognize an officer is recording, which alleviates their motivation to file a frivolous complaint. Though the participant's comments had some relevancy with the concept of complaints or punitive measures, it was coded as behavior modification and will be discussed more in depth in an up-coming section of this chapter.

A different participant had a different perception of citizen complaints and punitive actions taken by agencies. The participant asserted "if an officer does something wrong, the footage is released to the media" and "if the officer did a good job, the footage is deleted or not released." The participant also felt officers fear footage may be used against them for disciplinary purpose in the form of a "witch hunt." The participant

believes his department policy should be amended reflecting footage should only be reviewed when a complaint is made (not randomly by supervisors). The participant concluded by acknowledging BWCs "will resolve any fake allegations or corroborate any factional complaints."

Another participant believes citizen complaints are more accurate with BWCs. This is based off of the assertion citizens "embellish" their interaction with police officers. Similar to a previous participant's perception, the interviewee suggested if the citizen is aware an officer is equipped with BWCs, they are less likely to make a false allegation. Therefore, when a citizen makes a complaint, the likelihood of it being legitimate increases. The participant argued that "a citizen's version of an incident is from their perspective and may not always reflect what is depicted on BWC footage." The participant provided an example of an incident in which they were recently involved with where a citizen made a complaint. The participant conducted a traffic stop. After the stop, the driver made a complaint to the participant's sergeant, indicating the officer yelled at him and was rude. The participant's sergeant reviewed the BWC footage from the stop and observed the citizen yelling at the officer. The participant was cordial during the encounter and the complaint was deemed unfounded. This example illustrated the participant's point of perspective of the citizen.

Privacy

Table 4

Theme 3: Confidentiality

Associated codes	Officer privacy	Citizen privacy
Participant 1	X	X
Participant 2	X	X
Participant 3	X	
Participant 4	X	X
Participant 5	X	X
Total	5	4

Officer Privacy. Out of the five participants, four indicated their most significant

privacy concern involves forgetting they are recording and using the restroom. It is not

uncommon during lengthy investigations for officers to require using the restroom.

Several participants noted this situation has occurred with them. Because an investigation

is included on the video, a decision has to be made whether the video is deleted or

retained. Therefore, an unforeseen (and significant) privacy issue potentially develops for

the officer. One of the officers who expressed concern over privacy issues and using the

restroom also quipped, "everything we do is public, and we have been recording for years

by the public so it's no big shocker." The only other officer privacy concern mentioned

by one of the participants was receiving or making private phone calls while recording

with BWC.

Citizen Privacy. Four out of five participants cited entering citizens' residence

while recording with BWCs as a primary privacy concern. One participant elaborated on

this concern by stating "I wouldn't want someone recording in my home." The same

participant also asserted that "half the people we deal with either do not know or forget we have them." The participant indicated they voluntarily advise the citizens that he is actively recording so they are aware. The only dissenting participant argued "any reasonable person should know officers have BWCs and should be aware that when in the presence of an officer, a BWC is in use, even in private residences."

Another participant stated that the majority of calls for service for law enforcement are in a public setting, so privacy is not an issue. The participant also discussed HIPPA and explained that when officers respond to a call where an involved party is in the hospital, HIPPA does not apply. He further explained HIPPA only applies to medical staff releasing information, not officer recording with BWCs. In addition, the participant explained businesses and companies with public access have no expectation of privacy on their premises. The participant noted their department policy requires officers announce they are recording with BWCs and if a citizen requests they discontinue recording, officers must comply. The final concerns regarding privacy offered by the participant included calls for service on secure facilities such as military bases and interacting with other jurisdictions (fire department or neighboring police agencies).

Behavior Modification

Table 5

Theme 4: Behavior Modification

Associated Codes	Use of force	Hesitation	Professionalism	Citizen behavior modification
Participant 1			X	X
Participant 2			X	X
Participant 3			X	
Participant 4				
Participant 5			X	X
Total	0	0	4	3

Use of Force. All five participants discussed changes in use of force from several different perspectives. However, the one consistent concept was none of the five officers had personally experienced changes in their level of use of force. All five officers also indicated they had not personally observed changes in use of force in other officers. One participant indicated he believes deadly force has increased in their agency since BWC implementation. No specific numbers or statistics were provided by the participant to support this assertion. The participant noted officers do not change dramatically but acknowledged there may be some brief changes in officers initially after being equipped with BWCs. The participant followed up by stating after a short amount of time, "normalcy settles in."

The participant did bring up an interesting concept with regards to citizens viewing BWC footage of officers using force. The participant stated, "When the untrained eye sees use of force by an officer, it is never easy." He elaborated noting citizens are not familiar with police tactics and likely will be appalled by defensive tactics

and arrest procedures taught to officers in the academy and in-service training." The

participant provided the following example of citizens not being familiar or

understanding tactics employed by police officers:

> I recall a training in which the instructor showed both civilian and police
>
> employees very brief snippet videos of use of force incidents without offering any
>
> backstory and while playing a rap song in the background with lyrics that
>
> contained 'this is what happens when you call the police'. After the videos, the
>
> instructor asked the audience if the use of force depicted was justified. I was the
>
> only one that raised their hand and I replied there is now what to know exactly
>
> what happened based on the limited video shown and no backstory. The instructor
>
> explained the backstory of one of the videos where a suspect was being pursued
>
> by officers after they were involved in a shooting and had a gun in their waistband
>
> which was not visible on camera. The totality of the circumstances is key.

The same participant concluded by noting, similar to people videotaping officers with

cell phones, initially it is a shock and may cause pause, but after a while, it becomes

second nature.

Another participant stated use of force policy has changed dramatically since he

were hired as a police officer over two decades ago. He elaborated by discussing policy

on domestic violence. Early in their career, it was not mandatory to make an arrest in a

domestic violence call. Parties were separated and one of the halves was asked to leave

the residence to "cool off." Now, officers are required by law to arrest the primary

physical aggressor. The participant also noted choke holds were taught in the police

academy. Now, choke holds are no longer permitted. Despite changes in use of force and policy pertaining to force, the participant has not seen a change in himself or other officers since BWC implementation.

When the participant was asked about discretion and BWCs, the participant misunderstood the question and provided an answer related to use of force. The participant stated BWC footage shows how lenient officers are with the public and how much patience is exhibited prior to resorting to force. The participant noted "it shows how many steps have been taken" by an officer during a call for service to address a situation. The participant also believes "society seems to sometimes forget we are allowed to use physical force on someone."

A similar concept emerged from a different participant. He stated he spends more time attempting to deescalate the situation by talking more. The participant stated he "wants whoever reviews the video footage with me in an incident to say I exhausted all options talking to a suspect first" before resorting to using force. The participant went on to say, "I don't want to spend 30 minutes on a 20-minute call, but if it shows on camera, I did everything I could then I'm good with that."

Only one participant stated he believes there is a change in use of force that could be perceived as negative. He perceives that since the advent of BWCs officers are less inclined to use force. However, the participant followed up this concern by quipping, "all I can say is I know I believe I behave the same way". I asked if he has witnessed a change in officers he works with and he replied, "No."

Hesitation by Officers. Paralleling use of force, no participants reported hesitation by themselves or officers they have worked with. However, several participants described their perceptions regarding hesitation because of the presence of BWCs. One participant indicated he could "see it happening" and gave an example of what he described as "cop baiters." The participant stated "cop baiters" will attempt to get officers to react during incidents involving civil unrest or protests. The participant acknowledged if officers are exhibiting restraint in these situations, it is a good thing they are not reacting out of emotion. The participant also indicated it is "similar to people videotaping officers with their cell phones; initially it is a shock and may cause pause, but after a while, it becomes second nature."

Another participant stated they could see officers hesitating because they are not sure if they are recording when responding to an incident. They perceived this to be a potential issue for veteran officers who have spent the majority of their career not equipped with BWCs. An additional participant perceived he could see an "immature officer" hesitating. When I probed the participant to elaborate, he indicated a newer officer may hesitate to record if they are going to ask a person on a date and do not want to be caught on camera.

One participant offered in-depth concerns pertaining to officers hesitating due to being equipped with BWCs. The participant believes officer on-duty deaths and injury have increased since BWC implementation. He did not offer any sources or basis for this perception. He described this assertion with the following explanation:

On a call, suspects read an officer's mannerism. They evaluate how the officer is

dressed, their body language, and how they speak. If the suspect detects hesitation

by an officer, they may challenge them, placing themselves in a position to be

hurt or killed. Body Worn Cameras makes an officer go from a hero to a zero

because instead of doing a good job, you hesitate because I may say something

wrong or do something wrong. This makes officers want to park under a tree and

read a book, so they don't have to be scrutinized.

