

PERSPECTIVE BIAS AND ATTITUDES TOWARD THE POLICE- AN ANALYSIS OF  
VIDEO-RECORDED CITIZEN AND POLICE INTERACTIONS

by

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by

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The University of Texas at Dallas, 2020

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Police officers across the United States face an onslaught of change, driven primarily by social upheaval in a country whose citizens are increasingly skeptical of the government and its institutions (Pew Research Center, 2019). One important change to the police occupation is the increased role of technology, specifically, the use of body-worn cameras (BWCs). These devices which are affixed to an officer's uniform, may protect them from false accusations of misconduct and provide clarity and transparency to potentially controversial police encounters with citizens. A nationally representative survey of police departments across the United States found that one-third of law enforcement agencies use BWCs and another 50 percent of departments intending to deploy them (Police Executive Research Forum, 2018). Despite the widespread use of BWCs, few studies have investigated the potential problem of perspective bias and in those that have, research suggests that camera angles play a role in the interpretation of encounters. This study examines the role of camera perspective bias in perceptions of police conduct. To accomplish this goal, video footage, shot from different perspectives, of two police-citizen encounters in which force was used were shown to study participants and their perceptions captured using

survey methodology. The findings suggest there is a significant difference in respondents' perceptions of the justifiability of officer use of force depending on the perspective from which the video is recorded.

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# CHAPTER 1

## INTRODUCTION

Police have been under heavy scrutiny in the last half-decade predominately because of several polarized uses of force incidents. These incidents occurred across the United States in places such as Ferguson, Missouri (Michael Brown); Cleveland, Ohio (Tamir Rice); Baltimore, Maryland (Freddie Gray); Houston, Texas (Sandra Bland); New York City, New York (Eric Garner); and most recently the death of George Floyd in Minneapolis, Minnesota. These incidents often involved police interactions with minorities resulting in serious bodily injury or death. Moreover, the incidents listed above share a commonality in that each resulted in controversy from either a video recording of the incident or in the case of Michael Brown, no video recording of the incident was present. In the instance where no video was present, the controversy stemmed from the police “controlling” the narrative; that is, there was no counter to the police officers’ account of events. In cases where video exists, viewers of the incident may have different interpretations. This phenomenon, the question of the efficacy and objectivity of video footage in often determining highly polarized incidents of police use of force, is the focus of this study. These incidents have far-reaching consequences and have heavily influenced social movements such as Black Lives Matter and spurred the former President of the United States Barack Obama to develop a Task Force on 21<sup>st</sup> Century Policing to address issues surrounding policing.

The Task Force on 21<sup>st</sup> Century Policing formed in December of 2014 to answer a simple question, how can we strengthen trust amongst the police and the community they serve? This question and its longwinded answer came upon the heels of several use of force incidents that

shook the nation. Unfortunately, five years later these events are still occurring, the task force's question still stands, and its suggestions for reform are still relevant.

The task force made recommendations along a spectrum of six "pillars" relevant to police and citizen relationships. These six pillars include building trust and legitimacy, policy and oversight, technology and social media, community policing and crime reduction, training and education, and finally, officer wellness and safety. Two of these pillars are of specific relevance to this study and will be explored further. The first pillar of interest is the use of technology and social media. Regarding technology such as body-worn cameras (BWCs), the task force spoke more broadly with concerns levied on citizen privacy and rights considerations (U.S. Department of Justice, 2015). Specifically, in the Task Force's final report, Pillar 3 Recommendation 3 Action 3 (or 3.3.3) suggests that law enforcement agencies use the Bureau of Justice Assistance's body-worn camera toolkit when implementing BWCs (U.S. Department of Justice, 2015). Included in the "toolkit" are considerations for citizens' privacy, recording minors, and the potentially devastating consequences if BWC footage is leaked to media outlets without proper context. In the report, however, there is no mention of how police agencies should analyze and interpret the video and what role the footage should play in officers' disciplinary process or the adjudication process of citizens. These factors are critical, considering the increased implementation of BWCs in police departments.

BWCs are small camera devices usually affixed to the chest of police officers. Their origins in law enforcement can be traced back to 2005 when they were first used in the United Kingdom (Schneider, 2018). The widespread discussion surrounding the implementation and use of BWCs in the United States did not begin until 2014, following the shooting death of Michael

Brown in Ferguson, Missouri (Sanburn, 2014). In that case, Michael Brown, an unarmed teenager, was killed after a confrontation with Darren Wilson, a Ferguson police officer. Accounts of the event were mixed with some witnesses stating Brown had his hands up in the air when he was shot, while the officer claimed Brown attacked him, and in self-defense, he fired the fatal shots. The lack of any video evidence made the case difficult to prosecute, and a grand jury declined to indict Wilson (Sanburn, 2014). Following this decision, chaos and riots ensued in Ferguson, Missouri, where racial tensions between police and minorities were volatile.

The subsequent choking death of Eric Garner at the hands of New York undercover police officers in 2014 also spurred calls to action by community members and other stakeholders (Goldstein & Schweber, 2014). Shortly thereafter, the “Rialto study” was published. It found declines in complaints against Rialto police officers, a mid-sized police department in California reductions were as large as 60 percent in the use of force when officers used BWCs (Ariel et al., 2015). This study was significant as it was one of the first randomized controlled trials testing the usefulness of BWCs in the United States. The findings from this study added to the continued calls for widespread implementations across the United States. As a result, nearly one-third of police departments reported implementing or planning to implement BWCs (Police Executive Research Forum, 2018). More recently, BWC footage has been shown of the arrest of George Floyd, during which he can be seen begging officers not to shoot him before being placed face down on the pavement, handcuffed, and restrained until he died (Parks, 2020). Again, calls for reform grew louder as widespread protests broke out in the U.S. and other countries.

Although the advent and proliferation of BWCs are new in the realm of policing, the use of recordings in police-citizen encounters is not. For example, dash-cam footage, videotaping of interrogations, and police activity recording by citizens have been around for decades. The Rodney King incident is relevant and instructive here. The incident, captured by an amateur videographer showing several officers beating an already handcuffed and subdued Rodney King, was shown across popular media at the time (Cannon, 1998). While many who viewed the video-footage believed and perceived the officers' actions to be excessive force, a jury failed to convict the officers involved in the incident. As a result, violent riots across Los Angeles, California, followed. Decades later, Walter Scott, a 50-year-old black man, stopped because he had a broken taillight, was shot in the back while fleeing Michael Slager, an officer in South Carolina (Vann & Ortiz, 2017). Similarly, a video of the incident was recorded by a citizen. These incidents mark a unique challenge to police officers and the community. As technology has grown, incidents involving police and citizens are more likely to be recorded and dispersed quickly throughout the world. Moreover, without proper context, these incidents can have devastating consequences for police and community relations and significantly harm the public's trust in the police. It may also impact the public's view of police as legitimate social control institutions (Newell, 2019).

The second pillar of interest is building trust and legitimacy, which is arguable, the most important pillar in the task force's recommendations. Decades of research suggests that citizens are more likely to obey the law when they believe that those with the authority to enforce the law are legitimate (U.S. Department of Justice, 2015; Tyler, 2004). Police legitimacy, a feeling of obligation to obey the law and support decisions made by legal authorities (Tyler & Fagan, 2008), leads to greater cooperation between police and citizens. In theory, this should lead to

greater effectiveness in controlling crime and maintaining order (Mazerolle et al., 2013b). Police legitimacy has been of great interest to policing scholars for the past several decades and has been linked to several positive outcomes for police and community relations (Tankebe, 2014). Mechanisms to achieve police legitimacy include procedural justice and problem-oriented policing, which have been proposed to bridge the gap between officers and the communities they serve. Police legitimacy as a concept can also play a role in how citizens interpret and perceive actions made by the police (Culhane & Schweitzer, 2017). Specifically, citizens who trust and believe in the legitimate nature of the police occupation may be more inclined to overlook or give officers the benefit of the doubt when faced with evidence on the contrary. Police legitimacy and concepts of procedural justice, distributive fairness, i.e., the degree to which people feel police treat all citizens fairly and citizens' willingness to cooperate with police, can play a large role in how people view the police. Taken together, the two pillars, the use of technology and social media and building trust and police legitimacy listed in the task forces' recommendations, complement each other well.

The seemingly intuitive idea of using technology and video evidence from BWCs to promote trust and police legitimacy is an appealing compromise. However, when considering the potential bias, these tools can introduce. Specifically, that of camera perspective bias, the optimism wanes in place of caution. Camera perspective bias refers to the idea that camera angles and points of view can significantly impact a viewer's perceptions of events (Lassiter & Irvine, 1986). Moreover, another source of bias can result from confirmation or implicit bias that results from an observer's racial, gender, or personal biases. Recent studies on aversive racism theory suggest that viewers of police-citizen interactions with strong implicit racial attitudes

favoring whites over blacks will rate black citizens negatively in encounters (Kalle & Hammock, 2019). Given the tumultuous climate regarding police accountability and use of force incidents, these biases could play a significant role in how these recorded incidents are perceived and ultimately adjudicated.

This study is important because of its unique contribution to the existing literature surrounding three lines of research. First, this study adds to the BWC literature by gauging people's perceptions of actual police-citizen encounters rather than simply asking respondents how they feel about the tool or using vignettes or simulated events to gauge perceptions. Second, this study adds to the camera perspective bias literature by testing how various camera angles can impact perceptions of citizen-police encounters. In addition to camera angles, this study also measures subtle sexist and racist attitudes of observers to understand how these may impact perceptions of these events. Finally, this study furthers the police legitimacy literature by measuring respondents' perceptions of the police before viewing the encounter and after viewing the encounter to understand if and how these perceptions may impact an observer's evaluations of these encounters. The idea is that if respondents have favorable attitudes toward the police, this may impact how they judge officers' actions. This design allows us to control for potential confirmation bias.

To accomplish these goals, video footage from two police-citizen encounters in which force was used was shown to study participants from varying perspectives and their perceptions captured using survey methodology. Participants were 957 adults from within and outside of the United States drawn from Amazon's mTurk workplace. The data and methods are discussed in Chapter 3. The findings, presented in Chapter 4, suggest a significant difference in respondents'

perceptions of the justifiability of officer use of force depending on the video's perspective. Chapter 5 includes a discussion of the results, followed by concluding remarks. In the next chapter, concepts of police legitimacy, camera perspective and implicit bias, and BWCs are explored.

## **CHAPTER 2**

### **LITERATURE REVIEW**

Perhaps one of the most heavily explored and thoroughly developed areas regarding policing is police legitimacy literature. Police legitimacy has been defined in many ways but is generally accepted as the desire to obey the law and support legal authorities through cooperation or other means (Tyler & Fagan, 2008). From a theoretical standpoint, the concept of police legitimacy developed and has grown in response to why people obey the law? Police legitimacy is an alternative answer to popular deterrence theories in criminology that have attempted to answer this question. From an empirical standpoint, the rich body of literature examining police legitimacy in various contexts and circumstances gives credence to its strong ability to be tested. Overall, police legitimacy has been empirically tested and credited with the potential to reduce offending, promote citizen satisfaction, confidence, and compliance with the police (Mazerolle et al., 2013b). The theoretical underpinnings and empirical literature on police legitimacy will be explored in this section.

Classic deterrence theory, as proffered by Cesare Beccaria, argues that people as rational, calculating, and ultimately hedonistic beings will avoid criminal acts if punishment is certain, severe, and swift enough. Deterrence, however, has not wholly lived up to its theoretical assumptions, especially regarding the severity of punishment (Nagin, 2013). Thus, the question of why people obey the law still looms. Police legitimacy attempts to answer this question by largely focusing on people's perceptions of society's most popular formal social control, the police. In a seminal article, Tyler (1990) found that people are concerned with symbolic gestures of respect, dignity, and recognition in their encounters with police. In later work, Tyler (2004)

expanded and enhanced the concept of police legitimacy by clarifying the pathway that legitimacy leads to an obligation to obey the law. First, he argues that police need the public's support to fulfill their duty to maintain peace and order. Next, he argues that the public's support and cooperation are a product of the public's perceptions regarding the legitimacy of the police. Finally, the perceptions of the legitimacy of police are derived from procedurally just encounters, where the police establish respect and give citizens a voice, thus entitling them as an entity to be obeyed. These encounters police and citizens share, no matter how simple, are described as important because citizens do not always know the justice system's inner workings and thus do not know what is fair or not. Thus, citizens will pay close attention to the police's procedures in making their determination of fairness (Nix, 2020). Procedural justice then is considered an important mechanism to enhance police legitimacy. Procedurally just policing is generally described as the police's ability to treat citizens with respect and dignity, make unbiased decisions, give citizens a voice in their encounters, and show a genuine investment in citizens and their communities (Tyler, 2004). The introduction of procedural justice opened an enormous amount of empirical curiosity in testing how this concept impacts relevant policing outcomes.

#### *Procedural Justice and Police Legitimacy*

The pathway from procedural justice to police legitimacy was explained by Tyler (2006) in his process-based model of policing. The process-based model posits that when officers exhibit fairness throughout their interactions with citizens and citizens perceive their encounters with officers as procedurally just, police legitimacy is enhanced. The result of increased police legitimacy is the short term compliance of accepting officer decisions at the moment, increased sense of cooperation with law enforcement, and ultimately an "empowerment" of officers or

willingness of citizens to accept increased police discretion (Sunshine & Tyler, 2003; Nix, 2020).

Figure 2.1 visually represents the process-based model of police legitimacy.

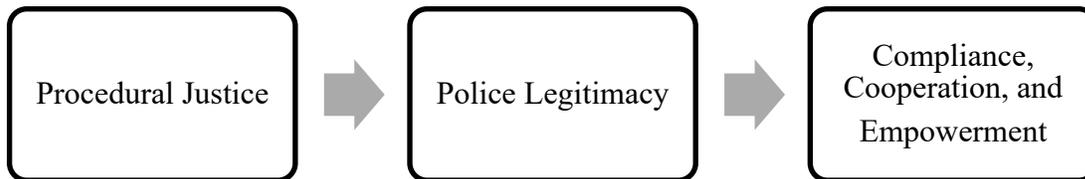


Figure 2.1. Process-Based Model

Although much of the literature surrounding procedural justice has been retrospective or prospective observational studies gauging citizens' compliance with the law (Reisig et al., 2014) or likelihood of offending (Bradford et al., 2015), some studies have attempted to isolate the effects in specific citizen-officer encounters. For example, Tyler and Huo (2002) interviewed over a thousand citizens in California who had recent encounters with police and found that their perceived level of procedural justice impacted their short-term compliance with officer decisions. Furthermore, these findings held across white, black, and Hispanic respondents. However, these findings of little to no observed differences between race and perceptions of the police are often contradicted by other research that suggests racial differences. For example, Fine and his colleagues (2020), using the Monitoring the Future's cohort dataset, found that across decades white youth perceived the police more positively than Hispanic and black youth. Furthermore, recent trends in minority youth's perceptions of law enforcement have fallen to a decades-long low suggesting an even wider gap in police perceptions.

Walters and Bolger (2018) performed a meta-analysis across 64 studies that tested the relationship between concepts of procedural justice and police legitimacy and their impact on citizen compliance. In this study, both procedural justice and police legitimacy were positive and significantly related to compliance outcomes. The researchers were careful to note that the link between these concepts and compliance was not reliably established longitudinally (Walters & Bolger, 2018). Mazerolle and his colleagues (2013a) conducted the first randomized experiment in the procedural justice literature. Their study which was conducted in Australia involved the random assignment of police behavior across traffic checkpoints. The treatment conditions involved checkpoints that used procedural justice “scripts” while control checkpoints were considered “business as usual” with officers largely moving through typical motions and not engaging in unnecessary communication. Following their interactions at the checkpoints, citizens were surveyed. The results indicated that drivers in the treatment checkpoints reported an increased willingness to cooperate with the police largely because of their increased belief in the legitimacy of the police. Bolger and Walters (2019) conducted a meta-analysis as a follow-up to their previous study where they observed effects on compliance (Walters & Bolger, 2018). In this meta-analysis the authors compiled studies over a 28-year period and found support for procedural justice and police legitimacy on cooperation outcomes, finding support for the process-based model along dimensions of police legitimacy and its desired outcomes.

Empowerment alongside compliance and cooperation is a desired and theoretically suggested outcome of procedural justice and police legitimacy. Empowerment suggests that as the legitimacy of the police increases, citizens will be more likely to grant the police more discretion and power (Sunshine & Tyler, 2003). The empirical literature surrounding

empowerment is relatively small compared to compliance and cooperation. Most studies along this line of research measure empowerment through increased police militarization or support for general police discretion. For example, Moule and his colleagues (2019) using a sample of 702 U.S. adults drawn from a Qualtrics survey found that respondents with higher levels of police legitimacy supported the idea of the police using and purchasing surplus military equipment. In another survey of 1,005 U.S. citizens, researchers found that satisfaction with the police and concern over terrorism contributed to greater support for outfitting law enforcement with military equipment (Lockwood, Doyle, & Comiskey, 2018). Outside of the United States, Yesberg and Bradford (2018) found that residents in London who reported greater trust in the police and more concern over terrorism were more supportive of arming the police.

Overall, the literature on procedural justice and police legitimacy has been broad and has encompassed many contexts and time periods. However, some researchers have argued that the methodological rigor of many of these studies are not on par with research in other areas of policing, with large numbers of studies being observational in nature (Nix, 2020). It is important to note that most of the research surrounding police legitimacy has focused on the concept of procedural justice; however, it has been proposed that other forms of police activity and behavior can drive police legitimacy.

Mazerolle and his colleagues (2013b) note in their systematic review of the police legitimacy literature to that point that other police interventions can enhance police legitimacy. These interventions can include policing strategies such as community-oriented and problem-oriented policing (POP). POP was proposed initially as a policing strategy by Herman Goldstein to professionalize policing and their practices (Goldstein, 1979). At the time of Goldstein's

proposal, policing was heavily reactive in nature, relying on standard practices such as patrol, an issue raised in another classic study, the Kansas City Preventive Patrol Experiment (Kelling et al., 1974). The Kansas City study found patrol as potentially ineffective at preventing crime (Kelling et al., 1974). Goldstein led the charge for a paradigm shift in policing, calling for the adoption of strategies that targeted the underlying root of problems within a community rather than focus on singular incidents. Goldstein also suggested that the police not only focus on criminal matters but also develop the community through partnerships and collaborations to increase the investment from both sides, a style of policing he coined, POP (Goldstein, 1979).

