Public Perceptions of the Justifiability of Police Shootings: The Role of Body Cameras in a Pre- and Post-Ferguson Experiment

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Abstract
We conducted two studies, wherein participants from across the United States watched, heard, or read the transcript of an actual police shooting event. The data for Study 1 were collected prior to media coverage of a widely publicized police shooting in Ferguson, Missouri. Results indicated that participants who could hear or see the event were significantly more likely to perceive the shooting was justified than they were when they read a transcript of the encounter. Shortly after the events in Ferguson, Missouri, we replicated the first study, finding quite different results. Although dissatisfaction with the shooting was seen in all forms of presentation, video evidence produced the highest citizen perceptions of an unjustified shooting and audio evidence produced the least. Citizens were nonetheless overwhelmingly favorable to requiring police to use body cameras. Body-mounted cameras with high-quality audio capabilities are recommended for police departments to consider.

Keywords
Body cameras, police shootings, Ferguson, Missouri, visual perception, audio perception

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On August 9, 2014, citizen Michael Brown was killed by Ferguson, Missouri Police Officer Darren Wilson. According to official reports of the incident (see Associated Press, 2014), Officer Wilson, who is White, was initially summoned to the area by a dispatched call for service received from a store owner who claimed that a large, Black male suspect—thought to be Michael Brown via video surveillance (Associated Press, 2014)—had stolen from his store. Upon arriving in the area, Wilson noticed two Black men walking down the center of the road and stopped his police cruiser to confront them.

At this point in the confrontation, the official reports of the Brown–Wilson encounter begin to differ considerably from the reports of eyewitnesses. On one hand, Officer Wilson claimed that when he stopped to ask the men to not walk in the middle of the street, he was immediately verbally and physically attacked by Brown. According to Officer Wilson, Brown assaulted him inside his cruiser and tried to gain control of his firearm. To prevent this from happening and fearing for his life, Officer Wilson drew his sidearm in self-defense. Wilson discharged his weapon inside the cruiser and then confronted Brown outside the vehicle. At this point, Wilson shot a charging Brown, this time killing him. On the other hand, reports from eyewitnesses refute most of what Wilson claimed. Amid the reports were eyewitness claims that Wilson was the aggressor in the incident (e.g., Associated Press, 2014) and that Brown, who was unarmed, had surrendered to Officer Wilson by putting his hands in the air prior to the shots being fired that led to his death (e.g., Associated Press, 2014; Santhanam & Dennis, 2014).

With competing allegations regarding the series of events that led to the death of Brown, the Ferguson case became the central focus of a national civil rights movement focused on Black citizen relations with police that was largely pushed by individuals on social media. For instance, there were over 3.6 million mentions of Michael Brown during the busiest day on only one of dozens of popular social media sites (Twitter; PEW, 2014). As the issues in the case ripened on Twitter and more traditional mainstream media, the discussion expanded to encompass other cases of potentially wrongful deaths of Blacks by police officers, social justice movements, and in-person protests. In the process, the events in Ferguson produced the largest ever social media-driven backlash against the police by the United States Citizenry in the history of the country (PEW, 2014).

In the midst of this massive, Ferguson-driven backlash against police forces across the United States, both traditional and social media sources increasingly began focusing on a recent innovation in technology with which police departments were beginning to experiment—body-worn cameras (BWCs).¹ Given the dramatic differences between official and eyewitness reports of the Brown–Wilson incident, the public began to understand the value of having BWCs. On top of the advantages of providing visual and auditory evidence of a police–citizen encounter, BWCs became seen as a means through which to keep police power in check and, by default, a way of instilling transparency in police interactions with Black citizens. Considering the majority of Americans
have cameras on their cell phones (PEW, 2013), many social media users failed
to comprehend how the Brown–Wilson encounter lacked video evidence and
equally failed to understand why police were not already using BWCs. Given
the opinion that cameras are “a dime a dozen,” citizens and government officials
stressed that BWCs should be implemented. Thus, an escalating opinion formed
that placed blame on the Ferguson Police Department for not having BWCs
prior to the Brown–Wilson incident.

Although Ferguson was clearly the spark that lit the match, it was only the
first in a string of incidents that fueled an increasingly well-formed push on
social media by the citizenry to implement BWCs. Perhaps no case spoke to
the citizenry’s perceived need for BWC more than the fatal shooting of Black
citizen Walter Scott in April of 2015. In North Charleston, South Carolina,
Officer Michael Slager, who is White, approached and tussled with Scott. As
Scott was trying to flee the situation, Slager shot him in the back multiple times
with his service weapon and then proceeded to drop evidence (presumably a
Taser) near the body. None of this would have likely made any national news
organization’s attention if it had not been for video footage of the incident
captured by a bystander. As of the submission of this study, Slager is under
indictment for murder (Ford, 2015). The obvious question presents itself: If
Officer Slager had been using a BWC, would Walter Scott be alive today?
Drawing on similar logic, would Michael Brown be alive? Moreover, if Officer
Wilson had a BWC during the Ferguson incident, would this have stopped the
unprecedented backlash against police that sparked large-scale riots in many
major cities in the United States?

These questions serve as the philosophical backbone of the current study. The
goal of the present research is to evaluate public perceptions of a fatal police
shooting which was recorded by a BWC. When citizens of the United States can
see exactly what happened, are they more likely to classify the interaction as
justified? The legal decision-making process has many actors (e.g., police, pros-
cutors, justices, and juries), and the system is designed so that internal checks
and balances exist at multiple stages of all criminal cases (e.g., police and pros-
cutors evaluate suspects, judges and juries evaluate defendants, etc.). However,
the public’s perception of controversial criminal actions and legal responses is a
major factor in cases, as public pressure and media coverage put a tremendous
amount of stress and pressure on legal actors, and police especially (Perrit, 2000).

