Police body-worn cameras (BWCs) are being rapidly and widely adopted by law enforcement. As a result, the question “How should police use body-worn cameras?” is becoming more relevant than “Should police use body-worn cameras?” While past studies have been informative about the benefits and limitations of BWCs, they have also been limited in their understanding of the best practices for this technology.

To address this knowledge gap about the use of BWCs, the Urban Institute evaluated two different implementations of the cameras in a single police department. The study focused on the intersection of BWCs and procedural justice behaviors among officers by collecting community surveys and departmental administrative records. Analyses revealed the following:

- Community members’ satisfaction with police was more positively influenced by officers’ procedurally just practices than by the presence of a body-worn camera alone.
- Community members had difficulty accurately remembering whether an officer was wearing a camera.
- Officers prescribed to inform residents of the presence of a BWC were more likely to activate cameras, while officers responding to more calls for service activated their cameras less often.
- Officers with BWCs made slightly fewer arrests than similar officers without BWCs.
Project Overview

Urban, in partnership with California State University, Long Beach, implemented a randomized controlled trial evaluation to assess the impact of cameras alone as well as cameras coupled with procedurally just practices. The study focused on four questions:

1. How do BWCs affect community members’ attitudes about the police officers with whom they interact and about the police department?
2. Does community members’ satisfaction with their interactions with police change with the presence and mention of BWCs?
3. Do officers vary in their propensity to activate their BWCs during encounters with the public?
4. How do the presence and uses of BWCs influence officers’ behavior?

The study took place in an economically and socially diverse city in the southwestern United States. The police department there, which was already using audio-only recording devices, was beginning a BWC program. Sixty officers volunteered to participate in the study. Each officer was randomly assigned to one of three groups for six months (figure 1):

1. **The control group** was not assigned BWCs and continued policing as usual.
2. **The treatment 1 group** was assigned BWCs and otherwise continued policing as usual.
3. **The treatment 2 group** was assigned BWCs and was asked to follow a script at the start of an encounter to inform community members that the interaction was being recorded.

**FIGURE 1**
Flow Chart of Randomization in the Body-Worn Camera Evaluation

Source: Urban Institute and California State University, Long Beach, 2017.
The script for officers in the Treatment 2 group informed community members that an interaction was being recorded. It was based on the tenets of procedural justice, for which transparency is a critical component, but the script itself was not intended to increase views of trust toward the department. The script was, “I would like to inform you that our interaction is being recorded.”

During the six-month study in late 2015, we collected data on officers’ activities, reviewed BWC recordings, and surveyed community members who interacted with the 60 officers participating in the project. The following sections summarize our primary findings.

**BWCs and Community Member Perceptions**

Past research has shown the use of BWCs can improve the behavior of both police officers and community members during encounters, compared with non-BWC conditions (Jennings, Lynch, and Fridell 2015). This “civilizing effect” has been connected to decreases in officer use of force, complaints against officers, and resistance during arrests (White 2014). The video recordings have been used to improve evidence for arrest and prosecution, to disprove and substantiate allegations made against the police, and to help expedite the resolution of complaints (Goodall 2007; Harris 2010). This study’s findings are largely consistent with past research on BWCs but also reveal new insights.

**DATA COLLECTED**

We completed 384 surveys with community members who had a recent documented interaction with one of the 60 officers in the study. The surveys were available in English or Spanish, and most were administered within one to two weeks of the encounter. Questions focused on community members’ perceptions and recollections of the encounter, their views of the officer and the police department, and their own demographic information.

**Procedural Justice Practices Improved Community Member Satisfaction with Police Encounters More than Body-Worn Cameras**

Aspects of procedural justice were strongly associated with greater community member satisfaction with a police encounter. Simply wearing a camera did improve community member satisfaction. However, the benefits of procedural justice practices were 60 to 360 percent larger than the benefits of wearing a BWC.

Table 1 describes each element of procedural justice used in the analysis, along with the statements posed to community members. Largely as expected, the more a community member agreed that the officer exhibited procedurally just behavior, the greater the community member’s satisfaction with the encounter, **except for “officer-provided information.”** More agreement with the statements about officer-provided information actually reduced community member satisfaction with the encounter.
TABLE 1

Procedural Justice Measures Used in the Body Camera Evaluation

<table>
<thead>
<tr>
<th>Procedural justice element</th>
<th>The community member agreed that the officer...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officer empathy</td>
<td>“listened to what I had to say.”</td>
</tr>
<tr>
<td></td>
<td>“seemed concerned about my feelings.”</td>
</tr>
<tr>
<td></td>
<td>“comforted and reassured me.”</td>
</tr>
<tr>
<td></td>
<td>“seemed to believe what I was saying.”</td>
</tr>
<tr>
<td>Quality of decisionmaking</td>
<td>“was fair and evenhanded.”</td>
</tr>
<tr>
<td></td>
<td>“gave me the opportunity to describe my situation before decisions were made.”</td>
</tr>
<tr>
<td></td>
<td>“clearly explained the reasons for his or her actions.”</td>
</tr>
<tr>
<td></td>
<td>“made decisions based on the facts.”</td>
</tr>
<tr>
<td>Quality of treatment</td>
<td>“took the matter seriously.”</td>
</tr>
<tr>
<td></td>
<td>“treated me politely.”</td>
</tr>
<tr>
<td></td>
<td>“treated me the same way as others would be treated in a similar situation.”</td>
</tr>
<tr>
<td></td>
<td>“treated me with dignity and respect.”</td>
</tr>
<tr>
<td>Officer-provided information</td>
<td>“provided me with useful tips to avoid this situation in the future.”</td>
</tr>
<tr>
<td></td>
<td>“explained what would happen next in the process.”</td>
</tr>
<tr>
<td></td>
<td>“referred me to people or agencies that might be helpful.”</td>
</tr>
</tbody>
</table>