Additionally, the participant made several references to officers being withdrawn because

of the equipment. This is due to the perception officers second guess themselves over fear

of being scrutinized by their supervisors. The participant asserted, "with BWCs, officers

become scared, withdrawn and go into a cocoon." He later acknowledged they do not

hesitate, nor has he observed another officers hesitating because of BWCs. The

participant elaborated by saying, "I act the same way as I did before I had a camera

because I'd rather be judged by twelve then carried by six."

Professionalism. Four out of 5 participants reported changes in professionalism.

One participant who observed a change in their professionalism noted they are more

aware of their language. He quipped, "Changes exist for me because I am more cognizant

of my language, like I'm talking to my mother and I don't want to get smacked in the

face." The participant also stated, "The way I worked when I first started in law

enforcement over 20 years ago is still the same way I work today except for watching my

language."

Another participant stated he believes it changes the way an officer conducts themselves He perceives that BWCs tends to increase professionalism but does not believe it curtails the way he would normally handle a situation. An additional participant had similar thoughts and he provided a specific example of how his professional conduct changes:

> I think it has the capacity or propensity to change me. I don't want you to see me yelling and screaming. I know if I'm being recorded either by my camera or another officer's camera, I'm going to show you my good side. Maybe showing you my good side, it will become my new behavior.

The participant also thinks BWCs make the officer more compassionate towards the public. The participant also made a comparison to changes in officer's professionalism wearing BWCs to when they have a ride-along during a shift with members of the media. He stated, "officers tend to editorialize and play to the camera", and "I play to the camera because I want them to see I did everything I could do" to have a citizen comply. Another participant shared this concept arguing officers who wear BWCs are more professional because they are talking from a "script."

Citizen behavior modification. Three participants discussed behavior changes in citizens in the presence of BWCs. One participant simply asserted "all BWCs are doing is combating citizens recording the police." Another participant stated citizens know they are being recorded and they conduct themselves in a more civil manner. The participant argued some citizens are aware of BWCs but act how they would normally act regardless. Similarly, a different participant believed BWCs "have a calming effect on someone."

Like the previous participant, he quipped, "but some people just don't care and will

escalate and encounter regardless." He also pointed out that BWC footage could be used

as a tool to calm civil unrest in response to a controversial use of force situation law

enforcement had with a citizen. If the officer was shown to conduct themselves in

professional manner and reacting to a hostile situation or person with a weapon, it could

ease tensions between the community and the police. However, the participant noted he

has seen "where a video reveals an officer did everything right and the public still does

not accept it."

Conclusion

In Chapter 4, the setting of the study was described. In addition, the demographics

of the participants were revealed. The process of how data was collected was reported.

Also, how the data was analyzed was explained. Evidence of trustworthiness was

discussed. Finally, emerging themes and participant accounts were highlighted. In

Chapter 5, I will discuss the findings of the results and themes shared among participants.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this qualitative study was to explore and describe police officers'

perceptions of and reasons for changes in behavior while wearing BWCs. The nature of

the study was a generic qualitative research approach to investigate the phenomenon of

interest (Patton, 2015). I employed the responsive interview model created by Rubin and

Rubin (2015) to complement the generic qualitative methodology. I examined the

selected participants' responses through the responsive interview model. The

participants' data were collected through semi structured interviews, complemented by

the responsive interview model. I carefully reviewed and coded the data for emerging

themes as discussed in Chapter 4. I conducted this study to determine and identify

potential adverse behavior changes in police officers who are equipped with BWCs in an

effort to improve citizen and officer safety, to enhance community relations with law

enforcement, and to improve the delivery of police services.

Findings concerning facets of BWC programs that participants perceived as

having an effect on police officers were as follows: (a) implementation processes of

BWCs in police departments, (b) personal harm that may arise due to BWCs, (c) privacy

issues for citizens and officers, and (d) behavior modifications in officers and citizens.

Interpretation of Findings

The findings of this study confirm the assertions made by researchers as discussed

in Chapter 2 of this dissertation that there are actual or perceived changes in officers'

behavior while equipped with BWCs (Ariel, 2017; Ariel et al. 2016; Jennings et al., 2014;

Jennings et al., 2015). The degree to which behavior changes occur in police officers equipped with BWCs has yet to be determined; however, this study does generate an extended knowledge of behavior changes, building upon previous qualitative and quantitative studies examining BWC effect on police officer behavior.

Extension of Knowledge

Because BWCs are such a new piece of duty equipment issued to officers in the United States, there have been limited studies conducted on the phenomenon. The majority of scholarly inquiry on the equipment has been quantitative (Ariel, 2017; Ariel et al. 2016; Ariel et al., 2015; Jennings et al., 2014; Jennings et al., 2015). This is due in part to a response to calls from the DOJ (2018) for researchers and law enforcement agencies to partner together to investigate changes in use of force, complaints, and arrests after BWC implementation. To date, quantitative study has produced inconsistent findings pertaining to the studied areas of use of force, complaints, and arrests (Ariel, 2017; Ariel et al., 2015; Katz et al., 2014). There has been a call by many researchers to conduct qualitative study on this phenomenon to determine why there is fluctuation in the studied behaviors in officers who are equipped with BWCs (Ariel, 2017; Gaub et al., 2016; McClure et al., 2017; Pelfry Jr. & Keener, 2016; Smykla et al., 2015; Sousa et al., 2016).

This study answered those calls for additional qualitative study, thereby extending the knowledge gained in previous studies. First, it presents officers' perceptions of BWC program implementation including initial acceptance, current acceptance, policy, training, and functionality. Second, it provides officers' perceptions of personal harm associated

with the equipment to include officer safety issues and potential punitive actions taken against them. Third, privacy is examined from officers' and citizens' perspectives. Fourth, it offers behavior modifications in officers and citizens to include use of force, hesitation, professionalism, and general changes in citizens' behavior.

Analysis

Theme 1: Implementation. As reported in Chapter 4, I identified numerous concepts by participants pertaining to the theme of implementation. These concepts were coded as initial acceptance of BWCs, current acceptance of BWCs, support of their department's policy, support of participants' departments' BWC training, and functionality of the equipment. Based on the data collected from participants, it could be argued there is a connection between officer "buy-in" and the implementation process of BWCs in police agencies. Goetschel and Peha (2017) warned that resistance by law enforcement officials designated to wear BWCs could result in lawsuits and injunctions being filed by unions and other police advocacy groups, which would inevitably either delay or inhibit the implementation process altogether.

Officer acceptance. None of the participants were aware of officer or police union membership inclusion in the implementation process of BWCs in their agencies. It could be surmised through officers' perceptions that if department members do not feel as though their input and approval was sought during implementation, the potential exists for pushback and lack of initial acceptance of the equipment. This was evident through examples of officers "fighting the machine" and muting sound on BWC equipment and inverting the camera to distort the view, as described by a participant in this study.

These findings align with concepts discussed in Chapter 2. Pelfrey Jr. and Keener (2016) found officers felt they were only advised of BWC implementation but were not included in the process. Similarly, Gaub et al. (2016) observed that numerous facets of implementation had an effect on police officers' perceptions of the equipment. Some of these factors include "their agency's planning and implementation process, administrative policy regarding BWCs, the experience of their colleagues in neighboring departments, and their own experience in the field" (Gaub et al., 2016, p. 276). The concept of other officers' experiences with BWCs affecting fellow officers' perceptions of the equipment was discovered in this study. For example, a participant described a dilemma facing a friend who is a police supervisor in an agency in a different part of the country. The participant's friend relayed that he is required to randomly review BWC footage from officers he supervises to ensure compliance. Though the participant has not experienced this phenomenon directly, his perception was shaped by what a fellow colleague has faced.

Three participants fully accept and embrace BWCs currently. The remaining two participants had varying levels of dissent regarding the equipment. One of the dissenting participants simply argued that they believe veteran officers should have an option to wear the equipment and added he only wears a BWC because he is required. The other dissenting participant had a very negative perception of how he believes BWCs cause other officers to hesitate, thereby exposing them to risk of injury or death. Ironically, the same participant has not experienced the hesitation he described, nor has he immediately observed officers he currently works with hesitate due to wearing BWCs. The varied

acceptance levels found in this study parallel the findings observed by Goetschel and Peha (2017). The researchers noted that officers with experience utilizing BWCs are more likely to accept the equipment. A majority of officers in this study initially did not accept the equipment. However, as they were exposed to BWCs in the field, their acceptance levels increased. This was exemplified by one participant who quipped, "I wouldn't be caught dead without it."

