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Empirical article

Believing is Seeing: Biased Viewing of Body-Worn Camera Footage

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Body-worn camera (BWC) footage is expected to be objective, thereby improving transparency. But can other information about an incident affect how people perceive BWC footage? In two experiments, we examined the effects of officer-generated misinformation and outcome information on people's memory for an event. Participants viewed BWC footage and/or read an officer's report containing misleading information. Some participants learned the officer was punished, some that the citizen was arrested. Participants then answered questions exploring their memory for the facts, the extent to which they relied on the officer's misinformation in judging who was at fault, and their impressions of the officer and civilian. Even when participants saw the BWC footage, their conclusions were consistent with the officer's misinformation. Moreover, participants' attitudes toward police predicted their interpretation of the footage, suggesting BWC footage is unlikely to be perceived objectively. We explain our results in terms of misinformation effects and confirmation bias.

General Audience Summary

Proponents of police body-worn cameras (BWCs) assume that recording police–citizen interactions will be a panacea for heightened tensions between officers and communities. Yet there is limited research on the inferences people draw about a police encounter recorded by a BWC. Importantly, we do not know whether other sources of information impact peoples' perceptions of BWC footage. Participants learned about the outcome of the event and then read the officer's report, watched the BWC footage or both—and if both, we manipulated the order. In his report, the officer justified his use of force by claiming that the civilian struck him and was carrying a knife, although neither of these claims were present in the footage. We found that when people viewed the BWC footage in conjunction with the discrepant officer's report, people viewed the civilian more negatively, the officer more positively, and were more likely to justify the officer's use of force. In addition, we found evidence of bias: (a) people's self-reported identification with police predicted the extent to which they recalled information consistent with the officer's report and (b) people formed conclusions about the police–citizen interaction in ways that were consistent with the outcome of the event.

Keywords: Memory, Misinformation, Legal processes, Policy-making

Imagine you are reading the news and learn about an altercation between a police officer and a citizen. The citizen claims the officer used excessive force; the officer claims the force was justified. To find out what really happened, you read the officer's report and view his body-worn camera (BWC) footage. Surprisingly, there are inconsistencies: the officer reports being attacked by the citizen, but the footage shows no such incident. When you talk about the event later, what will you remember happened? Politicians, law enforcement agencies, and civil rights groups have all trumpeted the implementation of BWCs

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(Miller, Toliver, & PERF, 2014; Stanley, 2015). But understanding whether people use other evidence to make sense of BWC footage—rendering the footage non-objective—is crucial and has not been investigated.

The basic assumption underlying the push for BWCs is that objective—accurate—footage will encourage transparent policing, improving police-community relations. Indeed, ruling the NYPD's "stop and frisk" policy was racially biased, a U.S. District Court ordered the NYPD to trial a BWC program, reasoning that because BWCs provide a contemporaneous record, the footage would substantiate complaints against officers (Remedies Opinion: *Floyd and Ligon v. NYC*, 2013). The NYPD is not alone. In 2015, the Justice Department awarded $23.2 million to fund BWC pilot programs in 32 states. Moreover, 43 of 68 "major city" US police departments already have BWC policies (BWC Policy Scorecard, 2016). The rhetoric, however, surrounding their implementation —BWCs will reveal what *really* happened—is not supported by empirical evidence (Lum, Koper, Merola, Scherer, & Reioux, 2015).

To date, three empirical studies have examined the influence of BWC footage on peoples' perceptions of police–citizen interactions. These studies suggest that BWC footage does not stand on its own; people's perceptions of what occurred during an incident can be altered by people's policing experiences (Boivin, Gendron, Faubert, & Poulin, 2016), media reports of fraught police–citizen interactions (Culhane, Boman, & Schweitzer, 2016), and the medium by which people learn about the encounter (McCamman & Culhane, 2017). Although troubling, these studies do not test the critical question of BWCs: can people discount discrepant evidence from less objective sources when viewing BWC footage?