Source: Urban Institute and California State University, Long Beach, 2017.

Importantly, the benefit of a BWC on improving community member satisfaction with police encounters was smaller than the effects of procedural justice practices. One possible explanation is that community members often did not remember—or remembered incorrectly—whether an officer was equipped with a BWC during an interaction.

Community Members Did Not Accurately Recall Whether an Officer Was Wearing a Camera

Community members who had interacted with officers were surveyed within one to two weeks of their encounters, yet they had a difficult time accurately recalling whether the officers were wearing cameras. Of the 321 individuals responding to the question “Do you remember if the officer was wearing a body camera?” 43 percent (or 139 people) did not remember. Table 2 compares community members’ recollections with whether the officer had a BWC during the encounter.

Among community members who remembered the officer either wearing or not wearing a camera, the same number were incorrect as were correct (28 percent, or 91 people). Figure 2 reorganizes these data to depict the poor accuracy of community members’ recollections.
TABLE 2
Community Members’ Recollections of Whether an Officer Had a Body-Worn Camera (BWC)

<table>
<thead>
<tr>
<th>Officer actually had a BWC</th>
<th>Remembers officer w/BWC</th>
<th>Remembers officer w/o BWC</th>
<th>Does not remember</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (no BWC)—control group</td>
<td>13</td>
<td>36</td>
<td>46</td>
<td>95</td>
</tr>
<tr>
<td>Yes (BWC only)—treatment 1 group</td>
<td>18</td>
<td>37.89%</td>
<td>31</td>
<td>78</td>
</tr>
<tr>
<td>Yes (BWC + script)—treatment 2 group</td>
<td>23.08%</td>
<td>37.18%</td>
<td>62</td>
<td>148</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>114</td>
<td>139</td>
<td>321</td>
</tr>
</tbody>
</table>

Source: Urban Institute and California State University, Long Beach, 2017.

FIGURE 2
Community Members’ Recollections of Whether an Officer Had a Body-Worn Camera (BWC)

Number of respondents

- BWC + script
- BWC
- No BWC

Source: Urban Institute and California State University, Long Beach, 2017.
Poor recollection of whether an officer was wearing a BWC may be understandable. Encounters with the police are often prompted by stressful events, which may affect a community member’s likelihood of noticing or remembering whether an officer was wearing a camera. Research has long recognized the fallibility of eyewitness identification and memory, especially under stressful situations (Wells 1978). However, if BWCs do produce the “civilizing effect” suggested by other research, these findings indicate that it is likely caused by something other than a community member recognizing that an officer is wearing a camera. Perhaps the effect is produced by a change in officer behavior brought on by the presence of a body-worn camera. The next findings focus on officer behaviors and BWCs.

**BWCs and Police Officer Behaviors**

Departmental policy toward BWCs can influence how the technology is used in practice. Discretion for BWC use can apply to both how often an officer independently chooses to activate the BWC and the circumstances under which officers are required to activate them. Past research has found that mandatory-use BWC policies, unsurprisingly, lead to more frequent activation (Young and Ready 2016). In terms of actually turning on the BWC, officers who elect to wear a camera have higher usage rates than those who did not volunteer to use BWCs under a discretionary use policy (Young and Ready 2016). In fact, the same study found a 27 percent decrease in activation when mandatory policy changed to discretionary (Young and Ready 2016). This suggests uneven enthusiasm and support for BWCs among officers, even if the department feels they would be a valuable tool.

Body-worn camera use also raises considerations related to officer safety. Some studies have found that BWCs may increase both the number of assaults on officers and officer use of force (Ariel, Sutherland, and Henstock 2016a), including more frequent handcuffing of nonresistant people (Ariel, Sutherland, and Henstock 2016b). In departments where officers closely followed policies about when and when not to record, use-of-force incidents decreased. In departments where officers did not follow the policies closely, use-of-force incidents increased (Young and Ready 2016). One study found greater officer discretion about when to use a BWC was associated with increased use-of-force incidents (Ariel, Sutherland, and Henstock 2016b).

**THE DATA WE COLLECTED**

The department provided administrative records on arrests, calls for service, calls with offense, and street checks for the six-month study period, as well as for the preceding three years. The department also provided us officer demographics, some employment information, and access to a sample of BWC footage and data on all participating officers’ BWC recordings made during the study.
Some Officers Use Their BWCS Much More than Others

The department’s BWC policy states that cameras are intended to support and assist officers in performing their duties, protect against false accusations, and provide video evidence to support criminal investigations and resolution of complaints. The policy further states that “all enforcement and investigative contacts, as well as all contacts specifically related to a call for service, will be recorded.” While this mandate does not mean BWCS will be used in every situation, our findings indicate considerable variation in how often officers activated their BWCS during encounters with the public.

