Contents lists available at ScienceDirect



Journal of Applied Research in Memory and Cognition



journal homepage: www.elsevier.com/locate/jarmac

What Should Happen After An Officer-Involved Shooting? Memory Concerns in Police Reporting Procedures $\stackrel{\text{\tiny{them}}}{\to}$



Rebecca Hofstein Grady*, Brendon J. Butler, and Elizabeth F. Loftus

University of California, Irvine, United States

Procedures around interviewing a police officer after a shooting have recently come under increased scrutiny. Some argue the officers should be allowed to view available video footage from body cameras and wait two to three days to de-stress before being interviewed. While viewing the video first may increase accuracy for details present in the footage, it may also cause forgetting or distortion for other parts of the situation not captured on camera, including the officer's perception and construal of the situation. Additionally, memory is likely to decay over any delay from a waiting period, with little support for the claim that a long de-stressing period will improve accuracy compared to an immediate report. Though this is a complex policy matter with many considerations, these procedures may do more harm than good when it comes to preserving the most accurate and helpful memory from the police officer.

Keywords: Memory, Stress, Police, Reporting, Body cameras

In recent years, tensions between civilians and police officers have seemingly escalated. The ubiquitous presence of smartphones has led to increased documentation of fatal encounters between civilians and police officers, leading to calls for transparency and justice. As a consequence, procedures surrounding reporting practices in police departments - how, when, and under what circumstances officers give their statement on what happened in an officer-involved shooting (OIS)—are under scrutiny. Two key issues have arisen. The first is whether, before making their report, officers should be allowed to view body-worn camera (BWC) footage of the incident. The second is whether officers should wait to give their report until two to three days after the encounter to allow them time to consolidate their memory. Proponents of the "pre-view of body camera footage" and proponents of the "wait two to three days" method argue that the officers' memories will be better. We argue, based on the psychological literature, that the most complete and accurate reports will be obtained soon after an incident, before video footage is reviewed and without a long delay. However, policy considerations from outside the realm of human memory may complicate the real-world decision.

Pre-Viewing of Body Camera Footage

As calls from the public for police use of BWCs increase, more and more police departments will need to decide if they will adopt BWCs and how they will be used. Given the many open questions, such as if officers should be able to turn the cameras off and how long the videos will be stored, police departments need guidelines regarding access to the video. In particular, after a citizen complaint or use of deadly force, some departments allow or require officers to view the video footage before making their written report of the event, while others require officers to make their report first. It may initially make intuitive sense to allow police officers to view the BWC footage if we want them to make the most accurate report. However, decades of research into human memory and cognition make it clear that there can be costs to this approach.

One relevant body of research concerns a topic called retrieval-induced forgetting (RIF; Anderson, Bjork, & Bjork, 1994), which shows that retrieving parts of a memory can reduce access to other parts of related memory which were not retrieved. In a typical RIF study, participants are given some sort of

Authors Note

^{*} Correspondence concerning this article should be addressed to Rebecca Hofstein Grady, Department of Psychology and Social Behavior, University of California, Irvine, Irvine, CA 92697, United States. Contact: gradyr@uci.edu

material they need to learn, such as pairs of words or faces. Later, they are tested on some elements of the material again. Finally, they are asked to remember as much or the original material that they can. While people are better at remembering the material they got extra retrieval practice on, they are *worse* at remembering related, unpracticed material, as compared to a separate group who never got any extra practice. RIF has been demonstrated not only with word lists, but in many contexts across hundreds of studies, including eyewitness situations (Camp, Wesstein, & Bruin, 2012). A meta-analysis of 512 studies showed this is a robust effect across many different contexts and paradigms, and does not appear to go away over time (Murayama, Miyatsu, Buchli, & Storm, 2014).

