

**What is the Moral, Ethical, or Personal Effect on Firefighters Using Body-Worn Cameras
on Incident Responses and Public Encounters?**

Research Presented in Partial Fulfilment

of the Requirements for the

Executive Fire Officer Program

by

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Abstract

This study examines the implementation of *Body-Worn Cameras (BWCs)* in the American fire service and examines the moral, ethical, or personal effects on firefighters. BWCs are widely used in law enforcement and their introduction to the fire service is in its infancy. There is a notable lack of current research specific to the firefighting profession's utilization of BWCs. This study used a phenomenological qualitative research approach to study the perceptions and experiences of firefighters' use of BWCs through surveys and interviews. This focus begins in Central Texas and expands across the United States and includes fire departments who are currently utilizing BWCs and those who are not. The study seeks to identify the benefits of using BWCs while simultaneously considering the impact on firefighters from a moral, ethical, and personal dilemma perspective. The findings could provide *policymakers* and *fire service administrators* with valuable insight so that policies and strategies for implementation of BWCs consider the *potential workforce consequences* for use while promoting the positive benefits provided by BWCs.

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The views expressed in this dissertation are the views of the author and participants' alone and do not represent the official views of the U. S. Government or any fire department. Certain commercial entities, equipment, or material may be identified to describe a concept or experimental procedure adequately. Use of company names or devices does not imply recommendations or endorsement by the author, nor is it intended to imply that the entities, materials, or equipment are the best available for the purpose.

Contents

CHAPTER 1: INTRODUCTION	8
CHAPTER 2: LITERATURE REVIEW	14
Introduction	14
Existing Literature	15
Synthesis of the Existing Literature	19
Summary	20
CHAPTER 3: METHODOLOGY	21
Introduction	21
Research Design	21
Population and Sample Size	22
Instruments	23
Research Process	24
Ethical Considerations	25
Summary	26
CHAPTER 4: STUDY RESULTS	28
Introduction – Demographics of the Participants	28
Research Results	29

Summary	33
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS	35
Summary of the Results	35
Conclusions Based upon the Results	36
Limitations	39
Implications and Recommendations to Field	40
Recommendations for Future Research	41
Conclusion	42
REFERENCES	43
FOOTNOTES	46

Appendix

Appendix A: Interview #1 –Texas Fire Chief Interview	47
Appendix B: Interview #2 -Utah Fire Chief Interview	48
Appendix C: Survey Instrument instructions and scale	49
Table 1. Item-level descriptive statistics for survey statements.	49
Table 2. Internal consistency reliability by theme (Cronbach's α)	50
Table 3. Composite theme scores	51
Table 4. Open-ended qualitative responses (verbatim; de-identified)	51

CHAPTER 1. INTRODUCTION

The use of body-worn cameras is common amongst US law enforcement agencies (Hyland, 2018) and is beginning to find a foothold in fire and emergency medical services (Gerressu et al., 2023). The use of BWCs is a controversial idea when applied to the fire service (Dewar et al., 2019). Some may argue that there is accountability value in video documentation of such public encounters (Fan, 2018). Others may believe that the personal values of the firefighters are challenged when required to use BWCs (Dewar et al., 2019). And yet others may conclude that anyone in public is under constant video surveillance, including firefighters, throughout their day through commonly encountered systems already used in the public and private sectors (Lysova, 2025).

At a surface level, this may seem like a simple solution. However, it fails to consider the impact on the end user and whether the impact of using body-worn cameras creates potential conflict for that individual. With the ever-increasing use of technology in the emergency services field, it is likely to take a matter of time before the use of BWCs by the fire service is as widespread as seen in law enforcement. As BWC usage in the fire service becomes more common, research is necessary to determine the potential impact on the long-term health and resilience of the workforce who will be affected by BWC policies and procedures.

Background

There are several notable studies surrounding the use of body-worn cameras in law enforcement (Fan, 2018; Phillips et al., 2020) and emergency medical response (Coen-Murphy, 2024; Dewar et al., 2019). However, there has been little research within the United States fire service to determine if moral, ethical, or personal conflicts exist amongst firefighters who wear

BWCs as required by their agencies. For example, one central Texas fire department has been using BWCs since early 2025. Each of the fire officers (Lieutenant through Battalion Chief) and paramedics in that agency are assigned a BWC to wear throughout the workday. For approximately one year prior to the deployment of the BWCs, there were multiple meetings and information sessions, with the ability to ask questions and voice concerns about the upcoming usage of BWCs.

The implementation process landed on a tiered approach whereas only the Battalion Chiefs and Safety Officers were initially issued a body camera. In the early phases of this implementation, several incidents were captured that began to display the importance of a body-worn cameras program from a personnel and agency protection standpoint (see Appendix A, Interview #1). After a three-month period, the cameras were distributed further to include company officers (Captains and Lieutenants) and Paramedics.

The policy for usage was established to consider the personal attitudes toward body-worn cameras so that there would be no recording required during routine, day-to-day activities. The only time the cameras were to be utilized were during emergency responses and public encounters. The cameras utilize the same chain of custody requirements as commonly practiced in law enforcement (D'Anna et al., 2023). This chain of custody simply means that any access to and retrieval of the footage is well documented and admissible for use in court cases.

The treatment of the footage as evidence must strictly abide by this chain of custody to ensure that all footage remains sterile. Only a select few personnel at the executive chief level have access to review any captured footage. Furthermore, software is utilized to allow censoring of the videos for privacy when necessary. Since the implementation, fear and consternation has generally settled down (Fire Chief, personal communication, March 2025).

In the United Kingdom, body-worn cameras usage by firefighters has been advocated by the National Fire Chief's Council due to the increased number of physical assaults on firefighters (Lentner, 2023). Opening the door in the UK allows the American fire service to examine the benefits of body camera usage from a personnel protection standpoint and explore the challenge it places on the principles of the wearers. In 2016, the Hampshire Fire Service in the United Kingdom began trailing BWCs to give them a more complete picture of incidents (Carr, 2016). The Fire Brigade Union (FBU) warned that it could compromise the neutrality of firefighters and act as a disciplinary tool. One FBU executive admitted that cameras could be valuable on fires but detrimental if used at other times. The union's secretary is not concerned about the use of cameras ("Hampshire Fire Service Begins Use of Body-Worn Cameras," 2016). This is one example of the different points of view regarding BWCs, even within a single agency. As this emerging use of BWC technology becomes more commonplace, there will be growing examples of these personal conflicts in which to perform further research.

The lack of academic literature on the specific subject of firefighters utilizing body-worn cameras requires research to begin outside the fire service to search for potential answers to the questions of this research study. Surveys and interviews of fire service personnel provided specific research in this paper to answer the central question. Several sub-questions have emerged as a part of the research. Where appropriate, those questions will be stated and answered in the study results and conclusions sections.

Significance of the Study

As the fire service continues to evolve in the usage of advanced technologies, body-worn cameras have begun to take their place at fire departments across the country (see Table 4). Without a look into the effects this technology has on the personnel assigned to use it, the

decision to utilize BWCs by these administrations could be counter-productive and lead to unintended consequences. This study aims to assist in making the policymakers at these agencies aware of the potential internal conflicts (moral, ethical, personal) that firefighters may feel when required to video their performance and interactions when BWC technologies are explored for safety, accountability, and security. Acknowledgement of these effects can help guide how the agency can implement the technology, write appropriate policies, and establish usage boundaries while simultaneously considering how the firefighters perceive the consequences of their use.

