



FORCE SCIENCE[®] NEWS

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In This Edition:

I. Could “contagious accountability” save your agency \$\$\$ on BWCs?

II. Body cams can improve report accuracy, another new study show

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Could “contagious accountability” save your agency \$\$\$ on BWCs?

I. Could “contagious accountability” save your agency \$\$\$ on BWCs?

A new study of body-worn cameras suggests that even partially equipping a patrol force with BWCs could produce a precipitous overall drop in citizen complaints, while saving a department significant costs.

Researchers found that once body cams were introduced on a limited basis in seven police agencies in the US and the United Kingdom, complaints against officers plunged a whopping 93% overall in the following 12 months.

Even the agency that still drew the largest number of complaints dropped from 558 in the year before cameras were introduced to just 33 in the year after. In another agency, complaints went from 331 to seven. One department’s complaint tally went to zero.

The investigative team credits the sharp declines largely to a change in officer behavior, brought about by what it terms “contagious accountability.”



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INSTITUTE

Lead author on this study is Dr. Barak Ariel, a lecturer in experimental criminology at the University of Cambridge's Institute of Criminology in England, who led an international research group of seven colleagues. (Ariel earlier conducted a groundbreaking study of the impact of body cams on use-of-force complaints in Rialto, CA, which we reported on in Dec., 2013 [see FSN #272].)

BIG NUMBERS. In the new study, the cooperating departments served populations ranging from 161,400 to 751,500 and totaling 1,875,687. Shifts of patrol officers on these agencies were randomly assigned to work with cameras or without while on duty. The shifts were changed weekly and were balanced as to day and night and days of the week.

In all, more than 4,200 shifts and more than 1,800 "front line" officers were involved, across more than 1.4 million hours.

Because of the random shift assigning, all officers ended up working tours of duty both camera-equipped and camera-free by the time the test period came to a close.

"[O]fficers were not able to exercise any personal discretion in deciding when cameras were turned on," Ariel reports. They were to be on throughout the shift, "during every interaction with members of the public," except when officers were "conversing with informants," dealing with "serious sexual assaults," traveling between calls, or on break.

For their on-camera contacts, officers were to warn subjects "as soon as possible" that the encounter was being videotaped—an element of the experiment that the

researchers consider a "quintessential component" of the outcome.

BIG RESULTS. Across the seven cooperating agencies, "1,539 [official] complaints were lodged against police officers in the 12 months preceding the study," an average of 1.20 complaints per officer, Ariel notes.

In the year after cameras were introduced, complaints dropped to a total of 113, or 0.08 per officer. "This marks an overall reduction of 93% in the incidence of complaints," the researchers note. Broken down by department, the decline ranged from a low of 44% to a high of 100%. Four of the seven departments registered 94% or above.

Of importance: complaints against officers diminished sharply even when they were not wearing cameras. In fact, there was no significant difference between the two conditions, the researchers found.

Much of the published paper on the study is spent theorizing on why this was the case.

DETERRENT EFFECTS. One reason body cams are associated with lowered complaints, the researchers point out, is because of the "observer effect," well-documented in psychology literature. When we're aware that "someone else" (the neutral camera in this circumstance) is watching, we "become more prone to socially acceptable behavior and [experience] a heightened need to cooperate with rules," lest doing something "morally or socially wrong" leads to negative consequences.

That's why the initial warning that the camera is on is so important, Ariel writes. This "verbal prompt" may "jolt" both sides into "thinking a little more before they act." Ariel calls this "the announcement effect."

But why were complaints down overall in this study—even on shifts when officers weren't wearing cameras?

One possibility, the researchers suggest, is "the contagious accountability effect." Briefly, this assumes that officers learn to modify complaint-producing behavior when they are being recorded by a camera and continue to act that way even when they are no longer under "surveillance."

Also, officers who are not wearing cameras are well aware of others who are and perhaps "impressed by [their] new practices, copy them." This might explain why officers in the cooperating departments who were not taking part in the study (such as neighborhood police teams, special victim support teams, etc.) contributed their share to the complaint decline. "Everyone was affected...and collectively everyone in the department(s) attracted fewer complaints," Ariel writes.

BIG SAVINGS? Because of the diffusion phenomenon—red meat for learning theorists and psychology scholars interested in the effects of "priming"—Ariel's team raises the possibility that departments could introduce body cams on a limited scale and "still provide a desirable effect."

The cost savings would be notable, "particularly in an age of public domain austerity"—perhaps half the price of a full-scale rollout.

The researchers urge caution in considering BWCs a panacea—a simple "technological fix"—for all the deep-rooted issues that today plague police-community relations. Still, notes Ariel, "most departments would be only too happy to reduce [complaints] to a minimum.... [M]ore complaints equate to more problems for [a] department to deal with." And when grievances are supported by the courts, they can "cost police departments millions of dollars that they do not have."

This study was recently published in the peer-reviewed journal *Criminal Justice & Behavior*, under the title "Contagious Accountability: A Global Multisite Randomized Controlled Trial on the Effect of Police Body-Worn Cameras on Citizens' Complaints Against the Police." It can be accessed by clicking [here](#).

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II. Body cams can improve report accuracy, another new study shows

A new study of how EMS personnel could use body-worn cameras to overcome memory errors when making reports has significant implications for law enforcement officers as well.