RIF is particularly relevant to the situation of allowing officers to view BWC footage before making their report because the camera can never capture the entire situation. It will be missing the victim's perspective, anything outside of the officer's field of vision, anything obstructed by the camera, and, crucially, the internal perception of the officer. When an OIS or other serious incident has occurred, all of these are important, not just the objective visual field directly in front of the officer. However, if officers view the footage before making the report and use it as "practice" in thinking of what they will report, they may be less likely to recall those other aspects that did not get the extra retrieval that happened by watching what the BWC caught. For example, they may be more accurate in recalling the facial features of the civilian, if they saw the face again on the footage, but may be less likely to recall the details of the car nearby outside the field of view. If they had made their report first, they would likely have better accuracy for the relevant peripheral details of a scene. And if their reporting of the central details was not as complete as it could be, the BWC footage could be used later to supplement with accurate information.

Another relevant body of literature comes from decades of research on how post-event information can alter a person's original memory for an event (Loftus, 2005). Although the postevent information-the BWC footage-is true information, it still may contain new or different information from what the officer actually noticed or would have otherwise remembered. Watching the BWC may inadvertently bias their memory against what their original perception of the situation was. If, in a tense situation, a police officer believed that a civilian was holding a gun, that would be an important thing to note in their report. However, if they were allowed to view the footage before making their report and saw it was a crowbar, their report would likely end up confirming the video, as opposed to being their unbiased assessment of what they thought had occurred. It would not necessarily be a malicious change in reporting; once the footage is seen, it will contaminate their memory to where they now, looking back on it, sincerely view it as a crowbar, whereas previously they had perceived it as a gun. Even though their report may seem more accurate since it confirms to the objective reality of the situation, it is actually less accurate about the officer's perception of the event, which may be far more relevant when it comes to figuring out what led to the use of force.

Some districts attempt to avoid this problem by asking officers, when they make their report, to specify what parts of their report came from their own memory and what came from the BWC footage that they viewed prior to making their report. While this method recognizes the importance of distinguishing memory of the event from memory of the video, it is not likely to be effective. Psychologists have documented for years the difficulty people have in remembering the source of information in their memory; mixing up the source of a memory has been called one of the "seven sins of memory" (Schacter & Dodson, 2001). It is one of the processes underlying the misinformation paradigm (Loftus, 2005), where subjects witness some event and then later are given incorrect information about it. Many people are misled into not only believing the new information, but incorporating it into their original memory; when directly asked about the source of the memory, many people specifically claim that they saw it in the original event (e.g., Zhu et al., 2012; Stark, Okado, & Loftus, 2010). While in this case the later new information-the BWC footage-is not inaccurate, it may be misleading or incomplete (e.g., if the camera is shaky or misses important context) or not what they originally perceived, and the same difficulty in accurately remembering the source of new information is likely to apply.

While there is support from psychology literature for not allowing officers to view camera footage before making a report, there are other considerations that complicate the real-world situation, rendering it too nuanced for a simple, universal recommendation. For example, consider the consequences that may arise when an officer's report does not perfectly match video footage, which is inevitable given the fallibility of human memory. Much like eyewitnesses who make honest mistakes in recounting events (and who generally would not have access to video footage), police officers may have sincere errors in their memory that do not necessarily indicate deliberate false reporting. The same factors that can lead eyewitnesses to have poorer memory (such as post-event suggestion, extremely high stress, weapon focus; Fawcett, Peace, & Greve, 2016; Wells & Olson, 2003) can similarly affect police officers. An officer might honestly believe the victim was rushing at him from the side, even if the video later shows that the person was walking. A discrepancy like this may lead to a perception that the officer is lying to protect him or herself, undermining trust from civilians and decreasing the desire to use BWCs at all (see Simon & Bueermann, 2015 for a longer opinion on this). This could happen despite the positive effect that BWCs provide in terms of decreasing negative interactions between police and civilians (Ariel, Farrar, & Sutherland, 2015). But the mistaken officers, like mistaken victims and eyewitnesses, deserve consideration of processes other than deliberate lying that may lead to a report that is contradicted by a video. Of course deliberately lying sometimes occurs, but it is only one possibility, and is not necessarily the mostly likely. Discrepancies should certainly be investigated, and when the officer gives later testimony (either in a trial or follow-up report, etc.), he or she can explain why their report differed from the video footage.