This initial lack of acceptance expressed by participants plays directly into an officer's discretion to use BWCs and when (and if) to record. This concept is supported by Lipsky (2010), who argued that SLBs will only do the bare minimum amount of work to simply avoid being disciplined. If officers are doing the bare minimum as suggested by Lipsky (2010), it potentially will have an adverse impact on the delivery of police services as well as the overall relationship between law enforcement and the community they serve. Similar findings were discussed by Ariel (2017), who argued that officer discretion has a significant effect on their decision making for the variables of making arrests, use of force, and other behaviors previously studied that were discussed in Chapter 2. Further use of discretion by officers is discussed in the next section.

Policy. Several issues were described by participants pertaining to their departments' BWC policy. The most notable observation was the need for police agencies to have a universal (or at least similar) policy pertaining to BWCs. As noted by a participant, the agency he works for has a contrasting policy with a neighboring agency in reference to the BWCs. The difference in policy noted by the participant was that his agency allows officers to take the equipment home versus it being assigned to an officer

prior to a shift starting with the neighboring agency. A similar concept was highlighted in Chapter 2 when McClure et al. (2017) argued that there are vast inconsistencies between agencies regarding their BWC policies. This could potentially cause confusion when neighboring jurisdictions interact with one another.

However, implementing a universal BWC policy for all agencies would not be conducive because each police department faces unique working conditions and other challenges (Joh, 2016). For example, a rural sheriff's department likely would have different methods of responding to calls for service in contrast to a large municipal agency based solely on personnel. Another example of this was pointed out by one of the participants of this study who argued that BWC policy is "fluid and ever morphing" because of the equipment's "newness." Policy is constantly evolving based on new situations that officers and supervisors encounter during the acclimation process. Therefore, creating a collective policy for all agencies would be unwieldly (Joh, 2016).

Regarding the concept of discretion as proposed by Lipsky (2010) and BWC policy, there also appears to be parallels to the findings in this study. Participants acknowledged the existence of discretion with their individual department's policy. For example, one participant explained a call where they recorded a juvenile who was the victim of an attempted kidnapping. Though their policy prohibits recording of juvenile victims, the action was accepted by the participant's supervisor because the footage allowed for the quick apprehension of the suspect. The concept described by the participant in this study was reflected in the work of McClure et al. (2017), who considered officers independently choosing or dictating when to activate the camera. In

this case, the participant used his discretion to deviate from his department policy after weighing the situation that was presented to him.

Training. A unanimous concern expressed by participants was BWC training. All five participants noted the training for BWCs was very limited and covered mostly functionality of the equipment and department policy. Two participants stated they learned more through self-teaching and trial and error in the field. This concept was reflected by Gaub et al. (2016), who argued that training on BWCs was very minimal, consisting only of functionality. Another participant stated they left the training course not wanting to touch the equipment because they were not comfortable that they knew how to properly use it.

Gaub et al. (2016) argued that officers lack of understanding of BWCs could potentially influence their acceptance of the equipment. Additionally, the concepts expressed by the participants in this study was echoed by Sousa et al. (2017) who asserted because of the rapid deployment of BWCs, there is a consistent lack of training protocols regarding the equipment. These findings reveal officers are not currently receiving the training they desire or need on BWCs. A study by the IACP (2001) warned that "as with any new technology, failure to properly train officers in the use, operation, and legal implications of proper use can result in disaster" (p. 19). Though this assertion was in regard to dash cameras in police cars, its relevancy translates directly to BWCs.

The fact that all participants in this study expressed concern over BWC training, coupled with the fact no previous studies examined this area, presents a significant gap in the research. It also exposes the need for additional pre-service (police academy) and in-

service training on the equipment. Though there is no known research specifically on

BWC training, numerous researchers suggested the need for agencies to incorporate this

facet into police departments who employ the equipment. Courdert, Butin, and Metayer

(2015) argue BWC footage could be useful to show to officers during training so they can

learn from mistakes and build upon successes. FEMA (2018) also used BWC footage

from LVMPD officers as a primary method of evaluating public safety officials' response

to the One October tragedy.

  Functionality. There are no known studies focusing specifically on the

functionality of BWCs. In this study, there were several functionality concerns mentioned

by participants. One concern pertained to the battery life of the equipment. After working

long hours, an officer is unable to record due to a dead battery. Another participant

expressed concern that the BWC camera does not offer any peripheral perspective and

the quality of audio is poor. Two participants indicated they have concerns about the cord

that connects the camera to the battery pack being an officer safety issue. A third

participant acknowledged this concern but noted it is the individual officer's

responsibility to ensure that the cord is properly positioned so as to not create a safety

issue. The participant also indicated that they check the cord several times per shift to

make sure it will not be in the way. A comparison was drawn to officers being

accountable for accessibility of all their duty equipment, including BWCs.

  Other functionality concerns will likely be addressed over time. As technology

continues to advance, problematic functionality issues will be resolved through

equipment improvement. Adjustments such as increased battery life, either condensing

the battery pack with the camera or making these components wireless, improving audio,

and enhancing the camera's vantage point (peripheral vision) will negate any concerns.

Theme 2: Personal harm. This study revealed several concerns expressed by

participants concerning their perceptions of personal harm. There were two main

concepts that were incorporated in this theme. Participants discussed issues that were

coded as officer safety or punitive.

Officer safety. As mentioned in Chapter 4, one of the participants noted that the

blinking light affixed to the battery pack poised a significant officer safety issue. The

participant noted it allows "the bad guy" to easily track an officer. This adds further

credence to the concern expressed in Chapter 2 regarding recommendations made by

researchers that officers be affixed with a blinking or flashing light, letting citizens know

they are recording (Joh, 2016, Stanley, 2015). Readily identifying officers by a flashing

or blinking light poses a significant officer safety risk and should not be considered under

any circumstance. Rather, departments should uniformly incorporate in policy that

officers should verbally announce they are recording when it is safe to do so.

Other officer safety concerns conveyed by participants pertained mainly to the

functionality of BWCs. As mentioned previously, no known studies have been

undertaken specifically regarding the functionality of BWCs. In this study, examples of

these concerns include the potential for officers to become tangled in the cord that

connects the camera to the battery pack. As highlighted in an earlier section of this

chapter, many of these concerns will be nullified as technology improves. In the

meantime, officers who are equipped with BWCs should hold themselves accountable for

maintaining their duty gear, including BWCs. Ensuring that the cord is properly positioned on or in their uniform shirt (and as dictated by their department's policy) and remains that way during the shift is the individual officer's responsibility. This assertion was supported by a participant in this study who routinely checks the positioning of his BWC equipment throughout his shift.

Two participants indicated that focusing on depressing the record button while responding to a critical incident may shift an officer's focus from the situation they are encountering. This is a valid concern that can be addressed through training (muscle memory) and with the individual officer being familiar with their duty equipment. This concept was supported by another participant who compared being familiar with the functionality of BWCs to another piece of assigned duty equipment. The participant gave the example that a police officer does not have to look down and find where their firearm is located prior to deploying it in a use of force situation. Therefore, it is both a training issue and an individual officer's responsibility to be familiar with their duty equipment. This concern exposes the need for incorporating BWCs into pre-service (police academy) scenario training to ensure that recruits are familiar with functionality prior to entering the field.

Another safety concern perceived by participants is the release of BWC footage to the public and media. Participants expressed concern that police tactics and response to incidents could be utilized by criminals to plan for ambushes or escape. This concept was reflected in the work of Gaub et al. (2017), when the authors expressed concern over release of BWC footage to the media. However, this concern is difficult to argue because

law enforcement agencies participate with television shows such as *Live PD* on the A&E

Network. On the show's website, it describes the intent of the program:

> As the debate over the policing of America continues to be a part of the daily
>
> conversation across the nation, Live PD viewers get unfettered and unfiltered live
>
> access inside a variety of the country's busiest police forces, both urban and rural,
>
> and the communities they patrol on a typical night. (A + E Television Networks,
>
> para. 1, n.d.)

If camera crews are allowed to follow police officers and broadcast their interactions live,

tactics will be revealed for a nationwide audience to observe. This negates arguments

over releasing redacted BWC footage to the public after an incident has occurred.

Paralleling this was a related concept discussed by a participant in this study who asserted

the public does not understand police tactics or training. Even when an officer is correctly

performing a tactic that is trained, it can appear to be disturbing or even violent to the

untrained eye. The perception of citizens regarding the action taken in the video by the

officer could do more damage to community relations then the described goal of

improving this rapport as outlined previously.