Different Lenses, Different Perspectives: Body Cameras
and Cell Phone Cameras

Regardless of who films police actions, video footage has been instrumental in
use of force cases since the beating of Rodney King in 1991. Recent incidents
such as the pistol whipping of a young teen in New York (see Yaniv, 2014) have
led authors (e.g., Harris, 2010) to argue that BWCs are a readily available
technology that should be implemented to provide visual evidence and increase
officers' compliance with the Fourth Amendment regulations. However, research
on the effectiveness of BWCs has been limited, and many questions remain about
the methodological rigor of the existing research (White, 2014).

As social media outlets continue increasing in number and popularity,
the modes of video dissemination available to the public are increasingly grow-
ing easier and more accessible. In a time where over 90% of adults have a
cellular telephone, many with camera technology (PEW, 2013), frontline officers
(lower ranking officers who are out in the field) are growing increasingly wary of
being videotaped while on duty (Young & Ready, 2015). Despite this concern,
constitutional protections are in place for such recordings, and it has become
abundantly clear that citizens will film police even if the police themselves are not
filming their own actions. Given this observation, one could certainly question
why more departments have not implemented BWCs to give a “second lens”
viewpoint of police–citizen encounters.

Citizen-disseminated video of police officers can have real implications for
police departments. This was recently demonstrated by an Internet posted video
of the police-involved death of Eric Garner in New York City, an incident for
which there was no BWC footage. A private citizen recorded Garner’s arrest and
subsequent plea of “I can’t breathe.” After a New York grand jury failed to
indict Garner’s arresting officers, widespread protests across the United States
mobilized, resulting in violence against officers. Also lacking in BWC evidence, a
similar situation occurred even more recently involving the death of Freddie
Gray, a Black resident of Baltimore, Maryland who died while in police custody.
His death sparked several days of protests that turned violent, leading a pros-
secutor to file charges against six officers in the absence of video-based evidence.

On occasion, citizen filmed encounters with police in which improper and
aggressive actions were taken by an officer(s) have resulted in criminal charges
and/or dismissals of the officer(s) (Stanforth, 2014). However, the most disturb-
ing of these instances are those in which officers have acted aggressively
against citizens solely because they were filming police actions and/or arrests.
For instance, Richinick (2014) reported on a pending lawsuit against the
Baltimore, Maryland Police Department in which a woman alleged she was
discriminated against for videotaping the beating and arrest of a fellow citizen.
Although police tried to delete the video after she was pulled from her car and
called offensive names, her phone’s video had automatically backed itself up and
is now the central basis of a civil lawsuit (see Wall & Linnemann, 2014 for a
discussion on police being filmed and Glik v. Cunniff, 2011 for a court decision
upholding the rights of citizens to film officers).

Shortly after Garner’s death grew into a national issue, the largest city in the
United States—New York City—began a pilot program on BWCs (Fenton &
Gonen, 2014), and for good reason. A recent study by Farrar (2013) reported
multiple improvements in police and community interactions as part of a
randomized implementation of BWCs. In a single police department, complaints against officers dropped an astonishing 88% when body cameras were used. Furthermore, use of force incidents dropped 50%, reducing the risk of physical injury to both officers and the public (Farrar, 2013).

It is clear that incidents such as Brown’s, Garner’s, Gray’s, and Scott’s have set off a national movement for getting a BWC on every police officer. Still, what remains unclear is the effect of having BWC evidence when the public is asked to evaluate a fatal encounter. This lack of knowledge is a serious shortcoming in criminological literature due to the importance of visual evidence to the public.

**Visual Processing**

Does video evidence give citizen evaluators the confidence to make informed decisions? For some time, it has been known that the processing of more complex stimuli activates more areas of the brain, and we know more about visual processing than any other mind-brain process (Pylyshyn, 1999). For decades, it has been postulated that the processing of visual images is similar to the processing of direct experiences (Wyer, Hung, & Jiang, 2008), leading one scholar to state that “in response to the increasing stress placed on our legal system in general . . ., numerous legal professionals and behavioral scientists have argued for the expanded use of videotaped . . . materials.” Although this sounds like a definitive statement written for the issues of today, it was actually written 40 years ago by Miller (1975, p. 561), who found that jurors were able to better recall information from video presentation of testimony than even a live presentation of a witness.

Although not dealing directly with police shootings, researchers have compared video presentations to transcript presentations in trial simulations. Using real manslaughter cases with a sample of citizens and students, Martin, De La Fuente, De La Fuente, and Garcia (2007) found a significant difference in verdicts based on the presentation mode, such that mock jurors who read a trial transcript were less likely to convict a defendant compared with those who watched a video of the trial. In the same vein, previous research has found that video presentation of a trial elicits a greater emotional reaction in mock jurors than does reading a transcript (Fishfader, Howells, Katz, & Teresi, 1996). In this instance, the jurors experienced more emotions (e.g., increased total mood disturbances) with the video condition compared with the transcript condition for a case involving the drowning death of a 12 year old. The viewing of graphic imagery can also lead to greater guilty verdicts in a criminal murder trial. Edwards and Mottarella (2014) found that not only did graphic visuals lead to more guilty verdicts, but the images also increased the emotional state of sadness in participants. In short, this group of research demonstrates that visual cues, including videotaped materials similar to those found with BWCs, are critical in the decision-making process of citizens selected as jurors.
General Design of the Two Experiments

With an increasing focus on the use of body cameras among police, the authors of this study began a nationwide data collection in May of 2014 that assessed United States citizens’ opinions of a police shooting that was recorded by a BWC. Participants, all of whom were American citizens, were solicited for participation from Amazon’s Mechanical Turk (mTurk) website and were paid $0.25 to $0.50² for participation. These respondents watched, listened to, or read a transcript of the actual audio from a real, fatal police shooting of a hit and run suspect that occurred in early 2014.