We have described some of the potentially detrimental effects that viewing BWC might have on memory. However, this type of long-term outcome is not something that the psychological literature yet has data to address (Letourneau, 2015). Any policy that requires officers to give a report before seeing the BWC footage, which might be recommended based on memory research, needs to consider how to address these and other downstream consequences that may arise.

The Waiting Period

Another challenging issue for law enforcement concerns when officers should be interviewed about a traumatic policecivilian encounter. In cases of an OIS, many agencies give officers a two- or three-day "cooling off" period before they are subjected to a detailed interview process. Many agencies have adopted these delayed-reporting policies as a result of recommendations put forth by various law enforcement advocacy organizations and research groups. Some organizations, such as the International Association of Chiefs of Police, recommend officers be provided with brief recovery period before being interviewed, ranging from a few hours to overnight (IACP, 2005). Other organizations, such as the Force Science Institute, advocate for a much longer delay, suggesting that officers should be given no less than 48 h of recovery time following an OIS (Force Science Institute, 2014). From a careful examination of the literature, however, it is clear that there is insufficient evidence to support the claim that having an officer wait two or three days post-OIS will lead to more accurate reports.

The most salient factor behind the delayed-reporting policy is the claim that officers need time to de-stress in order to accurately recall what happened during the incident; agencies believe that if an officer gives a report while under high levels of stress, the report will be less accurate and complete than if the report was given later under lower levels of stress. This phenomenon is sometimes referred to as *critical incident amnesia* (Grossman & Siddle, 2001), with the idea being that the high stress they experience will impair their memory for a period of time after the event, and that one or more night's sleep will help with emotional decompression and memory consolidation (Lewinski, Dysterheft, Priem, & Pettitt, 2016). This idea has been gaining acceptance in police departments and court cases involving OIS, but the literature does not support its claims.

Research has shown that memory accuracy can be impaired by intense stress. For example, military personnel exposed to an extremely stressful situation were less accurate at identifying their interrogators than those in a less stressful interrogation (Morgan et al., 2004) and can be quite susceptible to misinformation (Morgan, Southwick, Steffian, Hazlett, & Loftus, 2013). Further, research has shown that stress and fatigue can have detrimental effects on an officer's memory and performance during critical incidents (for more, see Hope, 2016). Despite research showing impaired memory accuracy after intense stress, research has not demonstrated that a waiting a period after the stress will lead to an increase in memory accuracy. We also know that the relationship between stress and memory is nuanced, and a single broad claim does not accurately reflect this complexity. In some situations, stress can lead to an improvement in memory accuracy, while in others it can cause memory impairment. Many factors moderate the relationship between stress and memory, such as the type and intensity

of the stressor, type of retrieval, type of items to be retrieved, and the time interval between encoding and retrieval (Christianson, 1992).

Those who argue that having an officer wait two or three days will *improve* their recall accuracy are not taking into account the extensive eyewitness memory literature that shows that delayed retrieval of events generally leads to poorer accuracy and fewer details remembered (Dunning & Stern, 1992; Loftus, Miller, & Burns, 1978). Research in several eyewitness studies has also shown that immediate testing improves retention of the studied information over time (Dunning & Stern, 1992; Mackay & Paterson, 2014; Odinot, Memon, La Rooy, & Millen, 2013; Paterson, Eijkemans, & Kemp, 2014; for a review, see Eisenkraemer, Jaeger, & Stein, 2013). The robustness of these findings challenges the claim that an officer's report will be more accurate two or three days post-OIS. Taken together, these studies suggest that the delayed-reporting policy may actually be detrimental to the accuracy of an officer's reports.