Another related concern was officers recording while passing through or near a

crime scene investigation, specifically a briefing. During most high-profile crimes, there

are multiple bureaus that respond and interact. This includes patrol, investigations, crime

scene technicians, and other specialized units such as a gang unit. These bureaus will

commonly conduct a briefing in which each bureau presents the facts of the investigation

in which they were associated. If officers are equipped with BWCs and are actively

recording during these briefings, sensitive information which could jeopardize the investigation could be inadvertently released. It is important that measures be taken so these concerns do not come to fruition.

Punitive action. Punitive action taken by department leaders resulting in discipline was another concern expressed by one of the participants. He perceived supervisors use BWC footage as a way to "screw" officers. Despite the fact that other participants did not share similar views, this participant's perceptions should be heavily considered. If officers believe their department is out to "screw" them, this perception could interfere with law enforcement's relationship with the community and with delivery of police services. Having an inherently negative attitude when interacting with the public due to this perception could cause an adversarial relationship between the officer and the public. In addition, officers may be less inclined to conduct proactive field activity to prevent crime, which could not only affect delivery of police services, but more significantly, the important relationship between the citizens and the police.

Other participants expressed concern with their department policy which requires supervisors to randomly check video for officer compliance. This was articulated as a "witch hunt", leaving officers with the perception department leaders are looking for mistakes an officer makes during a shift. Concerns over punitive action taken by supervisors reviewing footage was observed by several researchers prior to this study (Drover & Ariel, 2015; Goestchel & Peha, 2017; Headly, Guerette, & Shariati, 2017; Katz et al., 2014; Pelfry Jr. & Keener, 2016; Sousa, Rodriguez, & Alper, 2017; Stanley, 2015).

Theme 3: Privacy. Two main concepts emerged pertaining to privacy. Participants shared concerns over privacy for officers and for citizens. The concern for officer privacy was significantly less than that for citizen privacy.

Officer privacy. Few prior studies recognized officer privacy issues as a concern (Courdert et al., 2015). However, the majority of participants in this study shared the same privacy concern of officers equipped with BWCs. Four out of the five participants indicated they were concerned about forgetting they are actively recording with the equipment and using the restroom. As human beings, it is inevitable that physiological needs will occur. An officer actively working an incident is no exception. However, there are very limited options to help quell this concern. Perhaps the only recommendation would be employing the "buddy system" with fellow officers to remind each other they are recording to prevent this situation from occurring.

Also, officers are entitled to personal lives. If a spouse or child calls their loved one at almost any other job, the employee likely has the option to accept the phone call. Law enforcement is a unique field where this luxury can be complicated. A participant mentioned accepting personal phone calls while recording as a potential privacy concern. Because it is an instinct to answer the phone, officers have to be cognizant to either decline the phone call or notify the caller they will recontact them. A participant described officer privacy concerns simply by stating "everything we do is public, and we have been recorded for years by the public so it's no big shocker." This statement could be interpreted as ultimately that the officer is responsible for being accountable for their actions while recording to ensure the equipment does not affect their privacy. As

technology improves, the capability to discard a segment of the recording may become an option if an officer simply forgets they are recording during an incident and mistakenly accepts a personal phone call or uses the restroom.

Citizen privacy. A majority of participants perceived entering a private residence while recording as being the most significant citizen privacy concern. Four out of five officers share the same concern, which was also echoed by the American Civil Liberties Union (2018). Therefore, these results show recording in citizens' private homes as a concern worthy of examination. As laws governing BWCs continue to evolve and the courts are looked to for clarification regarding them, citizens and members of law enforcement agencies should expect future changes.

Theme 4: Behavior modification. Behavior modification was a theme discussed in great depth by previous researchers. In a study conducted by Jennings et al. (2015), the researchers found 30 % to 40 % of officers believe there is some form of behavior modification by officers who are equipped with BWCs. The concepts discovered in this study parallel researchers' previous examinations of BWCs. The concepts isolated in this study were use of force, hesitation, professionalism, and behavior modification by citizens.

Use of force. All five participants had varying perceptions of officers altering their application of use of force due to being equipped with BWCs. No participants in this study acknowledged undergoing any change in their application of use of force or observed this behavior change in officers with whom they work. However, several participants stated they could envision the possibility officers would alter their

application of use of force while wearing BWCs. One participant provided an example of a civil unrest situation. The participant stated officers may exhibit more restraint when "baited" by citizens to engage them during a protest. The participant later acknowledged this change is positive and would be welcomed.

There were several dissenting findings by researchers regarding officers changing their application of the use of force as examined in Chapter 2. Early research by Ariel et al. (2015) found a dramatic decrease in the use of force by officers who wore BWCs. However, in a more recent study by Ariel (2017), the researcher discovered there was no change in levels of use of force. Ariel (2017) argued the contrasting finding is perhaps related to officers' discretion regarding what course of action to take. As discussed previously, Ariel (2017) indirectly was employing Lipsky's (2010) SLB theory with this argument. The most recent findings by Ariel (2017) were supported in this study because no participant acknowledged experiencing changes in use of force or witnessed any other officers alter their actions. Participants only acknowledged the possibility exists for officers to alter their application of use of force when wearing BWCs.

Hesitation. Only one participant discussed perceptions of officers hesitating due to the equipment. Comparable to use of force, none of the participants experienced hesitation because of being equipped with BWCs. In addition, none of participants were aware of other officers they have worked with experiencing hesitation because of being outfitted with BWCs. However, despite the fact that participants have not experienced or witnessed officers hesitating because of the equipment, some participants acknowledge

the potential exists for officers to hesitate. This concept parallels participants' perceptions of changes in the application of use of force while wearing the equipment.

Regarding perceptions, a comparison can be drawn between the participants in this study and an example provided by one of the interviewees. As reported in Chapter 4, a participant gave an example of videos shown to a mixed group of students in a training class depicting officers using force. In the video, a rap song was playing that contained lyrics of "this is what happens when you call the police." The participant explained the point of the example was to show that citizens' perceptions may not always be accurate because of outside influences (song lyrics, media, etc.). The same possibility exists where officers personally have not experienced changes in use of force or hesitation because of BWCs. But, because of outside influences, the perception by officers is this phenomenon exists.

However, it is important not to diminish the participants' perception of this concern. Any hesitation or change in application of use of force when justified could pose a significant risk to the public and to officers. Because participants expressed perceptions of this potentially occurring in other officers, further study should be commenced to examine the legitimacy of the concerns. Similarly, it is important not to diminish citizens' perceptions of use of force. Rather, a community orientated campaign should be undertaken to educate citizens regarding the unfortunate necessity of officers being required to use force when justified. Special care has to be taken in this process not to reveal tactics that may jeopardize officer safety.

Professionalism. Increased professionalism was reported by four out of five participants. Changes in professionalism described by participants as being, "in general." using less profanity, showing more empathy to citizens, and taking more time on a call for service. In this study, professionalism was the most significant and positive behavior modification noted. This finding supports one of the main pillars of employing BWC programs (DOJ, n.d.) which was increased professionalism. In addition, findings are also supported by prior studies in which researchers found that officers perceived BWCs would cause members of law enforcement to act in a more professional manner (Gaub et al., 2016). The findings from this study and previous studies may align with the Hawthorne Effect Theory, which argues individuals behave differently when they are being watched (Adair, 1984). However, a participant in this study indicated they want the BWC to show they are a good officer and are conducting themselves in a professional manner. This does present many questions for future consideration. Without BWCs, are officers generally unethical? Is this phenomenon isolated to the field of law enforcement or is it society in general?

Participants of this study universally indicated the use of BWC footage is critical regarding supervisors or internal affairs investigators responding to complaints made by citizens. The primary benefit citied by several participants was the speed at which investigations were concluded. Prior to BWCs, investigations could take weeks or months to complete. With BWC footage, an investigation can be resolved in minutes or days. As one participant noted, the investigator can quickly determine if the complaint is legitimate or if it was inaccurate or even fabricated. This expedites the process of

appropriately addressing the situation either through disciplinary measures, additional training, or exoneration.

Citizens behavior modification. This study also revealed participants perceive there are changes in citizens' behavior when encountered by officers outfitted with BWCs. One participant argued there is a possibility for behavior modification by citizens, but he acknowledged some people are going to "act how they act" regardless of the presence of BWCs. Quantitatively speaking, it is difficult to analyze if BWCs have an effect on citizens' behavior. The best method to investigate this is through qualitative study of officers' perspectives of this phenomenon, as well as studies of citizens who have been contacted by police who were equipped with BWCs.