Body-worn cameras are a piece of technology that fire departments may explore using and have potential to be widely used. Firefighters are under the highest threat of attack ever recorded (Lentner, 2023). Use of this technology is an executive leadership issue and requires attention to ensure that its use is implemented with consideration for the effect it has on the firefighters who use it. There is an overwhelming lack of fire service specific research covering BWC usage.

Problem Statement

With the rise in usage of BWCs in the fire service, the research is lacking to understand how their usage affects the personnel charged with wearing them and the views are varied. That of the agency who may value protection, transparency and accountability (Chapman, 2019). And that of the end users who may be more concerned with personal accountability and responsibility surrounding surveillance and personal privacy (Coen-Murphy, 2024). Furthermore, there could be psychological tolls of being continuously recorded during traumatic events (Foye et al., 2024). Additionally, there must be consideration for the potential toll on the mental health and well-being of the BWC users (Poirier et al., 2024). Current policies focus on the operational and legal

parameters of BWCs but fail to address these implications and the unintended consequences of workforce morale, culture, and resilience.

Purpose Statement

The purpose of this phenomenological qualitative study is to explore the lived experiences and perceptions of firefighters utilizing body-worn cameras during incident responses and other public encounters. By examining the perceptions and experiences of firefighters, this study seeks to provide fire service leaders with critical insights to guide the ethical implementation of BWCs while preserving the overall health and morale of fighters.

Research Questions

1. What are the lived experiences of firefighters who have worn BWCs while providing patient care?
2. How do firefighters describe the emotional and/or psychological barriers that could exist when considering wearing BWCs?
3. What policy and practice strategies support the use of BWCs for firefighters on medical emergency calls?

Summary

In review, this study seeks to answer the central question of understanding how body-worn cameras affect the moral, ethical, and personal implications of requiring firefighters to wear a camera while performing their routine duties. Body-worn cameras have become pervasive in law enforcement, and their usage is spreading into the American fire service. Some readers will argue that the enhanced accountability and agency protections that come with body-worn

cameras supersedes the feelings of firefighters and is simply good stewardship of public trust and funds by a public safety agency. Others fear the value of personal feelings and perceived distrust of firefighters should demonstrate the flaws in BWC use. The background for this study initially focuses on a Central Texas fire department which underwent an implementation process to place BWCs on fire officers and paramedics to be utilized during routine emergencies and public encounters. There, the initial distrust slowly subsided and the value of BWCs began to be noticed when a few firefighters with various public accusations against them were exonerated by the footage the BWCs provided (Fire Chief, personal communication, March 2025).

Body-worn cameras lack a significant volume of research and study when specifically applied to the fire service. There are multiple resources available from a law enforcement perspective and a few from emergency medical services which provided the necessary literature to review past examinations into similar implementations. The overall goal of this study is to give guidance to policymakers who are looking to implement BWCs at their respective agencies. The structure of this study will continue with a literature review in Chapter 2 to open a lens to the existing literature. Chapter 3 will follow with a detail of the methodology including research design, population and sample sizes, instruments of measurement, the research process, and ethical considerations when conducting the study. Chapter 4 will display the study results and include a detail of the participant demographics. Finally, Chapter 5 will provide conclusions and recommendations based on the summary of the results as well as limitations, implications and needed future research into the use of body-worn cameras in the fire service.

CHAPTER 2. LITERATURE REVIEW

Introduction

Body-worn cameras (BWCs) are not a new concept for public safety agencies. BWCs were first used by police in the UK and Australia in the 2000s, but did not see widespread adoption until the following decade (Lum et al., 2020). However, academic research is largely centered on law enforcement's use of BWCs, and fire department usage is significantly lacking in research and literature. This lack of available research reinforces the need for research as the fire service is comparatively underexamined in relation to law enforcement. For this reason, the bulk of the academic research and literature will tap into the existing literature and research from law enforcement studies. Studies involving other organizations that encounter people, such as hospitals and EMS systems, are also available and are utilized when pertinent to this study. This is not to say that there is zero available research specific to the fire service as there are a few fire-service specific sources that have also been examined for this research project.

Using law enforcement studies overlaps nicely with the intent of this research paper. While the mission differs between law enforcement and the fire service, both entities exist as a part of public safety. Both entities have similar challenges and justifications for employing a body-worn camera program (Lentner, 2023; Sousa et al., 2016). And both entities rely on the front-line personnel to effectively use the BWCs under the direction of the guiding policies for their agencies.

Common justifications crossing multiple disciplines arguing for the use of body-worn cameras were found in the research including incident documentation, after-action reviews, officer safety, and transparency. The same can be said for arguments against implementing a

BWC program. Common concerns noted throughout literature review include public confidentiality and privacy, performance auditing leading to discipline, and possible personal anxiety when morally or ethically challenged.

While reviewing existing academic research and scholarly literature, five themes about body-worn cameras used by public safety agencies emerged. These themes include (a) agency protection, (b) wearer accountability, (c) wearer protection, (d) privacy, and (e) ethical considerations for BWC usage. The literature review is organized according to these five themes. The purpose of this review is to critically evaluate the strength, consistency, and applicability of existing research to the fire service and to identify research design principles for fire departments considering implementing a BWC program. The overall goal is to establish answers to the research questions listed in Chapter 1. These answers draw from this existing literature, previous studies, and new studies to be outlined in the next chapter.

Existing Literature

The concept of agency protection was a prevalent theme when researching existing literature. The importance of this theme is to allow the reader to further understand why agencies may choose to implement a body-worn camera program. Law enforcement agencies are concerned with this protection for several reasons. Chain of custody is often regarded as the most important and critical process of documenting evidence (D'Anna et al., 2023). This chain of custody ensures that the evidence presented for prosecutorial action is free from tampering and is authentic. BWCs can assist with evidentiary chain of custody. One study revealed that the main reasons local police and sheriff offices acquired BWCs were to improve officer safety, increase evidence quality, reduce civilian complaints, and reduce agency liability (Hyland, 2018). Finally, BWCs may provide a level of trust amongst the public. After the Michael Brown

incident in Ferguson Missouri, the residents strongly supported the use of body or dash cameras (Kochel, 2014).

Another theme identified in the literature research was wearer accountability. Public safety entities rely on humans to deliver the services they provide. Improving personnel accountability through the use of body-worn cameras is powerful (Fan, 2018). Body camera data analytics can be used to reveal potentially problematic police practices and to avert resulting harm without sacrificing safeguards for the privacy of the public (Fan, 2018). One argument is that personnel will act more appropriately when they are aware they are being recorded. This was a disproven theory in a randomized control trial evaluating the effects of police body-worn cameras. The devices, in fact, have no effect on behavior. Perhaps neither the officer nor civilian involved in an interaction are actually aware of or affected by the camera, either due to attention being diverted elsewhere or desensitization over time to the presence of the cameras (Yokum et al., 2019). However, in-house departmental police oversight has both the major benefits and drawbacks of proximity to the events in the field. Among the benefits is a better understanding of the challenges that officers and communities face. Among the drawbacks is the difficulty of judging one's own, particularly in police-said/suspect-said credibility contests, without other compelling evidence to tip the balance (Fan, 2018).