Several types of evidence—a statement made by a witness or suspect, cellphone video—could be inconsistent with BWC video. Here, we focus on discrepancies between officers' reports and their corresponding BWC footage. Although officers may intentionally write false reports, it is far more likely they could unintentionally include information they remember incorrectly (see, for example, Hope et al., 2016). Indeed, decades of research reveals memory is both malleable and fallible (Loftus, 2005; Schacter, 2001). Thus, it is simply not plausible that an officer's account will always perfectly match a video recording. Therefore, as a consequence of memory distortion, an officer may accidentally include inaccurate, misleading information in their report—misinformation—that is, by necessity, not depicted in the BWC footage.

On one hand, people should recognize that BWC footage is inherently more objective and accurate than a police report. Research shows people can discount evidence from biased sources in forensic contexts (Cooper & Neuhaus, 2000; Dodd & Bradshaw, 1980; Olson & Wells, 2004). As such, any misinformation embedded in a police report should have little influence on peoples' interpretation of the encounter if they believe the officer is biased. BWC footage may also be more memorable given that it contains visual and verbal information, allowing more memorial cues, and perhaps rendering the misleading report less problematic (Paivio, 1990). In addition, by providing a concrete visual representation of the incident, BWC footage may constrain viewers' imaginations, making it more difficult for people to elaborate on what they saw (Garry & Wade, 2005). Thus, people should remember more accurate information from BWC footage than from written reports.

On the other hand, an extensive literature describes how easily people integrate misinformation into memory. For example, we know that misinformation introduced *after* an event can alter our memory for what we witnessed or experienced (Loftus, 2005), and misinformation that is later corrected can still exert influence on how we remember and understand an event (Johnson & Seifert, 1994). Importantly, we are all susceptible to the effects of misinformation (Patihis et al., 2013) and the effects are notoriously difficult to correct, even if the error is acknowledged, and especially when the misinformation fits with people's expectations (Lewandowsky, Ecker, Seifert, Schwarz, & Cook, 2012). Our susceptibility to misinformation is typically explained as a failure in source monitoring (Lindsay, 2008). Briefly, according to the source monitoring framework, we do not store the details of our memories with a tag or label specifying the origins of each detail. Thus, without careful monitoring efforts, we can make mistakes, misremembering details we read in a police report, for example, as something we saw in the BWC footage (Johnson, Hashtroudi, & Lindsay, 1993; Lindsay, 2008).

Of course, if people receive additional information prior to viewing the BWC footage, it may alter what they see. Knowing the outcome of the case could lead people to form hypotheses in line with that information, focus on evidence that supports their expectations, and ignore disconfirming evidence. Put differently, confirmation bias, hindsight bias, and anchoring are all likely to play a role in what people remember seeing (Nickerson, 1998; Tversky & Kahneman, 1974). Moreover, people's beliefs about the criminal justice system and police officers, in particular, may be difficult to set aside, biasing the way people view BWC footage (Lord, Ross, & Lepper, 1979). To summarize, we do not know the extent to which people's biases render BWC footage non-objective.

In the present studies, we address two primary research questions: What do people remember about a police–citizen interaction when an officer's report and BWC footage differ, and how do biases influence such memories and conclusions about the event? To address these research questions, we gave some participants an officer's report that described a "use of force" incident with a civilian. The officer justified his use of force by claiming the civilian struck him first and was carrying a knife. The officer's BWC footage, however, did not show either claim. Rather, the BWC footage showed no clear reason for the officer's use of force. We manipulated what evidence people received—the report or BWC footage—and if both, the order they received it. We also measured people's biases in two ways, (a) by providing them with outcome information—either that the officer was fired and charged with assault or the citizen was arrested—before they learned about the incident and (b) by measuring people's attitudes toward police officers, the criminal justice system, and authority. We predicted that the misleading information in the officer's report would influence how participants viewed the corresponding BWC footage, ultimately shaping their perceptions of the officer and civilian. We

also predicted that participants would rely on information about the outcome of the interaction and their own biases to interpret the footage. Thus, evidence and biases that engender a favorable impression of the officer will lead people to rely on misinformation that supports that view. Conversely, evidence and biases that prompt the belief that the officer acted inappropriately will lead people to reject the misinformation.