Limitations of the Study

Several limitations discussed in Chapter 1 did come to fruition. The qualitative nature of the study provided rich and detailed data. However, as previously noted, only five participants were interviewed. Though saturation was achieved, this created a tradeoff between in-depth data collection and the number of participants. Restricting the geographical area where participants were recruited from left other regions of the country unrepresented. One limitation that was not previously discussed in Chapter 1 emerged post-study. Though the participants came from diverse ethnic and racial backgrounds, there were no female officers who participated. Unfortunately, I was unable to secure a female participant to volunteer for the study. All of these limitations could be addressed in future studies conducted on the topic. A limitation that was discussed in Chapter 1 but did not occur was personal bias. The concern of personal bias by the researcher was

addressed through member-checking of notes taken during the interview and reviewing audio transcripts.

Recommendations

Current Recommendations

Department leadership should include line officers and union membership during the implementation process. Results from the data in this study show the need for police departments to include officers and police union membership in the implementation process when considering BWCs to achieve buy-in on the equipment. A recommendation on how to achieve this is through the creation of a steering committee in police departments comprised of union membership, line officers, and supervisors. This would create a think tank of various perspectives to address concerns of officers and citizens.

This effort could quell concerns reflected in responses by participants pertaining to department policy. Specifically, it would address the concern that BWC footage should not be reviewed randomly by supervisors with punitive intent. BWC footage should not be used a "witch hunt" as described by one participant. Committee members could also evaluate various BWC vendors to determine which company may have the most conducive equipment based on the needs of the officers of the respective agency. A pilot program on BWCs could be utilized within an agency with the committee collecting participating officers' input. Achieving buy-in by employing these recommendations may reduce or eliminate the initial lack of acceptance of BWCs as reported by several participants.

Initial hands-on training for current officers on the equipment is recommended when a BWC program is first implemented. Prior to entering the field with the equipment, officers should be comfortable with the positioning of the BWC as well as its functionality. As recommended by participants in this study, departments should utilize vendors from the company where the equipment was purchased to train officers on the equipment's functionality. If this is not feasible, a department trainer who is well-versed with the equipment should assist with the education of officers regarding the described areas. As recommended by a participant in this study, class sizes should be reduced, thus allowing officers to feel more comfortable to ask questions about the equipment and more one-on-one time can be spent between the officer and instructor.

Update department training to incorporate BWCs in preservice (police academy) training and annual in-service training. Once BWCs have been implemented in an agency, department training should be amended to include integrating BWCs into pre-service (police academy) training for recruits. In pre-service training, recruits spend a significant amount of time being instructed on various pieces of duty equipment to include firearms, expandable baton, taser, oleoresin capsicum (o.c.), defensive tactics (handcuffs), and radio. Since BWCs are another piece of equipment an officer will be carrying, training should be incorporated in the pre-service level for this equipment.

Recruits should be initially exposed to the same training veteran officers are recommended to receive, including functionality, practical application, and knowledge on how BWCs can support them in their role as a police officer. In addition, most police

academies have evaluated scenario training based on what recruits have been taught in

the classroom. In most cases, these scenario trainings are pass/fail and determine if a

recruit will graduate from the police academy and advance to become a police trainee.

During academy scenario training, it is recommended recruits be required to wear BWCs

and activate them when deemed necessary by their department policy. This will ensure

future officers have developed "muscle memory," as suggested by one of the participants

in this study which will ensure proper use and activation in the field. Incorporating

BWCs in these training scenarios would cement the functionality of the equipment in the

foundation of the recruit's mindset.

In addition, departments should consider incorporating BWC footage during in-

service training courses. As suggested by several participants in this study, the footage

could be used as a learning tool for showcasing correct or incorrect handling of unique

incidents encountered by officers. Using BWC footage as a learning tool was also

discussed in Chapter 2 by Courdert, Butin, and Metayer (2015). Footage could also be

utilized when evaluating the response of emergency personnel to major incidents such as

One October. Officers would be able to learn from the footage in a safe and static

environment as opposed to during an actual incident. In addition, examples of how BWC

footage has cleared officers who were wrongly accused through citizen complaints or

substantiated concerns where officers have committed wrongdoing should be

incorporated. This would allow officers to actually see examples of how footage can

protect them and their department, or how it holds unethical officers accountable. This

may increase confidence in the equipment and lead to "buy-in."

In-service training on BWCs should be offered to current officers on an annual basis. Most states require an annual recertification on the duty equipment mentioned previously when discussing pre-service training. Several participants mentioned the perceived benefit of viewing actual BWC footage of incidents to learn what was done correctly and what could have been done to improve performance in an incident. This would afford officers the opportunity to openly discuss how to handle incidents from their varying training and experience. In addition, this would also provide a forum for current officers to discuss functionality issues with the equipment they may have encountered so department leaders can work with the vendor to resolve them.

Continue routine meetings with steering committee members formed during the pre-implementation phase. A continuance of a steering committee which was recommended for the implementation process could be extended postimplementation to facilitate idea and concern sharing amongst vested parties. This information could then be conveyed to department leadership. It is imperative for department leaders to have an effective flow of communication with officers in the field to determine what policy amendments can be made. As the technology of BWCs advance, the committee would also be able to relay functionality concerns with upgraded equipment to share with vendors for resolution.

If followed, these recommendations would ideally address negative perceptions of the equipment by officers. If future study discovers behavior changes in officers, employing the recommendations have the potential to negate the concerns of officers regarding the equipment. These measures would hopefully reverse the behavior changes

in officers that is deemed adverse. Expanding in-service training can enhance the overall skillset of officers through learning from others' mistakes and building upon officers' examples of effectively handling an incident.

Officers should employ individual responsibility to avoid privacy issues. Based on this study, officer privacy issues should be addressed through individual responsibility. Officers should ensure they are not recording in situations where their privacy would be compromised. Baring exigent circumstances, making a conscious effort to avoid taking personal phone calls or texting during incidents is essential. Utilizing the "buddy system" to remind fellow officers they are recording is the only other potential safeguard (other than self-awareness) to minimize the potential for an officer to forget they are recording during a restroom break. Regarding citizen privacy, law enforcement agencies, law makers, and civil liberty groups should work together closely to ensure steps are taken to respect a citizen's expectation of privacy in their home.

Future Considerations

Functionality. Some facets will resolve themselves as time progresses and technology improves. One of the safety concerns described by participants was the wire that connects the camera to the battery. In the future, as technology improves, these components will likely be condensed into one piece, negating the need for a cord. Additionally, policy will continue to evolve based on unique incidents involving officers wearing the equipment.

Shift in perceptions by police officers. Another dimension a participant astutely asserted was in five or ten years, changes in behavior due to officers being equipped with

BWCs will be negated because the equipment will become "the new normalcy." A similar assertion was made by another participant who stated he believes BWCs will become mandated by the DOJ. If this is the case, every officer who is newly hired by a police department will be required to wear the equipment. As veteran officers move into specialized units, command staff, other positions in their department that does not require BWCs, or simply retire, animosity toward the equipment will become minimal or non-existent.

       Considerations for future researchers regarding evaluation of variables. The most notable consideration is intended for future researchers. It is common knowledge there is a certain degree of controversy between the effectiveness of qualitative versus quantitative inquiry. The RCT is universally considered the "gold standard" by academics. However, it is important for future researchers looking to study BWCs to consider several dimensions associated with the equipment most notably, the convoluted nature of law enforcement in general.

       There are numerous variables that are not accounted for that may contribute significantly to the findings of RCT studies. First, it is critical for researchers to consider how the diversity of individual officers poses a significant concern when formulating conclusions to findings. Officers come from different backgrounds to include racial, ethnic, religious, gender, and generational. Their backgrounds may include military experience, varying levels of education, training, and life experience. All of these factors are significant and should be considered when studying behavioral changes such as use of

force, self-initiated field-activities, complaints, and hesitation. Other major considerations include the environment where the study is conducted.

Factors such as the economic situation including unemployment, affordable housing opportunities, and income levels may have an impact on police services for the respective municipality where the study is taking place. A final area of consideration is the timeframe in which the study was conducted. Were there controversial police interactions recently released via the national media prior to or during the study? In the timeframe the study was conducted, was there civil unrest in response to these interactions? It could be surmised the mentioned considerations play a factor in an officer application of use of force, complaints made by the public, self-initiated field activities, and citizen – police relations in general. In the studies perused as part of the literature review in Chapter 2, these considerations were not mentioned.