Data for Study 1 was collected from May to July of 2014. Based on the previously described case, participants were randomly assigned to 1 of 18 conditions. The study was designed in a 3 (type of medium presentation: full video, audio only, transcript of audio only) × 2 (orders from senior officer: enter the premises, wait for back-up) × 3 (suspect’s mental history: known mentally unstable, known mentally stable, unknown) fashion. After participants were presented with the video, audio, or transcript of the police–citizen interaction, they were then questioned about the facts of the case to ensure the manipulations were successful. Next, they were asked how justified they felt the shooting was, their certainty of their justification decision, and then they rated the officer and suspect on a variety of factors.

Out of sheer chance, the data collection for Study 1 ended just before the tragic Ferguson, Missouri police-involved death of Michael Brown. The demise of Michael Brown, which has been extremely controversial, provided for a natural experiment to be conducted on citizen perceptions of a police shooting event involving a BWC. Addressing the empirical support of perceptions of justifiability of a police shooting before and after the Ferguson incident provides insight into public perceptions of BWC-recorded police shootings (a) in a time where there is little to no organized disdain against police versus (b) a time where there is widespread public criticism of police use of force. As such, we replicated and extended the first study, henceforth called Study 2, in October of 2014.

Current Research

Drawing on data gathered from the studies conducted before (Study 1) and after (Study 2) the Brown–Wilson encounter in Ferguson, the first goal of this study is to evaluate and explore whether citizens of the United States support the use of BWC in everyday police actions. Second, we investigate whether having a record of the event from a BWC results in significantly higher perceptual justification of an actual shooting than having an audio recording or merely a transcript of the BWC’s audio track. Third, we explore if (and how) randomized correlates (particularly, orders from a senior officer and mental health status of the suspect) change our understanding of public opinions of justifiability in a BWC shooting event.
And fourth, we assess how public opinions of a body camera recorded shooting may have changed before and after the Ferguson incident.

Even though shootings constitute a very small percentage of police interactions (Ochs, 2009; White, 2006), many studies have examined the influencing factors behind the use of lethal force (Kesic, Thomas, & Ogloff, 2012). Despite this valuable knowledge, the crossover of research between BWCs and public perceptions of police shootings is just now emerging. Accordingly, we treat our research questions as exploratory and avoid making specific hypotheses about potential results or how they may change from the time between our two experiments.

Method

Participants of the Two Studies

Study 1. Four hundred and four American citizen participants were recruited from Amazon’s mTurk website in May through July of 2014, prior to the Ferguson incident. Their mean age was 36.04 (SD = 12.32) and females constituted 61.9% of the sample. The majority (74.8%) self-reported their race as White, followed by Black (10.4%), and Hispanic (8.2%), with the rest indicating another race/ethnicity.

Study 2. Following the Brown–Wilson altercation in Ferguson, Missouri, we replicated and extended Study 1 with a new data collection in October of 2014. A total of 432 subjects from mTurk participated in Study 2. The mean age of these participants was 37.06 (SD = 12.72). Females comprised the majority of participants (60.9%) and the race and ethnic composition was as follows: White (76.6%), Black (10.0%), Hispanic (6.5%), and the remaining participants indicating “other.”

Materials and Procedures of the Two Studies

After completing the informed consent process, participants during both studies were given brief instructions which explained that they would be presented with an incident involving a police shooting. They were then provided a short description of the facts of the case, which stated that (a) Eric Johnson was shot by police on August 25, 2013, (b) Officer Martin was responding to a hit and run, and (c) Officer Martin first encountered Johnson’s girlfriend outside of the residence.

Following the first three pieces of information, two more facts, both manipulated, were provided to each respondent. The fourth fact, which has two manipulated conditions, stated that Officer Martin was (a) ordered to proceed with his investigation or (b) wait for back-up, but chose to enter the residence against orders. In the fifth fact, which has three manipulated conditions,
respondents were told that Johnson (a) was known to the police department to be of sound mind, (b) was known to be mentally ill, or (c) his mental state was unknown to the police department. Respondents were randomly assigned to an experimental condition which determined which scenarios they received. Participants then proceeded to the next page of the survey in which they watched a BWC recording of the incident with full audio, listened to only the actual audio of the event, or read the transcript of the audio file from the incident. Next, participants were asked to complete a series of questions and scales (detailed later). The measures between Studies 1 and 2 were identical, with the exception of five added questions about the Ferguson, Missouri shooting during Study 2.3

The police shooting event. To examine public perceptions of BWC evidence of a police shooting, the mode of presentation of an actual police shooting was manipulated across three conditions (video, audio, and transcript). The basis of each mode of presentation was a 2-minute, 31-second video of a fatal police shooting. The incident centered on a White, male officer responding to an investigation call for a hit and run. The officer, who is wearing a BWC attached to his uniform, over his chest, and on top of his bullet proof vest, approaches the suspect’s apartment. Upon arrival, the officer is met by a female resident and told that the hit and run suspect has a knife and may be wanting to harm himself. After multiple verbal calls for the suspect to come out, the officer entered the apartment and found the suspect, who was a White male, with a knife in hand. The suspect then walked toward the officer despite multiple instructions to drop the weapon. The officer’s voice escalated in both volume and inflection with each instruction he gave. Ultimately, the officer shot the suspect five times.4 The actual video of the event serves as the first mode of presentation. The audio file (the second mode of presentation) was a true recording of the same video, and the transcript (the third mode) was a verbatim account of what was said by all parties.