Years later, with Goldstein's assistance, Eck and Spelman (1987) created a model by which POP could be implemented. This model commonly referred to as the SARA model of policing, consisted of four distinct phases: scanning, analysis, response, and assessment (Hinkle et al., 2020). The SARA model of policing promotes the idea of police officers taking an almost scientific approach to crime and deviance. Specifically, officers identify problems, weigh potential options, respond carefully, and then assess the intended or unintended consequences. Given the carefulness and thought required to fulfill the SARA model and engage in POP, it can be argued that implementing these strategies can fulfill the dimensions of procedural justice and thus lend itself to enhancing police legitimacy.

In a meta-analysis of 39 experimental and quasi-experimental studies on POP published between 1989 and 2018, researchers found that POP reduces crime and disorder by as much as 33.8 percent in treatment groups than controls (Hinkle et al., 2020). Unfortunately, only six out of 39 studies attempted to measure changes in police legitimacy or procedural justice. The results were mixed. While no studies found that POP strategies harm police trust and legitimacy, only

one study found evidence of enhanced legitimacy perceptions. In a multi-site evaluation in England, Tuffin and colleagues (2006) found a 15 percent increase in confidence in the police and an 8 percent increase in beliefs that officers would listen to them in treatment sites compared to control locations. However, the other five studies did not report any significant changes in policy legitimacy across their studies (Hinkle et al., 2020).

Given this recent analysis of the most rigorous methodological studies of POP, it is important that future studies investigate the link between these police strategies and their impact on legitimacy. Furthermore, scholars should disentangle the theoretical relationship between POP strategies and police legitimacy. It could be argued that POP strategies on their own increase legitimacy by the merits of its implementation and execution by officers; however, by what mechanism do these strategies increase legitimacy? Will these strategies enhance police legitimacy because citizens perceive an increased investment by officers in their communities? Or do these strategies enhance legitimacy because they deliver an actual reduction in crime and disorder? If so, do citizens notice these reductions?

Police legitimacy is a burgeoning field of study for policing scholars and will continue to pique the interest of stakeholders, practitioners, citizens, and scholars alike. Interestingly, recent research has linked concepts of police legitimacy to compliance with COVID-19 regulations (Kooistra et al., 2020). Specifically, in a national representative sample (N=555) of residents in the United Kingdom, researchers found that normative obligations to obey were linked to compliance with COVID-19 regulations such as social distancing and lockdown (Kooistra et al., 2020). Given the relevance and interest surrounding police legitimacy, there are still many questions about this concept.

First, with respect to measuring police legitimacy, the obligation to obey is used heavily across the literature to capture concepts of legitimacy. There are some problems, however, when considering obligation as a measurement tool for this concept. Tankebe (2014) points out that obligation is a concept that can encompass a host of emotions outside of legitimacy. For example, if one were to ask people directly why they obey the police, many may respond that they believe that the police are legitimate and, therefore, deserving of compliance. However, one may also receive responses that people feel powerless to disobey or are fearful of the potential consequences of disobeying (Tankebe, 2014). Recent research using causal mediation analysis to disentangle the complexities of these measurement questions has suggested that using normative forms of obligation to obey to measure concepts of police legitimacy is reasonable (Posch et al., 2020).

Second, from a theoretical standpoint, the causal pathways by which police legitimacy is achieved needs to be clarified. While procedural justice is not considered to be the only mechanism to achieve police legitimacy, it has been a heavy focus of the literature (Nix, 2020). This singular focus overlooks the potential impact that other police activities have on police legitimacy, such as POP, as elaborated on previously. Other forms of police activity have also been linked to perceptions of police legitimacy. For example, in an experiment in Connecticut, police officers randomly visited homes across the state and initiated a community-oriented policing strategy of simply engaging in a ten-minute meet and greet. These nonenforcement visits were linked to substantial improvements in residents' perceptions of police legitimacy and a willingness to cooperate (Peyton et al., 2019). Furthermore, Demir and colleagues (2020) found in an experiment during traffic stops in Turkey that the simple presence of BWCs

improved citizens' perceptions of police legitimacy and procedural justice. These findings draw into question the various pathways that police legitimacy can be achieved and paint a more complicated picture of what it may take to keep legitimacy intact. Despite these limitations, the literature has suggested that police legitimacy can play a significant role in citizens' compliance to the law in the short and long term, their intent and continued cooperation with the police, and support of police discretion and actions. The introduction and continued use of BWCs presents a tremendous opportunity for the law enforcement profession and the communities in which they serve. BWCs offer the potential for several positive outcomes in their use. These outcomes include increased police transparency, accountability, and justice not only for citizens but for officers who may be falsely accused of overstepping their authority.

### *Body-Worn Cameras*

The literature surrounding BWCs and their potential effects on policing is relatively new, with the most recent reviews drawing the first set of studies from 2014 (Lum et al., 2019; Maskaly et al., 2017). Maskaly and his colleagues (2017) reviewed 21 studies on BWCs and determined that the literature revolves mainly around how the use of this technology impacts citizens and officers. These studies investigate how BWCs impact complaints against officers, perceptions of the police, officer behavior, officer decision-making, and perceptions of the actual tool (BWCs). Generally, the results suggest that, if used correctly and responsibly, BWCs can improve perceptions of the police, create a culture of transparency between a community and the police, and regulate police behavior (Lum et al., 2015; Maskaly et al., 2017). Lum and her colleagues (2019) extended this review by conducting a comprehensive review of 70 empirical studies covering the impact of BWCs. Overall, their review found that citizens and officers

support BWCs, and officers do see reductions in complaints levied against them when using BWCs. However, the evidence is not definitive to suggest that BWCs will improve relationships between officers and the community at large. Given these reviews, the literature surrounding BWCs can be divided into three lines of inquiry.

First, researchers have been interested in the impact of BWCs on police officers, primarily in their behavior and attitudes. Second, researchers have also been interested in the potential impact of BWCs on citizens' attitudes and behavior. Finally, researchers have investigated how BWCs impact police organizations and their investigations. While the literature surrounding BWCs is not as extensive as other policing related topics, there has been a heavy emphasis on methodology, with a large majority of the studies incorporating some style of randomized controlled trials (Maskaly et al., 2017). These lines of research explored below suggest that there is an incumbent and lingering tension that BWCs cannot be expected to resolve alone. This issue and the literature will be explored in the following sub-sections.

### **Officer Behavior**

A driving force for more massive implementation of BWCs has been the idea that it will alter officers' behaviors during citizen encounters. Specifically, BWCs are theorized to prevent officers from engaging in acts of excessive use of force or behavior that would deprive citizens of their constitutional rights (Ariel, Farrar, & Sutherland, 2015). The accountability mechanism that appears to be inherent in the use of BWCs is still up for debate. Researchers have used complaints against officers, instances of the use of force, and arrests by officers to measure officer behavior.

Regarding complaints against officers, the literature has generally found that officers wearing BWCs receive fewer complaints than those not wearing BWCs (Braga et al., 2018; Goodison & Wilson, 2017; Jennings, Lynch, & Fridell, 2015). The findings of fewer complaints come from strong methodological studies using randomized controlled trials, usually in departments across the United States (Braga et al., 2018; Jennings, Lynch, & Fridell, 2015). However, what has not been explicitly addressed in-depth are the reasons for the drop in complaints. Theoretically, the decrease in complaints can be attributed to officers regulating their behavior because of the deterrent effect of being recorded (Ariel, Farrar, & Sutherland, 2015). Another potential explanation could be that officers are using the recordings of encounters to discourage citizens from reporting a complaint about a variety of reasons outside of whether the complaint is warranted. Koen (2016) found these types of interactions taking place when he conducted an on-site ethnographic research project investigating BWCs within a police department. Within this police department, supervisors reviewed footage from BWCs with citizens before a complaint was filed; thus, raising the question as to whether decreases in complaints could be attributed to actual changes in officer behavior or some other factor related to these interactions, such as supervisors discouraging citizens from reporting a complaint.

Several studies have investigated whether the use of BWCs would impact the instances of the use of force by police officers. In their comprehensive review of the literature, Lum and her colleagues (2019) found 16 studies investigating this relationship. The results seem to be mixed, with several experimental studies finding that officers equipped with BWCs use force less frequently and over-time (Jennings et al., 2017; Sutherland et al., 2017). In contrast, other experimental studies find no differences in the use of force by officers equipped with BWCs and

those without (Braga et al., 2018; Peterson et al., 2018). An explanation for this discrepancy comes from a finding that suggests that officers tend to exhibit greater use of force when they are given the discretion to activate or deactivate their BWCs (Ariel, 2016). Given that the aforementioned studies did not track whether the officers could activate or deactivate their BWCs, the findings could have been impacted. It is important to note that instances of the use of force and even complaints against officers are relatively rare instances given the number of contacts between citizens and police. Therefore, it is reasonable to question whether complaints or use of force are good measures of officer behavior. While the community may be more concerned with these infrequent behaviors, given their nature as statistical anomalies, it may be hard to find patterns among these events. A few scholars have attempted to measure officer behavior in other forms, such as officer arrests or engagement in certain policing activities.

Research using officer arrest and citation patterns are mixed at best. For example, a controlled experiment in a police department in Arizona using both arrests and citations found that officers utilizing BWCs make fewer arrests but give more citations (Ready & Young, 2015). In contrast, another randomized controlled trial in Nevada found that arrests increased for officers using BWCs compared to their colleagues, not using BWCs (Braga, Sousa, et al., 2018). However, another randomized controlled trial using officers in Washington state found no significant differences between officers using BWCs and those not using them (Wallace et al., 2018). These differences are as of yet to be explained in the literature. However, an important insight from an ethnographic study finds that officers using BWCs feel that their discretion ability is inhibited, and if a crime is clearly captured on the footage, they must make an arrest (Rowe et al., 2018). This finding could be impacting various results across these studies and

context. Outside of officer behavior or manipulation, changes in complaints, use of force, or arrests could be a result of changes in citizen behavior, which is often cited as the primary explanation for a decrease in complaints by police officers who claim that these cameras keep citizens honest (Lum et al., 2019).

### **Citizen Behavior**

Fewer studies have examined the relationship between BWCs and citizen behavior compared to officer behavior; however, some studies have investigated this relationship and draw some interesting findings. It has been suggested that BWCs will instill some type of “civilizing effect” into citizens, essentially that citizens will cooperate or not escalate encounters if they know they are being recorded (Malm, 2019). The literature has not been supportive of this notion. Citizen behavior, considered in terms of compliance with law enforcement, is generally measured by the resistance to arrests and assaults on police officers. In their review of the literature, Lum and her colleagues (2019) found nine studies that measured assaults and resistance to arrest as compliance with police. Six of these studies found no significant difference in officers using BWCs and officers not using them regarding these outcomes. Perhaps more concerning, however, is that three of these studies found that officers using BWCs suffered from an increase in assaults. A potential explanation for these findings is that officers who are equipped with BWCs will conduct themselves in a manner that would leave them more susceptible to an assault because they are aware they are being recorded (Ariel et al., 2018). However, this explanation does have problems as research has shown that only 28 percent of interviewed citizens who had encounters, which were recorded by BWCs, even knew they were being recorded (White et al., 2017). This brings to question the actual efficacy of BWCs to

mitigate or alter behavior amongst citizens. A potential remedy to this problem is for officers to declare to citizens when an encounter begins that they are being recorded. This action may bring its own unintended consequences. For example, a study in England using systematic social observation of police-citizen encounters where BWCs were utilized noted that these encounters were becoming robotic and scripted (White et al., 2018). The potential consequences of this finding should not be overlooked. Encounters such as these nullify the potential human relationships that can be developed in police-citizen encounters. These relationships are necessary for developing trust and respect, which are foundations for police legitimacy (Tyler, 2004). The next section will discuss research into officer's and citizen's attitudes toward the use of BWCs. This line of research has discovered a potential troubling and festering problem when it comes to police-citizen relations.

### **Officer and Citizen Attitudes**

Several studies have investigated the perceptions and attitudes of both officers and citizens toward BWCs. Police agencies have been generally receptive to these studies on officer attitudes due to concerns over their implementation (Lum et al., 2019). In a similar vein, citizen attitudes toward BWCs have been a critical talking point due to concerns with police transparency and accountability. Many studies have focused on the attitudes of officers toward the implementation and general use of BWCs. The research has been descriptive, generally drawing on surveys of officers and citizens within a specific police department or community and gauging considerations of the general use of BWCs. In general, the literature suggests that both officers and citizens support the idea of BWCs, and their primary reasoning for supporting these tools is for protection from each other. This distinct line of distrust between police and

citizens that has become evident in the exploration of the perceptions of these tools marks a troubling problem that BWCs cannot be expected to resolve alone.

While skeptical at first, police officers appear to have positive perceptions of BWCs and their utility after they begin using them (Fouche, 2014; Owens & Finn, 2018). The reasoning for these positive perceptions may be related to actual changes in officer behavior and performance, the utility of BWCs in assisting in the recollection of facts from events when writing reports, improving the quality of evidence against citizens, or the most generally accepted reason, which is that officers believe BWCs will protect them from unfounded complaints (Fallik et al., 2018; Jennings et al., 2015; Koen, 2016; Makin, 2016; White, Todak, & Gaub, 2018). Makin (2016) used qualitative interviews with 12 officers pre- and post-implementation of BWCs and found that officers did offer positive themes related to BWCs such as an ability to self-correct their behavior in reviews of their interactions with citizens, improved training, and professionalism. In contrast, however, many studies that produce positive results regarding officer perception of BWCs also find that officers have lingering negative concerns with BWCs. Officers often complain of technical difficulties, increased workload, and how BWCs limit their discretion. Rowe and his colleagues (2018) express these concerns directly in their ethnographic study of police officers' perceptions of newly implemented BWCs. Their study found that officers are resistant to the use of BWCs because they believed it hindered their ability to use discretion freely and felt as though they were constantly under a microscope and second guessing themselves as they conducted their duties.

Citizens, as stated previously, are often supportive of the idea of BWCs, citing the need for accountability and an expectation that officers will uphold their oaths given the oversight

provided by these tools (Lum et al., 2019). Stakeholders within a community, such as business owners, have also consistently supported the idea of BWCs being implemented by officers (Todak et al., 2018). Furthermore, citizens who have just been arrested also support the idea of BWCs. Taylor and Lee (2019) found in interviews with 907 individuals shortly after their arrest that they were generally supportive of BWCs, but also expressed concerns with potential manipulation, modification, or misrepresentation. In contrast, another study on officer perceptions of bystander video sheds light on the distrust between the police and citizens. In Newell's (2019) study of officers' perceptions of bystander video, officers were much more inclined to express caution and dislike in citizens' recording their actions, primarily because of how they can alter the video to make them look unfavorable. These findings regarding the same principle of misrepresentation and manipulation should be alarming for the simple fact that the "objective" nature of video evidence does not appear to hold given these stark contrasts. This brings to light the uncomfortable medium that BWCs are expected to be nested in. Given the tremendous expectations placed on BWCs, police agencies have been spurred to incorporate them more heavily amongst their officers. This raises questions about how these tools impact the structure and operations of a police department.

### **Impact of BWCs on Police Organizations**

Few studies have investigated how incorporating BWCs can impact a department. However, the ones that have identified some potential cost-saving benefits and some negative consequences. Braga and his colleagues (2017), in their randomized controlled trial of BWCs in the Las Vegas Metropolitan Police Department, found a potential savings of 4 million dollars annually from investigating complaints against officers. Given the tremendous potential in cost

savings, this could drastically alter the budgeting and overall effectiveness and efficiency of a police department. Koen (2016), in his embedded study with a small police department, found that police agencies used BWC footage to improve training across their department. Video footage was often used to help officers identify ways to improve the delivery of policing services and for purposes of officer safety. An unfortunate potential consequence of BWC implementation has been found in the increased burnout of officers who use them (Adams & Mastracci, 2019). Finally, as Lum and her colleagues (2019) point out, BWCs are often used as a tool to institute change among a police department; however, the tool cannot inherently change the command and accountability structure of the leaders in place. Therefore, the problems that have historically plagued police departments regarding overzealous hierarchies and a rigid organizational structure may produce unintended consequences with BWCs increased implementation. It should be clear that BWCs can influence a number of actors within and outside of the justice system. Many lingering issues surround BWCs, including their widespread implementation, benefits, consequences, and overall place amongst an evolving police profession. Of particular interest to this study is the issue regarding camera perspective bias and its impact on viewers.

#### *Camera Perspective Bias & Police Legitimacy*

As discussed in the previous section, BWCs have many positive outcomes associated with their use. However, these benefits have led many people to overlook the potential negative consequences that may be introduced by the implementation of these devices. In this section, bias, as an external threat to the objectivity and use of BWCs and video evidence, will be discussed.

In a 1950s study, two psychologists showed a film of a football game between Dartmouth and Princeton and asked students from both schools about their perceptions of rough play. Princeton students were twice as likely to report that the Dartmouth team committed infractions than were Dartmouth students (Hastorf & Cantril, 1954). While perhaps unsurprising, this finding is relevant in that it exposes concepts of selective perception or otherwise known as confirmation bias. Selective perception refers to the process by which individuals accept information that only fits into their already existing beliefs (Sullivan, 2009). Individuals operating within the frame of selective perception may also reject information that does not align with their beliefs, finding some fault in its presentation or simply disregarding it completely.

Regarding police legitimacy, the idea of confirmation bias is relevant. As discussed in the previous section, police legitimacy involves notions of trust, respect, and perceptions that the police are trying to help (Tyler, 2004). If observers of video evidence already have strong positive perceptions of police legitimacy, they may be more inclined to seek out behavior to confirm their beliefs in the legitimacy of the police. Conversely, if observers have weak perceptions of police legitimacy, they may be more inclined to seek out behavior to confirm their beliefs. The potential bias and opinions people hold prior to taking in new information are problematic to BWCs from a societal and practical standpoint. From a societal standpoint, BWCs are intended to create accountability and transparency to potentially controversial situations involving the police (Jones, Crozier, & Strange, 2017). However, when video footage that presents information to the public is misunderstood deliberately or through some underlying cognitive process – this presents a tremendous challenge to the justice system. From a practical standpoint, if the information presented is interpreted in various ways, driven potentially by

personal experiences or inherent bias, the validity of the evidence is severely undermined. This may, in turn, impact decisions that may affect a person's life and liberty. In addition to these personal biases, camera footage presents a challenge in that the camera perspective (the position of the camera from which the incident is recorded) may not capture the entirety of the situation. Upon review, the recording may lead to more questions than a narrative report of the same incident.