Finally, it is critical future researchers take into consideration the force continuum that officers are trained on throughout their career and enforced by department policy and state and Federal law. There are multiple levels of force an officer can use in a situation. Typically, the level of force is dictated by the degree of resistance by a citizen among other factors. There is a stark contrast between justified and unjustified use of force. Statistically investigating only levels of use of force without differentiating whether the force used was justified or unjustified is nonsensical. Future inquiry should differentiate between justified and unjustified use of force. This is due to the fact the application of use of force by officers is undeniably a major facet of enforcing the law. Similarly, not distinguishing between a complaint being sustained or unstained when conducting

quantitative inquiry also is a disservice to the advancing body of research on the phenomenon. Similar to use of force, a distinct separation should be made between sustained and unstained complaints against officers.

Future Study

There is a need for continued quantitative and qualitative study on the effects of BWCs. Because of the limited body of research conducted on BWCs, both qualitative and quantitative studies are needed. Due to small sample sizes incorporated within the qualitative methodology, future qualitative inquiry is especially imperative to improve understanding of officers' perceptions of the equipment. Future studies will continue to identify how BWCs potentially affect officers' behavior and assist in understanding their concerns regarding the equipment. As disclosed in the limitations section of this chapter, future qualitative study should expand to other regions of the United States to ascertain if these trends are noted on a more global perspective.

Though no participants in this study experienced or directly observed other officers hesitate, alter their use of force when justified, or decreased self-initiated field activities, the perception by some of the participants suggest it may be occurring in officers in general. Because these behavior changes are so critical to the safety of citizens and officers and they potentially jeopardize the effective delivery of police services, additional qualitative study is essential. These efforts will allow department leaders to be able to address concerns and issues effectively.

Researchers should partake in studies conducted with new officers who were issued BWCs from the inception of their employment as a police officer. Two

participants recommended studies be conducted with newer officers who have been

assigned BWCs for their entire careers to gain an understanding of their perceptions

regarding changes in behavior. This study focused on veteran officers who have had

significant experience in law enforcement prior to being equipped with BWCs. The

officers included in this study could describe from their experience if their behavior on

duty changed as a result of BWCs. However, it is important to consider that even though

newer officers have been equipped with BWCs since their careers began, they likely were

not wearing BWCs personally or with their previous employment. Therefore, a researcher

would not be able to determine changes in behavior on duty unless this population is

studied specifically. In addition, researchers could investigate more broadly officers'

perceptions on their decision-making while equipped with BWCs. Inquiries could be

made with officers with less experience to understand their perceptions of veteran

officers (such as those in this study) to understand how senior officers view the

equipment.

Qualitative studies should be conducted focusing specifically on the effects of

BWCs on officer and citizen privacy. Officer and citizen privacy poses a significant

controversy worth studying in the future as BWC programs expand. Future study should

be conducted on officer and citizen privacy while interacting with law enforcement

officials who are equipped with BWCs. It is critical that the Fourth Amendment is

followed, and citizens' privacy is respected. Citizens' perceptions of BWC usage in the

private residence should be examined to help guide legislators who are crafting BWC law

and police department leaders who implement department policy pertaining to the

equipment. In addition, taking into consideration officers' privacy is also important and should be investigated.

Behavior changes in citizens who are contacted by officers equipped with BWCs should be studied. Additionally, inquiry should be made into how the presence of BWCs affect citizens' behavior. Several participants in this study referred to BWCs having the potential to alter citizens' behavior to achieve compliance. Ensuring citizen compliance with lawful direction given by police, coupled with officers following department policy and ethical practices, will greatly reduce the potential for incidents involving use of force.

Qualitative studies should be conducted to understand the relationship between behavior changes in police officers and current concepts such as the "war on cops" and de-policing. Future study should be conducted to compare the dichotomy between officers' change in behavior due to being equipped with BWCs and the concept of de-policing as a result of the "war on cops" as argued by Nix, Wolfe, and Campbell (2017). It is clear there are changes in behavior occurring. However, what is not clear is what is directly or indirectly causing this change. The possibility exists that there are multiple factors contributing to this phenomenon, which is worthy of future study. Overall, there are many facets of BWCs that are worthy of study given the newness of the technology.

Implications

It can be argued that BWCs are currently present in many agencies throughout the United States, but it can also be surmised the equipment will continue to expand into

other law enforcement agencies in the future. Therefore, it is critical to minimize any

potentially adverse reactions and behavior changes associated with implementation of the

equipment. Several recommended changes to the implementation process were made to

include involving officers and police unions in the selection process of the equipment,

amending training to include pre-service (police academy) and in-service training on

using the equipment in the field, and providing video footage examples of how officers

can learn from incidents, and working with vendors to alleviate functionality concerns.

Incorporating these recommended steps will ideally attain the goals of achieving officer

buy-in with the equipment. Ensuring buy in from officers will aid in the goal of

improving citizen and officer safety, cultivating relationships between the police and the

community they serve, and enhancing the delivery of police services.

Conclusion

In this Dissertation, perceived changes in behavior stemming from the

implementation process of BWC in police departments in the Southwestern United States

utilizing the SLB theoretical framework was studied. I discovered the majority of

participants did not initially feel as though the equipment was needed and they perceived

BWC implementation was a result of public pressure in reaction to a "few bad apples" as

one participant described. Due to shortcomings in the implementation process, buy-in

was not initially achieved by department leaders, thereby potentially jeopardizing the

long-term success of the BWC programs. This led to a lack of preliminary acceptance of

the equipment. At the time this study was conducted, the majority of participants had

evolved into a more favorable impression of BWCs. Participants in this study saw the

benefits associated with BWCs for both officers and citizens after they had experience with the equipment. As this study progressed, concepts developed, and themes emerged on facets of BWC programs that can be amended or addressed to improve program implementation such as achieving buy-in, amending training on the equipment, and addressing department policy governing it.

Since the trend of implementing BWC programs in law enforcement agencies is likely to continue, it is imperative the fields of academia and law enforcement continue to collaborate to ensure a smooth transition into the era of police transparency. It is equally important that officers are put in the best position to succeed with the equipment once a determination has been made by an agency to implement a BWC program. Measuring this success is contingent upon achieving the goals of officer buy-in, ensuring citizen and officer safety, improving relations between the police and the community they protect, and improving the delivery of police services.

It can be argued the relationship between the police and the community they serve, honor, and protect is one of the most vital in our society. The responsibility of ensuring the health and stability of this relationship falls into the hands of several stakeholders. Ultimately, the individual officer is responsible for adhering to the oath they swear to before pinning on a badge. When an officer compromises this oath, they should be held accountable by their department leaders and the criminal justice system.

The community also plays an extremely important role. Citizens should effectively communicate and give the same level of respect to officers that they expect in return during all interactions with law enforcement. Scholars perhaps play the most

significant role. Embarking on qualitative and quantitative studies on a wide range of

topics involving law enforcement is essential to understanding the fragile relationship

with the community. Continued study can also determine what can be done to minimize

barriers, improve communication, and foster positive relationships with the citizens who

the police vow to serve, to honor, and to protect.

References

A + E Television Networks. (n.d.). About Live PD. Retrieved April 29, 2019, from the A + E Television Networks webpage: https://www.aetv.com/shows/live-pd/about

Adair, J. G. (1984). The Hawthorne effect: A reconsideration of the methodological artifact. *Journal of Applied Psychology, 69*(2), 334–345. doi:10.1037/0021-9010.69.2.334

American Civil Liberties Union. (2018, June). A model act for regulating the use of wearable body cameras by law enforcement. Retrieved from https://www.aclu.org/other/model-act-regulating-use-wearable-body-cameras-law-enforcement

Ariel, B. (2017). Police body cameras in large police departments. *Journal of Criminal Law & Criminology*, *106*(4), 730-767. Retrieved from https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=7596&context=jclc

Ariel, B., Farrar, W., & Sutherland, A. (2015). The effect of police body-worn cameras on use-of-force and citizens' complaints against the police: A randomized controlled trial. *Journal of Quantitative Criminology*, *31*(3), 509-535. doi:10.1007/s10940-014-9236-3

Ariel, B., Sutherland, A., Henstock, D., Young, J., Drover, P., . . . Henderson, R. (2016a). Wearing body cameras increases assaults against officers and does not reduce police use-of-force: Results from a global multi-site experiment. *European Journal of Criminology*, *13*(6), 744-755, doi:10.1177/1477370816643734

Ariel, B., Sutherland, A., Henstock, D., Young, J., Drover, P., . . . Henderson, R. (2016b).
Report: Increases in police use-of-force in the presence of body-worn cameras are
driven by officer discretion: A protocol-based subgroup analysis of ten
randomized experiments. *Journal of Experimental Criminology*, *12*(3), 453-463,
doi:10.1007/s11292-016-9261-3

Baker, M. A., & Bacharach, V. R. (2017). Police officer-civilian confrontations caught on
camera: The influence of contextual frames on judgements of excessive
force. *American Journal of Criminal Justice,42*(4), 683-697. doi:10.1007/s12103-
017-9387-5