The file was publicly disseminated and freely available on the Internet because of a public records request filed by multiple media outlets. Only two modifications were made to the original recording. First, the name of the agency was eliminated from the recording (i.e., “________ police department” simply became “police department”). Second, the voice of the female participant had to be amplified so that it could be heard clearly.

Measures of Studies 1 and 2
Dependent Variable
Our dependent variable in both experiments, justifiable homicide certainty, was the product of multiplying a dichotomous survey item that asked the respondent whether he or she thought the shooting was justified (justified = 1/not justified = − 1) and the participant’s certainty of the justification response on a
1 (not at all) to 5 (very certain) point metric. Therefore, the dependent variable was measured on a metric where 5 was completely unjustified and 5 was completely justified.

Control Variables

Because prior research demonstrates that personal factors relate to perceptions of the use of force by officers, a number of individual difference and attitudinal measures were included in the original design to predict justified homicide scores. The order in which participants completed the measures was randomized. These scales were incorporated as control variables in the subsequent ordinary least squares (OLS) regressions. The first measure entered in the regression was the sixth iteration of the Social Dominance Orientation scale (SDO6; Sidanius & Pratto, 1999). Prior research shows that adherence to social hierarchies is related to perceptions of justifiability in the use of police interrogation tactics, which is related to the use of force (Culhane, Hosch, & Heck, 2008). Next, the Right-Wing Authoritarianism scale (RWA; Altemeyer, 1981), a measure shown to correlate with the SDO6 and predict interrogation tactic endorsement (Culhane et al., 2008), was entered in the regression. Third, the reduced Grasmick Self-Control scale (SCS; Grasmick, Tittle, Bursik, Jr., & Arneklev, 1993), as used by Young, Barnes, Meldrum, and Weerman (2011), was included because of an extensive literature base that shows self-control impacts people’s perceptions of cognitive thought process outcomes (e.g., Boman, IV, Stogner, Miller, Griffin, III, & Krohn, 2012). Finally, because one’s opinions about the acceptability of a police shooting could be influenced by how one feels about the police, seven items that capture each participant’s attitude toward police (ATP) were covaried. The items, which were adapted from Brunson and Miller’s (2006) research, asked participants if the police do a good job enforcing the laws, if they respond quickly to calls, if they work hard to solve crimes, if they are easy to talk to, if they are polite, if they do a good job preventing crime, and if they harass or mistreat people (reverse coded).

Demographics

Three questions about the sex, age, and race of the respondents, respectively, were included. Due to the undertones of racial bias in the Ferguson case, these variables were more central to the analyses of Study 2. Additionally, two standalone questions were included that inquired about (a) the individual’s ownership of any firearms and (b) the participant’s attitudes toward background checks for firearm purchases. These latter measures were included to protect against spuriousness since previous work has found that gun ownership is a significant predictor of support for police use of force (Arthur & Case, 1994). Finally, participants were asked to indicate their support for required body cameras for police officers on a 1 (strongly disagree) to 5 (strongly agree) scale.
Analytical Strategy

To explore public perceptions of the police shooting events in our $3 \times 2 \times 3$ design, a series of analyses of variance (ANOVAs) are implemented. We begin by investigating the results of Study 1, which was conducted before the Ferguson incident. Following the ANOVAs, we implement the use of correlation statistics to explore the zero-order relationships between our independent variables (i.e., medium of presentation type, officer’s orders, and mental history of the suspect) and justifiable homicide certainty. Finally, since our data are nonnested, we employ OLS regression to determine the simultaneous associations between the independent variables and justifiable homicide certainty.

Results of Study 1

Overall, 39% of our sample felt that the shooting was justified and 61% felt it was unjustified. A $3 \times 2 \times 3$ ANOVA was conducted on the dependent variable, justifiable homicide certainty. The mean value of justifiable homicide certainty was 0.87 ($SD = 3.85$) on a scale from 5 to 5, indicating that, on average, participants thought the shooting was slightly unjustified.

Results of the ANOVA indicated two main effects. First, a marginally significant ($p = .053$) main effect was found for type of medium presentation. The video condition ($M =-0.50$) and the audio condition ($M =-0.49$) led to the officer being seen as more justified in his shooting of the suspect compared with the transcript condition ($M =-4.50$, $F(2, 386) =2.95$, $p =.053$, Partial $\eta^2 =.02$). A follow-up question asking participants whether they supported the required use of BWCs had a mean response of 4.05 ($SD = 1.05$), indicating that on average participants agreed with the use of body cameras for police officers.

The second main effect was found for the senior officer’s orders. If the officer was given orders to enter the premises ($M =-0.24$), he was judged to have been more justified in the shooting than if he was told to wait for back-up ($M =-4.42$, $F(1, 386) =8.88$, $p =.003$, Partial $\eta^2 =.02$). The mental state of the suspect did not reach statistical significance ($F(2, 386) =.49$, $p =.61$, Partial $\eta^2 =.00$), as there was no difference in justification when the offender was known to be mentally ill. Similarly, the medium of presentation and other variables (officer’s orders and mental state of offender) did not significantly interact, with the largest $p$-value being over .90.