Oftentimes law enforcement advocacy groups point to studies such as Morgan et al. (2004) and Hope et al. (2016) as evidence supporting their policy suggestions. This is problematic because although the studies show that stressful events can impair memory accuracy, they are not designed in a way that can be directly compared to cases of OIS reporting timeframes because they only manipulate the stress level *at the time of encoding*, not at the time of recall, and then give everyone a test at the same retention interval. In an OIS, the stressful event has already happened, so any reduction in memory due to the stress during the event is too late to address. In other words, knowing the stress at time of encoding impairs memory does not tell us anything about the effects of stress at time of retrieval or the amount of time that gives the optimal report.

Other arguments in support of the delay also rely on studies that do not apply to the question at hand. For example, one two-part claim is that is possible for people to retrieve information they did not attend to at the time of encoding, and that sleep facilitates this process (Grossman & Siddle, 2001). However, the studies cited in support of this claim were not designed to test this question. Support for the first part about retrieving previously forgotten information involve demonstrations of implicit learning (e.g. Corteen & Wood, 1972) and memory retrieval aids (e.g., Anderson & Pichert, 1978), while support for the second part comes from unrelated studies on sleep and memory, such as those comparing REM sleep to sleep deprivation (as opposed to comparing sleep to an immediate test; e.g. Schoen & Badia, 1984; Tilly & Empson, 1978). None of these actually test the claim that a delay and/or a night's sleep will allow people to remember previously forgotten information, and the role of REM sleep in memory consolidation is not universally accepted (e.g., see Vertes & Eastman, 2000). One study (Cartwright et al., 1975) cited in support of the waiting period was used in a claim about REM sleep supports long-term consolidation of information, but the study was comparing change in recall from an immediate to a delayed test in a variety of levels of REM sleep or sleep deprivation. Though they found some differences based on sleep condition, ALL conditions had a net decrease in correct items recalled at the delayed recall (7 h) compared to initial recall.

To be applicable to the policy question at hand, a study would need to take people who have undergone a stressful event and randomly assign them to a memory test immediately or after a delay. Although much research has been conducted on the issue of stress and memory, few studies meet the criteria to generalize to the practice of delayed reporting following an officer-involved shooting. Two relevant studies—Beehr, Ivanitskaya, Glaser, Erofeev, and Canali (2004) and Alpert, Rivera, and Lott (2012)—provide some insight into how a delayed-reporting policy might affect the accuracy of police reports following a stressful situation.

Beehr et al. (2004) studied experienced police officers who went through in-service training at the police academy. During the training, officers experienced a simulated, stressful on-duty shooting incident. In this simulation, officers were required to enter a house that was the location of a suspected breaking and entering. Inside the house, life-sized posters of persons holding handguns moved from behind cover to aim at the officer. When necessary, officers shot at the moving targets. After completing the simulation, half of the officers were tested on their memory for the event while the other half were not, and all of them were tested twelve weeks later. Beehr and colleagues found that officers who were tested immediately had better long-term memory for the event 12 weeks later than those who did not take the initial test. Specifically, those that took the immediate test were more accurate when recalling the number of armed and unarmed persons in the house, were more accurate at identifying objects that were in the house, and were better at correctly rejecting items that were not in the house.

In a study with a closer timeframe to the policy in question, Alpert et al. (2012) studied a group of officers participating in a live-fire training simulation. During the simulation, officers responded to either a school shooting or a terrorist attack. In each scenario, officers were required to help victims, apprehend suspects, and clear the building. Half of the officers wrote a report about what happened during the training immediately after it ended, and then again three days later (the immediate reporters). The other half of officers did not write an immediate report, only writing a report three days later (the *delayed* reporters). The reports were the scored for accuracy in recalling various details of the events. Alpert and colleagues found that the first reports made by the immediate reporters were more accurate than those by the delayed reporters, which is consistent with research showing immediate retrieval improves memory accuracy. The second reports of the immediate reporters, taken three days later, were also more accurate than the initial reports (made at the same three day delay) of the delayed reporters.