Boivin, R., Gendron, A., Faubert, C., & Poulin, B. (2017a). The body-worn camera
perspective bias. *Journal of Experimental Criminology,13*(1), 125-142.
doi:10.1007/s11292-016-9270-2

Boivin, R., Gendron, A., Faubert, C., & Poulin, B. (2017b). The malleability of attitudes
toward the police: Immediate effects of the viewing of police use-of-force videos.
Police Practice and Research, *18*(4), 366-375,
doi:10.1080/15614263.2016.1230063

Bowers, N. (2018, March 09). Judge rules Metro has to start releasing 1 October reports
to media within 3 days. Retrieved August 7, 2018, from 8LasVegasNow.com.
website: http://www.lasvegasnow.com/news/judge-rules-metro-has-to-start-
releasing-1-october-reports-to-media-within-3-days/1026821681

Braga, A., Coldren, J. R., Jr., Sousa, W., Rodriguez, D., & Alper, O. (2017). *The Benefits
of Body-Worn Cameras: New findings from a randomized controlled trial at the*

Las Vegas Metropolitan Police Department (Rep. No. 2013-IJ-CX-0016, pp. 1-68). Arlington, VA: CNA Analysis and Solutions.

Brown, G. R. (2016, March 1). The Blue Line on Thin Ice: Police Use-of-force Modifications in the era of Cameraphones and YouTube. *British Journal of Criminology*, *56*(2), 293-312, doi:10.1093/bjc/azv052

Brucato, B. (2015). Policing made visible: Mobile technologies and the importance of point of view. *Surveillance & Society,13*(3/4), 455-473. doi:10.24908/ss.v13i3/4.5421

Bureau of Justice Assistance. (n.d.). *Body-worn camera toolkit.* Washington, DC: Author. Retrieved from https://www.bja.gov/bwc/

Buvik, K. (2014). The hole in the doughnut: A study of police discretion in a nightlife setting. *Policing and Society, 26*(7), 771-788. doi:10.1080/10439463.2014.989157

Center for Constitutional Rights. (n.d.). Summary of remedial opinion and order in Floyd, et al. v. City of New York, 08-cv-1034 (SAS). Retrieved from https://ccrjustice.org/sites/default/files/attach/2015/09/Floyd-Remedy-Decision-Summary-8-12-13.pdf

Chapman, B. (2019). Body-worn cameras: What the evidence tells us. *National Institute of Justice Journal,* (280), 1–5. Retrieved from https://www.nij.gov/journals/280/Pages/body-worn-cameras-what-evidence-tells-us.aspx

Crosby, R. (2018, April 28). Supreme Court orders release of audio, video from Las
Vegas shooting. *Las Vegas Review-Journal.* Retrieved from
https://www.reviewjournal.com/crime/courts/supreme-court-orders-release-of-
audio-video-from-las-vegas-shooting/

Coudert, F., Butin, D., & le Metayer, D. (2015). Body-worn cameras for police
accountability: Opportunities and risks. *Computer Law & Security Review. 3*(1),
749-762. Retrieved from www.sciencedirect.com

Crow, M. S., Snyder, J. A., Crichlow, V. J., & Smykla, J. O. (2017). Community
perceptions of police body-worn cameras: The impact of views on fairness, fear,
performance, and privacy. *Criminal Justice and Behavior,44*(4), 589-610.
doi:10.1177/0093854816688037

Custers, B., & Vergouw, B. (2015). Promising policing technologies: Experiences,
obstacles and police needs regarding law enforcement technologies. Computer
Law & Security Review, 31(4), 518-526. doi:10.1016/j.clsr.2015.05.005

Darrell L., R. (2002). An assessment of Graham v. Connor, ten years later. Policing: An
International Journal of Police Strategies & Management, (2), 294.
doi:10.1108/13639510210429383

De Angelis, J., & Wolf, B. (2016). Perceived accountability and public attitudes toward
local police. Criminal Justice Studies: A Critical Journal of Crime, Law &
Society, 29(3), 232-252.

Drover, P., & Ariel, B. (2015). Leading an experiment in police body-worn video cameras. *International Criminal Justice Review,25*(1), 80-97. doi:10.1177/1057567715574374

Federal Emergency Management Agency. (2018). 1 October after-action report (pp. 1-50). Washington, DC: Author. Retrieved from https://www.hsdl.org/?view&did=814668

Gaub, J. E., Choate, D. E., Todak, N., Katz, C. M., & White, M. D. (2016). Officer Perceptions of Body-Worn Cameras Before and After Deployment. *Police Quarterly,19*(3), 275-302. doi:10.1177/1098611116653398

Gaub, J. E., Todak, N., & White, M. D. (2017). *Beyond patrol: Exploring the perceptions of police body-worn cameras among officers in specialized units* (pp. 1-17, Rep.). Tempe, AZ: Arizona State University Center for Violence Prevention and Community Safety. Retrieved from https://www.bja.gov/bwc/pdfs/specialty-unit-report-final-2-17.pdf

Goetschel, M., & Peha, J. M. (2017). Police perceptions of body-worn cameras. *SSRN Electronic Journal.* doi:10.2139/ssrn.2944387

Headley, A. M., Guerette, R. T., & Shariati, A. (n.d). A field experiment of the impact of body-worn cameras (BWCs) on police officer behavior and perceptions. *Journal of Criminal Justice, 53,* 102-109. doi:10.1016/j.jcrimjus.2017.10.003

Hedberg, E. C., Katz, C. M., & Choate, D. E. (2017). Body-worn cameras and citizen interactions with police officers: Estimating plausible effects given varying

compliance levels. *Justice Quarterly*, *34*(4), 627-651,

doi:10.1080/07418825.2016.1198825

Holliday, A. (2002). *Doing and writing qualitative research.* London, United Kingdom:

Sage Publications.

Holliday, A. (2007). *Doing and writing qualitative research* (2nd ed.). London, United

Kingdom: Sage Publications.

Hung, V., Babin, S., & Coberly, J. (2016). *A primer on body-worn camera technologies*

(Rep. No. 2013-MU-CX-K111, pp. 1-42). Laurel, MD: John Hopkins University

Applied Physics Laboratory.

: International Association of Chiefs of Police. The Impact of Video Evidence on Modern

Policing (pp. 1-40, Rep. No. 2001-CK-WX-0157). (2001). Washington, DC.

Retrieved from https://ric-zai-inc.com/Publications/cops-w0404-pub.pdf

Jennings, W. G., Fridell, L. A., & Lynch, M. D. (2014). Cops and cameras: Officer

perception of the use of body-worn cameras in law enforcement. *Journal of*

Criminal Justice, *42*(6), 549-556, doi:10.1016/j.jcrimjus.2014.09.008

Jennings, W. G., Lynch, M. D., & Fridell, L. A. (2015). Evaluating the impact of police

officer body-worn cameras (BWCs) on response-to-resistance and serious

external complaints: Evidence from the Orlando police department (OPD)

experience utilizing a randomized controlled experiment. *Journal of Criminal*

Justice, *43*(6), 480-486, doi:10.1016/j.jcrimjus.2015.10.003

Joh, E. E. (2016). Beyond surveillance: Data control and body cameras. *Surveillance &*

Society, 14(1), 133-137. doi:10.24908/ss.v14i1.6286

Kahlke, R. M. (2014). Generic qualitative approaches: Pitfalls and benefits of

methodological mixology. *International Journal of Qualitative Methods, 13*(1),

37-52. doi:10.1177/160940691401300119

Katz, C. M., Choate, D. E., Ready, J. R., & Nuňo, L. (n.d.). *Evaluating the impact of

officer worn body cameras in the Phoenix Police Department* (pp. 1-43). Phoenix,

AZ: Arizona State University Center for Violence Prevention and Community

Safety. Retrieved from

https://publicservice.asu.edu/sites/default/files/ppd_spi_feb_20_2015_final.pdf

Keane, J., & Bell, P. (2013). Confidence in the police: Balancing public image with

community safety – A comparative review of the literature. International Journal

of Law, Crime and Justice, 41(3), 233-246. doi:10.1016/j.ijlcj.2013.06.003

Kyle, M. J., & White, D. R. (2016). The impact of law enforcement officer perceptions of

organizational justice on their attitudes regarding body-worn cameras. *Journal of

Crime and Justice,40*(1), 68-83. doi:10.1080/0735648x.2016.1208885

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity

in naturalistic evaluation. New Directions for Program Evaluation, 1986(30), 73-

84. doi:10.1002/ev.1427

Lippert, R. K., & Newell, B. C. (2016). Debate Introduction: The Privacy and

Surveillance Implications of Police Body Cameras. *Surveillance & Society,14*(1),

113-116. doi:10.24908/ss.v14i1.6279

Lipsky, M. (2010). *Street level bureaucracy: Dilemmas of the individual in public services* (30th Anniversary Expanded Ed.). New York, NY: The Russell Sage Foundation.