Personality and Attitudes: Study 1

Table 1 presents zero-order correlations for the four independent control measures of interest (i.e., RWA, SDO, SCS, and ATP), as well as the internal consistencies (Cronbach’s alpha), means, and standard deviations for each. All scales loaded consistently.
Table 1. Means, Standard Deviations, and Correlations of the Personality and Attitude Measures: Study 1 (N = 404).

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>SD</th>
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<th>2</th>
<th>3</th>
<th>4</th>
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<td>1. SCS</td>
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<td>2. PAQ</td>
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<td></td>
<td>.21***</td>
<td>.13*</td>
<td>.90</td>
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<td>3. RWA</td>
<td>34.09</td>
<td>37.61</td>
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<td></td>
<td></td>
<td>.41***</td>
<td>.96</td>
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<tr>
<td>4. SDO6</td>
<td>38.05</td>
<td>17.18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.93</td>
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Note. SCS = Self-Control Scale; PAQ = Police Attitudes Questionnaire; RWA = Right-Wing Authoritarianism Scale; SDO6 = Social Dominance Orientation Scale.

*p .05.
***p .001.

The justifiable homicide certainty variable was regressed on the four personality and attitude scales in the first step of a single-level OLS regression. The variable of senior officer’s orders to either proceed or wait for back-up and the dummy coding of video and audio presentation compared with transcript were then included in the regression’s second step. The mental state of the offender was not included given its lack of variability in the above tests. Both models were significant (see Table 2). The addition of the two dummy coded variables (video and audio) and the superior officer’s orders resulted in a significant increase in $R^2$ (0.03 [a 3% increase], $F(3, 396) = 4.94, p = .002$). All three of the variables were significant after accounting for the personality and attitudinal scores. Subsequent analyses demonstrated that in no case did a binary race variable (defined as White and non-White) interact significantly with any of the personality or mode of presentation variables.

Results of Study 2

After the events in Ferguson, Missouri unfolded, participants were overall largely unfavorable in their perceptions of justifiable homicide certainty ($M = −4.02, SD = 3.91$). As in Study 1, 39% of respondents said the shooting was justified and 61% said it was not justified. The $3 \times 2 \times 3$ ANOVA revealed two significant main effects, similar to Study 1, and one significant interaction. Several findings were similar to results from the first experiment. Like Study 1, a significant main effect was found for superior officer’s orders ($F(1, 339) = 5.38, p = .021$, Partial $\eta^2 = .02$) and the presentation mode ($F(2, 339) = 3.15, p = .044$, Partial $\eta^2 = .02$). Additionally, the pattern of results for superior officer’s orders was consistent with Study 1. When the officer was ordered to wait for backup, the mean perceived justification (1.47) was less favorable than when the officer was ordered to go in ($M = −0.50$). As in Study 1, there was no main effect for the mental state of the suspect.
The results of presentation mode after the Ferguson incident, however, were distinctly different from the first study (see Figure 1). Although the video condition resulted in more justifiable homicide certainty in Study 1, the viewing of the video in Study 2 had a starkly different and detrimental effect on participants’ justifiable homicide certainty \((M = -4.71)\) when compared with the audio \((M = -0.42)\) and transcript \((M = -0.83)\) conditions. And despite the fact that video evidence was harmful to the officer’s case of a justifiable homicide, participants’ agreement with the idea that police should be required to wear body

<table>
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Note. SCS = Self-Control Scale; PAQ = Police Attitudes Questionnaire; RWA = Right-Wing Authoritarianism Scale; SDO6 = Social Dominance Orientation Scale; Orders = Officer’s orders to wait for backup (1) or proceed (2); Video = dummy code compared with transcript condition; Audio = dummy code compared with transcript condition.

\*\(p < .05.\)

\**\(p < .01.\)

\***\(p < .001.\)
cameras ($M = 4.28$, $SD = .85$) was significantly higher than in Study 1 ($t(834) = -3.45$, $p = .001$, $d = .24$).

Additionally, a significant interaction between superior officer’s orders and presentation mode did occur (see Figure 2). This interaction indicated that participants judged the homicide to be least justified when a video was presented in conjunction with orders to wait for backup ($M = -2.82$). Post hoc analyses revealed that this condition was significantly different from all other conditions except for the transcript-based, wait for back-up condition ($F(5, 351) = 3.47$, $p = .004$).

**Personality and Attitudes: Study 2**

A replication of the OLS regression models with personality and attitudes resulted in findings nearly identical to Study 1. The overall model with self-control, police attitudes, RWA, SDO, orders from superior, and the two dummy coded variables for mode of presentation was significant ($F(7, 424) = -12.22$, $p < .001$, $R^2 = .17$). However, neither of the dummy coded variables for presentation medium were significant in the full model (video: $b = -4.492$, $SE = .420$, $t = -4.17$, $p = .242$; audio: $b = .486$, $SE = .428$, $t = 1.14$, $p = .257$; see Table 3).7
Interestingly, subsequent analyses demonstrated that the inclusion of a dummy variable measuring whether the respondent paid at least some attention to the Michael Brown case or no attention to it also failed to influence perceptions of justifiable homicide certainty. Additionally, no interactions were observed between race and (a) the modes of administration (video, audio, or transcript), (b) the personality and attitude variables, or (c) the amount to which the respondent paid attention to the Michael Brown media coverage.