The Beehr et al. (2004) and Alpert et al. (2012) studies show that officers were most accurate when recalling an event immediately as opposed to when there was a delay before reporting. Further, the studies demonstrated that initial testing leads to remembering more about an event when tested again in the future. These findings are consistent with research that shows that our memories are most accurate when tested shortly after encoding, as well as research that shows that repeated testing can enhance memory for the items specifically tested (as opposed to related but untested material, as discussed previously in the RIF literature, which is why having the most complete early report is necessary).

There are important limitations to mention in regards to these studies we have described. First, Alpert et al. (2012) was a pilot study which did not utilize tests of statistical significance "because the purpose of this exercise was to examine the issues, rather than test for significant differences." In Beehr et al. (2004), the final recall task took place 12 weeks after the initial event. Following an OIS, officers typically give their reports after a few days have passed, not a few months. In both Beehr et al. and Alpert et al., the officers were exposed to a simulated officerinvolved shooting, not an actual one. The levels of stress induced in a designed experiment are not likely comparable to those of a live shooting. Still, the findings do not provide any support for the claim that a cooling-off period between the stressful event and subsequent recall would improve memory. A study providing support for the delayed-reporting policy would have to demonstrate that, relative to an immediate report, a report taken at a later time after a cooling off period was more accurate or complete.

We know that over time memory accuracy decreases, and we know that more time between encoding and retrieval increases the likelihood of being exposed to misinformation. It is unlikely that officers would remain completely isolated from any outside, biasing information in the days between an OIS and their report, making the report less valuable, reliable, and informative than it would have been initially. Even proponents of the waiting period recognize the possible memory reconstruction that may happen during a long delay (Grossman & Siddle, 2001); any discussion about the event from lawyers, colleagues, the media that the officer is exposed to will distort the original memory. Thus, researchers would have to show that potential benefits of the delayed reporting outweigh any memory costs that do occur. Other policy-relevant variables not currently found in the memory and cognition literature could be addressed, such as whether having a cooling-off period has other side effects, positive or negative, such as differences in the well-being of officers, or perceptions of fairness from civilian witnesses or suspects who are not given this delay before reporting. A comprehensive study would compare multiple possible reporting timeframes (e.g., as soon as possible, after a few hours, after a night's sleep, three days later), after a stressful event to figure out the optimal reporting time on a variety of outcomes. Until such research is presented, there is insufficient support to suggest that a delay would offer any improvement in memory, given what we know about the degradation of memory over time.

Final Remarks

In both of these questions surrounding police reporting practices, some policy-related considerations cannot be strictly answered by (primarily laboratory) research in cognitive psychology that usually focuses on single dependent variables (Wells, 2005). Longitudinal, prospective, quasi-experimental research into the outcomes of various policy options would constitute an important step towards really knowing the likely non-cognitive consequences of both potential policy

implementations. Until that time, the relevant literature can give us insight into the best way to preserve an accurate, complete, and informative memory from an officer's report, and the conclusion seems to support interviewing the officer sooner rather than later, before any other new information, evidence, BWC footage, or time has contaminated or decayed an officer's memory and perception of an event.

Author Contributions

All authors contributed in reviewing the literature and writing the paper.