Martinez, D. T., Cochrane, C. M., & Tan, C. C. (2016, October). *Encryption-based privacy protection for police body-worn cameras.* Paper presented at the 2016 IEEE Conference on Communications and Network Security (CNS), Philadelphia, PA. doi:10.1109/cns.2016.7860513

Mateescu, A., Rosenblat, A., & Boyd, d. (2016). Dreams of Accountability, Guaranteed Surveillance: The Promises and Costs of Body-Worn Cameras. Surveillance & Society, 14(1), 122-127.

McClure, D., La Vigne, N., Lynch, M., Golilan, L., Lawrence, D., & Malm, A. (2017). *How Body Cameras Affect Community Members' Perceptions of the Police* (pp. 1-12). Washington, DC: Urban Institute. Retrieved from https://www.researchgate.net/publication/323615924_How_Body_Cameras_Affect_Community_Members'_Perceptions_of_Police_Results_from_a_Randomized_Controlled_Trial_of_One_Agency's_Pilot

Menichelli, F. (2014). Technology, context, users: A conceptual model of CCTV. *Policing: An International Journal of Police Strategies & Management, 37*(2), 389-403. doi:10.1108/pijpsm-06-2013-0055

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey-Bass.

Merola, L.M., Lum, C., Koper, C.S., and Scherer, A. (2016). *Body worn cameras and the courts: A national survey of state prosecutors. Report for the Laura and John Arnold Foundation.* Fairfax, VA: Center for Evidence-Based Crime Policy, George Mason University.

National Archives. (2016, April 28). Body worn camera technologies market survey. *Federal Register: The Daily Journal of the United States Government.* Retrieved from https://www.federalregister.gov/documents/2016/04/28/2016-09958/body-worn-camera-technologies-market-survey

National Institute of Justice. *The Use-of-Force Continuum*. (2009, August 04). Retrieved December 05, 2017, from https://www.nij.gov/topics/law-enforcement/officer-safety/use-of-force/Pages/continuum.aspx

National Law Enforcement Memorial Fund (n.d.). *Facts & Figures*. Retrieved from https://nleomf.org/facts-figures

Newell, B.C. (2014). Crossing lenses: Policing's new visibility and the role of "smartphone journalism" as a form of freedom-preserving reciprocal surveillance. *Journal of Law, Technology & Policy.* Retrieved from http://illinoisjltp.com/journal/wp-content/uploads/2014/05/Newell.pdf

Nix, J., Wolfe, S. E., & Campbell, B. A. (2018). Command-level Police Officers' Perceptions of the "War on Cops" and De-policing. Justice Quarterly, 35(1), 33-54.

Nuth, M. S. (2008). Taking advantage of new technologies: For and against

crime. *Computer Law & Security Review,24*(5), 437-446.

doi:10.1016/j.clsr.2008.07.003

Organizational Development and Support Consulting. (2011). Body worn video projects

in Paisley and Aberdeen self-evaluation (pp. 1-19, Rep.). Glasgow, United

Kingdom: Author. Retrieved from http://www.bwvsg.com/wp-

content/uploads/2013/07/BWV-Scottish-Report.pdf

Patton, M. Q. (2012). *Essentials of utilization-focused evaluation* (4th ed.). London,

United Kingdom: Sage Publications.

Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and

practice* (4th ed.). Los Angeles, CA: Sage Publications.

Pelfrey Jr., W. V., & Keener, S. (2016). Police body worn cameras: A mixed method

approach assessing perceptions of efficacy. *Policing: An International Journal of

Police Strategies*, *39*(3), 507-520, doi:10.1108/PIJPSM-02-2016-0019

Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in

psychology. *Qualitative Report, 20*(2), 5th ser., 76-85. Retrieved from

http://www.nova.edu/ssss/QR/QR20/2/percy5.pdf

Piza, E. L., Caplan, J. M., Kennedy, L. W., & Gilchrist, A. M. (2014). The effects of

merging proactive CCTV monitoring with directed police patrol: A randomized

controlled trial. *Journal of Experimental Criminology,11*(1), 43-69.

doi:10.1007/s11292-014-9211-x

Police Executive Research Forum. Citizen Perceptions of Body-Worn Cameras: A
Randomized Controlled Trial (pp. 1-57, Rep.). (2017). Washington, DC:

Ready, J.T. & Young T.N. (2015). The impact of on-officer video cameras on police-
citizen contacts: Findings from a controlled experiment in Mesa, AZ. *Journal of
Experimental Criminology. 11*(3)*,* pp 445–458, doi:10.1007/s11292-015-9237-8

Ross, D. L. (2002). An assessment of Graham v. Connor, ten years later. *Policing: An
International Journal of Police Strategies & Management*, *25*(2), 294-318.
doi:10.1108/13639510210429383

Rubin, H. J., & Rubin, I. S. (2016). *Qualitative interviewing: The art of hearing data*. Los
Angeles, CA: Sage Publications.

Rudestam, K. E., & Newton, R. R. (2015). *Surviving your dissertation: A comprehensive
guide to content and process* (4th ed.). Thousand Oaks, CA: Sage Publications.

Sabatier, P. A., & Weible, C. M. (2014). *Theories of the policy process.* Boulder, CO:
Westview Press.

Simon, M. K. (2011a). Developing research questions. In Dissertation and scholarly
research: Recipes for success (pp. 1–3). Seattle, WA: Dissertation Success.
retrieved from http://dissertationrecipes.com/wp-
content/uploads/2011/04/Developing-Research-Questions.pdf

Smykla, J. O., Crow, M. S., Crichlow, V. J., & Snyder, J. A. (2015). Police body-worn
cameras: Perceptions of law enforcement leadership. *American Journal of
Criminal Justice,*424-443. doi:10.1007/s12103-015-9316-4

Sousa, W. H., Coldren, J. R., Rodriguez, D., & Braga, A. A. (2016). Research on body worn cameras. *Police Quarterly,19*(3), 363-384. doi:10.1177/1098611116658595

Surette, R. (2005). The thinking eye. Policing: An International Journal of Police Strategies & Management, 28(1), 152-173. doi:10.1108/13639510510581039

Stanley, J. (2015, March). Police body-mounted cameras: With right policies in place, a win for all. Retrieved October 10, 2017, from https://www.aclu.org/other/police-body-mounted-cameras-right-policies-place-win-all

Sutherland, A., Ariel, B., Farrar, W., & Anda, R. D. (2017). Post-experimental follow-ups—Fade-out versus persistence effects: The Rialto police body-worn camera experiment four years on. *Journal of Criminal Justice,53*, 110-116. doi:10.1016/j.jcrimjus.2017.09.008

Taylor, E. (2016). Lights, camera, redaction... police body-worn Cameras: Autonomy, discretion and accountability. *Surveillance & Society*, *14*(1), 128-132. Retrieved from https://ojs.library.queensu.ca/index.php/surveillance-and-society/article/view/cdebate3

Use-of-force Model. (2017, October 10). Retrieved October 10, 2017, from https://cops.usdoj.gov/pdf/use-of-force.pdf

U.S. Census Bureau. (2019, February 11). Fast growth in the Desert Southwest continues. Retrieved March 5, 2019, from https://www.census.gov/library/stories/2019/02/fast-growth-in-desert-southwest-continues.html

Vincente, F. & Fisher, A. (2007). Plymouth Head Camera Project:

Public Relations Evaluation University of Plymouth Centre of Expertise.

Retrieved October 10, 2018 from

http://www.serio.ac.uk/resources/files/Plymouth%20Head%20Camera%20Project

%20Public%20Relations%20Evaluation.pdf

http://www.serio.ac.uk/resources/files/Plymouth%20Head%20Camera%20Project%20Public%20Relations%20Evaluation.pdf

Worrall, J. L. (2000). Constitutional issues in reality-based police television programs:

Media ride-alongs. American Journal of Criminal Justice, 25(1), 41-64.

doi:10.1007/bf02886810

Yokum, D., Ravishanker, A., & Coppock. (2017). Evaluating the Effects of Police Body-

Worn Cameras: A Randomized Controlled Trial (pp. 1-27, Working paper).

Washington, DC: The Lab @ DC, Office of the City Administrator, Executive

Office of the Mayor.