Wearer protection is a theme that was discovered during the review of existing literature. This may first be evident when preparing a report that may be reviewed during prosecutorial proceedings. (Fisher, 1993) stated how the details are recalled by police when arresting a criminal:

Written police reports of criminal incidents and arrests and give details such as the time, place, and nature of criminal conduct; the names and

addresses of victims and witnesses; physical characteristics of the perpetrator(s) or arrestee (s); weapons used; property taken, recovered, or seized from the arrestee; and injuries to persons and property. Through their reports, the police "have fundamental control over the construction of [the] 'facts' for a case, and all other actors (the prosecutor, the judge, the defense lawyer) must work from the framework of facts as constructed by the police. (p. 4-5)

Further findings also offer a potential cautionary tale for those agencies that permit command-level investigations of citizen complaints, as such investigations significantly reduce the odds of a sustained finding of officer wrongdoing (Terrill & Ingram, 2016). Body cameras greatly assist in the consistency and fair review of the facts during such investigations. Proving that officers are acting in non-discriminatory application of the law is a challenge. Officers stated that a benefit of ticketing everyone who was pulled over decreased the likelihood of being questioned about whether they were treating people differently, or favoring some groups over others (e.g. race, sex, or social status) (Koen & Mathna, 2019).

Another major theme found in the literature includes privacy concerns including 1st and 4th amendment infringements. For example, one report determined that the use of BWCs by police officers also impacts citizens who may feel uncomfortable being recorded during personal or sensitive situations and almost 40% of US police agencies chose not to purchase BWCs mainly because of concerns about privacy (Poirier et al., 2024). To compound the issue, police leadership also expressed some concern regarding citizens' privacy, but few

indicated concern about officers' privacy (Crow et al., 2017). A survey in the same report reveals that survey respondents were not, however, concerned about privacy implications surrounding BWCs. Only 11.4% agreed or strongly agreed that BWCs are an invasion of residents' privacy, while only 7.2% agreed or strongly agreed that the cameras are an invasion of officer privacy (Crow et al., 2017). Law has been clearly established that concludes there are general First Amendment principles about the right to gather information on the work of government officials, available both to journalists and private citizens established by two decisions—one by the Eleventh Circuit and the other by the Ninth—concluding, that an individual has a First Amendment right to record police conduct in public places (Lipez, 2016). Regarding the 4th Amendment, body cameras are not only a potential solution to safeguarding people's rights and liberties from law enforcement but also a potential threat (Aggarwal, 2025). Furthermore, in work life, 'a breach of privacy' is an increment in power for employers/supervisors who breach the privacy of employees, and it changes social relations and interactions between employees and supervisors, between co-workers and between employees and third parties (Hansen Löffstrand & Backman, 2021).

As for the ethical considerations that much of the literature addresses, one study noted the perspectives reported show that respect and consideration for the dignity and rights of patients, needs to be maintained through information, consultation, and inclusion in the decision-making of all those involved (Foye et al., 2024). Ethical concerns remain central to wider debates surrounding the implementation of BWCs in mental healthcare settings. Those who require care in

an inpatient mental health ward are often admitted against their will and are at the most vulnerable point in their patient journey (Wilson et al., 2022). It is extremely plausible that any goods brought about by using PBWCs count in favor of their use, and conversely that any bads their use brings about counts against them. However, to complete an argument for the ethical permissibility of employing PBWCs we have to make an all-things-considered judgement about how all reasons, teleological and deontological, cash out (Thomsen, 2020). Despite evidence suggesting that BWC are one of the most rapidly diffusing technologies globally (Lum et al., 2020), there remains a distinct lack of evidence on the effect of these wearable technologies on team members, customers, the community, and the service-based business itself (Mortimer et al., 2025).

Synthesis of the Existing Literature

Focusing on the themes identified in the previous section, the literature studies or expresses a consideration for how the end user's ethical beliefs and moral compass is affected using body-worn cameras. The inherent lack of scholarly research related to the use of BWCs in the fire service leads to the unanswered question of "what is the moral, ethical, or personal effect on firefighters using body-worn cameras on incident responses and public encounters?" While there are studies covering this effect on police officers, it must be understood that the mission of the fire department and police department are similar but categorically different. Caution was taken to prevent overreliance on existing literature and its application to the fire service.

Summary

In summary, the reviewed literature has revealed a heavy emphasis on law enforcement and five themes that could be further analyzed and applied to the fire service. Of the identified themes, two of them focused on protection of the agency and the wearer, one was focused on holding the wearer accountable, and two were focused on individual perceptions by the public and the wearer. All these themes include justifiably researched aspects, any of which could be further analyzed for the fire service. As a point of research and potential for a high level of end-user scrutiny, the ethical aspect of body-worn cameras in the fire service was the theme that was identified as the subject of this paper.

CHAPTER 3. METHODOLOGY

Introduction

The intent of this phenomenological study is to explore the lived experiences of firefighters who wear body-worn cameras during encounters with the public to gain a better understanding of the moral, ethical, and personal implications of enacting a body-worn camera program at a fire department. Due to the difficulty in placing interval or ratio measurements on thoughts and feelings of individuals, a qualitative research process was undertaken in lieu of a quantitative approach. The use of ordinal measurements using a Likert scale was found to be the most appropriate for this process. This chapter will cover the research design, population and sample size, instruments used, research process, and ethical considerations employed during the gathering and analysis of the results of the research.

Research Design

As stated above, the research method for this paper was designed to follow a qualitative approach. This approach is best used for exploring and understanding the meaning, individuals or groups ascribe to a social or human problem (Creswell & Creswell, 2023). Furthermore, no explicit or implied variables were identified in the research design and therefore, no theory was established. The lack of these measurable datapoints further reinforces the need for a qualitative research process. Because the research questions involve the lived experiences of the body-worn camera end users, this process was further narrowed down to phenomenological research design. The intent of this research paper is to gather information for these lived experiences by using questionnaires and interviews.

A framework of identified themes was established by the author and analyzed using analytical software (Google Forms analytics and Microsoft Excel). The overall intent of the research is to see if phenomena exist amongst the users of BWCs which would reinforce the need for or the argument against implementation of a BWC program. These themes were introduced in Chapter 2 and were established to simplify the data for readers of this paper so they can draw their own conclusions for a BWC program implementation. As a reminder, the themes identified were a) agency protection, (b) wearer accountability, (c) wearer protection, (d) privacy, and (e) ethical considerations for BWC usage. The survey questions were structured to give equal opportunity to answer questions covering each of these five themes.

Population and Sample Size

The demographic chosen for the research was varied based on each instrument used. For the first instrument, an interview was conducted with one fire chief, from central Texas whose agency currently uses body-worn cameras as a standard operating procedure. This interview allowed the researcher to gain some introspect as to why an agency may have chosen to incorporate BWCs into their public safety missions. A separate interview with similar questions was conducted with a fire chief from Utah who was in the process of considering implementing a BWC program.

For the second research instrument, a questionnaire (survey) was sent with a goal to reach 100 firefighters and fire officers to determine the extent of BWC usage in the fire service across the United States. Only 18 surveys were returned with a positive answer to the first question, “Does your agency currently utilize body-worn cameras as part of a standard operating procedure?” Only those 18 surveys were included in the findings.

