Body-Worn Video through the Lens of a Cluster Randomized Controlled Trial in London: Implications for Future Research

Catherine Owens* and William Finn**

Abstract  The College of Policing, the Metropolitan Police Service, and the Mayor’s Office for Policing and Crime designed and implemented the largest randomized controlled trial of body-worn video (BWV) cameras to date, to test its impact on a range of outcomes, including criminal justice outcomes, complaints made against the police, stop and search, officer attitudes, and public experience. This article summarizes the finding of the trial relating to interactions between the police and the public, drawing on analysis of surveys and interviews with officers and a range of administrative data. The article explores how BWV might affect police–public interactions and highlights a number of gaps in the evidence that may benefit further research.

Introduction

The body-worn video (BWV) trial in the Metropolitan Police Service (MPS) was launched at a time when a growing number of small pilots of BWV were gaining momentum in the UK, exploring potential benefits of the new technology. The MPS has been committed to monitoring and improving public confidence for a number of years1 and, having early experience of BWV, was keen to explore its impact on improving community relations through complaints reduction, increased criminal justice (CJ) outcomes, and improved trust and confidence in policing.2 Recording interactions, it was thought, would change the quality and nature of the contact between the police and the public, reducing complaints. BWV has been reported elsewhere as key to increasing the transparency, efficiency, and effectiveness of police conduct (Drover and Ariel, 2015). Like Bentham’s (1791) concept of the Panopticon for prisoners BWV would make officers’ behaviour visible at all times (or at least perceived to be), and may reduce concerns, more broadly, about a potential accountability gap in police use of power e.g. ‘who guards the guardians?’ (Waddington, 1999).

The roll out of the cameras in the MPS was delivered as a randomized controlled trial, with supporting process evaluation. The MPS has 32 distinct

* College of Policing Ltd, London, UK. E-mail: Catherine.owens@college.pnn.police.uk
**College of Policing Ltd, London, UK

boroughs, and BWV was piloted across 10 of these over a year long period (May 2014 and April 2015), the 10 boroughs were chosen based on where BWV would be expected to make the most difference, so low complaint rate boroughs were excluded and boroughs with higher crime and stop and search rates were included. Therefore, the results from this trial may not directly translate into other boroughs in the MPS, which vary in important ways to those chosen to be part of the trial.

Two randomly assigned emergency response teams on each borough were issued cameras, with the remaining three teams acting as the control group. Allocation was done at the team level for two reasons: to stop contamination, where the presence of a camera-wearing officer could influence the actions of the non-camera-wearing officers; and to ensure that the camera condition had stronger fidelity, as even if one officer chose not to record then other members of the team would, ensuring that the impact of the camera would persist. The teams of officers usually worked together, and all shared the same line manager/sergeant. Early sample size calculations for the trial design, however, showed greater differences between boroughs than between teams in boroughs in numbers of complaints/arrests/stop and search activity. While the teams are broadly equivalent, allowing strong statements about impact to be made for the boroughs, the generalizability of results is more limited, due to the variation in impact seen across boroughs.

In total, throughout the trial, 814 officers in 19 teams were assigned to wear cameras and 1,246 in 29 teams were assigned to not receive cameras. Both groups consisted of 26% female officers. Age distribution and number of years in service were also very similar. The proportion of officers from a black or minority ethnic groups was slightly different, with 15% of the officers recorded as Black and minority ethnic in the treatment group compared to 11% of the officers in control group. All officers in the trial were response constables, so are the first attenders to emergency calls made to the police. They operate on a 24-h basis, working shifts on a rotation—so that every officer works early, late, and night shifts. They were chosen as they are the first officers to attend a scene, therefore, collect vital early evidence, have a high volume of interactions, and deal with members of the public at times of distress.

The findings for one of the interaction outcome measures, complaints, along with other measures used to explore police–public interaction are discussed here, along with additional implications and suggestions for future research.

**Police–public interactions—the impact on complaints**

If the nature of police–public interactions improves because they are recorded, one would expect to see a reduction in complaints where BWV is present.

During the MPS trial period 261 complaints were recorded, comprising 462 allegations. Analysis showed that BWV reduced the number of allegations against officers, particularly of oppressive behaviour. The odds of an officer receiving an al-

---

3 The wrong allocation of a team to the treatment condition in one borough led to the exclusion of two teams from the analysis.

4 One complaint can be made up of multiple allegations.

5 Each complaint can comprise a number of different allegations (for example, an officer could be alleged of unlawful arrest and discriminatory behaviour during the same incident—this would equate to one complaint, with two allegations).

6 MPS categorizes the following types of allegations as oppressive behaviour: oppressive conduct or harassment, other assaults, other sexual conducts, serious non-sexual assaults, sexual assaults, unlawful/unnecessary arrests or detention.
legation of oppressive behaviour were 2.55 higher if the officer was in a non-BWV team, compared to a BWV team. Complaints related to how the officer interacted with the public also reduced significantly and the trend in overall complaints, including those not specifically linked to officer behaviour at incidents, was consistent with these findings, although the reduction was not statistically significant.