**Racial and Ethnic Comparisons**

Given the heightened sensitivity surrounding the shooting of a Black man by a White police officer, participants were coded by race and ethnicity as White \((n = 637)\) or non-White \((n = 199)\). For Study 1, the mean justifiable homicide certainty scores for White \((n = 305)\) participants \((0.71)\) appeared to be more favorable than the non-White \((n = 99)\) participants \((1.38)\). However, a \(t\)-test indicated that this was not a significant difference \((t(402) = 1.52, p = .13)\). When the same test was conducted in Study 2, the difference between White \((M = 0.70)\) and non-White \((M = -4.58)\) participants expanded and reached statistical significance \((t(430) = 1.97, p = .05, d = 0.23)\). Non-White participants were significantly less likely to think the shooting was justified.
Table 3. OLS Regression of Personality Characteristics/Attitudes, Presentation Mode, and Officer’s Orders on Justifiable Homicide Certainty: Study 2 Results (N = 432).

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
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<tr>
<td>SDO6</td>
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<td>.012***</td>
<td>.037</td>
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<tr>
<td>Constant</td>
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<td>1.236***</td>
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<tr>
<td>F</td>
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<td></td>
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<td>R²</td>
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<td>R²</td>
<td>.168</td>
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Note. SCS = Self-Control Scale; PAQ = Police Attitudes Questionnaire; RWA = Right-Wing Authoritarianism Scale; SDO6 = Social Dominance Orientation Scale; Orders = Officer’s orders to wait for backup (1) or proceed (2); Video = dummy code compared with transcript condition; Audio = dummy code compared with transcript condition.

* p < .05.
** p < .01.
*** p < .001.

When questioned about the Michael Brown case specifically, White participants were more likely to place blame on Brown for the incident than were non-Whites (t(355) = 2.31, p = .022, d = .29). Non-White participants saw more blame attributable to Officer Wilson for the incident (t(355) = −3.73, p < .001, d = .46).9

Discussion and Conclusions

In wake of the controversy of the shooting in Ferguson, Missouri, it is increasingly more important to understand the dynamics behind the push for furthering
BWCs in everyday police use. From a managerial standpoint, the benefits to the police seem evident based on past research—increased safety for both officers and civilians, as well as reduced citizen complaints (Farrar, 2013). However, many frontline officers are resistant to the use of BWCs. For instance, one frontline officer told an author that he was afraid of being “micromanaged” through a body video recording of his actions. However, it appears that this may be a surmountable obstacle, as recent research demonstrates that positive experiences with BWCs among other frontline officers contributes substantially to officers’ willingness to accept BWCs (Young & Ready, 2015).

Conversely, citizens being constantly videotaped by police officers do pose a potential reduction in privacy for the public that cannot be ignored. Still, the American Civil Liberties Union has called the use of BWC technology “a win for all,” noting “police on-body cameras are different because of their potential to serve as a check against the abuse of power by police officers” (Stanley, 2013, p. 1). With the White House recently allocating over $75M from a $263M fund to provide more than 50,000 body cameras and necessary computer-based storage (White House, 2014), there is certainly political, as well as public, pressure stemming from social and traditional media for police managers to make BWCs mandatory.

In this pre- and posttest, the results of Study 1 show that American citizens were significantly more likely to believe that the police shooting was the most justified when they either saw the event via the BWC video feed or heard the audio from the event. Both of these conditions resulted in significantly improved citizen perceptions of the police shooting compared with merely reading the transcript of the event. Interestingly, no known video or audio footage of the encounter between Wilson and Brown exists. Setting aside all other factors of the events in Ferguson, perhaps part of the reason that the citizenry is so unsatisfied with the outcomes of the event, and the grand jury’s decision to not prosecute Officer Wilson, is because there is not audio or video evidence of the confrontation. Indeed, we do find support for this observation, as the results of our first study suggest that citizens find a legal police shooting of a citizen more justified when they can see or hear the incident. Taking this finding at face value, the implication is clear: Police departments should adopt BWC technology to aid in legal proceedings after a police use of force event has occurred. However, such a simplistic recommendation from Study 1 comes with caveats that were demonstrated in Study 2.

Despite having clear implications, police managers still need to be wary that their departments and officers are stepping into a different world when they fully implement the use of BWCs. Cameras can protect their officers from false allegations of impropriety. However, public backlash could also potentially increase when a video perceived by the media or public to show excessive use of force, racial bias, and both comes to light. In the latter case, it may seem reasonable to assume that public opinions would follow official outcomes of pretrial
investigations (e.g., grand jury decisions, etc.). However, recent events show us that the public can lash out at law enforcement even when a prosecutor or a grand jury decides that the use of force was justified. We have seen the latter recently in the police-involved death of Eric Garner. In this instance, Garner, a very large, Black man, repeatedly stated that he could not breathe before dying in a makeshift police chokehold by several White New York City police officers. This video, which was captured on a cell phone camera, was posted to a multitude of websites and received wide viewership (e.g., YouTube’s channel TheAdviseShowTV posted the video and had received over 3,000,000 views at the time this study was first placed under peer review). Following a grand jury’s decision to not charge the arresting officers, protests broke out across the county, some of which turned violent (e.g., Parascandola & Stepansky, 2014).