Experiment 1

Method

Participants. We recruited participants from Amazon's Mechanical Turk (MTurk). MTurk is a crowd-sourcing platform that provides diverse samples, producing more generalizable data (Buhrmester, Kwang, & Gosling, 2011). In total, 478 MTurk workers completed the experiment and we compensated them $0.75 for their time. We restricted data collection to individuals residing in the United States and excluded 14.6% participants who failed to follow our instructions or experienced technical difficulties (e.g., video buffering, no sound, or poor internet connection). After these exclusions, our final sample included 408 participants (241 females, 167 males) aged 20–77 years ($M = 41.34$, $SD = 13.22$). Of these, 360 (88.2%) identified as White, 16 (3.9%) as Hispanic/Latino, 32 (7.8%) as Black/African American, 12 (2.9%) as Asian, 1 (0.25%) as Native Hawaiian/Pacific Islander, and 10 (2.5%) as Other. We based our sample size estimate on an a priori G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) analysis with a medium effect size ($f = 0.175$) and 80% power to test for main effects and interactions in a design with eight conditions. Our power analysis calculated a required sample of 360 (45 participants per cell); we increased our collected sample by 33% to account for exclusions (typical of our prior MTurk studies), making our total recruitment 478.

Design. John Jay College's Human Research Protection Program approved our experiment. The experiment design was a 2 (Outcome Information: negative officer outcome vs. negative civilian outcome) × 4 (Source of Evidence: report, video, report + video, or video + report) between-subjects factorial design. For our *negative civilian outcome* manipulation, participants ($n = 208$) learned that the civilian was arrested following his interaction with the officer. For our *negative officer outcome* manipulation, participants ($n = 200$) learned that the civilian was arrested *and* that the officer was fired and charged with one felony count of aggravated assault following the interaction.

For our Source of Evidence conditions, *report* participants ($n = 103$) only read about the interaction via the officer's written report; *video* participants ($n = 100$) only saw the officer's BWC footage. By contrast, participants in the remaining two conditions learned about the interaction from both the officer's report and BWC video but the presentation order depended on their assigned condition. Thus, our design adapted two classic misinformation paradigms. In the Misinformation Effect paradigm (ME; Loftus, 2005), participants are typically shown an event, then given misleading information about that event, and later tested regarding what they remember seeing (video + report condition; $n = 99$). In the Continued Influence Effect paradigm (CIE; Johnson & Seifert, 1994), participants are given misinformation when they learn about an event, and that misinformation is later corrected (report + video condition; $n = 106$). The number of participants for our eight cells ranged from 49 to 56.

Materials. We obtained real BWC footage from YouTube and then submitted a Freedom of Information Request to the Athens-Clarke County Police Department for the accompanying police report. Consistent with our *negative officer outcome*, the officer involved in the actual event was subsequently fired and charged with assault. We have made our materials available on the Open Science Framework (OSF) at osf.io.ud5vc.

The BWC footage. The footage is six min long, with audio, and in color. Briefly, the officer had been called to a hotel to escort an inebriated college-aged male off the property. Both the officer and civilian are White. The incident unfolds when the citizen refuses to cooperate with the officer's instructions. Although he is clearly not violent, he is rambling and incoherent. Apparently frustrated, the officer ultimately responds by forcefully hitting the civilian with his baton until he is on the ground. Once on the ground, the video depicts the civilian bracing himself from the officer's blows. The film ends with the civilian incapacitated and the officer shouting at him to put his hands behind his back.