BWCs are often seen as objective tools for law enforcement to present a factual account of events that transpired (Lum et al., 2015). However, this assumption has been brought into question by several scholars who point out that camera perspective bias may impact interpretations of video footage (Boivin et al., 2017). Camera perspective bias refers to the point of view from which a video is recorded, which can significantly impact an observer's judgments. (Lassiter & Irvine, 1986). Lassiter and Irvine (1986) are often credited with the discovery of this phenomenon. Their study showed the same videotaped interrogation of suspects from three points of view: directly behind the detective facing the suspect, behind the suspect facing the detective, and the final view from a wall-mounted camera. The researchers found that respondents who viewed the perspective focused solely on the suspect reported lower levels of coercion than the other views. The results led Lassiter and Irvine to conclude that the perspective from which a respondent views an encounter can considerably impact their judgments and perceptions of the encounter. Since this classic study, Lassiter and his colleagues have repeatedly found this bias across various types of crime and context concerning video confessions (Lassiter et al., 1992; Lassiter et al., 2002a). Furthermore, scholars have replicated the findings supporting

camera perspective bias in videotaped confessions from countries outside the United States, specifically Korea (Park and Pyo, 2012).

Camera perspective bias is theorized to be driven by a well-documented concept in social psychology research, known as illusionary causation (McArthur, 1980). Illusionary causation refers to the tendency to attribute unwarranted causality to a stimulus because it is more noticeable or pronounced than any competing stimuli (Lassiter et al., 2002a). In the case of video recordings, it is hypothesized that those viewing footage from various perspectives are not given the entire picture and thus reserve their judgments and perceptions on what they can see. Importantly, scholars have found evidence that this bias can be attributed to the camera angle and not the potential individual bias of the person viewing the video (Ratcliff et al., 2006; Ware et al., 2008). This is an important distinction from the confirmation bias that has been discussed before and indicates that taken as a whole, the evidence from the literature suggests that different forms of bias can impact observers of video evidence.

Perhaps even more concerning is evidence suggesting that even experienced judges and law enforcement “experts” are sensitive to camera perspective bias (Kahan et al., 2009; Lassiter et al., 2007). For instance, Lassiter and colleagues (2007) found that a sample of 21 judges who had experience as prosecutors or criminal defense attorneys, and 24 police officers with extensive interrogation experience, were susceptible to camera perspective bias. The law enforcement experts participated in a randomized experiment where they viewed a videotaped mock confession from one of three camera perspectives (focused on the suspect, focused on the detective, or an equal focus). The results found support for illusionary causation through camera

perspective bias. They ultimately suggested that these confessions should be conducted with an “equal-focus perspective,” which shows both the suspect and interrogator to remedy the impact.

Furthermore, Kahan and colleagues (2009) took issue with the Supreme Court’s decision in a 2007 case where a police officer’s cruiser rammed a fleeing suspect in a vehicle. The Supreme Court, who accepted video evidence showing the pursuit from the dashcam of the police cruiser, ruled in a majority decision that the suspect’s rights were not violated when the officer rammed his vehicle, leaving him paralyzed (Scott v. Harris, 2007). The Supreme Court subsequently released the video of the incident challenging dissenters to see the video for themselves. Essentially, the Supreme Court’s argument using this video evidence was that the “objective” presentation of the events in the video would lead to an obvious result of conviction. This sentiment is present in the arguments of the majority who argued that “no reasonable juror” could find that the suspect did not present a clear danger to the community (Scott v. Harris, 2007). Kahan and colleagues tested these claims in a nationally representative survey of adults (N=1,350) who viewed the video and found that while the majority of the respondents affirmed the Court’s decision, a small subset of respondents, particularly those who were minorities, did not agree with the sentiment presented by the Court. The researchers then argued that the Supreme Court was taking part in cognitive liberalism—a form of bias in which conclusions are drawn without taking into account a more comprehensive view of societal risk and values of an ideal society (Kahan et al., 2009). The historical precedent set by this case should present a significant concern for those interested in BWCs and the potential unintended consequences. While the aforementioned case involved dashcam footage, it is reasonable, considering the current climate and use of technology to record citizen-police encounters, to conclude that a

Supreme Court case involving BWC footage will occur in the near future. Outside of the potential for camera perspective bias, the case for subtle racial attitudes to impact perceptions of video evidence is also present.

### *Subtle Racial Bias*

Aversive racism theory asserts that people who are aversive racists are not overtly or expressively racist; they do not want to appear to be racist and generally would like to be egalitarian (Dovidio & Gartner, 2004). However, aversive racists have glaring contradictions in their attitudes and behaviors. First, while aversive racists express egalitarian attitudes outwardly, they also exhibit subtly biased behaviors. (Dovidio & Gartner, 2004). These subtle biased behaviors often emerge when situations are ambiguous or when the facts are unclear. The reasoning for this is that when a situation is clear, and the facts are straightforward, they are fearful of challenging notions of the situation because they would appear to be racist (Kalle & Hammock, 2009). When a situation becomes ambiguous and unclear, aversive racists exhibit unintentionally biased behaviors (Dovidio & Gartner, 2004). Aversive racism is suggested to be significantly different from traditional "old-fashioned" racism that is much more direct (Dovidio, Gaertner, & Pearson, 2017). Aversive racists do not exhibit open hostility or hatred; rather, they feel emotions of discomfort, anxiety, or fear. Regarding ambiguous situations, it is hypothesized that aversive racists will engage in discrimination when normative structures are fragile or when the parameters for what is socially acceptable is unclear (Dovidio, Gaertner, & Pearson, 2017).

Considering the framework for aversive racism theory, it has typically been tested by measuring prosocial behaviors. Aversive racism has been found to impact employment, college

admission, and legal decisions (Dovidio, Gaertner, & Pearson, 2017). Furthermore, of relevance to this study, aversive racism theory has been tested in tandem with camera perspective bias (Kalle & Hammock, 2019). Kalle and Hammock (2019), using a sample of predominately undergraduate students, randomly assigned participants to three video conditions: one video focusing on the citizen, another focusing on the officer, and the final group watched both perspectives. The video they used was a police-citizen encounter that had been deemed "ambiguous" because of an unclear movement the black citizen made toward a white officer, where the officer subsequently took him to the ground. In their study, the researchers found support for camera perspective bias and aversive racism theory (measured through the Implicit Association Test). Considering the theoretical underpinnings and consequences of the aversive racist theory, this is relevant to the current study and the use of a racial bias scale to capture dimensions of this potential subtle racism. These measures are discussed in more detail in Chapter 3 Methodology.

The importance of these concepts of bias and camera perspective cannot be understated. The potentially devastating consequences of a justice system wrongfully convicting or accusing citizens or law enforcement personnel based on methods mired in bias is problematic. Some scholars have already recognized the problem, and recommendations for neutral camera angles to be implemented in the arena of interrogations have already taken hold (Kassin et al., 2010). However, few studies have bridged these concepts of bias and linked them to BWCs, an area of law enforcement tactics and technology that has received much attention in recent years. Including camera perspective bias and subtle racial bias in a study of BWCs allows us to examine more carefully the role that video footage can play in the criminal justice system. In the

next section, the literature surrounding body-worn cameras will be explored. This study intends to fill an important gap in the literature surrounding the bias associated with BWCs and its impact on police and citizens alike.

## **CHAPTER 3**

### **METHODOLOGY**

The purpose of this study is to examine whether different forms of bias influence a viewer's perceptions of officer-citizen interactions involving the use of force. Primarily this study is concerned with how camera perspective bias may impact viewers' perceptions of these incidents. Based on previous literature, it is anticipated that respondents viewing the incident from the officer's perspective (via the BWC) will be more likely to find the officers' actions as justified (Granot et al., 2018). Respondents viewing the incident from the citizen's perspective, however, will find the officer's actions as not justified.

Research surrounding video evidence and perceptions of police also raise two further questions. First, research has linked implicit racial attitudes to influencing perceptions of video evidence (Kalle & Hammock, 2019). Specifically, evidence has been found to suggest that people with implicit racial attitudes may perceive minorities negatively when reviewing video evidence. Second, research surrounding perceptions of the police has suggested that citizens with high levels of police legitimacy will lead to increased compliance, cooperation, and empowerment by allotting police greater levels of discretion (Bolger & Walters, 2019; Moule et al., 2019; Walters & Bolger, 2018). These findings bring into question whether citizens who hold favorable attitudes toward the police or hold negative subtle racial attitudes may be biased in their perceptions of officer-citizen encounters. Regarding favorable attitudes toward the police, people may be giving officers the benefit of the doubt when viewing potentially controversial use of force incidents. In the instance of subtle racial attitudes, it may be that people are condemning

minorities prior to taking in the full extent of the factual evidence in a video, thus only retaining information that confirms their bias against the minorities. To isolate the effects of these potential biases, this study will implement an experimental format.

A sample of people within and outside of the United States was drawn from Amazon's workplace mTurk. Participants were randomly assigned to one of four potential groups. Each group consisted of a video showing a police-citizen use of force encounter. Prior to the video, the respondents completed a survey with questions about their perceptions of the police and attitudes about race and benevolent sexism. Following the video, participants completed a survey that measured their perceptions of the officer's behaviors. The survey also solicited the participants' demographic information, perceptions of the police, attitudes toward racism and sexism, and other questions of interest. Specifically, respondents were asked if they perceived the officer's actions in the video as acceptable, justified, and whether the level of force was appropriate. Specifically, these questions asked the following:

1. The officer(s) actions were: (Not Acceptable / Acceptable)
2. Officer(s) were justified in using force (Likert 1-4)
3. The level of force used by the officer(s) was appropriate (Likert 1-4)

These measures will be discussed in more detail later in this chapter, the entire survey can be found in Appendix A. To extend the literature surrounding various forms of bias impacting video viewers, hypotheses were developed to be tested in congruence with findings from the literature. The following hypotheses were tested in this study:

### **Hypotheses on Camera Perspective Bias**

H1: When presented with footage from the perspective of an officer a respondent will be more likely to interpret the use of force as justified.

H2: When presented with footage from the perspective of a citizen a respondent will be more likely to interpret the use of force as unjustified.

### **Hypothesis on Favorable Attitudes toward the Police**

H3: When presented with footage of the police and citizen encounter, a respondent who reported higher levels of favorable attitudes toward the police will be more likely to interpret the use of force as justified.

### **Hypothesis on Implicit Racial Bias**

H4: When presented with footage of the police and citizen encounter, a respondent who reported higher scores on the racial bias scale will be more likely to interpret the use of force as justified.

### *Research Design*

This study will deploy an experimental design, using a randomized four group alternative-treatments pretest-posttest design (Shadish, Cook, and Campbell, 2002). The participants were randomly assigned to one of four groups to ensure equivalency between the groups. Figure 3.1 shows a visual illustration of the research design with the symbols representing the following: R-random assignment, O-observation, X<sub>12...</sub>-treatment. The four treatments will consist of observing a video on a police-citizen encounter from a certain camera perspective. The four camera perspectives are drawn from two separate use of force incidents. The primary independent variable of interest in this study is camera perspective bias. To observe this, two incidents were selected from two different perspectives, BWC and citizen cell phone.

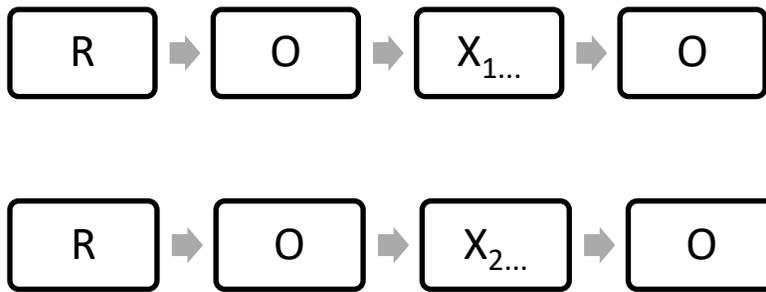


Figure 3.1. Alternative-Treatment Pretest-Posttest Design

The use of two incidents, one deemed "good" and one "bad," was subjective and based on two sources, community outcry and the justice systems response. First, in the good encounter, the officers received little to no community backlash, and the officers faced no administrative punishment. In the bad encounter, the officers were immediately placed on leave without pay pending an investigative outcome, and the police department received tremendous backlash from the immediate community in Tuscaloosa, Alabama. The rationale behind using two incidents with different outcomes was driven by empirical curiosity, to see if incidents that received drastically different responses would be perceived differently by their outcome or impacted by the variables in this study. The video selection process will be discussed in more depth in the section titled "selection criteria." Figure 3.2 presents a visual breakdown of the groups along with the treatments by groupings. The incidents and consequences of each video are discussed more thoroughly below.

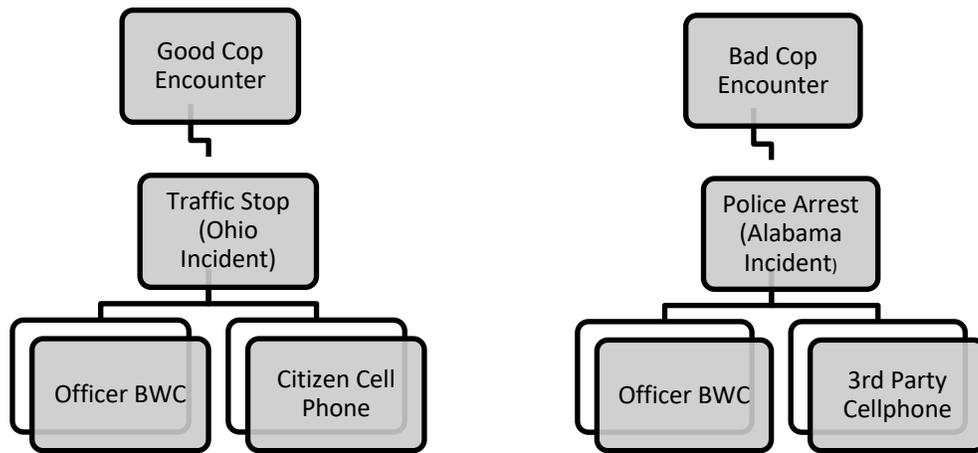


Figure 3.2. Breakdown of Video-Groups

### *Sample*

A sample of adults within and outside of the United States was used in this study. Most respondents reported that they resided in the United States (N=754), with a small population (N=84) of respondents who reside outside of the U.S. Amazon's workforce marketplace, Mechanical Turk (mTurk), was used to gain access to volunteer respondents. Amazon's mTurk is comprised of "workers" who volunteer to participate in surveys made available through Amazon for financial compensation. The respondents were compensated \$1.00 dollar for participating in the survey. This amount of compensation is consistent with other researchers who have used mTurk to draw respondents. (Culhane & Schweitzer, 2017). While mTurk does suffer similar limitations as other participant pools (college samples) in that volunteers make up a subset of the population, mTurk tends to be more diverse and representative of the general population than college samples (Culhane & Schweitzer, 2017). Surveys were built through Qualtrics with a link prompting the respondents to view the police-citizen encounter footage. The data collection

period began in February of 2020 and was completed a month later in March of 2020.

Subsequent analysis was completed on Stata. This study was approved by the University of Texas at Dallas Institutional Review Board (IRB).

### *Video Footage*

Respondents in this study viewed one of four videos showing two different perspectives of two different interactions between the police and citizens. The first incident (Ohio incident) occurred in Canton, Ohio, in May of 2018 when police, after noticing the driver using a homemade license plate, pulled over a citizen who identified himself as a sovereign citizen. The driver, later identified as Ronald Wagner, then refused to provide officers with identification. The officers, after extensive dialogue with the driver, informed him that he would be forcibly removed from the vehicle. The officers then smashed the window of the driver's vehicle, and forcibly removed him. While attempting to subdue the driver, they released a K9 unit on him, and officers made an arrest.

The second encounter (Alabama incident) occurred in Tuscaloosa, Alabama, on April 19<sup>th</sup>, 2019, when officers responded to a hit-and-run incident. The female driver, later identified as Jhasmynn Alexiss Sheppard, was stopped and told to exit her vehicle. After exiting the vehicle and during the arrest, the driver pulled away from the officer, begging to not be arrested. The officer then wrestled with her and, in the process, dislodged his BWC while it was recording. When the back-up officers arrived on the scene, they can be seen through a third-party camera perspective filmed by pedestrians struggling with the female driver while attempting to arrest her. During the arrest, the officer draws his baton and repeatedly strikes the driver. Following the

arrest and retrieval of his BWC, the officer can be heard berating the driver and informing her that "he is gonna kick her in the teeth" and that "she is lucky she didn't get a gun to the back of her noggin and make her obey." The incident has drawn the ire of community members and activist groups as the driver in this incident was a black female. Furthermore, the Tuscaloosa Police Chief Steve Anderson has come out and expressed his "disgust" at his officer's actions. Both officers involved in the incident were placed on leave, pending an investigation. While the investigation of the officer's conduct is still unknown, an updated news article reported that the citizen's attorney received over \$16,000 in attorney fees, while the city and citizen came to some undisclosed settlement (Dionne, 2019).

### *Selection Criteria*

Hundreds of hours of use of force video were viewed and considered for this study. Videos were viewed from mainstream media and social media outlets. Incidents were excluded because the videos were either too long, did not clearly show the incident, or, more commonly, were only viewable from one perspective. Highly publicized incidents were also excluded because respondents of the survey may have been swayed by knowledge of the specific details of such incidents. For example, the death of Sandra Bland was a heavily polarized incident that saw much national attention following the incident and its outcome. These incidents, as tragic and controversial as they are, were excluded because of the impact they may have on the respondent's objective perception of the event. The encounters that were chosen for this study can be interpreted in a variety of ways based on the perspective of the encounter viewed. This potential variation is invaluable to this study and how respondents may interpret these encounters. It is

important to note here that each incident, while similar in that both resulted in the use of force, contains some distinct differences regarding their outcomes and the citizens involved.