What is especially noteworthy about Study 2 is that there was a sudden and drastic changing of American citizens’ opinions after the Ferguson incident of the same police shooting as shown in Study 1 with the same experimental conditions. In these results lie another awaiting challenge for police managers: Other departments can “pay for” perceived injustices of actions taken by a totally different department. This was illustrated by the decrease in justifiability ratings of the same officer-involved shooting in Study 2 even though race seemingly played no role, as a White officer shot a White suspect in the shooting event we used.

This raises attention to a very important observation regarding the potential for widespread implementation of BWCs. Footage provided by BWCs is not the end all and be all of citizen decision making on an issue. The BWC video will undoubtedly help well-intentioned officers, who act appropriately, but it will be quite important for police managers to realize that the amount of backlash for a police shooting event can vary depending on the general political climate toward the police at any given time, case facts, and even official outcomes of a case (although this was not observed with Eric Garner’s case in New York).

These challenges for police are shared by judges, prosecutors, and defense attorneys, particularly during voir dire. With an increasing intensity to which perceived injustices are covered on social media, the most obvious difficulty will be finding impartial jurors who have not had their opinions swayed by social media. However, there are other complications. A recent study by St. Eve and Zuckerman (2012) discusses how important and difficult it is to keep jurors away from social media during a trial. The authors state that “social networking by jurors during trial (whether at the courthouse or at home) carries with it a dangerous potential to undermine the fundamental fairness of trial proceedings” (p. 9). Jurors are not allowed to have case-related discussions with anyone besides other jury members, and only after closing arguments and the judge’s instructions. Through jurors’ use of social media during a trial, the results of high-profile criminal cases have been changed, such as in the reversal of a murder conviction in the case of Dimas-Martinez v. State (2011). Thus, legal actors must
be equally cognizant of the social media-fueled political climate at the time of a trial and recognize that social media could have a real impact on a juror’s view of case facts, evidence presentation, and guilt attribution, to name only a few.

In addition to these difficulties, police departments across the country are now dealing with the challenges of the “Ferguson Effect” in at least two ways. First, departments and officers must be aware that their actions are always subject to being captured on film, either by BWCs or citizen cell phone video. To this point, the trepidation of being filmed could be adversely affecting police work. The Director of the Federal Bureau of Intelligence recently blamed crime spikes in multiple cities on officers’ apprehension of interacting with the citizenry. He was quoted as asking, “In today’s YouTube world, are officers reluctant to get out of their cars and do the work that controls violent crime?” (Perez, Prokupecz, & Bruer, 2015). Second, police departments across this country must be prepared for the release of BWC footage to social media. In instances of controversial cases, this could result in protests, violence, or retaliation against officers, even in shootings that absolutely do warrant deadly force; after all, our video of an actually justified shooting was rated by most participants as unjustified. Taking these two observations into account and given the wide variance in citizen perceptions of shooting justifiability observed in our research, we are of the opinion that BWC footage will fail to result in a “Black and White” consensus that a shooting was either “justified” or “not justified.”

The replication of Study 1 was of crucial importance to understanding the dynamics of a national media frenzy in the wake of a controversial confrontation between a police officer and Michael Brown. In particular, the inclusion of video evidence had a detrimental effect on the perception of officer justification after Ferguson. The effect was further exacerbated when the officer was given orders to wait for back-up. However, the presentation of audio in both studies resulted in the highest rating of justifiable homicide certainty, which raises a final important point about the logistical use of BWCs: Regarding public opinions of a police shooting event, it does not appear that it matters where on the body officers implement a BWC.

Of the departments currently using BWCs, two options have seemingly become most popular. First, some departments have required officers to wear body cameras mounted on the lapels of their uniform or on top of their vests, as the officer in this study’s video was doing. On the other hand, other departments require officers to wear glasses equipped with cameras. Although the reasons for this primarily boil down to administrative choice and cost, a police line officer expressed to one author of this study that the perceived benefit to the glasses was to make sure the view of the camera was never obstructed (despite the potential for such glasses to be knocked off in a struggle). Drawing on this observation, our results demonstrate that the public will be equally likely to perceive a shooting to be justified regardless whether the video is obstructed or not, as long as the audio on the camera is functioning properly.
On a lapel-based or over-the-vest mounted camera, there will be periodic points in an officer’s shift when the camera is obstructed. Indeed, this happened in our video when the officer drew his sidearm and pointed it at the suspect and whenever the officer put his arm across his chest to make a radio call. When the camera is obstructed and footage is missing, audio becomes crucial. As we saw across Study 1 and 2, participants who heard only an audio recording of the incident were most likely to think the shooting was justified. As such, these findings suggest that concerns regarding possible camera obstruction can be quelled; audio recordings of the incident are equally helpful.

Although further research is certainly necessary on the topic, our findings regarding public perceptions of a BWC-recorded shooting could potentially aid police departments who are going to implement BWC in several ways. First, over-the-vest cameras cost less and have more memory than glasses-mounted cameras, meaning that there is less chance of failing to capture portions of an officer’s shift. Second, we encourage police managers to ask their officers which option they would prefer (over-the-vest or glasses-mounted BWC) if they are going to make such an implementation. Third, when purchasing BWCs, police managers may wish to put extra resources toward ensuring that the body cameras they are buying are equipped with high-quality microphones to ensure audio is still captured when the camera is obstructed. Fourth, and finally, another point of consideration is thwarting frontline officer dissatisfaction or fear of micromanagement, which can be achieved if key frontline personnel approve of BWCs (see Young & Ready, 2015).