Instruments

In this study, two different instruments are used. Each of the instruments has their own advantages and disadvantages. This study used an interview due to the complexity of understanding why an agency would opt to begin using body-worn cameras. These interviews were limited to two different agency fire chiefs and were useful in collecting in-depth information and allowed for supplemental questions to be asked. Furthermore, the interviewer could explain the questions where necessary. However, due to the time-consuming nature of interviews (on both the interviewer and the interviewee), the interviews had to be limited in length and quantity. One agency was chosen which currently utilizes BWCs. One additional agency that is planning to implement a BWC program in the next 12-18 months was also selected. Using these interviews, questions were formulated for the second instrument (discussed in the next paragraph). Disadvantages of the interviews include the potential to inject interviewer bias and the difficulty in quantifying the information obtained into a graphical representation of the answers. For these reasons, all responses to the answers in their entirety are included in appendix A and appendix B.

The second instrument utilized was a survey with a common Likert scale (1 to 5 of strongly disagree to strongly agree). An identified method to reach multiple agencies from states across the US is the use of snowball sampling. This process involves starting with a few individuals who take the survey and then are asked to share the survey with others who would be able to provide useful information (Kumar, 2014). This criterion was limited to those who are currently using or have previously used BWCs at a fire department. This process continued until the saturation point of 18 completed surveys were submitted or 30 days passed. The survey was created and conducted in Google Forms with respondents able to select a level of applicability to

them as an individual for each question. Each identified theme was addressed and allowed the user to respond with answers of how they would feel or felt given a comparable situation to some of those identified in the initial interviews. Each response was given a scalar value and the answers were analyzed using the built-in analytic components of Google Forms. Using those analytics, each response was then translated into a statistical representation using Microsoft Excel for ease of deciphering the results.

Research Process

This research study uses a two-method, qualitative data collection process which includes structured interviews followed by a themed survey. The survey was a Likert scale survey with an open-ended optional question to allow the participants to give any additional details not extracted within the survey. The intent is to capture leadership perspectives on adoption and end-user experiences with body-worn cameras (BWCs) in the fire service.

Method one is interviewing fire chiefs who have been identified as the heads of an agency that utilizes BWCs or is planning on using BWCs selected through purposeful sampling. Purposeful sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources (Palinkas et al., 2015). The interview questions were developed by using uncovered information during the literature review for this research paper. To solidify the study, there is a need for real examples of how their BWC program has succeeded or failed. This interview process was limited to two separate agencies and fire chiefs. The interviews were conducted in person when available and over the phone as a secondary preference for gathering the answers. Each question was designed to allow an open-ended dialogue so that as much or as little information as the chief was willing to divulge was obtained. Each interview question was documented and analyzed to identify key

phrases and discussion points that could be translated into clear survey questions with common ordinal answers.

Method two is a qualitative inquiry using a survey with snowball sampling (Creswell & Creswell, 2023). This process involves developing the survey based on the interview findings and framing those answers into the five identified themes. The initial surveys were sent to approximately 250 contacts via email. All participant email addresses were entered in the BCC line of recipients. This email included a short consent statement, instructions, a confidentiality statement, and the estimated time to complete the survey. At the end of the survey, the respondents were asked to forward the same email with the survey link to at least two additional contacts using the BCC recipient function in the email platform. The intent in the BCC is to maintain confidentiality and separation between the study and the participants. This snowball distribution was intended to reach much further and wider than the researcher could perform on their own. The collection window for responses was intended to be left open for 30 days or until 18 complete surveys were collected, whichever occurred first.

The data from both methods were analyzed to determine how each BWC program participant perceived the use of BWCs and if those experiences were common amongst the two different research subject groups. This methodological triangulation helps to develop a comprehensive understanding of phenomena (Patton, 2015). The overall results from each method are displayed in graphical format in the appendices (see Appendices).

Ethical Considerations

Great consideration was given to ensure that no harm would come to any of the participants. For this reason, any personal identifying information that could lead to the

identification of any research participant was omitted from the survey questions and results. The locations of the participants were limited to the state level. To minimize bias, the study asked participants to share the survey with any firefighter or fire officer they know who is currently or has formerly worked for an agency who utilizes BWCs. This process of allowing the survey to be sent from a targeted participant to one completely unknown by the researcher ensures that participants unknown to the researcher could be included in the results. One flaw is that responses from a specific email address could not be limited to one without the respondent having to log into the forms system using their email address. Placing the value of confidentiality over the possibility of receiving two responses from the same person was a key consideration in that decision. Therefore, the survey never collected any personally identifiable information, including email addresses. Ensuring transparency and integrity remain at the forefront of this research paper, the complete information gathered and analyzed is included in the data collection tables (see Appendix C).

Summary

This chapter introduces a phenomenological, qualitative study designed to examine the lived experiences of firefighters who use body-worn cameras (BWCs) during interactions with the public, with the goal of better understanding the moral, ethical, and personal implications of implementing BWC programs in the fire service. Given the challenge of quantifying perceptions, emotions, and experiences, a qualitative approach using interviews and surveys was selected as the most appropriate methodology. The chapter outlines the overall research design, including the use of phenomenology to capture lived experiences, the population and sample, which includes fire chiefs and firefighters from agencies using or considering BWCs, and the instruments employed, consisting of structured interviews and a themed survey. It also describes

the research process, which integrates purposeful and snowball sampling to gather both leadership and end-user perspectives across five established themes of agency protection, wearer accountability, wearer protection, privacy, and ethical considerations. The design concludes with a discussion of ethical safeguards implemented to ensure confidentiality, minimize bias, and protect research participants throughout data collection and analysis.

CHAPTER 4. STUDY RESULTS

Introduction: Demographics of the Participants

When designing the research process, traditional demographics were intentionally eliminated from the data collection process. Apart from the fire chiefs interviewed, the rest of the participants were unknown to the researcher. The initial emails sent were to a group of other Executive Fire Officer students. By design, individual survey responses could not be linked to any specific participant. Therefore, the demographics for this research were limited to two known fire chiefs and 18 other respondents whose name, rank, department affiliation, age, sex, education, and other traditional demographical information remained completely anonymous.

The overall goal for the research was to determine if there are moral, ethical, or personal effects on firefighters using body-worn cameras on incident responses and public encounters and did not rely on demographical similarities or differences to determine the answer. A preliminary expectation (hypothesis) was formed that anticipated there would be some negative impact on the end user unless they had been scrutinized for wrongdoing and later exonerated due to body-camera footage. Interpretation of the findings involves several procedures including summarizing the findings, comparing the findings to existing literature, discussing a personal view of the findings and stating the limitation and future research needs (Creswell & Creswell, 2023).

Survey respondents (N=18) reported that they have current or prior experience working for a fire service agency that utilizes body-worn cameras (BWCs). Participants represented multiple US states with the majority indicating employment in Texas and South Carolina. It is recognized that this distribution could be due to the method in which the surveys were

conducted. The exclusive inclusion of respondents with direct exposure to BWCs ensured that all perceptions reported were informed by lived operational experience rather than hypothetical assumptions about BWC use.

Research Results

The survey questionnaire was structured so that the questions asked fit well within the five themes identified throughout this paper. The survey contained four questions for each theme that specifically focused on obtaining the perspectives of the respondents within that theme's framework. Although Likert-scale data are ordinal, means and standard deviations were used descriptively to summarize response patterns. The five themes analyzed were agency protection, wearer accountability, wearer protection, privacy, and ethical considerations.