References

- Alpert, G. P., Rivera, J., & Lott, L. (2012). Working toward the truth in officer-involved shootings. *FBI Law Enforcement Bulletin*, 81(5), 1–7.
- Anderson, R. C., & Pichert, J. W. (1978). Recall of previously unrecallable information following a shift in perspective. *Journal of Verbal Learning and Verbal Behavior*, 17, 1–12.
- Anderson, M. C., Bjork, R. A., & Bjork, E. L. (1994). Remembering can cause forgetting: Retrieval dynamics in long-term memory. *Journal* of Experimental Psychology: Learning, Memory, and Cognition, 20, 1063–1087. http://dx.doi.org/10.1037/0278-7393.20.5.1063
- Ariel, B., Farrar, W. A., & Sutherland, A. (2015). The effect of police body-worn cameras on use of force and citizens' complaints against the police: A randomized controlled trial. *Journal of Quantitative Criminology*, 31, 509–535. http://dx.doi.org/10.1007/ s10940-014-9236-3
- Beehr, T. A., Ivanitskaya, L., Glaser, K., Erofeev, D., & Canali, K. (2004). Working in a violent environment: The accuracy of police officers' reports about shooting incidents. *Journal of Occupational* and Organizational Psychology, 77, 217–235. http://dx.doi.org/ 10.1348/096317904774202153
- Camp, G., Wesstein, H., & Bruin, A. B. (2012). Can questioning induce forgetting? Retrieval-induced forgetting of eyewitness information. *Applied Cognitive Psychology*, 26, 431–435. http://dx.doi.org/ 10.1002/acp.2815
- Cartwright, R. D., Lloyd, S., Butters, E., Weiner, L., McCarthy, L., & Hancock, J. (1975). Effects of REM time on what is recalled. *Psychophysiology*, 12, 561–568.
- Christianson, S. Å. (1992). Emotional-stress and eyewitness memory: A critical review. *Psychological Bulletin*, *112*, 284–309.
- Corteen, R. S., & Wood, B. (1972). Autonomic responses to shock associated words in an unattended channel. *Journal of Experimental Psychology*, 94, 308–313.
- Dunning, D., & Stern, L. B. (1992). Examining the generality of eyewitness hypermnesia: A close look at time delay and question type. *Applied Cognitive Psychology*, 6, 643–657. http://dx.doi.org/ 10.1002/acp.2350060707
- Eisenkraemer, R. E., Jaeger, A., & Stein, L. M. (2013). A systematic review of the testing effect in learning. *Paidéia (Ribeirão Preto)*, 23, 397–406.
- Fawcett, J. M., Peace, K. A., & Greve, A. (2016). Looking down the barrel of a gun: What do we know about the weapon focus effect. *Journal of Applied Research in Memory and Cognition*, 5, 257–263.
- Force Science Institute. (2014). *Force Science News* #254.. Retrieved from http://www.forcescience.org/fsnews/254.html
- Grossman, D., & Siddle, B. K. (2001). Critical incident amnesia: The physiological basis and the implications of memory loss during extreme survival stress situations. *The Firearms Instructor*.