First, the Ohio incident was chosen as a “good cop encounter” because the officers did not face disciplinary action or civil litigation against them following their actions. It is challenging to judge any use of force incident as "good," given the nature of forced compliance often being difficult to watch. The officers in this incident, however, acted in a professional manner to non-forcible remove the driver from the vehicle for a lengthy period prior to them using force. Furthermore, the officers did not verbally abuse the citizen following the arrest, unlike the Alabama incident; the sharp contrast in the behavior of the officers in these incidents gave credence to their corresponding placement. While the use of the K9 unit and its subsequent damage to the driver could be excessive- neither the Ohio Highway Patrol nor the district attorney pressed the issue. A University of Akron constitutional professor later commented that the officers were justified in their response in this case (Nethers, 2018). This incident was captured both through officer BWC footage and from the driver, who was capturing footage of the encounter on his cellphone.

Second, in the Ohio incident, the citizen is a white male, and in the Alabama incident, the citizen is a black female. This distinct difference in the race and gender of the citizens involved presented an obstacle for this study. It is possible that respondents may perceive the encounter as not acceptable, justified, or appropriate because of the race or gender of the citizen rather than the actual behavior of the officers. To control for these confounding factors, measures of respondents' potential racial or sexist biases were incorporated into the survey. These measures will be discussed in more detail below. Secondly, regarding differences, while both incidents are

shown from the perspective of the officers BWC, the second perspective for each incident is different. While the Ohio incident is filmed first-hand by the citizen who gets arrested, the Alabama incident is filmed by a third-party observer. These distinct perspectives may influence a viewer to believe that either the Ohio citizen was instigating or expecting a confrontation; therefore, they began to record or, in the case of the Alabama encounter, the citizen did not deserve what was happening to them because bystanders chose to record. While this is not an exhaustive list of the potential emotions or scenarios an observer may feel or think when viewing the videos, it is important to note the potential limitation. However, while some may consider these factors as limitations, they may serve as a strength for this study in that reality often does not present incidents that are clear and uniform. Incidents where force is used are often mired with confusion, and motivations from neither law enforcement nor citizens are clear. Given the potential for confusion, contextual, or situational differences, this study adequately addresses these potential concerns. Links to each incident and camera perspectives are provided in Appendix B.

### *Dependent Variable*

The dependent variable in this study is the respondent's interpretation or perception of the police-citizen encounter. This variable was measured in three ways. First, respondents were asked to determine whether the officer's actions were *acceptable* measured as 1 = Not acceptable or 0 = Acceptable. Secondly, the respondents were asked to determine whether the officer's use of force was *justified*. This was measured with a Likert Scale, with 1 equal to strongly disagree, 2 equal to disagree, 3 equal to agree, and 4 equal to strongly agree. Finally, the respondents were asked whether the officer's level of use of force was *appropriate*, measured with a Likert Scale

with 1 equal to strongly disagree, 2 equal to disagree, 3 equal to agree, and 4 equal to strongly agree (Likert: 1-4). These measures were also used by a similar study of camera perspective bias (Boivin et al., 2017).

### *Independent Variables*

The primary independent variable of interest in this study is camera perspective bias. The secondary variable of interest is favorable attitudes toward the police. Camera perspective bias was captured through experimental design with random assignment of participants to one of four videos. Natural groupings were created of respondents with similar characteristics who viewed and reacted to these events. Measures are generally used in the policing literature to capture the dimensions of police legitimacy, procedural justice, and cooperation with the police. The measures used capture favorable attitudes toward the police, the entire collection of items are presented in Table 3.1; please note that these items were presented as statements with respondents answering their agreement or disagreement on a 1-4 Likert scale.

Table 3.1. Favorable Attitudes Toward the Police

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<b>Obligation to Obey</b>
1. You should accept police decisions even if you think they are wrong.
2. You should do what the police tell you to do even if you disagree.
<b>Cooperation</b>
3. I would call the police to report a crime.
4. I would call the police to report an accident.
5. People should report suspicious activity in their neighborhood.
6. People should provide information to the police to help find a suspected criminal.
<b>Distributive Fairness</b>
7. Police give minorities less help because of their race. *
8. Police provide better services to wealthier citizens. *
<b>Procedural Justice</b>
9. Police treat citizens with respect.
10. Police take time to listen to people.
11. Police treat people fairly.
12. Police respect citizens' rights.
13. Police are courteous to citizens they come in contact with.
14. Police make decisions based upon facts.
15. Police explain decisions to people they deal with.
16. Police make decisions to handle problems fairly.

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Note: Items with an asterisk\* were reverse coded

By measuring participants' levels of favorable attitudes toward the police, it is anticipated to control participants' levels of bias toward the police. Capturing favorable attitudes toward police is intended to act as a proxy variable for the concepts of bias toward police. General perceptions of the police will be consistent with previous literature and use four global measures to assess dimensions of police legitimacy (Parry et al., 2019; Reisig et al., 2007). These four dimensions are based on the process-based policing model that gauge the respondent's obligation to obey, willingness to cooperate, concepts of procedural justice, and distributive fairness (Reisig et al., 2007). Following the video, the respondents took a post-survey to measure their

perceptions of the encounter itself. These questions gauged whether they perceived the incident as justified.

Finally, two inventories were included to capture racial and sexist attitudes. Items from the Ambivalent Sexism Inventory developed by Peter Glick and Susan Fiske in 1996 were used to measure "ambivalent sexism," which is composed of "hostile" and "benevolent" prejudiced attitudes toward women. Hostile sexism is described as sexist antipathy and measures strong antagonistic attitudes toward women (Glick & Fiske, 1996). Benevolent sexism is described as chivalrous attitudes that portray women as weak and in need of a man's protection. These measures were included to capture potential prejudicial attitudes toward women because, in one video (Alabama), the suspect is a woman, while in the other video (Ohio), the suspect is a man. It is possible that any variation in responses to the justification or acceptability of the officer's actions could be based on the gender of the suspect. Therefore, this study incorporated six items from the benevolent sexism inventory to control for the potential gender bias.<sup>1</sup>

The six measures include the following statements which respondents: No matter how accomplished he is a man is not truly complete as a person unless he has the love of a woman; Women should be cherished and protected by men; People are often truly happy in life without being romantically involved with a member of the other sex; Women, compared to men, tend to have a superior moral sensibility; Men, should be willing to sacrifice their own well-being in order to provide financially for the women in their lives; Women, as compared to men, tend to

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<sup>1</sup> The entire survey is found in the Appendix A along with the items from the Benevolent Sexism Inventory.

have a more refined sense of culture and good taste. Table 3.2 presents the individual items from this scale in table format, please note items with an asterisk were reverse coded to make sense in the analysis.

Table 3.2. Benevolent Sexism Scale Questions

- 
1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman
  2. Women should be cherished and protected by men.
  3. People are often truly happy in life without being romantically involved with a member of the other sex. \*
  4. Women, compared to men, tend to have a superior moral sensibility.
  5. Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives.
  6. Women, as compared to men, tend to have a more refined sense of culture and good taste.
- 

Note: Items with an asterisk\* were reverse coded.

Similarly, this study also uses a racial bias scale to measure potential prejudice amongst respondents since one video shows a black citizen and the other is a white citizen. The racial bias scale used here was developed by the researcher. Most commonly, researchers have used the Implicit Association Test (IAT) to gauge and measure racial implicit bias attitudes (Kalle & Hammock, 2019). Using the IAT would have been difficult for this study for several reasons. First, the survey was intended to take 10-15 minutes, with the video embedded into the survey including the IAT would have been laborious for our respondents given the compensation. Second, while other racial bias questionnaires were considered, most of these were overt and direct measures of racial attitudes. Given the foundation of aversive racism theory these would not be adequate measures for the purposes of our study. Instead, a series of questions based on

current events and research by experts on subtle racial bias was developed (Tatum, 2003). The following statements were developed to gauge respondents' subtle racial biases: Athletes should be punished for not standing during the national anthem; The following statement describes me, "I do not have a prejudice bone in my body."; I agree with affirmative action as long as it is not applied to my job; Symbols of the Confederacy should be removed from public display; I have a hard time telling people apart who are not the same race or ethnic group as me; If someone posts a racist remark in an online forum, I make it a point to report these comments.

Table 3.3. Subtle Racial Bias Scale Questions

1. Athletes should be punished for not standing during the national anthem.
2. The following statement describes me, "I do not have a prejudiced bone in my body."
3. I agree with affirmative action as long as it is not applied to my job.
4. Symbols of the Confederacy should be removed from public display.
5. I have a hard time telling people apart who are not the same race or ethnic group as me.
6. If someone posts a racist remark in an online forum, I make it a point to report these comments.

Table 3.3 shows the individual items that were used on the racial bias scale. As stated previously, these items were used for their subtle language measuring concepts of racial bias compared to other inventories that are more direct and overt. Some items, such as kneeling for the national anthem and using symbols of the Confederacy, were developed in the current socio-political climate in which these two matters were linked. For example, the sports realm of entertainment saw much dialogue and coverage on Colin Kaepernick, a former National Football League player who chose to kneel during the national anthem in protest of police brutality and racial inequality

in 2016. These actions drew the ire and support of many citizens across the nation, with some arguing that the action disrespected the service of military members, while others argued that the silent, non-violent protest was among the best ways to address these problems. During the presidential election of 2016, current President Donald Trump even argued that Kaepernick should consider finding another country to reside in when expressing his disagreement with his protest ("Donald Trump on Kaepernick," 2016). Research on these polarized actions has discovered stark racial division between those who supported and disapproved of Kaepernick's actions. Intravia and colleagues (2020) found that in a sample of college students that non-black conservative students were much more likely to oppose support for Kaepernick's protest than black students. These large racial differences were among the primary reasons items such as these were included in this inventory.

### *Survey Instrument*

The survey consisted of 78 questions, including measures of respondents' perceptions of the encounter shown in the video, basic demographics, their levels of favorable attitudes toward police, and other variables of interest. Following the respondent's acceptance of the consent form approved by the IRB at the University of Texas at Dallas, they were prompted to answer the 16-question scale on their attitudes toward police. The measures for favorable attitudes toward police consist of measures that have been extensively used in the literature and are strong valid indicators (Parry et al., 2019). The next 12 questions consisted of 6 questions from the benevolent sexism inventory and 6 questions from the racial bias scale. Following these questions, the respondents were prompted to view one of the videos from one of the camera perspectives. After viewing the video, respondents were asked two recollection of events

questions asking them how many officers were present in the encounter and during what time of day the event transpired. These questions were added to gauge the viewers' awareness of the events in the video; while not directly a part of this study's scope, it was interesting to understand observers' recollection. Following these questions, respondents were asked three questions to gauge their perceptions of the encounter, i.e., whether the officer(s)' actions were acceptable, the officer was justified in the use of force, and whether the force used was appropriate. The next three questions will gauge whether the respondent believes that the officer(s) should be commended, reprimanded, or required to complete additional training. These measures are drawn directly from Boivin and her colleagues' (2017) study on camera perspective bias. The respondents were then prompted to answer the same 16 question inventory on attitudes toward police they completed before observing the video. They will also complete the 12 questions consisting of the benevolent sexism inventory and racial bias scale. Basic demographic questions will gauge the respondent's age, gender, ethnicity, educational attainment, employment status, household income, and marital status. Finally, five additional questions were included at the end of the survey instrument to assess the respondent's connection with the criminal justice field.

These questions included:

1. Are you, a relative or a close friend currently or formerly employed in a criminal justice field?
2. Have you ever had contact with the police?
  - a. If yes, would you describe your contact with the police as positive or negative?
3. Has someone in your family or a close friend been in contact with the police?
  - a. If yes, would you describe their contact with the police as positive or negative?

For a complete list of questions in the survey, see Appendix A.

## CHAPTER 4

### RESULTS

To present the results from this study coherently and efficiently, the section is divided into three sections. First, this study relies on survey responses from various respondents nested into groups. Their placement into these groups is a product of random assignment. Therefore, our discussion begins by observing the characteristics of each of our groups. Second, using a two-sample difference of means t-tests, our dependent variables across all groups were compared to see if there are actual and significant differences between the groups based on camera perspective. Third, to understand these relationships, multivariate analysis incorporating several important control variables, with special emphasis placed on how respondents' potential biases may impact their perceptions of these use of force incidents in the videos, is presented.

#### *Equivalence of Comparison Groups*

Table 4.1 shows the counts and percentages of each of the four groups of interest. Each respondent was randomly assigned to view one of four videos from two separate incidents. The first two columns (indicated by Ohio BWC and Ohio Cell) presents the breakdown by demographics of the Ohio incident involving the male citizen. The next two columns (indicated by Alabama BWC and Alabama Cell) presents the breakdown by demographics of the Alabama incident involving the female citizen. As seen in Table 4.1, each group is similar to each other in terms of demographics. Generally, most of our respondents are male, white, college-educated, between the ages of 25-34, and generally fall into the income range of \$10k-\$60k. Observing the counts and percentages, a large separation in participants' frequency by group is not observed.

After conducting a series of differences of means t-tests (not shown here), the groups were found not to have significant differences across demographic variables except for one, respondents' gender. The Alabama incident did not show significant differences between the gender of those viewing the BWCs and those viewing the cellphone footage. However, in the Ohio incident, the results of the t-test suggest there are significant differences between the means of those viewing the body-worn footage and those viewing the cellphone footage by gender. By observing the counts shown in Table 4.1, there appear to be more females that viewed the BWC (112) than the cell phone footage (79), and slightly more males viewed the cell phone footage (150) compared to the BWC (128). No other demographic variables were not found to be significantly different based on subsequent t-tests.

Given each group's demographic characteristics, groups can confidently be compared without the concern of extraneous bias introduced by non-similar comparison groups. It is important to note that one of the survey questions asked respondents to identify which state in the US they resided or if they did not reside in the US. This variable was then broken into four geographic regions in the U.S. (Northeast, Midwest, West, and South); however, there was a significant amount of missing data and nonresponse. Including the region into the analysis would have resulted in a loss of over 200 observations. Education was also measured through several subcategories, including bachelors, masters, and doctoral degrees. However, for simplicity, these categories were grouped. Across all groups, respondents were predominantly college-educated, with the Ohio BWC group having the lowest percentage of college-educated respondents at 78%. Further discussion on the demographics of the sample will be explored later in this chapter.

Table 4.1. Descriptive Statistics by Group, n = 957

Variables	Count	%	Count	%	Count	%	Count	%
	<b>Ohio BWC, n=247</b>		<b>Ohio Cell, n=231</b>		<b>Alabama BWC, n=239</b>		<b>Alabama Cell, n=240</b>	
<b>Gender</b>								
Female	112	47	79	35	93	39	86	36
Male	128	53	150	66	144	61	152	64
<b>Race</b>								
Non-White	106	43	98	42	107	45	111	46
White	141	57	133	58	132	55	129	54
<b>Relationship</b>								
Not Married	115	47	124	54	124	52	128	53
Married	132	53	107	46	115	48	112	47
<b>Education</b>								
No College	52	21	57	25	45	19	46	19
College-Educ.	194	79	173	75	194	81	192	81
<b>Residence</b>								
Non-Urban	125	52	101	46	122	53	131	57
Urban	116	48	121	55	108	47	98	43
Non-Suburban	153	63	155	70	141	61	131	57
Suburban	88	37	67	30	89	39	98	43

Table 4.1. Descriptive Statistics by Group cont., n = 957

Variables	Count	%	Count	%	Count	%	Count	%
	<b>Ohio BWC, n=247</b>		<b>Ohio Cell, n=231</b>		<b>Alabama BWC, n=239</b>		<b>Alabama Cell, n=240</b>	
<b>Age</b>								
18-24	26	11	26	11	21	9	29	12
25-34	116	47	116	50	121	51	118	49
35-44	60	24	39	17	57	24	44	18
45-54	24	10	29	13	19	8	20	8
55-64	14	6	17	7	12	5	24	10
65-74	7	3	4	2	9	4	5	2
<b>Income</b>								
>10k	14	6	22	10	19	8	25	10
10-19k	34	14	28	12	32	13	30	13
20-29k	26	11	26	11	22	9	17	7
30-39k	29	12	25	11	34	14	22	9
40-49k	35	14	34	15	25	10	24	10
50-59k	24	10	26	11	27	11	17	7
60-69k	16	6	18	8	19	8	25	10
70-79k	21	9	14	6	19	8	24	10
80-89k	16	6	12	5	9	4	14	6
90-99k	8	3	10	4	15	6	16	7
100-149k	17	7	12	5	16	7	23	10
<150k	7	3	4	2	2	1	3	1

### *Testing Mean Differences by Group*

After determining the comparability of groups, the next step is to determine how respondents' perceptions of the acceptability and justifiability of officer use of force are impacted by camera perspective. Of further interest is how these perceptions are impacted when one encounter is deemed good and the other bad. Those who viewed each incident's BWC view and those who viewed the cellphone footage were split into two separate groups to observe the differences between groups. Table 4.2 and 4.3 show the results of a T-test analysis on whether respondents found the use of force by officers as justified or acceptable, regardless of the encounter. The results indicate that overall, those who viewed the BWC view of the incidents reported officers' behavior as more justified (2.59;  $p=0.01$ ) and within this sample as more acceptable (0.51;  $p=0.15$ ).

Table 4.2. Two sample t-test of justified force by camera perspective

	Observations	Mean	Std. Error	Std. Deviation
Cell video	471	2.45	0.05	1.02
Body-worn	486	2.59	0.05	1.01

Note:  $t$ : -2.20;  $df$ : 955;  $Pr(T < t)$ : 0.01;  $Pr(|T| > |t|)$ : 0.02;  $Pr(T > t)$ : 0.98

While this finding alone is interesting and lends support to hypothesis 1, further analysis is necessary to uncover more nuanced details of these findings. For example, if these findings are driven by whether the officers' actions were deemed good or bad. To accomplish this, each incident was divided into groupings by incident and camera perspectives. Tables 4.4 and 4.5 show the results from the Ohio incident (good encounter), while Tables 4.6 and 4.7 show the Alabama incident results (bad encounter).

Table 4.3. Two sample t-test of acceptability by camera perspective

	Observations	Mean	Std. Error	Std. Deviation
Cell Video	466	0.47	0.02	0.49
Body-Worn	482	0.51	0.02	0.50

Note: t: -1.44; df: 946; Pr(T<t): 0.07; Pr(|T|>|t|): 0.15; Pr (T> t): 0.92

The Ohio incident had the most variation in attitudes across both groups concerning the acceptability and justification of the use of force shown by perspective. The results indicate that BWC viewers reported the behavior as significantly more justifiable (2.82; p=0.0004) and acceptable (0.65; p=0.0003) compared to those who viewed the cellphone incident perspective.