Focusing first on the theme of agency protection, respondents expressed strong agreement with the statements describing organizational and operational benefits of body-worn camera (BWC) use. On a five-point Likert scale (1 = strongly disagree to 5=strongly agree), the highest mean scores were observed in items related to agency protection, documentation accuracy, and investigative support. A substantial majority (89%) of participants agreed that BWCs help protect their agency from false complaints or allegations. Similarly, respondents overwhelmingly indicated that BWC footage provided accurate documentation of incidents involving the public and supports agencies during internal and external investigations.

Wearer accountability emerges as a positive justification for the use of body-worn cameras despite different findings during the literature review. On the same scale, the majority (83%) of respondents indicated agreement that BWCs promote professionalism and accountability during interactions with the public. These findings suggest that respondents view

BWCs as a behavioral influence that supports professional standards within the fire service. There was slightly more variability in the answers than those associated with purely the organizational benefits in the first theme.

Responses related to personal safety or wearer protection revealed more neutral and mixed perceptions ($M = 3.63$) just slightly above the neutral/neither agree nor disagree midline of the scale. There was also a higher standard deviation in this category than the previous two discussed ($SD = 1.29$ versus 0.79 and .89 respectively). This variability indicates inconsistent perceived personal safety benefits across respondents. While some respondents agreed that wearing a body-worn camera increased their sense of personal safety while on duty, others selected neutral or lower options.

The theme of privacy received the lowest levels of agreement throughout the survey. However as an important note, the coding for these categories was reversed in the survey. Most of the respondents disagreed or strongly disagreed with statements expressing concern about their own personal privacy while wearing body-worn cameras. This indicates low concern that personal privacy for either the wearer or the public is violated when being recorded. However, concern regarding the privacy of patients or civilians being recorded showed the 2nd highest variability in the survey with a resulting standard deviation of 1.2. The average response within this theme was 3.18 despite 40% of the responses being returned with a value of four or five. The feeling that the captured footage was handled appropriately by the agency was overwhelmingly viewed as positive with an average response of 4.4 out of 5 and no responses of disagree or strongly disagree.

The last theme identified and surveyed was ethical considerations which emerged as a notable finding. Most respondents (78%) agreed that the use of body-worn cameras aligns with

their personal ethical values and with 89% agreeing or strongly agreeing that their agency uses BWCs ethically. Additionally, more than 75% of the participants agreed that the benefits of BWCs outweigh associated ethical concerns.

The findings from the two chief interviews are presented here as contextual case examples that illustrate and help explain the broader survey results. These interviews provide leadership-level perspectives on BWC adoption from agencies at distinct stages of implementation. This leadership perspective aligns with survey findings in which 89% of respondents agreed that BWCs protect agencies from false complaints. This is not to say that leadership is all in across the U.S. as the agency that has yet to implement BWCs expressed a cautious approach to implementation. However, when the chief whose agency is currently using BWCs was asked if there are ethical concerns with their usage, he stated, “Absolutely not! There are ethical concerns with agencies who have the means to use BWCs and choose not to.” When analyzed through the five thematic lenses used in this study—agency protection, wearer accountability, wearer protection, privacy, and ethical considerations—both interviews reinforced the dominance of agency protection as the primary driver for leadership interest in BWCs, while diverging on ethical certainty and perceived return on investment.

The end of the survey allowed the participants to enter an optional comment on their personal experience with a body-worn camera that significantly influenced their opinion about using BWCs. Eleven of the eighteen respondents took the time to write a comment in this section of the survey. Open-ended responses were reviewed and coded inductively, resulting in two dominant thematic categories.

Theme one was organizational protection, accountability, and evidentiary value where participants consistently described BWCs as a critical tool for protecting personnel and agencies

through objective documentation. BWCs were perceived as particularly valuable for exonerating employees, resolving complaints, clarifying disputed events, and supporting administrative or criminal investigations. Footage was repeatedly cited as “concrete proof” of actions or inactions, reducing ambiguity and strengthening trust in investigative outcomes. Representative statements included, “exonerate employees and issue commendations,” “clarifying false complaints and unfounded claims,” “a potential homicide with BWC footage serving as key evidence,” and “supporting review of a sedation error by an outside EMS agency.”

Theme two was behavioral influence and operational realities where participants described body-worn cameras as having a measurable influence on responder behavior, professionalism, and decision-making while simultaneously presenting practical and operational challenges in daily use. Wearing a BWC heightened self-awareness and encouraged more deliberate communication and actions, particularly during high-risk, emotionally charged, or interagency encounters. Respondents noted that the presence of a camera often functioned as a behavioral moderator, reinforcing professional standards and accountability in real time.

At the same time, participants acknowledged operational realities that complicate body-worn camera use in the field. Managing cameras while wearing personal protective equipment, transitioning between EMS and fireground operations, and ensuring proper activation and deactivation were identified as ongoing challenges. Concerns were also raised regarding inadvertent recording during informal settings, such as post-incident hot washes, as well as the limited utility of cameras during certain non-medical operations. Representative statements included, “increased subconscious awareness,” “slower, more deliberate communication,” “challenges managing camera placement,” and “need to balance transparency with privacy and situational awareness.”

Summary

This chapter presented the findings of a phenomenological qualitative study examining the moral, ethical, and personal effects of body-worn camera (BWC) use within the fire service. Results were derived from two leadership interviews and survey responses from firefighters and fire officers with direct experience using BWCs. Data were analyzed using five thematic lenses established earlier in the study: agency protection, wearer accountability, wearer protection, privacy, and ethical considerations.

Survey findings demonstrated strong consensus that BWCs provide significant organizational value, particularly in the areas of agency protection, documentation accuracy, and investigative support. Respondents overwhelmingly agreed that BWCs assist in resolving complaints, protecting agencies from false allegations, and promoting professional accountability during public encounters. Ethical acceptance of BWCs was also high, with most participants indicating alignment between BWC use, personal ethical values, and agency policy. Concerns related to personal privacy were generally low, although responses regarding patient or civilian privacy demonstrated greater variability, suggesting situational sensitivity rather than categorical opposition.

Leadership interview findings provided important contextual insight that helped explain both the strengths and variability observed in the survey results. The interview with a fire chief from an agency actively using BWCs highlighted post-implementation benefits, including employee exoneration, evidentiary value, and the absence of punitive disciplinary outcomes. In contrast, the interview with a fire chief from a non-implementing agency reflected ethical

hesitation, concerns about data storage, and uncertainty regarding whether the benefits of BWCs outweigh the operational and moral costs. Together, these perspectives illustrate how leadership perceptions may differ based on implementation status rather than philosophical opposition.

Collectively, the interviews and survey findings suggest that ethical concerns surrounding body-worn cameras are most pronounced prior to implementation and tend to diminish once agencies establish clear policy boundaries, chain-of-custody protections, and demonstrated non-punitive use. This distinction helps explain why survey respondents with lived experience using BWCs expressed higher ethical acceptance than leaders still evaluating adoption. Open-ended survey comments further reinforced these findings by emphasizing the evidentiary value of BWCs, their influence on professional behavior, and the operational challenges associated with real-world use.

In summary, the results presented in this chapter indicate that body-worn cameras are largely perceived by fire service personnel as an ethically acceptable and operationally valuable tool when implemented with clear policies, leadership transparency, and defined limitations on use. These findings provide a foundation for the conclusions and recommendations discussed in Chapter 5, where implications for policy development, leadership decision-making, and future research are explored.