Some officers turned on their body-worn cameras less than 2 percent of the time during the study period, while others used their cameras in about 65 percent of documented encounters with the public.

Figure 3 represents the rate of body-worn camera activation by officers in treatment groups 1 and 2 (BWC or BWC plus script). Usage rates range from 1.5 to 65.4 percent.3 Each dot represents one of the 60 officers in the study, arranged from left to right in order of BWC activation rate. Each officer’s rate is calculated as “the total number of encounters during the study period in which that officer turned on his or her BWC at least once during a documented encounter” divided by “the officer’s total number of documented encounters during the study period.” A documented encounter is a unique interaction between police officer(s) and community member(s) represented in at least one of the street-check, calls for service, or reported crimes databases.

Though body-worn camera use among officers is clearly not universal, 100 percent camera activation should not be expected. There are many conditions and circumstances for which it is not appropriate for an officer to activate the BWC. Nevertheless, our analyses found that camera activation rates among officers varied based on whether they were assigned to the treatment group and on the nature of their patrol work.4 Officers who activated their BWCS more frequently were included in treatment group 2, which prescribed that officers explain the presence of their BWC. Officers who activated their BWCS less frequently responded to a larger percentage of the resident calls for service received by the department.
Officers Equipped with Cameras Made Fewer Arrests

Past research has yielded mixed findings on the impact of body-worn cameras on arrests, with some showing no effect (Grossmith et al. 2015; Owens, Mann, and Mckenna 2014) and others showing a slight increase (Katz et al. 2014). The current study found a slight decrease in the number of arrests made by officers assigned a BWC. Officers assigned a BWC made about 0.35 fewer arrests every two weeks (14 days) than those not assigned a BWC.

Final Thoughts

Our study finds that BWCs do affect the perceptions of community members who interact with the police, but those effects are largely dictated by the officers’ behavior. The effects of BWCs appear more complicated than the popular belief that “everybody will behave better when there’s a camera recording the encounter.” For example, this study finds the following:

- For improving community members’ satisfaction with police encounters, procedurally just practices mattered more than the presence of body-worn cameras.
- Most community members did not accurately recall whether officers were wearing BWCs.
Officers varied significantly in how often they activated their BWCs, and those differences were associated with different policing activity and policy.

- Officers who were expected to explain the presence of their cameras tended to activate them more often.
- Officers who responded to more calls for service tended to activate their cameras less often.

- Officers equipped with BWCs had a slightly lower volume of arrests than officers without cameras.

These findings indicate that there is value in using body-worn cameras for both police officers and community members. However, these findings also suggest that BWCs are not a simple “plug-and-play” policy solution; significant variations across officers and circumstances affect the potential benefits of BWCs. As cameras continue to proliferate, it will become even more important to understand the specific effects and contexts of how BWCs are used if departments—and the community at large—are to gain the full benefits of this technology.

Notes


2. Community members were asked whether they “strongly disagreed,” “disagreed,” “agreed,” or “strongly agreed” with each statement.

3. The officer representing number 1 on this graph was assigned a camera but is shown as recording no encounters, because there were no data on that officer having an encounter of any kind, recorded or otherwise. For most analyses presented in this brief, this officer is not included in the calculations.

4. We were unable to look at some factors (such as duty assignment, use of force, or citizen complaints) because of data limitations.

5. Time intervals were set at 7-day increments to ensure there would be the same number of weekdays and weekends in each period. The period was aggregated to 14 days to ensure sufficient observations in each period to allow for statistical analysis.

6. This finding is statistically significant at the 0.024 level.

References


About the Authors

Dave McClure is a research associate in the Justice Policy Center at the Urban Institute. His work focuses on improving the efficiency and effectiveness of government through science and technology, particularly in the justice system. McClure holds bachelor’s degrees from the University of Georgia and a MA and a PhD from George Mason University.

Nancy La Vigne is director of the Justice Policy Center at the Urban Institute. Her research interests include evaluating criminal justice technologies, informing efforts to reduce recidivism of criminal justice-involved populations, and promoting policing and criminal justice reform through data and research evidence.

Mathew Lynch is a research associate in the Justice Policy Center, where his research portfolio includes projects on police technology and innovation, program evaluation and implementation, prisoner reentry, and treatment alternatives/diversion.

Laura Golian is a research assistant in the Justice Policy Center. Her work focuses primarily on victimization, juvenile justice, and policing. She received her BA from American University, where she majored in justice and law and in psychology.

Daniel Lawrence is a research criminologist in the Policing Science Program at RTI International. His research interests include police legitimacy and procedural justice, police screening and hiring practices, police technology, and community policing. Lawrence received his MA and PhD from the University of Illinois at Chicago.

Acknowledgments

This brief was funded by the Laura and John Arnold Foundation. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute’s funding principles is available at www.urban.org/support.