Table 4.4. Two sample t-test of justified force by Ohio Incident

	Observations	Mean	Std. Error	Std. Deviation
Cellphone	231	2.49	0.07	1.08
BWC	247	2.82	0.06	0.96

Note: t: -3.57; df: 476; Pr(T<t): 0.0002; Pr(|T|>|t|): 0.0004; Pr (T> t): 0.99

In contrast to the Ohio incident, there is less variation in responses in the Alabama incident. Tables 4.6 and 4.7 show the results of the Alabama incident's t-tests across those who viewed the incident from the cellphone compared to the BWC.

Table 4.5. Two sample t-test of acceptability by Ohio Incident

	Observations	Mean	Std. Error	Std. Deviation
Cellphone	229	0.49	0.03	0.50
BWC	245	0.65	0.03	0.48

Note: t: -3.65; df: 472; Pr(T<t): 0.0001; Pr(|T|>|t|): 0.0003; Pr (T> t): 0.99

The results indicate that within this sample, respondents who viewed the BWC perspective believed that the officers' actions were less justified (2.37; p=0.56) and acceptable (0.37;p=0.09) compared to those who viewed the cellphone footage. However, it is important to note that neither of these findings is statistically significant, but the acceptability test does come close at

0.09. While the anticipated direction of this relationship was that the cellphone videos would produce less support for justification and acceptability, the Alabama incident was deemed the bad encounter that explains this result. As discussed previously, in the BWC footage in the Alabama encounter, the officer is clearly heard berating and threatening the female citizen. While the cellphone footage does not show this verbal berating and belittling, the cellphone footage does include audio of bystanders commenting on the arrest. These factors may have played a role in these findings; however, further analysis is necessary to better understand these findings.

Table 4.6. Two sample t-test of justified force by Alabama Incident

	Observations	Mean	Std. Error	Std. Deviation
Cellphone	240	2.42	0.06	0.95
BWC	239	2.37	0.07	1.02

Note: t: 0.58; df: 477; Pr(T<t): 0.72; Pr(|T|>|t|): 0.56; Pr (T> t): 0.28

The findings from the Alabama incident, while not significant, are still fascinating when considering the camera perspective. The results from these t-tests also affirm that respondents from this study were able to identify the bad and good encounter, with justification and acceptability being lower in the Alabama incident. The biggest takeaway from this section is the confirmed presence of camera perspective bias regardless of the encounter, which appears to impact respondents' perceptions of citizen-police encounters. In the following section, multivariate analyses investigate the relationship between these variables while controlling for potentially important extraneous variables.

Table 4.7. Two sample t-test of acceptability by Alabama Incident

	Observations	Mean	Std. Error	Std. Deviation
Cellphone	237	0.44	0.03	0.49
BWC	237	0.37	0.03	0.48

Note: t: 1.68; df: 472; Pr(T<t): 0.95; Pr(|T|>|t|): 0.09; Pr (T> t): 0.04

### *Multi-Variate Analysis of Outcome variables*

While significant results were found across the t-tests in the previous section, simple t-tests cannot show more nuanced data differences. An ordinal logistic regression and simple logistic regression will be carried out to isolate and identify the strongest indicators for predicting whether respondents found the videos acceptable or justified. The use of these regression analyses comes as a direct result of the nature of the dependent variables. The acceptability of using force in the videos is measured dichotomously (0–Unacceptable / 1–Acceptable); thus, using a simple logistic regression is appropriate to determine the nature of relationships of the variables. The justifiability and appropriateness of the use of force are measured on a Likert scale (1–4 Strongly Disagree to Strongly Agree); therefore, using an ordered logistic regression is appropriate. For simple and straightforward interpretation, Tables 4.9, 4.10, and 4.11 were presented with the odds ratios rather than coefficients. Table 4.8 shows the descriptive statistics for all variables included in the model. A couple of interest variables were included in the model, specifically a question in the survey asking whether or not the respondent, their family members, or close friends were employees of the criminal justice system and whether they had any personal contact with the police. As illustrated in Table 4.8, close to 80 percent of the sample has had some form of contact with the police, and almost 30 percent of the sample report that the criminal justice system employs them or someone close to them.

Table 4.8. Descriptive Statistics for Variables, n = 957

Variables	Mean	Std. Dev.	Min	Max
<b>Dependent Variables</b>				
Acceptable	0.49	0.50	0	1
Justified Force	2.53	1.02	1	4
Appropriate Force	2.38	1.11	1	4
<b>Video Condition Variables</b>				
Body-Worn Perspective (Pooled)	0.51	0.50	0	1
Ohio Incident BWP	0.52	0.50	0	1
Alabama Incident BWP	0.49	0.50	0	1
<b>Scales</b>				
Favorable Attitudes toward Police	44.80	8.59	16	64
Racial Bias Scale	14.18	2.64	6	21
Benevolent Sexism Inventory	14.55	4.32	6	24
<b>Demographics</b>				
Age	2.61	1.17	1	6
Male	0.61	0.49	0	1
White	0.56	0.49	0	1
Married	0.49	0.50	0	1
College	0.79	0.41	0	1
Income	5.50	3.07	1	12
Urban	0.48	0.49	0	1
Suburban	0.37	0.48	0	1
<b>Other Variables of Interest</b>				
CJ Employee	0.30	0.46	0	1
Police Contact	0.79	0.41	0	1

Furthermore, around 48 percent of the sample reside in urban areas, while 37 percent reside in suburban areas. As stated previously in comparing our groups, the sample is predominately male (61%) and white (56%). A large majority of the sample are college-educated (79%). Regarding the video conditions, the pooled body-worn perspective refers to the entire sample of respondents being separated into two groups (0 – cellphone perspective, 1 – BWC perspective). While the Ohio Incident BWP and Alabama Incident BWP capture the two groups, who saw those separate incidents (0- cellphone perspective, 1- Body-worn Perspective). To analyze the results using multivariate analysis, six different models were used three logistic regression analyses on the

dichotomous variable gauging whether the respondents believed the officers' actions were acceptable. These results are shown in Table 4.9. The regression was fitted on the variable classifying the groups by camera perspective, specifically BWC or cell phone footage. In clear terms, each model analyzed was based on the groups to which the respondents were assigned. Table 4.8 shows that the video condition variables are almost half (52% and 49%) across both the Ohio and Alabama incident (Body-worn perspective and cellphone). Furthermore, empirical interest was to compare the BWC perspective's total membership with those who viewed it from the cell phone perspective (51% split overall). In the following sections, the respondents' perceptions of the acceptability, justifiability, and acceptability will be explored.

#### *Acceptability of Officer Use of Force*

The results from the logistic regression analysis shown in Table 4.9, model 1, indicate that when BWCs are viewed across both incidents within the sample, the force's odds are deemed acceptable increase by a factor of 1.28. This finding is not statistically significant; however, five other variables within this model are significant. The first two significant findings show that respondents residing in urban and suburban areas report decreased odds (0.562,  $p = 2.34 / 0.625$ ;  $p = -1.98$ ) of finding the force acceptable. Next, those reporting higher scores of favorable attitudes toward police have increased odds (1.06;  $p = 4.68$ ) of reporting the force as acceptable. Furthermore, respondents with higher scores on the racial bias scale also have increased odds (1.18;  $p = 4.81$ ) of reporting the force as acceptable. Finally, the results suggest that respondents who reported having some affiliation with the criminal justice system have significantly increased odds (2.92;  $p = 5.43$ ) to report the force as acceptable. To further isolate these effects, each use of force incident was separated into two more analyses.

Model 2 shows the analysis of the acceptability of the use of force solely focused on the Alabama incident. The primary variable of interest or the effect of camera perspective bias is not significant in this model (0.633;  $z = -1.88$ ). However, the results indicate that high scores on both the racial bias (1.23;  $p = 3.79$ ) and favorable attitudes toward the police scales (1.04;  $p = 2.14$ ) increase the odds of respondents finding the Alabama incident as acceptable. Interestingly, males reported increased odds of finding the incident as acceptable (1.78;  $p = 2.19$ ). Furthermore, like model 1, it is found that respondents with ties to the criminal justice system have significantly increased odds (3.71;  $p = 4.41$ ) of finding the incidents acceptable. The only finding suggesting the opposite was respondents who reported residing in suburban areas reported decreased odds (0.44;  $p = -2.20$ ) of finding the officer's actions in this incident as acceptable.

The final logistic regression analysis investigated the acceptability of the use of force in the Ohio incident. These results were presented in Model 3 of Table 4.9. Model 3 reports four significant findings. First, regarding the camera perspective, respondents viewing the BWC have a significant increase in odds of reporting the Ohio incident as acceptable (2.28;  $p = 3.72$ ). Secondly, respondents who reported working for or knowing someone who worked for the CJ system have increased odds of finding the officer's actions acceptable (2.71;  $p = 3.55$ ). Thirdly, respondents reporting higher scores on the racial bias scale were found to have increased odds of reporting the officer's actions as acceptable (1.14;  $p = 2.77$ ). Finally, respondents reporting favorable attitudes toward the police were found to have increased odds of finding the officer's actions acceptable (1.08;  $p = 4.42$ ). In the next section, Table 4.10 will be assessed along with the hypotheses proposed in the previous chapter on the respondents' perceived justification of force in this study.

Table 4.9. Logistic Regression Analysis on Acceptability of Use of Force

Variables	Model 1 (N=847)		Model 2 (N=421)		Model 3 (N=426)	
	odds	z	odds	z	odds	z
Body-Worn Camera (Pooled)	1.283	1.59				
Alabama (Fixed Effect)	0.439	-5.19***				
Alabama Incident (BWC)			0.633	-1.88		
Ohio Incident (BWC)					2.288	3.72***
Age	0.940	-0.81	0.873	-1.09	1.002	0.03
White	0.840	-0.98	0.765	-0.99	0.949	-0.21
Male	1.367	1.88	1.788	2.19*	1.140	0.56
Married	1.162	0.97	2.310	1.77	0.826	-0.53
College	0.904	-0.50	1.247	0.67	0.728	-1.15
Income	1.022	0.82	0.986	-0.32	1.054	1.35
Urban	0.562	-2.34*	0.500	-1.85	0.634	-1.30
Suburban	0.625	-1.98*	0.441	-2.20*	0.814	-0.59
CJ Relation	2.922	5.43***	3.711	4.41***	2.717	3.55***
Police Contact	0.912	-0.46	0.752	-0.95	1.103	0.35
Benevolent Sexism	1.011	0.47	1.025	0.68	0.973	-0.73
Race Bias Scale	1.186	4.81***	1.238	3.79***	1.148	2.77**
Favorable Attitudes of Police Scale	1.060	4.68***	1.042	2.14*	1.082	4.42***
$\chi^2$	202.37(15)***		135.88(15)***		85.53(15)***	
<i>Log likelihood</i>	-484.60409		-212.59888		-249.57643	
<i>Pseudo R2</i>	0.1727		0.2422		0.1463	

Note: \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

### *Hypotheses Testing*

This study's primary purpose is to investigate the theoretical underpinnings and extend the previous literature surrounding camera perspective bias, subtle racial bias, and the various dimensions encompassing favorable positive attitudes toward the police, including police legitimacy. The hypotheses based on previous literature and the expected direction of these variables are assessed here. Table 4.10 illustrates the findings from the measures that directly gauged respondents' perceptions of the justification of the officer's actions in each of the incidents.

#### *Hypothesis 1: BWCs impact on justification of use of force*

Hypothesis 1 suggests that respondents who observe the use of force incidents from an officer's perspective (via BWC) will be more likely to report the encounter as justified. Support is found for this hypothesis from Model 1 and 3 in Table 4.10. Specifically, in Model 1, it is found that across both incidents, respondents who view the BWC have increased odds of agreeing that the use of force was justified (1.4;  $p= 2.53$ ). When disaggregated, however, the results suggest that only the Ohio incident (Model 3) viewers have a significant increase in odds of reporting that they find the force justified (2.01;  $p= 3.70$ ). Comparatively, Model 2 shows that respondents who viewed the Alabama incident have decreased odds of finding the officers' actions as justified (0.94;  $p= -0.32$ , non-significant). The nature of the video could explain this finding within this sample. The Alabama incident was considered the "bad" citizen-officer encounter, and the respondents actively picked up on the officers' negative behavior compared to

the "good" encounter. The results suggest that the camera perspective impacts respondents' perceptions of an encounter when viewing an incident from an officer's perspective.

*Hypothesis 2: Citizens perspective impact on justification of use of force*

Hypothesis 2 suggests that when footage is viewed from the perspective of a citizen, the respondents will be more likely to find the use of force as unjustified. The evidence presented in Hypothesis 1 corroborates this finding; however, the aforementioned t-tests are drawn upon to further discuss these findings. Tables 4.2, 4.4, and 4.6 all present the results of simple two sample t-tests investigating the justification of force by camera perspective. In Table 4.2, it is found that overall, respondents across both incidents reported lower levels of acceptance of justification when viewing the incidents from the citizen's perspective (2.45 compared to 2.59). Furthermore, in the Ohio incident, respondents reported significantly lower perceptions of justification of use of force compared to those who viewed the BWC perspective of the incident (2.49 compared to 2.82, Table 4.4). However, in the Alabama incident, the results suggest that respondents who viewed the cellphone footage reported higher levels of justification than those who viewed the officer perspective (2.42 compared to 2.37, Table 4.6). These findings will be discussed in more detail in the discussion chapter; however, this may be an artifact of the circumstances surrounding each incident rather than an indictment on the prevalence of camera perspective bias.

*Hypothesis 3: Favorable attitudes towards the police impact on justification of use of force*

Hypothesis 3 predicts that respondents who report more favorable attitudes toward the police will be more likely to interpret the use of force as justified in police-citizen encounters.

Strong support for hypothesis 3 is found across all models, positive attitudes toward the police were relevant and significant in the positive direction. Respondents who report these attitudes measured through notions of an obligation to obey, fairness, procedural justice, and a sense of cooperation are significantly more likely to report the officer's actions as justified. This level of support extends to the Alabama incident where the officers' actions were deemed erroneous and even "disgusting" by the officer's police chief; however, respondents with higher scores on this scale have significantly increased odds of finding the officers' actions as justified (1.08;  $p=5.50$ ).

*Hypothesis 4: Subtle racial biases impact on justification of use of force*

Hypothesis 4 predicts that respondents with higher scores on the racial bias scale will be more likely to interpret officers' use of force as justified. Model 1 from Table 4.10 reports that across all groups, respondents who reported higher levels on the racial bias scale have significantly increased odds of finding the officers' use of force justified (1.15;  $p=4.81$ ). A significant relationship between the racial bias scale and the Ohio incident is not found; however, a significant relationship is found for the Alabama incident. In model 2, respondents viewing the Alabama incident (involving a black female citizen) who report higher scores on the racial bias scale have significantly increased odds of finding the officers' actions as justified (1.21;  $p=4.71$ ). Considering that the Alabama incident is considered the "bad" incident in which the officers were deemed unprofessional, the results from this analysis provide support for subtle racial biases impacting people's perceptions of officer use of force. The implications of these findings will be discussed in further detail in the discussion chapter.

Outside of these findings, only two more significant findings are reported in the analysis of justification of use of force. Specifically, across all groups, males have increased odds of finding the officers' actions as justified (1.33;  $p = 2.09$ ). In the Ohio incident, it is found that those respondents reporting employment in the CJ system by themselves or someone close to them have increased odds of finding the officers' actions as justified (1.64;  $p = 2.13$ ). Compared to acceptability, it appears that employment in the CJ system does not play a large role in interpretations of justification. The respondents' location regarding whether they reside in suburban or urban areas also does not appear to play a significant role in interpretations of justification compared to acceptability. Furthermore, benevolent sexism does not appear to impact respondents' perceptions of the police-citizen encounters as all models concerned with acceptability and justifiability were non-significant regarding these measures.

Table 4.10. Ordinal Logistic Analysis on Justifiability of Use of Force

Variables	Model 1 (N=854)		Model 2 (N=426)		Model 3 (N=428)	
	odds	z	odds	z	odds	z
Body-Worn Camera (Pooled)	1.401	2.53**				
Alabama (Fixed Effect)	0.593	-3.99***				
Alabama Incident (BWC)			0.943	-0.32		
Ohio Incident (BWC)					2.011	3.70***
Age	1.013	0.20	0.957	-0.48	1.037	0.40
White	0.953	-0.32	0.881	-0.60	0.993	-0.03
Male	1.331	2.09*	1.397	1.68	1.389	1.67
Married	0.961	-0.17	0.882	-0.39	0.955	-0.14
College	0.768	-1.55	0.902	-0.40	0.747	-1.23
Income	1.010	0.46	0.985	-0.46	1.040	1.17
Urban	0.919	-0.42	1.112	0.37	0.795	-0.80
Suburban	0.811	-1.03	0.906	-0.34	0.792	-0.78
CJ Relation	1.327	1.77	1.098	0.39	1.640	2.13*
Police Contact	0.956	-0.26	0.991	-0.04	0.957	-0.18
Benevolent Sexism	1.024	1.10	1.033	1.11	1.001	0.05
Race Bias Scale	1.153	4.81***	1.215	4.71***	1.085	1.84
Favorable Attitudes of Police Scale	1.106	9.27***	1.084	5.50***	1.135	7.74***
$\chi^2$	259.95(15)***		122.89 (15)***		378.94(15)***	
<i>Log likelihood</i>	-1010.5142		-500.60901		-495.71942	
<i>Pseudo R2</i>	0.1140		0.1093		0.1272	

Note: \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

### *Acceptability of the Level of Use of Force*

Table 4.11 further investigates the perceptions of the respondents on these incidents. The following table illustrates the results from three ordinal regression analyses on whether the respondents believed that the *level* of use of force shown to them in the videos was appropriate. This variable was of particular interest because of the manner in which force was delivered in each of these incidents. In the case of the Alabama incident force was applied primarily through hand to hand combat and baton strikes. In the Ohio incident a K9 unit was used against the citizen. The results of these analyses is presented below with a careful discussion on the primary takeaways from this discussed in Chapter 5.