CHAPTER 5. CONCLUSIONS AND RECOMMENDATIONS

Summary of the Results

The findings of this study suggest that body-worn cameras (BWCs) are largely perceived by fire services end users as a net positive tool, particularly in relation to agency protection, documentation accuracy, and ethical accountability. While some concerns related to privacy and personal comfort were identified, these concerns were generally outweighed by the perceived operational and organizational benefits.

A dominant theme emerging from the data was agency and employee protection. Respondents consistently indicated that BWCs provide reliable documentation during incidents, assist with internal and external investigations, and protect personnel against false or unfounded complaints. This finding aligns with the practical realities of the modern fire service, where increased public scrutiny and digital documentation are now commonplace (Chapman, 2019; Lum et al., 2020). Participants' perceptions suggest that BWCs are viewed not as punitive tools, but as mechanisms that provide objective clarity in complex or contested situations.

Another significant finding relates to behavioral influence and professionalism. Respondents reported increased awareness of their own behavior and a corresponding emphasis on professionalism during public interactions while wearing BWCs. This suggests that BWCs may function as a self-regulating mechanism, reinforcing professional standards rather than fundamentally altering responder conduct. Notably, respondents were less convinced that BWCs significantly influence civilian behavior, indicating that the behavioral impact of BWCs may be largely internal to the responder rather than external to the public.

From an ethical and privacy perspective, the results indicate relatively low levels of concern among participants. While privacy considerations were acknowledged, particularly regarding patients and civilians, respondents generally expressed confidence in agency policies governing activation, data storage, and access to footage. Ethical alignment between BWC use and personal values was strong, suggesting that respondents largely view BWCs as consistent with the fire service mandate of transparency, accountability, and public trust.

Importantly, respondents indicated that the benefits of BWCs outweigh associated ethical or operational concerns, reinforcing the notion the BWCs are becoming normalized within fire service operations. Qualitative responses further supported this conclusion by providing real-world examples in which BWC footage was used to exonerate personnel, clarify disputed events, and support commendations as well as corrective actions when necessary.

Overall, the findings indicate that BWCs are perceived as tools that support ethical decision-making, organizational integrity, and professional accountability rather than instruments of surveillance. These perceptions suggest that successful BWC implementation in the fire service is closely tied to clear policy guidance, transparent leadership intent, and an organizational culture that emphasizes learning and protection rather than discipline alone.

Conclusion Based Upon the Results

The conclusions drawn from this study are supported not only by the descriptive statistical findings, but also by the internal consistency of the survey instrument. Reliability analysis using Cronbach's alpha demonstrated acceptable to strong internal consistency across the primary constructs examined, including agency protection, behavioral influence and professionalism, and ethical alignment and trust ($\alpha = >0.716$). This level of reliability indicates

that the survey items within each construct were measuring cohesive and related concepts, strengthening confidence in the interpretation of the results. As a result, conclusions regarding the alignment of body-worn camera use with NFPA 1500 principles,^{1,2,3} organizational ethics, and trust are grounded in consistently measured perceptions rather than isolated or inconsistent responses. The presence of acceptable reliability supports the assertion that respondent agreement related to accountability, ethical use, and organizational protection reflects stable and meaningful perceptions held by fire service end users.

The results of this survey indicate that body-worn cameras (BWCs) are perceived by fire service end users as a net positive organizational tool, supported by consistently high levels of agreement across multiple operational, ethical, and accountability-related measures. Statistical findings from the survey demonstrate strong support for the use of BWCs in protecting personnel, enhancing professionalism, and reinforcing trust, while revealing comparatively lower levels of concern related to privacy and personal discomfort. These findings are further reinforced by the interviews with fire chiefs.

From an organizational and operational standpoint, respondents reported high agreement that BWCs provide accurate documentation of incidents involving the public ($M = 4.46$), assist agencies during internal or external investigations ($M = 4.3$), and protect personnel from false or unfounded complaints ($M = 4.38$). These findings suggest that BWCs are viewed as a mechanism that increases objectivity and clarity in post-incident review processes. Such perceptions align closely with NFPA 1500, which emphasizes the responsibility of the organization to ensure fair, consistent, and evidence-based evaluation of member actions. The strong agreement that BWCs fairly represent firefighter actions during incidents ($M = 4.22$)

further supports the conclusion that BWC's function as an administrative control that reduces ambiguity and supports organizational learning.

Survey results also demonstrated a moderate to strong behavioral influence associated with BWC use. Respondents agreed that wearing BWC increases awareness of personal behavior ($M = 3.95$) and promotes professionalism during public interactions ($M = 3.92$). These findings suggest that BWCs may reinforce existing professional norms rather than fundamentally altering firefighter behavior. This internal self-regulation aligns with the emphasis NFPA 1500⁴ places on individual responsibility and adherence to established standards of conduct during emergency operations. In contrast, respondents reported limited agreement that BWCs significantly reduce aggressive or confrontational behavior from the public ($M = 2.42$), indicating that the primary behavioral impact of BWCs may be internal rather than external.

Ethical considerations were also supported by the statistical findings. Respondents reported strong agreement that BWCs are used ethically within their agencies ($M = 4.34$), and that BWC use aligns with their personal values ($M = 3.91$). Confidence in agency policies governing privacy, activation, and data handling was similarly high ($M = 3.79$), with strong agreement that recorded footage is stored and managed appropriately ($M = 4.26$). Conversely, concerns related to personal privacy ($M = 2.37$) and patient or civilian privacy ($M = 2.32$) were comparatively low. These results suggest that ethical concerns exist but are mitigated by clear policy frameworks and leadership oversight, reinforcing the importance of ethical governance in BWC implementation.

Internal and external trust emerged as a critical outcome supported by the data. Respondents expressed agreement that BWCs protect responders during difficult outcomes ($M = 4.00$) and increase accountability for both personnel and the public ($M = 4.26$). Moderate

agreement that BWCs increase personal safety ($M = 3.21$) suggests that while BWCs are not viewed as a direct safety device, they contribute indirectly to a sense of procedural fairness and organizational support. The overall assessment that the benefits of BWCs outweigh ethical or operational concerns ($M = 3.99$) further supports the conclusion that BWCs are broadly accepted within the fire service when implemented with transparency and clear intent.

The statistical findings support the assertion that BWCs align with NFPA 1500, reinforce organizational ethics, and contribute to trust within the fire service. When supported by clear policy, ethical leadership, and a culture focused on accountability rather than punishment, BWCs are perceived as instruments that protect firefighters, strengthen organizational integrity, and enhance public confidence. These conclusions underscore the role of leadership in ensuring that BWC programs remain consistent with the fire service mission, ethical standards, and the trust placed in the profession by the communities it serves.

Limitations

Several limitations should be considered when interpreting the results of this survey. First, the study relied on a relatively small, non-random sample of fire service personnel, which limits the external validity of the findings across the broader fire service. Participants self-selected into the study and were drawn primarily from professional networks, including Executive Fire Officer students, which may introduce response bias. Additionally, the survey captured perceptions at a single point in time, limiting the ability to assess changes in attitude toward body-worn cameras as familiarity, policy maturity, or organizational culture evolves. However, these limitations are consistent with the purpose of Executive Fire Officer applied research, which emphasizes practical insight, leadership relevance, and contextual understanding over broad statistical generalization.