While the research does not focus on policing, the findings suggest that officers should be routinely incorporating a review of BWC video in their documentation of notable events to enhance accuracy.

Currently, body cams are not widely used by emergency medical services. As has been traditional in law enforcement, after-action reports of EMS calls typically rely “heavily on short-term memory of what has just occurred,” the study notes.

But memory “is a re-constructive event that is influenced by many factors,” including fatigue, stress, and multi-tasking, which “can negatively affect cognition, decrease attention to detail, and prevent accurate recall,” the researchers explain. “Especially under stressful circumstances, memory is often inaccurate.”

Consequently, the researchers hypothesized in launching the study, “significant error” is likely occurring in the EMS reporting process, and BWCs might provide a practical tool for setting the record straight.

A team of physicians headed by two well-known emergency medicine specialists, Drs. Jeffrey Ho and Donald Dawes, designed a first-of-its-kind pilot study that was reported recently in the peer-reviewed journal *Prehospital Emergency Care*. (Ho and Dawes are professionally affiliated with TASER International, Inc., which manufactures a BWC; the six other MDs on their team are not.)

INTENSE ENCOUNTER. One at a time, 10 advanced life support paramedics with a busy EMS operation in Minneapolis responded to an intense 911 scenario in a medical simulation lab while wearing a head-mounted TASER AXON Flex BWC. The volunteer subjects were 22 to 43 years old, two were female, and their experience ranged from two months to 20 years.

The staged “apartment” each entered was a drug den, dressed with “mattresses on the floor, discarded syringes, dim lighting, open alcohol containers, discarded condoms, 3 firearms, 2 baggies of simulated marijuana and cocaine,” and empty pill bottles in plain view. Four role-playing bystanders, including two minors, were costumed as “commercial sex workers,” and the “patient” was an apparent OD victim in need of naloxone, with a tourniquet on her arm and a syringe lying next to her.

As the scenario progressed, the paramedics had to deal with a profusion of complications, including a combative patient they had to place in restraints, a firefighter first responder who attempted to ventilate the patient, a cop who argued about procedures, an “excited” relative who revealed that the patient had an “underlying HIV infection,” the discovery of a knife on the patient, a simulated ambulance ride during which the “very upset” patient threatened suicide and offered bribes of sex and drugs to get released, and the eventual arrival at a simulated ER where a verbal description of the situation had to be given in order to “hand off” the case to a nurse.

MEMORY VS. BODY CAM. After that, the paramedics used a desktop electronic template to report from raw memory on the call as they normally would on a portable device on the job.

That completed, they were allowed to view their BWC recording and to “make any changes to their initial report that they believed were important and necessary,” based on what the video showed. No time limits were imposed, and they could review their video any number of times and in any fashion, including jumping “to target specific

areas," pausing the action, and watching the images "slowly frame-by-frame."

Finally, Ho and Dawes assessed the errors that the paramedics corrected. These were categorized as: minor ("generally inaccuracies such as time sequence or misquoted statements"); moderate ("generally errors in medications, dosing amounts, or issues of elevated liability"); and major ("generally issues of personal safety").

ERROR ANALYSIS. In all, the paramedics made 71 changes in their original reports after the camera review: "7 minor, 51 moderate, 13 major." Subjects with more experience tended to make fewer changes, "but all paramedics had some changes," the researchers found.

One paramedic alone accounted for most of the minor errors, but all corrected moderate errors and all but two changed errors judged to be major. In the moderate category, all made mistakes regarding the patient's vital signs and all but one erred regarding patient medications; some of the errors, Ho writes, were "clinically significant." Most common among major errors were mistakes relating to the patient's methadone use, suicidal threats, and need for restraints.

Ho writes that "the natural bias that people have to fill in the gaps of memory" with speculation about what happened rather than what they actually remembered was evident.

Eight of the 10 participants indicated that they "had an increased confidence in the accuracy of their reports after using the BWC recording."

Interestingly, there was a profusion of errors that persisted even after the body cam review. In other words, some "errors that were clearly seen on the BWC recording and could have been corrected...were not."

This number ranged from eight to 16 across the paramedics, but all missed or failed to change mistakes in each of the three categories. Persistent errors related, among other things, to living conditions and other parties present at the scene, patient medications, the ambulance-ride bribe offers, endangered juveniles, the knife found on the patient, and firearms.

IN REAL LIFE. "Obviously, some inaccuracies are more concerning than others but any inaccuracy can lead to an increase in poor outcomes and liability," Ho writes.

What's more, the researchers point out, the level of memory error in real life is likely higher than was demonstrated in the laboratory. The participating volunteers were all rested at the time of testing, so fatigue was not a factor in the experiment. Likewise, although "some of the paramedics were visibly shaken by the scenario," physical and mental stress did not likely reach real-world levels either.

Wider use of BWCs, the team concludes, not only is a "reasonable" means for increasing report accuracy but also for "decreasing frivolous complaints, protecting EMS personnel from false accusation, and promoting better behavior by both EMS and the public."

A full report on the study, titled “Effect of Body-Worn Cameras on EMS Documentation Accuracy: A Pilot Study,” can be accessed for a fee by clicking here. A free abstract of the findings is available free at that site.

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