Using an appropriate analytic method of ordinal regression analysis to assess the results from the Likert scale measuring the appropriateness of the level of force used, Table 4.11 presents the results. In regard to camera perspective, respondents who viewed the BWC perspective of these incidents have increased odds of reporting that the level of force used was appropriate (1.39;  $p= 2.54$ ). While this finding did not extend to the Alabama incident (Model 2), the Ohio incident (Model 3) where a K9 was used to subdue the citizen, respondents have significantly increased odds of reporting the level of force was appropriate (2.08;  $p= 3.94$ ). Across all groups, favorable attitudes toward the police were also significantly linked to determining whether respondents believed the level of force used was appropriate (1.11;  $p= 9.45$ ). Similarly, in the Alabama incident (Model 2) and the Ohio incident (Model 3) higher scores of favorable attitudes results in a significant increase in the odds of finding the level of use of force appropriate (1.1;  $p= 6.31$  / 1.12;  $p= 7.24$ ). Furthermore, racial bias also appears to play a significant role in the overall model and the Alabama incident. The results suggest that

respondents with higher scores on the racial bias scale increase the odds of finding the level of force used by officers as appropriate (1.15;  $p = 4.76 / 1.22$ ;  $p = 4.75$ ).

Furthermore, urban and suburban areas appear to also impact participants' perceptions of the level of use of force. In the pooled model, Model 1 suggests that respondents from urban and suburban areas have decreased odds of deeming the level of force used by officers as appropriate (0.56;  $p = -2.85 / 0.66$ ;  $p = -2.00$ ). When disaggregated, model 4 suggests that respondents from urban areas who viewed the Ohio incident have decreased odds of finding the level of force used by officers as appropriate (0.56;  $p = -2.01$ ). Those who reported themselves or someone close to them as employed by the CJ system also impacted the appropriateness of the level of force used. Particularly in the Ohio incident where respondents have significantly greater odds of reporting officers' level of force as appropriate (2.2;  $p = 3.40$ ). Finally, males who viewed the Alabama incident have greater odds of reporting the officers' level of force as appropriate (1.68;  $p = 2.53$ ).

Overall, the results from these analyses on the acceptability, justifiability, and appropriateness of the force used by officers in these videos paint a complicated and interesting picture on the concepts of camera perspective bias, subtle racial bias, and favorable attitudes on the police. The consistent and sporadic findings will be discussed more fully in the following chapter along with the limitations of this study and suggestions on how future studies should proceed.

Table 4.11. Ordinal Logistic Analysis on Level of Force

Variables	Model 1 (N=854)		Model 2 (N=426)		Model 3 (N=428)	
	odds	z	odds	z	odds	z
Body-Worn Camera (Pooled)	1.390	2.54**				
Alabama (Fixed Effect)	0.648	-3.33***				
Alabama Incident (BWC)			0.867	-0.76		
Ohio Incident (BWC)					2.082	3.94***
Age	0.960	-0.64	1.006	0.07	0.913	-0.99
White	0.971	-0.19	0.737	-1.42	1.216	0.93
Male	1.274	1.76	1.688	2.53**	1.016	0.08
Married	1.083	0.28	1.373	0.92	0.893	-0.35
College	1.132	0.73	1.461	1.44	0.977	-0.10
Income	1.002	0.10	0.979	-0.65	1.032	0.95
Urban	0.563	-2.85**	0.625	-1.58	0.561	-2.01*
Suburban	0.665	-2.00*	0.667	-1.34	0.729	-1.08
CJ Relation	1.651	3.04**	1.302	1.09	2.207	3.40***
Police Contact	0.811	-1.24	0.897	-0.44	0.727	-1.32
Benevolent Sexism	1.039	1.80	1.050	1.64	1.012	0.38
Race Bias Scale	1.152	4.76***	1.225	4.75***	1.068	1.51
Favorable Attitudes of Police Scale	1.110	9.45***	1.103	6.31***	1.126	7.24***
$\chi^2$	293.06(15)***		172.89(15)***		147.34(15)***	
Log likelihood	-1025.8278		-488.29823		-516.86981	
Pseudo R2	0.1250		0.1504		0.1247	

Note: \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

## CHAPTER 5

### DISCUSSION

This study finds support for all four hypotheses regarding camera perspective bias, favorable attitudes toward police, and subtle racial bias. This section will discuss these findings and the policy relevance and limitations of this study. Concluding remarks will be focused on the avenues of future research exploring camera perspective bias.

Regarding the hypotheses, the results suggest three overarching findings. First, evidence that respondents viewing these incidents from varying perspectives report different perceptions on the acceptability and justifiability of the incident. Respondents viewing the BWC footage are more likely to report that the incident was justified (see Table 4.10). Furthermore, in a series of differences of means tests that respondents generally report lower levels of justifiability and acceptability when viewing the incident from the perspective of a citizen (see Table 4.2 and 4.3). Secondly, across all regression models that as respondents report higher levels of attitudes favorable toward the police, the likelihood of reporting incidents as justifiable or acceptable increases significantly (see Tables 4.9 and 4.10). Finally, the racial bias scale was relevant in all regression models, excluding one (see Table 4.10, Model 3). The results suggest that respondents reporting higher levels of racial bias are also more likely to find instances of use of force as acceptable and justifiable. This finding is consistent with recent research on camera perspective bias and the impact that implicit racial attitudes have on viewers' perceptions of the officer and citizen (Kalle & Hammock, 2019).

### *Exploring Group Differences*

Digging deeper into the results, differences between the incidents are found. The Alabama incident finds that respondents are less likely to report the incident as justifiable or acceptable when viewing the BWC compared to the Ohio incident. This finding could be explained by the nature of the video, given that the BWC shows the officer callously scolding and threatening the citizen while the cellphone footage does not. Essentially, the respondents saw what they were supposed to see, that the officers in this incident were reprimanded for their actions, and respondents appear to recognize their actions as unacceptable. Another potential explanation for this variation could be that the second perspective from the Alabama incident comes from a third-party perspective. Included in this perspective is audio commentary from people who recorded the incident expressing their distaste for how the police officers handled the situation. While the commentary could have impacted respondents' perceptions of the event, it was included so respondents could experience the full incident with little alteration. Furthermore, in the Ohio incident, the citizen actively comments on his encounter with police officers, which could have drawn either sympathy or the ire of viewers.

Interestingly, Table 4.11 shows other differences as the results of the analysis on respondents' perceptions of the level of force suggest that while Alabama viewers disagreed with the level of force used by officers, Ohio viewers were more likely to believe the level of use of force was appropriate. This is interesting as the Ohio incident involved the use of a K9 unit, whereas the Alabama incident involved the use of a baton. Although the K9 unit is higher on the use of force spectrum, the use of the baton appears to be more jarring and inappropriate to viewers. This reaction to baton use could result from the general "banishment" of the baton item

as a tool for law enforcement. For example, in Los Angeles, police officers used the baton 741 times in 1990, just one year before the infamous Rodney King incident, as compared to 54 times in 2015 (Winton, 2016). The decline in baton use could be the result of the implementation and general use of other items such as the Taser, which was used by Los Angeles police officers 541 times in 2015 (Winton, 2016). Another reason could be that the baton has become a symbol of police brutality linked to the Rodney King incident. This sentiment was explained by former LAPD deputy chief Bill Murphy, who said that law enforcement practice in those times entailed going around and “whacking” people with the baton. Since that incident, officers are much more reluctant to use the tool as it has become synonymous with brutality. Perhaps then, outside of respondent’s general recognition of officer malpractice, the symbolic use of the baton may have played a role in respondents’ disagreement with the acceptability and justifiability of the use of force used by officers in the Alabama incident. Another interesting note in the results is the slight differences seen in the respondents' perceptions of acceptability and justifiability.

While some may argue that acceptability and justifiability capture the same concept of agreement with officers’ actions in an incident, there are notable differences between these concepts. In Boivin and colleagues' (2017) work on camera perspective bias, the researchers noted in their sample of university students and police academy trainees that students tended to react to controversial incidents more emotionally while trainees reacted more analytically. The researchers concluded that since police cadets have training that assists them in analyzing an incident; their reactions are “colder” and based on the facts of the incident. By contrast, university students react more emotionally based on the harm suffered by either officer or citizen and perhaps overlook more technical details of the case. These findings suggest that citizens and

police view incidents such as these in qualitatively different aspects. It could be that citizens often view interactions with police under the perspective of morality, whereas police view these same interactions with legality in mind. In that, while citizens are more concerned with the righteousness of officers' actions being aligned with commonly accepted values or acceptability, other viewers, specifically, police will be more concerned with whether the officer's actions were justified within the bounds of the law. While this study was not designed or intended to answer this question specifically, mixed evidence is found to support this proposition.

First, regarding differences in acceptability and justifiability, respondents found the incidents to be more justifiable than acceptable (Table 4.9 & 4.10, Model 1). These differences appear to be driven heavily by the Alabama incident as respondents were more likely to find the incident to be justifiable rather than acceptable (Table 4.9 & 4.10, Model 2). This is perhaps not as surprising for the reasons given previously in this section. However, what is surprising is that across all models, respondents reporting some affiliation with the criminal justice system were much more likely to report the officer's actions as acceptable (Table 4.9, Models 1-3). However, they were not as overwhelmingly likely (or statistically significantly) to report the officers' actions as justifiable (Table 4.10, Models 1-3), outside of the Ohio incident. It is unclear whether respondents who reported having an affiliation with the criminal justice system were all police officers. The question asked if the respondent, a family member, or close friend, was formerly or currently employed in the criminal justice field. As a result, these respondents could be employed in the criminal justice field outside of law enforcement, such as in corrections or court system, or associated with someone employed in these capacities. Therefore, a definitive determination cannot be made as to the morality vs. legality perspective. However, this study can

provide insight on the various forms of bias that may impact viewers of police-citizen encounters. In the following sections the various hypotheses surrounding bias will be discussed along with their implications.

### *Camera Perspective Bias*

Illusionary causation is what is believed to drive camera perspective bias. At its foundation, illusionary causation refers to the idea that people attribute unwarranted causality to a stimulus because it is more present and noticeable than any competing stimuli (Lassiter et al., 2002b). Initially, it was argued that salience alone did not drive attributions of causality, and the entire process was linked to memory recall (Smith & Miller, 1979). Essentially, arguments surrounding illusionary causation suggested that simply observing something was not enough to attribute causality; rather memory recollection of events and comprehension were primary mediators of the relationship (Smith & Miller, 1979). Later studies questioned the veracity of these claims and established that simply a person's point of view affects how someone perceives, interprets, and ultimately draws conclusions on an event (Lassiter et al., 2002b). These studies generally observed how camera perspective bias would impact people's perceptions of someone's guilt during interrogations (see Lassiter and colleagues' extensive work). This tradition was passed on recently to investigate how camera perspective bias may impact interpretations of BWC footage. The results of these studies also suggested that perspective bias may impact viewers in this realm of interest (Boivin et al., 2007).

This study builds upon the literature by showing evidence through an experimentally designed study on perspective bias that, indeed, the camera perspective in which a person observes a

police-citizen encounter impacts how they perceive the acceptability and justifiability of an officer's actions. Concerns over the implications of these findings should lie predominately in the use and advertisement of BWCs as objective evidence in a court of law. Clearly, evidence mired in potential bias should be of great concern to a criminal justice system concerned with the distribution of fair and equal justice. While BWCs and other forms of video evidence should not be outright stricken as evidence, footage should be contextualized and used primarily as an addition to existing evidence (White & Fradella, 2018). Furthermore, regarding the use of BWC footage in mainstream media, it is concerning that footage may be released that spurs negative emotion from citizens toward the police or vice-versa when the footage may not contain a complete picture. Equally concerning, however, is police withholding video evidence because it may be considered "biased" against the police. Unfortunately, there are no easy avenues to pursue in determining the correct course of action. However, previous instances of camera perspective bias and potential solutions can serve as a learning tool here. As discussed previously, criminal interrogations are among some of the most carefully studied areas when concerning camera perspective bias. Standard practices have been instituted because of these studies, such as the inclusion of "neutral" camera perspectives during criminal interrogations (Kassin et al., 2010). Regarding BWCs, further research should investigate how and if other camera perspectives may mitigate perspective bias, such as using multiple BWCs or how dashcam footage may sway observers. These studies could shed light on the concerns over camera perspective bias and allow practitioners to implement standards for how BWC footage is disseminated and used in the justice system.

### *Favorable Attitudes Toward Police Bias*

It appears that another form of bias outside of camera perspective is also impacting respondents' perceptions of these encounters. Respondents with favorable attitudes toward the police appear to find the officers' actions acceptable and justified even when the encounter is considered poor conduct by the officers involved. As shown in Tables 4.9 and 4.10, favorable attitudes consistently and significantly impact respondents' perceptions of the acceptability and justifiability of these police-citizen encounters. Overall, these findings support the idea that personal biases are at play when "objective" video is being viewed (McKay & Lee, 2019). Interesting findings are also found when the measures for favorable attitudes toward the police are disaggregated into their various dimensions. Appendix C shows an abridged summary of the results from the logistic and ordinal logistic regression models from Table 4.9 and 4.10 (Model 1= Acceptability, Model 2= Justifiability). In Appendix C, the only reported odds ratios are those from the dimensions of favorable attitudes toward police as the results of the other variables did not change when disaggregated. Model 1 includes the results from the logistic regression on the acceptability of the officers' actions, while Model 2 shows the results from the ordinal logistic regression on the justifiability of the actions. Appendix C suggests that measures commonly used to capture police legitimacy (Obligation to obey) do not impact respondents' perception of the acceptability of the encounters (odds ratio: 0.990;  $z = -0.15$ ). However, they significantly impact viewers' perceptions of the justifiability of the encounters (odds ratio: 1.219;  $z = 3.64$ ). Similar findings are reported for measures capturing respondents' willingness to cooperate with law enforcement. These findings may be more aligned with the morality and legality argument

proffered earlier in this section – that viewers who align themselves closely with police may find their actions uncomfortable and unacceptable, but still find these actions justifiable.

However, Appendix C also indicates that respondents who believe strongly in the procedurally just nature of the police seem to be more likely to affirm their behaviors. While this study did not directly measure citizen empowerment of the police, the results may provide evidence that citizens who report high levels of favorable attitudes may also be empowering officers. As discussed in Chapter 2, one of the potential outcomes of increased levels of police legitimacy is the impact it may have on empowerment. Empowerment refers to the idea that citizens who believe in the legitimacy of the police may also be more inclined to give officers more discretion and faith in their behavior and actions. While previous studies have linked empowerment to citizens accepting police use of military equipment and increased use of discretion, the link has not been made to perceptions of officer use of force. The results from this study may provide evidence that citizen empowerment of the police may play a role in their affirmation of officer behavior in the realm of police use of force.

In a similar vein as favorable attitudes toward police, respondents who report having some affiliation or relationship with the criminal justice system report a higher likelihood of reporting the incidents as acceptable. This does not carry over to justifiability; however, as Table 4.10 indicates that only in the Ohio incident do respondents with some CJ affiliation or relation report a significant increased likelihood to find the actions of the officers as justified. Taken altogether, these favorable attitudes and affiliation could be indicative of some form of confirmation bias in that respondents have preconceived notions and beliefs that align with the police. Therefore, they are more willing to overlook and selectively perceive officers' actions as

acceptable or justifiable. These findings are troubling when considering that polarized video footage can split viewers based on preconceived notions of the favorability towards law enforcement. Furthermore, it is troublesome that concepts that are generally seen as having positive impacts on citizen-police relationships, such as procedural justice, can also be linked to the nulling of objectivity and mired in troubles of bias. The implications of this should not be overstated as further studies are required to link the relationship of these variables, definitively. However, this potential unintended consequence should be recognized as it may have undetermined long-term consequences for citizens and police alike. Along with camera perspective bias and a bias toward police, there appears to be a final source of bias captured in this study. The final source of bias is along the lines of subtle racial bias, and our findings provide support for aversive racism theory.

### *Subtle Racial Bias*

When considering the models, one of the most consistent findings across all groups was the relevance of the racial bias scale. As discussed in a previous chapter, the intention of including the racial bias scale was to control for the potential of confoundedness as one of the encounters included a white male and the other a black female. The concern was that observers of these incidents might report their dissatisfaction with the officer's behavior because of the citizens' race rather than judging the officer's behavior solely. Furthermore, previous research on perspective bias identified racial bias as an impactful factor in determining perceptions of encounters (Kalle & Hammock, 2019). The results presented in Tables 4.9 and 4.10 show that respondents reporting higher scores on our subtle racial bias scale increase their likelihood of reporting the use of force as acceptable across both encounters (Table 4.9) and justifiable in the

Alabama incident (Table 4.10, Model 2). Aversive racism theory contends that most people are not overtly racist and tend to favor egalitarian attitudes (Dovidio & Gartner, 2004). However, when scenarios arise that are ambiguous by nature, subconscious racial bias may play a role in perceptions and decision-making (Kalle & Hammock, 2019). Perhaps no type of encounter in policing embodies the idea of ambiguity more so than police-citizen incidents that involve use of force. Given the variety of situational factors that can play a role in these encounters attempting to make sense of what occurs during these incidents can prove challenging. In these encounters, the details surrounding the incidents are unclear as the Alabama incident and Ohio incident videos begin as the police and citizens have already been interacting. In the Alabama incident, the viewers did not know what the citizen did unless they had previous knowledge of the case. In the Ohio incident, the viewers knew that the citizen had been pulled over and was being requested by officers to step out of the vehicle, but the infraction is unclear. Given the ambiguity surrounding these encounters, the potential for racial bias was anticipated. The results from this study provide support for aversive racism theory playing a role in people's perceptions of officer-citizen encounters involving force. Given the impact of these various forms of bias, practitioners need to recognize the potential harm from using these tools to dictate objectivity in these polarized encounters.

### *Policy Relevance*

The policy relevance and important role BWCs play in the justice system cannot be understated. Video evidence can deprive citizens and police officers of their life and liberty if used as a critical component of a trial against either party. If the evidence presented from video footage captured through a BWC or another perspective has bias internally built into it, this

could significantly impact the way jurors perceive an event. Alarming, research on other forms of evidence has already shown how implicit racial bias may influence a jury interpreting video evidence (Kalle & Hammock, 2019). Considering the potential for racial bias and camera perspective bias found in this study, this should be carefully considered. Research suggests that video evidence obtained through BWCs are more likely to be used against citizens than officers (Lum et al., 2019). Video evidence can still be devastating to police and community relations. The devastation that can be caused is relevant in the number of riots that have occurred across the nation after an incident of use of force between a police officer and citizen is viewed (Poon & Patino, 2020). Proponents of BWCs would suggest letting the video “speak for itself”; however, it appears that video footage should be heavily contextualized and presented with other forms of evidence to ensure the proper use of this device (White & Fradella, 2018).