Second, the study relied on self-reported perceptions rather than observation or objective performance data. While internal consistency of the survey instrument was supported through reliability analysis, self-reported responses remain subject to individual interpretations, recall bias, and social desirability effects. The intentional absence of traditional demographic data, while protective of participant anonymity, also limited the ability to examine differences in perceptions based on role, tenure, agency type, or operational assignment. Within the EFO applied research framework, this approach was appropriate, as the study sought to capture lived experiences and ethical perspectives of practitioners rather than establish causal relationships or predictive models. As a result, the findings should be interpreted as reflective of perceived ethical, organizational, and professional impacts of body-worn camera use rather than definitive measure of behavior or operational outcomes.

Implications and Recommendations to the Field

The findings of this study suggest that body-worn cameras (BWCs) are widely perceived by the fire service end users as tools that enhance accountability, documentation accuracy, and organizational protection when implemented with clear policy and ethical leadership. Strong agreement regarding the value of BWCs in supporting investigations, protecting personnel from unfounded complaints, and reinforcing professionalism indicates that BWC programs align with NFPA 1500's standard for organizational responsibility, risk management, and fair evaluation of member actions (see Footnote 3). These perceptions also highlight the role of BWCs in supporting ethical decision-making and strengthening internal trust, particularly when personnel are confident that footage is handled consistently and transparently.

Based on these findings, fire service leaders are encouraged to approach BWC implementation as leadership and ethics rather than solely a technological deployment. Agencies

should establish comprehensive policies and procedures addressing activation, data management, privacy protections, and appropriate use of footage, while clearly communicating leadership intent that BWCs are intended to protect personnel, support learning, and ensure fairness. Integrating BWC footage into training, post-incident review, and professional development can further reinforce organizational learning consistent with NFPA 1500.⁵ By emphasizing ethical governance and transparency, fire service organizations can enhance internal trust among members while reinforcing public confidence in the profession.

Recommendations for Future Research

Future research should expand upon this study by utilizing larger and more diverse samples across multiple fire service delivery models, including career, combination, and volunteer departments. Broadening the participant pool would improve external validity and allow for comparative analysis across agency size, operational role, and geographic region. Longitudinal studies examining firefighter perceptions over time would also be valuable in assessing how attitudes toward body-worn cameras evolve as policies mature, technology improves, and organizational cultures adapt.

Additional research should incorporate mixed-methods approaches that combine survey data with qualitative interviews, policy analysis, and case studies of critical incidents involving body-worn camera footage. Examining objective outcomes, such as complaint rates, disciplinary actions, training improvements, or legal claims, alongside self-reported perceptions would provide a more comprehensive understanding of the operational and ethical impacts of BWCs. Future studies should also explore the intersection of body-worn camera use with privacy law, patient confidentiality, and emerging technologies, particularly within the unique context of fire-based EMS operations.

Conclusion

This study examined fire service end-user perceptions of body-worn cameras and found that BWCs are largely viewed as a positive and ethically aligned tool when implemented with clear policy, transparent leadership intent, and organizational accountability. Across survey data and supporting interviews, respondents consistently identified agency protection, documentation accuracy, and professional accountability as primary benefits, while concerns related to privacy and personal comfort were present but comparatively limited. The reliability of the survey instrument, supported by acceptable to strong Cronbach's alpha values across key constructs, strengthens confidence that these findings reflect stable and meaningful perceptions rather than isolated responses.

Taken together, the results indicate that BWCs are not perceived by firefighters as instruments of surveillance, but rather as administrative tools that support fairness, professionalism, and trust within an increasingly scrutinized operating environment. The alignment of these findings with NFPA 1500 principles underscores the role of BWCs in supporting evidence-based evaluation, organizational learning, and ethical governance. While limitations related to sample size, self-reporting, and generalizability must be acknowledged, these constraints are consistent with the purpose of applied Executive Fire Officer research, which prioritizes leadership relevance and practical insight. Ultimately, this study reinforces the conclusion that successful BWC implementation in the fire service depends less on technology itself and more on leadership, policy clarity, and a culture that emphasizes protection, learning, and public trust.

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Footnotes

1. NFPA 1500 § 4.1.1-The fire department shall evaluate current trends and research to determine if policies and procedures are appropriate at least annually or following a near miss or catastrophic event.

2. NFPA 1500 § 4.2.1-The fire department shall develop and adopt a comprehensive written risk management plan.

3. NFPA 1500 § 4.2.3- The risk management plan shall include at least the following components: 1)Risk Identification-actual and potential hazards, 2) Risk evaluation-likelihood of occurrence of a given hazard and severity of its consequences, 3) Establishment of priorities for action-the degree of a hazard based upon the frequency and risk of occurrence, 4) Risk control techniques-solutions for elimination or mitigation of potential hazards; implementation of best solution, 5) Risk management monitoring-evaluation of effectiveness of risk control techniques.

4. NFPA 1500 § 8.1.2-An incident management system that meets the requirements of NFPA 1561 shall be established with written standard operating procedures applying to all members involved in emergency operations.

5. NFPA 1500 § 8.11-Post incident analysis

Appendix A

Chief Interview questions (Currently using BWCs)

1. What was the initial reason for looking into body-worn cameras?

#1 performance QM. Wanted to ensure we had an accurate view of how we perform on incidents. Usually, memory alone is inaccurate (not maliciously).

#2 for complaint investigations. Historically it's "he said/she said" and with a lack of evidence, you have to go on trust alone.

2. Is the footage captured utilized to impart discipline or accountability on the wearer.
 - a. Is it actively sought out or passively obtained?

No!. This was never part of the creation of the program. It is useful during investigations and in 3 years, there has been no discipline, write-ups, time off, or terminations as a result of camera footage. There has only been coaching.

3. Are there examples of what you would call success or failure in the BWC program?

Yes. See # 1 above. Also, on the medical side working with a sub-par ambulance agency who has made accusations against us. The cameras show definitively what occurred.

I have no examples of failures...only challenges. This has been more with the cameras themselves as they are not well-suited for fire departments (they are police technology we have had to adapt to us). Also, with the end users not turning them on. We remain sensitive to the issues and address them when they are brought up.

4. How do you handle privacy concerns for the wearers and those being recorded?

We have legal protections. All footage is handled under a strict chain of custody. All access is ran through a lawyer who has the capability to scrub the video (face blurring, voice bleeping).

There is no reasonable expectation that you are not being recorded (legal precedence in Texas set by law enforcement). Employees have been informed, trained, and demonstrated the utility.

5. Do you believe there are ethical concerns with BWC usage?

Absolutely not! There are ethical concerns with agencies who have the means to use BWC's and choose not to.

Appendix B

Interview 2:

Chief Interview questions (Not currently utilizing BWCs)

1. What was the initial reason for looking into body-worn cameras?

Mostly for liability reasons. We have had accusations of malpractice and medical errors. This allows us to review what occurred and make corrections as needed or prove/disprove accusations.

2. Is the footage captured utilized to impart discipline or accountability on the wearer.
 - a. Is it actively sought out or passively obtained?

We are not currently using cameras so I am not able to answer that question.

3. Are there examples of what you would call success or failure in the BWC program?

N/A. Not currently using them.

4. How do you handle privacy concerns for the wearers and those being recorded?

Policy revision. Look at our HIPPA policy to manage the concerns. Certain things will be allowed to be released and other things will not.