Of course, all of these findings and recommendations should be attenuated since these studies were the first to evaluate perceived public justification of a deadly police use of force incident based on BWC evidence. Replication of the results is necessary when the negative atmosphere around police subsides. Additionally, even though a national sample was used, it was nonetheless a convenient, repeated cross-section sample, meaning the frame drew from those who were already active on an online survey website. In particular, those who use survey websites regularly may be more inclined to follow other electronic media sources, and especially social networking websites where cases such as Michael Brown, Eric Garner, and Freddie Gray have had such a striking impact on political climate in the United States. Despite some limitations, the current study points light on an incredibly important issue that is at the forefront of the current political climate in the United States.

In the same vein, it is important to explore public attitudes about police shootings in interracial episodes regardless of the official outcomes of the cases. Much has been said on social media and elsewhere about the fact that the officer and citizen were of different racial backgrounds in Ferguson and New York. However, no empirical test has specifically explored BWC shootings of minorities and how case facts interplay into public decisions of justification in the officer’s (or officers’) use of force. Future research should look to rectify this gap
in the literature, especially considering the highly charged political climate that surrounds American law enforcement at this time.

At the end of the day, it is imperative to keep in mind that BWC footage only shows what the suspect is doing and not the officer. The officer’s actions may be inferred, but BWC footage provides only a “one lens” perspective and does not offer a complete picture of the situation. This may indicate that BWC footage could actually present a bias against the suspect since a viewer would only see what the suspect is doing and not the officer. Clearly, this is an important future direction of research that must be explored.

We initially set out to determine the extent to which citizens supported the use of force for an actual police shooting that was captured on BWC. Although we sincerely wish that there was no reason to rerun the study and replicate the results a month and a half later, the death of Michael Brown provided for a true experiment and allowed for this to happen. Through the loss of life, results that lead to a final recommendation should be informative to researchers, the police, legal actors, and ultimately the American public: Body-mounted video cameras with high-quality microphones should be implemented and put into use by all police departments in the United States to aid in the collection of evidence and interpretation of case facts in police use of force incidents.

Author Note

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Notes

1. Young and Ready (2014) refer to BWC as on-officer video cameras.
2. The level of compensation may seem low, but it is consistent with other research on mTurk (Mason & Suri, 2012). In addition, many mTurkers do not participate in research for the pay, but instead are motivated through interest in the subject matter or other factors (Mason & Suri, 2012).
3. The five questions asked about participants’ tendency to follow national news, their knowledge of the shooting in Ferguson, Missouri, and how responsible they felt the parties were in the incident. Responses were scored on a 5-point Likert-type scale.
Seventy-five individuals indicated that they had “not at all” followed the media coverage of the Ferguson, Missouri case and were excluded from nearly all subsequent analyses (they were not omitted from a test of the racial/ethnic differences in the perceptions of the study’s shooting or from general attitudes about the police).

4. This type of shooting is typically classified as a “suicide by cop” (McKenzie, 2006). The county prosecutor in the case ruled that the shooting was justified, as the officer was acting to protect his own life, and, accordingly, no charges were brought against the officer for his involvement in the shooting.

5. Although the $R^2$ increased in the second model, the $F$-statistic decreased because of a change in degrees of freedom.

6. Two control measures (unreported in the model), firearm ownership ($p = .24$) and support for background checks for firearm purchases ($p = .82$), were not related to perceived justifiability of the shooting event.

7. Although owning a gun and attitudes toward background checks for firearm purchases were not significantly related to the dependent variable in Study 1, different findings were observed in Study 2. Those who owned a gun were more likely to perceive the shooting as justifiable ($r(430) = -0.99, p = .047, d = .22$). A significant, negative relationship was also found between support for required background checks for firearm purchases and perceived justifiability of the shooting ($r(430) = -0.1, p = .02$). The direction of this relationship demonstrates that those who supported background checks were more likely to perceive the shoot as unjustified after the Ferguson incident.

8. These subsequent analyses added the 75 people who did not pay attention to the Ferguson coverage back into the models.

9. To further investigate this finding, the fault attributed to Brown was regressed on the four attitudes/personality measures, and the model was significant ($F(4, 352) = 27.49, p < .001, R^2 = .24$). Three of the four measures significantly predicted fault: police attitudes ($b = .060, SE = .016, t = 3.85, p < .001$), RWA ($b = .007, SE = .002, t = 4.06, p < .001$), and SDO ($b = .020, SE = .004, t = 5.10, p < .001$). All three indicated that higher attribution resulted in increased fault ascribed to Brown. The inverse question of attribution of fault to Officer Wilson was also significant ($F(4, 352) = 40.17, p < .001, R^2 = .31$). Like in the first experiment, police attitudes ($b = -0.900, SE = .015, t = -9.94, p < .001$), RWA ($b = -0.007, SE = .002, t = -4.46, p < .001$), and SDO ($b = -0.021, SE = .004, t = -5.61, p < .001$) were all significantly related to justifiable homicide certainty. All three indicated that higher ascription to the variable was related to less attributable fault to the police officer. Interestingly, the respondent’s self-control was also significant ($b = .029, SE = .010, t = 2.82, p = .005$), which suggested that citizens with higher self-control attributed more fault to Officer Wilson.

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John H. Boman, IV is an assistant professor at the University of Wyoming in the Department of Criminal Justice. His research interests are primarily focused on the behavioral influence that peers exert on behavior and how this influences changes over the life-course, gender, theory, substance use, measurement, and construct validation. Recently, his work has appeared in Crime and Delinquency, the Journal of Criminal Justice, Criminal Justice and Behavior, the Journal of Crime and Justice, and the Journal of Quantitative Criminology.

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