The results from this study on the surface would suggest that if a police-citizen encounter occurs and it is deemed as “good” that the police department should release the BWC video as people would consider the use of force as justifiable and acceptable. However, in the instance of “bad” encounters the results are non-significant and undeterminable in either direction. The null findings in these results presents an interesting challenge. The challenge is that people are often most concerned with the polarized “bad” incidents in which officers’ actions are either poor or where officers’ actions are debatable. The results of the study seem to suggest that racially biased attitudes and favorable attitudes toward police seem impact people’s perceptions of these incidents. The clear bias of people when viewing these seemingly “objective” videos is a problem for practitioners and society alike. More effort should be focused on testing ways in

which bias can be limited when video evidence is viewed and in the following section research avenues to pursue neutral perspectives will be discussed.

### *Limitations*

This study, like all others, has its limitations. A clear limitation is that only two incidents where the suspects were of different races were shown to the respondents. One incident involves a white man while the second incident involves a black female. Ideally, two more incidents involving a black male and white female could be shown to groups to balance potentially biased results for racial or gender effects. In practice, this proved to be difficult to accomplish. First, finding an incident with two separate camera angles is a tremendous task. Often, in incidents where two camera angles exist, only one of the perspectives is widely available. This could result from a host of factors, from the evidence being sealed after civil litigation or deliberately withheld from public view by a police department. For instance, the media have widely reported on the reluctance of police departments to release BWC footage to the public (Umansky, 2020). The New York Police Department has received much scrutiny recently for withholding BWC footage from reporters requesting the video (Umansky, 2020). Another issue is that highly polarized incidents specifically were not chosen for this analysis because of the potential bias resulting from a respondent knowing the details or narrative surrounding the case that may influence the reported perceptions of the event. Regarding the difference in the race and gender of the citizens in the video, this study alleviated this concern by including the racial bias and benevolent sexism scale to control for those potential effects.

Like other studies regarding camera perspective bias, the primary limitation is determining why camera perspective introduces bias into viewers' perceptions of the event (Boivin et al., 2017; Lassiter & Irvine, 1986). While this study does present evidence of camera perspective bias understanding the more nuanced mechanisms that lead to an alteration of perceptions it cannot. For example, do BWCs inherently allow viewers to become more sympathetic with an officer because they are put in “their shoes,” allowing the viewer to observe the encounter from their perspective? Do they make these encounters appear more or less dangerous than they otherwise may be perceived? Future research should address these questions by asking open-ended qualitative questions to viewers to try to get more of these nuanced explanations.

#### *Future Research*

Moving forward, as law enforcement and technology continue to intersect, the concept of camera perspective bias needs to be carefully understood. Studies in the future should utilize a variety of methods and scenarios to understand the potential for illusionary causation and its implications. Studies investigating camera perspective bias should consider testing the phenomena in the following scenarios: multiple BWCs in a single incident, dashcam video, and BWCs, incidents where the suspect who receives the use of force is recording in comparison to a 3<sup>rd</sup> party perspective. Regarding multiple BWCs, it would be helpful to researchers and practitioners to understand how and if having multiple BWCs recording a single incident can bring clarity to an incident or draw more questions. Secondly, dashcam video has been utilized by law enforcement for decades, and often this video is used as evidence or for training purposes by law enforcement and the justice system. An important line of research could be to investigate

how the public and law enforcement understand the perspectives of both tools. Specifically, if dashcam video is considered a “neutral” perspective, could this remedy potential camera perspective bias concerns or be used to present a complete picture of what occurred in an incident? Finally, in this study, the perspective of the Ohio incident was recorded by the suspect using his own cellphone, and the Alabama incident was recorded by a third party, these alternative sources could have an impact on the perceptions of an incident. For instance, someone recording video of the police may be perceived as instigating an event, whereas a third-party video may be considered a view that would have never been seen if not for a bystander. Another potential line of research should also focus on the impact of camera perspective bias on a variety of officer behavior, not just use of force. It should be noted that officer use of force is rare, and recorded moments of force are even rarer. It would be beneficial for future research to investigate how camera perspective bias plays a role in verbal confrontations or various types of crimes and environments (Kalle & Hammock, 2019).

Theoretically, development on *why* camera perspective bias impacts police and citizen encounters need to be explored. While the idea of illusionary causation has been explored in social psychology, the extension of this theory in the realm of policing and society deserves attention. Perhaps a worthy extension can be found through exploring formal social control and accountability in the 21<sup>st</sup> century. The concepts of formal social control and accountability are at a melting point given society's current climate of questioning authority. The roman poet Juvenal famously wrote his phrase “*Quis custodiet ipsos custodes?*” commonly translated into “Who watches the watchers” holds considerable weight now. The questioning of the power given to the formal social control in our society has brought about the necessity of accountability. The

common belief amongst lawmakers is that BWCs can bring forth this accountability (Ray et al., 2017). This study, along with others, should provide caution to this claim. It also opens the possibility for theoretical development in these concepts.

Conclusively, BWCs are an exciting tool that has the investment and attention of the justice system and citizens. Given the current climate of social upheaval, all avenues and tools should be explored to alleviate tension between the police and citizens. BWCs have a rich line of research suggesting that using this technology can decrease complaints against officers, save police departments millions of dollars in investigating complaints, and positively alter officer behavior (Lum et al., 2019; Maskaly et al., 2017). However, as this study's findings suggest, there are potential unintended consequences of the widespread implementation and reliance on these tools as an objective standard-bearer. The current state of research suggests that BWCs should be heavily contextualized and used as an addendum when attempting to understand volatile and polarized instances of use of force. This study adds to this line of research through its findings that suggest deeper concern should be paid toward the various forms of bias that come with the use and interpretation of BWCs in police-citizen encounters where force is used.

## **APPENDIX A**

### **SURVEY QUESTIONS**

Each scale was measured through Likert scales from 1-4 as follows: 1- Strongly Disagree, 2- Somewhat Disagree, 3- Somewhat Agree, and 4- Strongly Agree. Each scale was also measured pre and post video. An asterisk \* indicates reverse coding.

#### **Measures on Police Legitimacy & Favorable Attitudes toward Police**

##### **Obligation to Obey**

- You should accept police decisions even if you think they are wrong.
- You should do what the police tell you to do even if you disagree.

##### **Cooperation**

- I would call the police to report a crime.
- I would call the police to report an accident.
- People should report suspicious activity in their neighborhood.
- People should provide information to the police to help find a suspected criminal.

##### **Distributive Fairness**

- Police give minorities less help because of their race. \*
- Police provide better services to wealthier citizens. \*

##### **Procedural Justice**

- Police treat citizens with respect.
- Police take time to listen to people.
- Police treat people fairly.
- Police respect citizens' rights.
- Police are courteous to citizens they come in contact with.
- Police make decisions based upon facts.
- Police explain decisions to people they deal with.
- Police make decisions to handle problems fairly.

### **Benevolent Sexism Inventory**

- No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman
- Women should be cherished and protected by men.
- People are often truly happy in life without being romantically involved with a member of the other sex. \*
- Women, compared to men, tend to have a superior moral sensibility.
- Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives.
- Women, as compared to men, tend to have a more refined sense of culture and good taste.

### **Racial Bias Inventory**

- Athletes should be punished for not standing during the national anthem.
- The following statement describes me, “I do not have a prejudiced bone in my body.”
- I agree with affirmative action as long as it is not applied to my job.
- Symbols of the former Confederacy should be removed from public display. \*
- I have a hard time telling people apart who are not the same race or ethnic group as me.
- If someone posts a racist remark in an online forum, I make it a point to report these comments. \*

**Dependent Variables: Acceptance, Justification, and Appropriateness**

Q) The officer(s) actions were:

Not Acceptable (0)

Acceptable (1)

---

Q) Officer(s) were justified in using force

Strongly disagree (1)

Somewhat disagree (2)

Somewhat agree (3)

Strongly agree (4)

---

Q) The level of force used by the officer(s) was appropriate

Strongly disagree (1)

Somewhat disagree (2)

Somewhat agree (3)

Strongly agree (4)

---

**Consequences of Officers Actions: Promotion, Reprimand, Additional Training**

Q) The officer(s) receive a promotion following this encounter.

- Strongly disagree (1)
  - Somewhat disagree (2)
  - Somewhat agree (3)
  - Strongly agree (4)
- 

Q) The officer(s) receive a reprimand following this encounter.

- Strongly disagree (1)
  - Somewhat disagree (2)
  - Somewhat agree (3)
  - Strongly agree (4)
-

Q) The officer(s) receive additional training following this encounter.

Strongly disagree (1)

Somewhat disagree (2)

Somewhat agree (3)

Strongly agree (4)

## Demographics

Q) What is your age?

Under 18 (1)

18 - 24 (2)

25 - 34 (3)

35 - 44 (4)

45 - 54 (5)

55 - 64 (6)

65 - 74 (7)

75 - 84 (8)

85 or older (9)

---

Q) What is your gender?

Male (1)

Female (2)

Other (3) \_\_\_\_\_

Q) What is your ethnicity?

- White / Caucasian (1)
  - Black / African American (2)
  - Hispanic / Latino (3)
  - Native American / American Indian (4)
  - Asian / Pacific Islander (5)
  - Other (6) \_\_\_\_\_
- 

Q) What is the highest degree or level of school you have completed?

- High school degree or equivalent (1)
  - Bachelor's degree (e.g. BA, BS) (2)
  - Master's degree (e.g. MA, MS, MEd) (3)
  - Doctorate (e.g. PhD, EdD) (4)
  - Other (please specify) (5) \_\_\_\_\_
-

Q) What is your current employment status?

- Employed full-time (40+ hours a week) (1)
  - Employed part-time (less than 40 hours a week) (2)
  - Unemployed (3)
  - Student (4)
  - Retired (5)
  - Other (please specify) (6) \_\_\_\_\_
- 

Q) What is your marital status?

- Single (never married) (1)
  - Married (2)
  - In a domestic partnership (3)
  - Divorced (4)
  - Widowed (5)
-

Q) What is your household income? (Actual responses broken into 12 categories per \$10k)

Below \$10k (1)

\$10k- \$50k (2)

\$50k - \$100k (3)

\$100k - \$150k (4)

Over \$150k (5)

Q) Do you currently reside in a(n):

Urban area (1)

Suburban area (2)

Rural area (3)

Q) In which state do you currently reside?

Drop down menu where respondents can select state or outside US option.

**Other variables of Interest**

Q) Based on your recollection of the events presented in the video, how many officers did you see involved in the interaction?

- One Officer (1)
  - Two Officers (2)
  - Three Officers (3)
  - More than three officers (4)
- 

Q) Based on your recollection of the events presented in the video, when did the events in the video take place?

- During the daytime hours (1)
- During the nighttime hours (2)

**Contact and Employment with the Criminal Justice Field**

Q) Are you, a relative or a close friend currently or formerly employed in a criminal justice field?

- Yes (1)
  - No (2)
-

Q) Have you ever had contact with the police?

Yes (1)

No (2)

Q) Would you describe your contact with the police as positive or negative? (If yes on prior question)

Positive (1)

Negative (2)

---

Q) Has someone in your family or a close friend been in contact with the police?

Yes (1)

No (2)

---

Q) Would you describe their contact with the police as positive or negative?

Positive (1)

Negative (2)

**APPENDIX B**  
**LINKS TO VIDEO FOOTAGE**

Please note that these videos are unlisted videos on YouTube that were shown to respondents of the survey.

Sovereign citizen – Ohio (Citizen Perspective)

[https://www.youtube.com/watch?v=VH4vB0owNv8&feature=emb\\_logo](https://www.youtube.com/watch?v=VH4vB0owNv8&feature=emb_logo)

Sovereign citizen – Ohio (Officer BWC)

[https://www.youtube.com/watch?v=EJ1Be5juEk4&feature=emb\\_logo](https://www.youtube.com/watch?v=EJ1Be5juEk4&feature=emb_logo)

Tuscaloosa PD – Alabama (Officer BWC)

[https://www.youtube.com/watch?v=aBypgv-1uOo&feature=emb\\_logo](https://www.youtube.com/watch?v=aBypgv-1uOo&feature=emb_logo)

Tuscaloosa PD – Alabama (3<sup>rd</sup> Party Perspective)

[https://www.youtube.com/watch?v=55zUTLYekIk&feature=emb\\_logo](https://www.youtube.com/watch?v=55zUTLYekIk&feature=emb_logo)

## APPENDIX C

### SUMMARY OF FINDINGS ON ATTITUTDES OF POLICE

Table C. 1. Summary Findings on Attitudes of Police

<b>Variables</b>	<b>Model 1 (N=847)</b>		<b>Model 2 (N=854)</b>	
	odds	z	odds	z
Obligation to Obey	0.990	-0.15	1.219	3.64***
Cooperation with Police	0.973	-0.69	1.072	2.12***
Distributive Fairness	0.879	-2.33***	0.889	-2.52***
Procedural Justice	1.101	4.58***	1.095	5.21***
<i>χ<sup>2</sup></i>	266.21(18)***		286.90(18)***	
<i>Log likelihood</i>	-472.68828		-997.04235	
<i>Pseudo R<sup>2</sup></i>	0.1931		0.1258	

**Note:** \* =  $p < .05$ , \*\* =  $p < .01$ , \*\*\* =  $p < .001$

**APPENDIX D**  
**CORRELATION MATRIX**

Table D. 1. Correlation Matrix

	Just Force	BWC Perspective	Age	White	Male	Married	College	Income
Justified Force	1							
BWC	0.07	1						
Age	-0.04	-0.02	1					
White	-0.10	-0.01	0.34	1				
Male	0.07	-0.08	-0.08	-0.10	1			
Married	0.14	0.05	0.16	-0.01	-0.07	1		
College	0.05	0.01	-0.11	-0.16	0.08	0.18	1	
Income	0.04	-0.02	0.15	0.17	-0.12	0.24	0.12	1
Urban	0.09	0.001	-0.25	-0.23	0.12	-0.06	0.13	-0.11
Suburban	-0.11	0.01	0.15	0.15	-0.07	0.001	-0.09	0.11
CJ Employee	0.20	-0.001	-0.23	-0.27	0.08	0.17	0.16	-0.07
Police Con.	0.01	-0.01	0.04	0.01	0.10	-0.01	-0.04	0.01
Sexist Scale	0.30	-0.01	-0.22	-0.29	0.09	0.21	0.17	-0.02
Race Scale	0.33	-0.01	-0.16	-0.15	0.09	0.15	0.16	-0.03
Police Scale	0.42	0.01	0.01	-0.07	-0.01	0.19	0.09	0.16

Table D. 1. cont. Correlation Matrix

	Urban	Suburban	CJ Employee	Police Contact	Sex Scale	Race Scale	Police Scale
Urban	1						
Suburban	-0.73	1					
CJ Employee	0.19	-0.21	1				
Police Contact	-0.04	-0.01	0.26	1			
Sexist Scale	0.24	-0.20	0.32	-0.05	1		
Race Scale	0.15	-0.15	0.23	-0.07	0.43	1	
Police Scale	0.09	-0.08	0.20	0.01	0.40	0.31	1

## REFERENCES

- Adams, I., & Mastracci, S. (2019). Police body-worn cameras: Effects on officers' burnout and perceived organizational support. *Police quarterly*, 22(1), 5-30.
- Ariel, B. (2016). Police body cameras in large police departments. *The Journal of Criminal Law and Criminology (1973-)*, 729-768.
- 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.
- Ariel, B., Sutherland, A., Henstock, D., Young, J., Drover, P., Sykes, J., ... & Henderson, R. (2018). Paradoxical effects of self-awareness of being observed: Testing the effect of police body-worn cameras on assaults and aggression against officers. *Journal of experimental criminology*, 14(1), 19-47.
- Boivin, R., Gendron, A., Faubert, C., & Poulin, B. (2017). The body-worn camera perspective bias. *Journal of Experimental Criminology*, 13(1), 125–142.
- Bolger, P. C., & Walters, G. D. (2019). The relationship between police procedural justice, police legitimacy, and people's willingness to cooperate with law enforcement: A meta-analysis. *Journal of Criminal Justice*, 60, 93–99.
- Bradford, B., Hohl, K., Jackson, J., & MacQueen, S. (2015). Obeying the rules of the road: Procedural justice, social identity, and normative compliance. *Journal of contemporary criminal justice*, 31(2), 171-191.
- Braga, A. A., Barao, L., McDevitt, J., Zimmerman, G., Evans, P. C. W., & Buckley, S. K. (2018a). The impact of body-worn cameras on complaints against officers and officer use of force incident reports: Preliminary evaluation findings. *Northeastern University, Boston*
- Braga, A. A., Coldren, J. R., Sousa, W. H., 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*. Arlington, VA: CNA Analysis & Solutions.
- Braga, A. A., Sousa, W. H., Coldren, J. R., & Rodriguez, D. (2018b). The effects of body-worn cameras on police activity and police-citizen encounters. *The Journal of Criminal Law and Criminology*, 108(3), 511-538.
- Bromberg, D., Charbonneau, É., & Smith, A. (2018). Body-Worn Cameras and Policing: A List Experiment of Citizen Overt and True Support. *Public Administration Review*, 78(6), 883–891.