5. Do you believe there are ethical concerns with BWC usage?

Yes. Not sold yet on if the benefits outweigh the cons. Also, storing so much video of so many people and patients for the 1 or 2 issues per year that would be helpful.

Appendix C

Survey Instrument: Fire Service Body-Worn Camera End-User Survey.

Instructions to Participants:

The following statements relate to your perceptions and experiences with the use of body-worn cameras (BWCs) in the fire and emergency medical services. Please indicate your level of agreement with each statement using the scale provided below.

1 = Strongly Disagree

2 = Disagree

3 = Neither Agree nor Disagree

4 = Agree

5 = Strongly Agree

Table 1. Item-level descriptive statistics for survey statements.

Item #	Survey Item	n	M	SD	Min	Max
1	The use of a body-worn camera helps protect my agency from false complaints or allegations.	18	4.78	0.43	4	5
2	Body-worn camera footage provides accurate documentation of incidents involving the public.	18	4.61	0.5	4	5
3	The presence of a body-worn camera increases public trust in my agency.	18	3.89	1.13	1	5
4	Body-worn cameras support my agency during internal or external investigations.	18	4.61	0.61	3	5
5	Wearing a body-worn camera increases my awareness of my own actions and behavior.	18	4.22	0.88	2	5
6	The use of a body-worn camera encourages professionalism during public interactions.	18	4.11	1.08	1	5
7	Body-worn cameras help ensure accountability for both responders and the public.	18	4.39	0.78	3	5
8	I believe body-worn cameras fairly represent my actions during incidents.	18	4.39	0.85	2	5
9	Body-worn cameras make me feel more protected during difficult or confrontational encounters.	18	4.22	1.0	2	5
10	The presence of a body-worn camera reduces the likelihood of aggressive behavior from the public.	18	2.5	0.99	1	4

11	Body-worn camera footage has the potential to support me if my actions are questioned.	18	4.5	0.62	3	5
12*	Wearing a body-worn camera increases my sense of personal safety while on duty.	18	3.28	1.32	1	5
13*	I am concerned about my personal privacy while wearing a body-worn camera.	18	2.06	1.16	1	5
14	I am concerned about the privacy of patients or civilians being recorded.	18	2.39	1.2	1	5
15	Body-worn camera policies adequately address privacy concerns.	18	3.89	1.02	2	5
16	I feel confident that recorded footage is handled and stored appropriately.	18	4.39	0.85	3	5
17	The use of body-worn cameras aligns with my personal ethical values.	18	4.17	1.1	1	5
18	I believe body-worn cameras are used ethically by my agency.	18	4.5	0.71	3	5
19	There are clear guidelines for when body-worn cameras should be activated or deactivated.	18	4.33	0.77	3	5
20	Overall, I believe the benefits of body-worn cameras outweigh the ethical concerns.	18	4.17	1.1	1	5

Note. Items 12 and 13 assess privacy-related concerns and were reverse-coded during analysis to ensure directional consistency when calculating composite scores and reliability estimates.

Table 2. Internal consistency reliability by theme (Cronbach's α)

Scale/Theme	k	n (complete)	Cronbach's α
Organizational Protection & Documentation	5	18	0.882
Responder Protection & Safety	3	18	0.747
Behavioral Influence & Public Interaction	4	18	0.716
Privacy & Data Governance	5	18	0.814
Ethical Alignment & Overall Support	3	18	0.94

Note. Privacy theme was evaluated after reverse-coding the two concern items (6–x).

Table 3. Composite theme scores

Scale/Theme	M	SD	n
Organizational Protection & Documentation	4.56	0.54	18
Responder Protection & Safety	4.0	0.83	18
Behavioral Influence & Public Interaction	3.68	0.75	18
Privacy & Data Governance	4.03	0.77	18
Ethical Alignment & Overall Support	4.28	0.93	18

Note. Composite score = mean of items within theme (person-level), summarized across participants.

Table 4. Open-ended qualitative responses (verbatim; de-identified)

Participant ID	State	Open-ended response
P01	South Carolina	My agency is EMS only and we implemented BWC in 2/25. I wrote and enforce the policies related to the use of BWC, storage of footage and ultimately the release of footage.
P03	Texas	Have already used several times to exonerate employees and get to the facts of what actually happened on incidents. Have issued commendations as a result.
P04	Texas	There was a lot of internal push back when we first starting rolling out body cameras. Once we put them in place, it didn't take long until we starting getting examples of the benefits of the cameras and how it could clear up complaints or false claims. I believe we have much more buy in to the cameras after providing examples as to how the cameras have helped clear up complaints and unfounded claims.
P06	Texas	Most recently, my crew and I responded to a vehicle fire where I had my BWC active throughout the entire incident. This is important, because this vehicle contained a victim and further investigation prompted investigators to treat the incident as a potential homicide. My BWC footage became an important piece of evidence that could potentially play a vital role in justice system. Personally, wearing it does provide a sort of subconscious awareness of my actions and

		decisions. Wearing the BWC sometimes helps me slow my thinking and consider my words and actions as though a mentor were standing there judging my worth or wisdom. Overall, I feel that having them protects my word, as I now have footage to confirm my testimony in the event of some serious accusations or critical event.
P09	Texas	When running calls with outside agencies, there can be blurred lines between policies and COG's. I feel confident with the BWC being concrete proof of action or inaction when it comes to outcomes or when aspects of patient care come into question.
P10	Texas	I have encountered two incidents where wearing a body-worn camera proved invaluable in accurately documenting events and informing my department of what occurred. The first incident involved a call in which a patient displayed erratic behavior toward first responders and later brandished a weapon. Several months afterward, the same patient accused me of fabricating the incident and claimed that he never produced a firearm. I informed him that he was welcome to file an open records request to review the footage and provided my rank, name, and department number. Following that interaction, I experienced no further issues with the patient. Due to his documented history, law enforcement continues to be included on responses involving this individual. The second incident involved a sedation error by a private EMS agency that assumed patient care and administered a sedative prior to fire department arrival. This event was immediately reported to executive staff and reviewed before the end of the shift. After receiving approval to review the body-camera footage with executive staff, the video clearly captured the sequence of events and actions taken. The footage allowed the department to fully understand what occurred, supplementing my written statement and providing objective documentation that supported a thorough and timely review of the incident.
P11	Texas	When I have the body camera on, I believe I get better interactions with members of the for profit EMS agency we run calls with.

		On the negative side, I sometimes have a hard time with managing the camera with my PPE. I have to move it when I'm fully bunked out, or dressed for EMS calls, or dressed in normal work uniform. This drives me a little bit crazy and it takes my mind away from the call or task at hand.
P12	Texas	Forgetting the stop recording after a call during a hot wash with the crew, which may contain jokes or personal opinions that were thought to be said in a private setting.
P13	Texas	In situations that were quick in the moment, you can slow it down and educate others on body language from a potentially dangerous patient
P15	Texas	Overall, I think this is where the fire service is headed. I have found them to be very functional for medical calls, but not so much for others (fires, vehicle rescues etc). Anytime the radio strap is removed the camera has to be clipped on somewhere it is likely to fall of. I have seen them capture footage that is undisputable when things are in question about what did/ did not happen.
P16	Texas	I have not yet had to use any body camera footage to address on scene issues on personal emergency calls. But I have noticed that my Department has had multiple serious outside provider incidents that the camera footage has solidified what exactly happened. It helped answer questions by all who were involved.