Although the overall average effect of BWV was a statistically significant reduction in complaints, the impact across the 10 trial boroughs varied. Six had, on average, a lower rate of complaints per officer in their BWV teams, compared to the control teams, and in two of these boroughs the difference was statistically significant. A number of other trials have also investigated the effects BWV has on complaints. Although these studies tend to indicate that BWV can reduce complaints (Goodall, 2007; Farrar and Ariel, 2013; Katz et al., 2014; Ariel et al., 2015, 2016), the extent of the reduction varied considerably, possibly due to differences in study design, but it is likely there are contextual factors that affect the extent to which BWV has an impact on complaints.

In exploring how context can affect the impact of BWV, it is important to understand the mechanisms by which BWV may effect interactions between the police and the public. There are a number of ways in which BWV might reduce complaints:

- **Deterrence**: Officers are deterred from oppressive behaviour because of the certainty they will be ‘caught on camera’.
- **Compliance**: Officers, consciously or unconsciously, more carefully adhere to processes and procedure, clearly articulating their rationale for decisions, and as a result improve the public’s perception of fairness and procedural justice.
- **Civility**: The public are more polite and compliant because they are aware of being recorded, and this leads to a more civil interaction overall.
- **Protection**: The public do not make groundless allegations, or where they do they are resolved before they become a formal complaint because of the availability of evidence supporting the officers’ actions, protecting them from malicious complaints.

The officer survey (treatment and control) was used to try to unpick which, if any or all, of these mechanisms may be driving the reduction in complaints. The officer surveys indicated no difference between the BWV officers’ self-reported behaviour at incidents (i.e. no change in compliance with protocols, use of force, or treating the public with fairness or respect), or their perceptions of the public cooperating with them compared to the control group. However, further exploration of these issues during interviews with officers given BWV, identified a number of examples of where officers did report changes to their and the public’s behaviour which are set out below.

**Police–public interactions—the impact on behaviour**

**Narrating interactions**

Some officers reported they had begun to narrate interactions since using BWV, saying what they were doing out loud, verbalizing their thought processes and decision-making, or speaking more loudly and clearly for the benefit of the camera. Sometimes this included making what might be implicit, explicit, to justify their actions.

“If I’m restraining someone, I’ll make sure that I say loudly, stop kicking or...”

---

7 Breach code A PACE/ breach code B PACE/ discriminatory behaviour/ incivility, impoliteness, and intolerance/ lack of fairness and impartiality/ oppressive conduct or harassment/ other assaults/ other sexual conducts/ serious non-sexual assaults/ sexual assaults/ unlawful or unnecessary arrests or detention.
stop spitting at me ‘cause otherwise it just looks a little bit heavy on the camera. . . .’

‘I knew the answers to the questions that I was asking yeah? But I was asking them because I wanted to capture it for evidence you know, silly things like have you got your keys on you? I knew that for that particular offence we were dealing with it was important and when he said “yes it is” it’s not just my word versus his.’

Linking to the procedural justice evidence, which suggests that ‘the legitimacy of the police in the eyes of the public is primarily based on people thinking officers would treat them with respect, make fair decisions and take time to explain to them, and be friendly and approachable’, the consequence of narrating interactions may be a more procedurally just interaction, which in turn may lead to greater compliance and fewer complaints.

Exploring the extent to which this reported change in interaction occurred, how long it might be sustained and how it was received by victims, witnesses, and suspects, would be useful in understanding whether BWV drives more procedurally just interactions. An alternative perspective could be that if police are narrating not for the benefit of the situation in hand, but rather for the later potential viewer of the footage that the public may respond negatively, something that needs further research.

The process evaluation also provided evidence of unexpected potential benefits of BWV such as footage being used to share good practice, change culture (e.g. encourage resistant officers to use BWV), foster better communication with partners (e.g. mental health organizations, social services) and aid officers’ professional development. Understanding the effects of using BWV footage for these purposes has clear implications for police forces investing in the technology. This activity highlights an additional, longer term, potential mechanism by which complaints might be reduced by using detailed accounts of officers’ actions during public interactions to coach, self-reflect, and improve performance.

Supported decision-making

Contrary to the a priori hypothesis, when responding to the survey, officers without BWV were statistically significantly more likely to agree they needed stronger justification for their actions, and BWV officers were statistically significantly more likely to feel greater protection from complaints. During interviews, officers with BWV reported that it made them feel more confident in the actions they took, as others would be able to see the rationale for their decision-making, with footage acting as a ‘safety net’, protecting them from complaints by demonstrating actions that were fair and proportionate. When officers were asked to show interviewers’ footage that summed up their experience of wearing BWV, many showed clips that had helped to protect them against potentially spurious complaints by the public. Officers also gave examples during interviews of using BWV recordings to achieve early resolution of potential complaints with little grounds, preventing them from becoming formally progressed. The early resolution was unable to be triangulated through available MPS data, and so more research into the potential for informal or early resolution of complaints would be needed to understand if this is a widespread effect.