- Cannon, L. (1998). THE KING INCIDENT: MORE THAN MET THE EYE ON VIDEOTAPE. Washington Post. Retrieved from:  
<https://www.washingtonpost.com/archive/politics/1998/01/25/the-king-incident-more-than-met-the-eye-on-vidiotape/2248e35e-178b-47e9-a8db-0734f88b46e0/>
- Culhane, S., & Schweitzer, K. (2018). Police shootings and body cameras one-year post-Ferguson. *Policing and Society*, 28(9), 1038–1049.
- Demir, M., Apel, R., Braga, A. A., Brunson, R. K., & Ariel, B. (2020). Body worn cameras, procedural justice, and police legitimacy: a controlled experimental evaluation of traffic stops. *Justice quarterly*, 37(1), 53-84.
- Dionne, B. (2019). Update: Tuscaloosa city council approves settlement to attorney of woman in viral arrest video. WBRC6 NEWS. Retrieved from:  
<https://www.wbrc.com/2019/06/26/tuscaloosa-city-council-approves-settlement-attorney-woman-viral-arrest-video/>
- Donald Trump on Kaepernick: Find another country. (2016). NFL. Retrieved from:  
<https://www.nfl.com/news/donald-trump-on-kaepernick-find-another-country-0ap3000000692256>
- Dovidio, J. F., & Gaertner, S. L. (2004). *Aversive racism*. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, Vol. 36 (p. 1–52).
- Dovidio, J. F., Gaertner, S. L., & Pearson, A. R. (2017). *Aversive racism and contemporary bias*. In C. G. Sibley & F. K. Barlow (Eds.), *The Cambridge handbook of the psychology of prejudice* (p. 267–294). Cambridge University Press.
- Fallik, S. W., Deuchar, R., & Crichlow, V. (2018). Body-Worn Cameras in the Post-Ferguson Era: An Exploration of Law Enforcement Perspectives. *Journal of Police and Criminal Psychology*, 1–11.
- Fine, A. D., Donley, S., Cavanagh, C., & Cauffman, E. (2020). Youth Perceptions of Law Enforcement and Worry About Crime from 1976 to 2016. *Criminal Justice and Behavior*, 47(5), 564–581.
- Fouche, A. (2014). Officer attitudes on deployment of body-worn cameras in the University of Georgia Police Department Patrol Division. *Campus Law Enforcement Journal*, 44(3), 21-28.
- Goldstein, H. (1979). Improving policing: A problem-oriented approach. *Crime & delinquency*, 25(2), 236-258.

- Goldstein, J., & Schweber, N. (2014). Man's Death After Chokehold Raises Old Issue for the Police. *The New York Times*. Retrieved from: <https://www.nytimes.com/2014/07/19/nyregion/staten-island-man-dies-after-he-is-put-in-chokehold-during-arrest.html>
- Goodison, S., Wilson, T., & Wellford, C. (2017). Citizen perceptions of body worn cameras: A randomized controlled trial. Retrieved from *Washington, DC: perf. memberclicks.net/assets/bodyworncameraperceptions.pdf*
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491–512.
- Granot, Y., Balcetis, E., Feigenson, N., & Tyler, T. (2018). In the eyes of the law: Perception versus reality in appraisals of video evidence. *Psychology, Public Policy, and Law*, 24(1), 93.
- Hastorf, A. H., & Cantril, H. (1954). They saw a game; a case study. *The Journal of Abnormal and Social Psychology*, 49(1), 129.
- Hinkle, J. C., Weisburd, D., Telep, C. W., & Petersen, K. (2020). Problem-oriented policing for reducing crime and disorder: An updated systematic review and meta-analysis. *Campbell Systematic Reviews*, 16(2), e1089.
- Intravia, J., Piquero, A. R., Leeper Piquero, N., & Byers, B. (2020). Just do it? An examination of race on attitudes associated with Nike's advertisement featuring Colin Kaepernick. *Deviant Behavior*, 41(10), 1221-1231.
- Jennings, W. G., Fridell, L. A., Lynch, M., Jetelina, K. K., & Reingle Gonzalez, J. M. (2017). A quasi-experimental evaluation of the effects of police body-worn cameras (BWCs) on response-to-resistance in a large metropolitan police department. *Deviant behavior*, 38(11), 1332-1339.
- Jennings, W., Lynch, M., & Fridell, L. (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.
- Jones, K., Crozier, W., & Strange, D. (2017). Believing is Seeing: Biased Viewing of Body-Worn Camera Footage. *Journal of Applied Research in Memory and Cognition*, 6(4), 460–474.
- Kahan, D. M., Hoffman, D. A., & Braman, D. (2009). Whose eyes are you going to believe? Scott V. Harris and the perils of cognitive illiberalism. *Harvard Law Review*, 122(1), 1–67.

- Kalle, A., & Hammock, G. (2019). Bias in video evidence: implication for police body cameras. *Applied Psychology in Criminal Justice, 15*(2).
- Kassin, S. M., Drizin, S. A., Grisso, T., Gudjonsson, G. H., Leo, R. A., & Redlich, A. D. (2010). Police induced confessions: risk factors and recommendations. *Law and Human Behavior, 34*, 3–38.
- Kelling, G. L., Pate, T., Dieckman, D., & Brown, C. E. (1974). The Kansas City preventive patrol experiment. *Washington, DC: Police Foundation*.
- Koen, M. C. (2016). *On-set with body-worn cameras in a police organization: Structures, practices, and technological frames* (Doctoral dissertation).
- Kooistra, E. B., Reinders Folmer, C., Kuiper, M. E., Olthuis, E., Brownlee, M., Fine, A., & van Rooij, B. (2020). Mitigating covid-19 in a nationally representative uk sample: Personal abilities and obligation to obey the law shape compliance with mitigation measures. *Available at SSRN 3598221*.
- Lassiter, G. D., & Irvine, A. A. (1986). Videotaped confessions: the impact of camera point of view on judgments of coercion. *Journal of Applied Social Psychology, 16*(3), 268–276.
- Lassiter, G. D., Slaw, R. D., Briggs, M. A., & Scanlan, C. R. (1992). The potential for bias in videotaped confessions. *Journal of Applied Social Psychology, 22*(23), 1838–1851.
- Lassiter, G. D., Beers, M. J., Geers, A. L., Handley, I. M., Munhall, P. J., & Weiland, P. E. (2002a). Further evidence of a robust point-of-view bias in videotaped confessions. *Current Psychology, 21*(3), 265–288.
- Lassiter, G. D., Geers, A. L., Munhall, P. J., Ploutz-Snyder, R. J., & Breitenbecher, D. L. (2002b). Illusory causation: Why it occurs. *Psychological Science, 13*(4), 299–305.
- Lassiter, G. D., Seidman Diamond, S., Schmidt, H. C., & Elek, J. K. (2007). Evaluating videotaped confessions: expertise provides no defense against the camera-perspective effect. *Psychological Science, 18*(3), 224–226.
- Lockwood, B., Doyle, M. D., & Comiskey, J. G. (2018). Armed, but too dangerous? Factors associated with citizen support for the militarization of the police. *Criminal justice studies, 31*(2), 113–127.
- Lum, C., Koper, C., Merola, L., Scherer, A., & Reieux, A. (2015). Existing and ongoing body worn camera research: knowledge gaps and opportunities. Fairfax: Center for Evidence-Based Crime Policy, George Mason University.
- Lum, C., Stoltz, M., Koper, C., & Scherer, J. (2019). Research on body-worn cameras: What we know, what we need to know. *Criminology & Public Policy, 18*(1), 93–118.

- Makin, D. A. (2016). When the watchers are watched: An interpretive phenomenological analysis of body-worn cameras. *Journal of qualitative criminal justice & criminology*, 4(1), 113-151.
- Malm, A. (2019). Promise of police body-worn cameras. *Criminology & Public Policy*, 18(1), 119-130.
- Maskaly, J., Donner, C., Jennings, W., Ariel, B., & Sutherland, A. (2017). The effects of body-worn cameras (BWCs) on police and citizen outcomes. *Policing*, 40(4), 672–688.
- Mazerolle, L., Antrobus, E., Bennett, S., & Tyler, T. R. (2013a). Shaping citizen perceptions of police legitimacy: A randomized field trial of procedural justice. *Criminology*, 51(1), 33-63.
- Mazerolle, L., Bennett, S., Davis, J., Sargeant, E., & Manning, M. (2013b). Legitimacy in Policing: A Systematic Review. *Campbell Systematic Reviews*, 9(1), 1–147.
- McArthur, L. Z. (1980). Illusory causation and illusory correlation: Two epistemological accounts. *Personality and Social Psychology Bulletin*, 6(4), 507-519.
- McKay, C., & Lee, M. (2019). Body-worn images: Point-of-view and the new aesthetics of policing. *Crime, Media, Culture*, 1741659019873774.
- McLean, K., Wolfe, S. E., Chrusciel, M. M., & Kaminski, R. J. (2015). Body-worn cameras in South Carolina: Law enforcement executives' views concerning use, policies, and outcomes. *University of South Carolina*, available at: [https://www.sc.edu/study/colleges\\_schools/artsandsciences/criminology\\_and\\_criminal\\_justice/documents/2015\\_census\\_report.pdf](https://www.sc.edu/study/colleges_schools/artsandsciences/criminology_and_criminal_justice/documents/2015_census_report.pdf).
- Moule, R., Burruss, G.W., Parry, M., & Fox, B. (2019). Assessing the Direct and Indirect Effects of Legitimacy on Public Empowerment of Police: A Study of Public Support for Police Militarization in America. *Law and Society Review*, 53:77-107.
- Nagin, D. S. (2013). Deterrence in the twenty-first century. *Crime and justice*, 42(1), 199-263.
- Nethers, D (2018). Driver seen on bodycam video being restrained by Canton K-9 pleads not guilty. FOX8 News. Retrieved from: <https://fox8.com/news/driver-seen-on-bodycam-video-being-restrained-by-canton-k-9-pleads-not-guilty/>
- Newell, B. (2019). Context, visibility, and control: Police work and the contested objectivity of bystander video. *New Media & Society*, 21(1), 60–76.
- Nix, J. (2020). Procedural Justice in Policing. *Critical Issues in Policing: Contemporary Readings*, 140.

- Owens, C., & Finn, W. (2018). Body-worn video through the lens of a cluster randomized controlled trial in London: Implications for future research. *Policing: A Journal of Policy and Practice*, 12(1), 77-82.
- Parks, B. (2020). Leaked police bodycam video shows new details of George Floyd's fatal arrest. CNN. Retrieved from: <https://www.cnn.com/2020/08/03/us/george-floyd-police-body-camera-video-leak/index.html>
- Park, K., & Pyo, J. (2012). An explanation for camera perspective bias in voluntariness judgment for videorecorded confession: suggestion of cognitive frame. *Law and Human Behavior*, 36(3), 184–194
- Parry, M., Moule, R., & Dario, L. (2019). Technology-Mediated Exposure to Police-Citizen Encounters: A Quasi-Experimental Assessment of Consequences for Citizen Perceptions. *Justice Quarterly*, 36(3), 412–436.
- Peterson, B. E., Yu, L., La Vigne, N., & Lawrence, D. S. (2018). The Milwaukee police department's body-worn camera program. *Washington, DC: Urban Institute*.
- Pew Research Center. (2019). Trust and Distrust in America.
- Peyton, K., Sierra-Arévalo, M., & Rand, D. G. (2019). A field experiment on community policing and police legitimacy. *Proceedings of the National Academy of Sciences*, 116(40), 19894-19898.
- Police Executive Research Forum. (2018). Cost and Benefits Of Body-Worn Camera Deployments. Retrieved from: <https://www.policeforum.org/assets/BWCCostBenefit.pdf>
- Poon, L., & Patino, M. (2020). CityLab University: A Timeline of U.S. Police Protests. Retrieved from: <https://www.bloomberg.com/news/articles/2020-06-09/a-history-of-protests-against-police-brutality>
- Posch, K., Jackson, J., Bradford, B., & Macqueen, S. (2020). "Truly Free Consent"? Clarifying the Nature of Police Legitimacy using Causal Mediation Analysis. *Journal of Experimental Criminology*.
- Ratcliff, J. J., Lassiter, G. D., Schmidt, H. C., & Snyder, C. J. (2006). Camera perspective bias in videotaped confessions: experimental evidence of its perceptual basis. *Journal of Experimental Psychology*, 12(4), 197–206.
- Ray, R., Marsh, K., & Powelson, C. (2017). Can cameras stop the killings? Racial differences in perceptions of the effectiveness of body-worn cameras in police encounters. In *Sociological Forum* (Vol. 32, pp. 1032-1050).

- Ready, J. T., & Young, J. T. (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), 445-458.
- Reisig, M. D., Bratton, J., & Gertz, M. G. (2007). The construct validity and refinement of process-based policing measures. *Criminal Justice and Behavior*, 34, 1005-1028.
- Reisig, M. D., Tankebe, J., & Mesko, G. (2014). Compliance with the law in Slovenia: The role of procedural justice and police legitimacy. *European journal on criminal policy and research*, 20(2), 259-276.
- Rowe, M., Pearson, G., & Turner, E. (2018). Body-worn cameras and the law of unintended consequences: Some questions arising from emergent practices. *Policing: A Journal of Policy and Practice*, 12(1), 83-90.
- Sanburn, J. (2014). Why Cops in Ferguson Don't Have Body Cameras. TIME. Retrieved from: <https://time.com/3114329/ferguson-michael-brown-police-body-cameras/>
- Schneider, C. J. (2018). Body worn cameras and police image work: News media coverage of the Rialto police department's body worn camera experiment. *Crime, Media, Culture*, 14(3), 449-466.
- Shadish, W. R., Cook T. D., & Campbell, D. T. (2002). *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*. Wadsworth Cengage Learning. Press.
- Smith, E. R., & Miller, F. D. (1979). Salience and the cognitive mediation of attribution. *Journal of Personality and social Psychology*, 37(12), 2240.
- Sullivan, L. E. (2009). Selective perception. In *The SAGE glossary of the social and behavioral sciences*, 465-465.
- Sunshine, J. and Tyler, T.R. (2003) 'The Role of Procedural Justice and Legitimacy in Shaping Public Support for Policing', *Law and Society Review*, 37(3): 513–47.
- Sutherland, A., Ariel, B., Farrar, W., & De Anda, R. (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.
- Tankebe, J. (2014). Police legitimacy. *The Oxford handbook of police and policing*, 238-259.
- Tatum, B.D. (2003). "Why Are All the Black Kids Sitting Together in the Cafeteria?" And Other Conversations About Race. New York: Basic Books.
- Taylor, E., & Lee, M. (2019). Off the Record? Arrestee Concerns about the Manipulation, Modification, and Misrepresentation of Police Body-Worn Camera Footage. *Surveillance & Society*, 17(3/4), 473–483.

- Todak, N., Gaub, J. E., & White, M. D. (2018). The importance of external stakeholders for police body-worn camera diffusion. *Policing: An International Journal*, 41(4), 448-464.
- Tuffin, R., Morris, J., & Poole, A. (2006). An evaluation of the impact of the National Reassurance Policing Programme. London: Home Office Research.
- Tyler, T. (1990). Why people obey the law. New Haven, CT: Yale University Press. Production Editor: Insert: Tyler, T. R. 1990. Why people obey the law. New Haven, CT: Yale University Press.
- Tyler, T. (2004). Enhancing Police Legitimacy. *The ANNALS of the American Academy of Political and Social Science*, 593(1), 84–99.
- Tyler, T. R. (2006). Why people obey the law. Princeton, NJ: Princeton University Press.
- Tyler, T., & Fagan, J. (2008). Legitimacy and Cooperation: Why Do People Help the Police Fight Crime in Their Communities? *Ohio State Journal of Criminal Law*, 231-275.
- Tyler, T. R., & Huo, Y. (2002). *Trust in the law: Encouraging public cooperation with the police and courts*. Russell Sage Foundation.
- Umansky, T. (2020). The NYPD Isn't Giving Bodycam to Officials Investigating Alleged Abuse. Retrieved from: <https://truthout.org/articles/the-nypd-isnt-giving-bodycam-footage-to-officials-investigating-alleged-abuse/>
- U.S. Department of Justice. (2015). The President's Task Force on 21st Century Policing. Washington D.C. Retrieved: [http://www.cops.usdoj.gov/pdf/taskforce/taskforce\\_finalreport.pdf](http://www.cops.usdoj.gov/pdf/taskforce/taskforce_finalreport.pdf).
- Vann, M. & Ortiz, E. (2017). Walter Scott shooting: Michael Slager, ex-officer, sentenced to 20 years in prison. NBC News. Retrieved from: <https://www.nbcnews.com/storyline/walter-scott-shooting/walter-scott-shooting-michael-slager-ex-officer-sentenced-20-years-n825006>
- Wallace, D., White, M. D., Gaub, J. E., & Todak, N. (2018). Body-worn cameras as a potential source of depolicing: Testing for camera-induced passivity. *Criminology*, 56(3), 481-509.
- Walters, G.D., Bolger, P.C. (2019). Procedural justice perceptions, legitimacy beliefs, and compliance with the law: a meta-analysis. *J Exp Criminol* 15, 341–372.
- Ware, L. J., Lassiter, G.D., Patterson, S.M., & Ransom, M. R. (2008). Camera perspective bias in videotaped confessions: evidence that visual attention is a mediator. *Journal of Experimental Psychology*, 14(2), 192-200.

- Winton, R. (2016). How the Rodney King beating “banished” the baton from the LAPD. Los Angeles Times. Retrieved from: <https://www.latimes.com/local/california/la-me-rodney-king-baton-20160303-story.html>
- Winton, R. (2016). How the Rodney King beating “banished” the baton from the LAPD.
- White, M. D., & Fradella, H. F. (2018). The intersection of law, policy, and police body-worn cameras: An exploration of critical issues. *NCL Rev.*, 96, 1579.
- White, M. D., Todak, N., & Gaub, J. E. (2017). Assessing citizen perceptions of body-worn cameras after encounters with police. *Policing: an international journal of police strategies & management*.
- White, M. D., Todak, N., & Gaub, J. E. (2018). Examining body-worn camera integration and acceptance among police officers, citizens, and external stakeholders. *Criminology & public policy*, 17(3), 649-677.
- Yesberg, J. A., & Bradford, B. (2018). Affect and trust as predictors of public support for armed police: Evidence from London. *Policing and society*.

### **Cases Cited**

- Scott v. Harris*, 550 U.S. 372 (2007).

## **BIOGRAPHICAL SKETCH**

Richard Hernandez is currently a PhD Candidate at The University of Texas at Dallas. His research focuses primarily on officer behavior and performance. Richard earned his Bachelor of Arts in Criminal Justice at St. Mary's University in 2014. Following this, he earned a Master of Science in Criminology at The University of Texas at Dallas in 2016. Richard began his doctoral studies at The University of Texas at Dallas in the fall of 2016. During his time at The University of Texas at Dallas, he has published in journals including *Youth & Society* and *International Criminal Justice Review*.

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### PUBLICATIONS

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Connell, N. M., Schell-Busey, N. M., Hernandez, R. (2018). Experiences Versus Perceptions: Do Students Agree That They Have Been Bullied? *Youth & Society*, 51(3), 394-416.

Han, S., Yim, H., Hernandez, R., Maskaly, J. (2019) Immigrants' Confidence in the Police: An Examination of Generational and Ethnic Differences in the United States. *International Criminal Justice Review*, 30(2), 156-174.

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