- Hope, L. (2016). Evaluating the effects of stress and fatigue on police officer performance during and after use of force incidents: A challenge for research, training, practice and policy. *Journal of Applied Research in Memory and Cognition*, 5, 239–245.
- Hope, L., Blocksidge, D., Gabbert, F., Sauer, J. D., Lewinski, W., Mirashi, A., & Atuk, E. (2016). Memory and the operational witness: Police officer recall of firearms encounters as a function of active response role. *Law and Human Behavior*, 40, 23–35. http://dx. doi.org/10.1037/lbb0000159
- IACP Police Psychological Services Section. (2005). Guidelines for police psychological service. *The Police Chief*, 72(9). Retrieved from http://www.policechiefmagazine.org/magazine/index.cfm? fuseaction=display_arch&article_id=699&issue_id=92005
- Letourneau, D. S. (2015). Police body cameras: Implementation with caution, forethought, and policy. *University of Richmond Law Review*, 50, 439.
- Lewinski, W. J., Dysterheft, J. L., Priem, M. M., & Pettitt, R. W. (2016). Police officers' actual vs. recalled path of travel in response to a threatening traffic stop scenario. *Police Practice and Research*, 17, 51–67. http://dx.doi.org/10.1080/15614263.2014.959950
- Loftus, E. F. (2005). Planting misinformation in the human mind: A 30-year investigation of the malleability of memory. *Learning & Memory*, 12, 361–366. http://dx.doi.org/10.1101/lm.94705
- Loftus, E. F., Miller, D. G., & Burns, H. J. (1978). Semantic integration of verbal information into a visual memory. *Journal of Experimental Psychology: Human Learning and Memory*, 4, 19–31.
- Mackay, T. L., & Paterson, H. M. (2014). How does timing of recall affect eyewitness memory and psychological distress? *Journal of Police and Criminal Psychology*, 30, 242–253. http://dx.doi.org/ 10.1007/s11896-014-9156-z
- Morgan, C. A., Hazlett, G., Doran, A., Garrett, S., Hoyt, G., Thomas, P., ... & Southwick, S. M. (2004). Accuracy of eyewitness memory for persons encountered during exposure to highly intense stress. *International Journal of Law and Psychiatry*, 27, 265–279. http://dx.doi.org/10.1016/j.ijlp.2004.03.004
- Morgan, C. A., Southwick, S., Steffian, G., Hazlett, G. A., & Loftus, E. F. (2013). Misinformation can influence memory for recently experienced, highly stressful events. *International Journal of Law* and Psychiatry, 36, 11–17.
- Murayama, K., Miyatsu, T., Buchli, D., & Storm, B. C. (2014). Forgetting as a consequence of retrieval: A meta-analytic review of retrieval-induced forgetting. *Psychological Bulletin*, 140, 1383–1409.
- Odinot, G., Memon, A., La Rooy, D., & Millen, A. (2013). Are two interviews better than one? Eyewitness memory across repeated cognitive interviews. *PLOS ONE*, 8(10), e76305–e76307. http://dx.doi.org/10.1371/journal.pone.0076305
- Paterson, H. M., Eijkemans, H., & Kemp, R. I. (2014). Investigating the impact of delayed administration on the efficacy of the self-administered interview. *Psychiatry, Psychology* and Law, 22, 307–317. http://dx.doi.org/10.1080/13218719.2014. 947670
- Schacter, D. L., & Dodson, C. S. (2001). Misattribution, false recognition and the sins of memory. *Philosophical Transactions* of the Royal Society of London B: Biological Sciences, 356, 1385–1393.
- Schoen, L. S., & Badia, P. (1984). Facilitated recall following REM and NREM naps. *Psychophysiology*, 21, 299–306.
- Simon, D., & Bueermann, J. (2015, August 24). What's the right body camera policy? Los Angeles Times,. Retrieved from http://www. latimes.com/opinion/op-ed/la-oe-simonandbueerman-police-bodycam-20150824-story.html

- Stark, C. E., Okado, Y., & Loftus, E. F. (2010). Imaging the reconstruction of true and false memories using sensory reactivation and the misinformation paradigms. *Learning & Memory*, 17, 485–488.
- Tilly, A. J., & Empson, J. A. C. (1978). REM sleep and memory consolidation. *Biological Psychology*, 6, 293–300.
- Vertes, R. P., & Eastman, K. E. (2000). The case against memory consolidation in REM sleep. *Behavioral and Brain Sciences*, 23, 867–876. http://dx.doi.org/10.1017/S0140525X00004003
- Wells, G. L. (2005). Helping experimental psychology affect legal policy. In N. Brewer, & K. D. Williams (Eds.), *Psychology and law: An empirical perspective* (pp. 483–500). New York, NY: Guilford Press.
- Wells, G. L., & Olson, E. A. (2003). Eyewitness testimony. Annual Review of Psychology, 54, 277–295.
- Zhu, B., Chen, C., Loftus, E. F., He, Q., Chen, C., Lei, X., ... & Dong, Q. (2012). Brief exposure to misinformation can lead to longterm false memories. *Applied Cognitive Psychology*, 26, 301–307. http://dx.doi.org/10.1002/acp.1825

Received 2 May 2016; received in revised form 1 July 2016; accepted 2 July 2016