In addition, BWV footage could increasingly be used in the investigation of formal complaints and provide evidence that could uphold or reject a complaint. The impact of using ‘independent’ evidence as provided by BWV footage to resolve complaints on the satisfaction of both officers and complainants warrants further understanding. It is possible that decisions would be perceived as fairer, as there

---

8 Survey items that make up the latent variable include: I think twice before I stop and search someone nowadays; I need stronger grounds to stop and search someone than I did last year; I need stronger justification to use force than I did last year.
is supporting visual evidence. This area has been explored, by Culhane et al. (2016) in relation to police shootings and the public’s perception of whether or not they were justified. This work, along with other high-profile police action in the USA, has demonstrated that while officers may have confidence that footage will support their action, videos can be interpreted in a number of ways and have not been the end to disputes about the justification of police action.

In the MPS trial, the perceived protection from complaints provided by BWV was a positive benefit for officers. In a previous trial conducted in Essex, UK (Owens et al., 2014) on the use of BWV in domestic abuse incidents, the opposite was found, with officers concerned about the potential for the ‘hindsight police’ to scrutinize decisions using the footage, and the camera recording what they did not notice at the time. These contrasting findings emphasize the importance of context. While some officers in the MPS found the introduction of BWV a supportive and empowering technology, BWV was introduced in the context of considerable scrutiny over the force’s response to domestic violence in Essex. Therefore, officers did not report the same reaction. The rationale for providing BWV to officers, and how that is communicated, is likely to affect officers’ reactions to it. This effect has important implications for implementation, officer uptake, and outcomes for the public, and it would be helpful to explore the moderating effect of communications with, and management of, officers when introducing BWV, which has already been dealt in one US study.

Public response

During interviews, officers reported varying responses from the public to being filmed. Some people, officers reported, became more polite, others more agitated or aggressive when being filmed. An officer in the MPS summed up his experience around filming as: ‘People don’t like being filmed, generally speaking. They don’t . . . I don’t like it when I’m dealing with someone and they start recording me. It feels a little bit intrusive . . . Quite a lot of the time, you’re told to turn it off.’

According to officers, the public’s response to being recorded was moderated by their level of intoxication and familiarity with the CJ system. Officers felt that some people were aware of the consequences of being recorded and so said less (to avoid incriminating themselves), whereas some seemed oblivious, or did not care about the consequences, and their behaviour did not change in the presence of the camera.

The interviews provided information on how officers perceived the public to respond to BWV, an attempt was made in the trial to measure public perceptions following contact with BWV officers, through a number of approaches. First, the MPS’s Victim Satisfaction Survey was used to assess whether there was any difference in victim satisfaction with officers wearing BWV. One would imagine if there was a difference in interaction, a difference in satisfaction may be seen because ‘victims of crime place a greater emphasis on process than outcomes’, however, there was no difference in the victim satisfaction levels in this trial. Attempts were made to measure other public experience of officers wearing BWV first by the analysis of geo-located tweets mentioning BWV; however, relevant tweets were so infrequent that it was impossible to draw any conclusions. Secondly, by asking, via a card handed out by the officer, those who had been stopped and searched to complete a survey. The response rate was extremely low, however, which precluded any meaningful analysis. The trial did manage to measure general public opinion on the use of BWV cameras through public attitude survey of Mayor’s Office for Policing and Crime, which found that London residents were generally supportive of BWV, agreeing that it would make officers more accountable for their actions, treat people fairly, act within the law, and follow correct procedures. The trial provided some limited information
on how members of the public feel about BWV and may respond to being filmed, but the evidence base on the impact of BWV on public response, although growing (e.g. Ariel, 2016) is still small.

**Conclusion**

BWV was seen as a disruptive technology that would revolutionize the way that officers and public interact—in the same way that CCTV was once considered (Goold, 2003). The trial showed that the use of BWV does impact on the number of complaints against officers, however, the interviews, surveys, and administrative data suggest the effects of BWV may vary in nature and extent, dependent upon individuals, settings, and context. Further investigation is recommended to explore the contextual differences that affect the impact of BWV on complaints, both at a micro level, within trials, but also across trials that have been run. Specifically, it is worth exploring in future research areas beyond the scope of this trial, the response of the public, and how and why this may vary, the impact of the organizational culture and implementation rationale on uptake and use by officers. In addition, there are benefits for the wider police service worth more exploration—the sharing and use of footage with partner agencies, as a training tool and for coaching, performance management, and organizational learning. BWV may be a disruptive technology, but the impact may not only be on interaction, but also on policy, practice, and continuous improvement.

**References**


Bentham, J. (1791). *Panopticon or the Inspection House.* Dublin: Thomas Byrne.