The officer's written report. The incident report, redacted to conceal any identifying information, describes the same scenario but with several key differences (see OSF for a table delineating the differences). Specifically, the officer's report states,

> At one point [the civilian] turned quickly to face me and stood toward me as if he was going to fight me. He then walked to a side door and tried to enter a code into the keypad. I continued to try to pull his hands behind his back by using my baton to gain leverage under his right arm. At this point, I noticed he was carrying a knife in his pocket. He clenched up and I couldn't get the baton between his arm and body. He hit me again with his elbow so I struck him in the leg and upper body with my baton.

Despite these accusations about the civilian's behavior, the BWC footage does not corroborate any of the claims. In fact, we added the information about the civilian carrying a knife. This piece of misinformation was not in the officer's actual report, and of course, no knife was shown in the video. With a separate group of participants ($n = 43$) we tested whether it was clear that the civilian did not possess a knife in the BWC footage. All participants reported that no knife was present and were confident in their response ($M = 3.98$, $SD = 1.01$; 1 = *Not at all confident*, 5 = *Very confident*).

Measures.

Fact questions. First, participants completed four *fact questions*, which examined participants' general memory for the police–citizen interaction (see Appendix). Specifically, participants answered questions about details that were present in the officer's report and BWC video: where the altercation took place, why the officer wanted the civilian to leave the hotel premises, and why the officer arrested the civilian. Participants selected an answer from five response choices. Additionally, participants

provided a confidence rating for each fact question on a scale ranging from 1 (*Not at all confident*) to 5 (*Very confident*).

Perceptions of the officer. We examined participant's impressions of the officer's culpability and behavior for the event with six questions such as, "How responsible was the officer for escalating the situation" and "Overall, how forceful was the officer?" (see Appendix). We computed participant's average ratings across these six questions to form a *perceptions of the officer* measure with responses ranging from 1 to 9. Higher scores indicated more favorable impressions.

Perceptions of the civilian. We examined participant's impressions of the civilian's culpability and behavior during the event with four questions (see Appendix). For example, we asked participants: "Overall, how threatening was the civilian," "How responsible was the civilian for escalating the situation," and "How violent was the civilian in resisting arrest?" We averaged participant responses to these questions to form our *perceptions of the civilian* measure with responses ranging from 1 to 9. Higher scores indicated more favorable impressions.

Misinformation. We included six multiple-choice questions that contained misinformation (see Table 1). We used these questions to examine the extent to which participants relied on the misinformation contained in the officer's report (see Appendix). We split the multiple-choice answers into two categories: responses that were inconsistent with the BWC footage (but consistent with the officer's report), and responses that were consistent with the BWC footage (but inconsistent with the officer's report). We then formed a composite *misinformation* score by counting the number of questions on which participants selected an answer that was inconsistent with the BWC footage (i.e., answer contained misinformation). Each participant received a score between 0 (no misinformation) and 6 (relied on misinformation for every question), We also asked participants to rate their confidence in their response, 1 (*Not at all confident*) to 5 (*Very confident*) for each question.

Responsible party. Participants' judgments of the cause of the police–citizen interaction were measured by their response to a single multiple-choice question, "What caused the officer to strike the civilian?" We categorized "The officer was frustrated that the civilian wouldn't cooperate," "The civilian resisted arrest," and "The officer was afraid the civilian would escape" as consistent with the BWC footage. By contrast, we categorized "The civilian assaulted the officer" as inconsistent with the BWC footage. Participants were also asked to rate their confidence from 1 (*Not at all confident*) to 5 (*Very confident*). To simplify the analyses reported in the Results section, analyses with the *responsible party* as a dependent measure are available on OSF https://osf.io/7dprs/.

Attitudes and scales. Participants responded to four attitudinal scales that examined their perceptions of police, authority, the criminal justice system, and need for cognition. We included these attitudinal scales as potential measures for individual biases that may affect how participants interpreted the BWC footage. Specifically, people with positive perceptions of police, people submissive to authority, and people with pro-prosecution views would likely have more favorable views of the officer, thereby leading participants to focus on information favorable to the officer. The relationship between misinformation and need for cognition has produced somewhat contradictory results in prior research, depending on the type of false memory paradigm (Hess, Popham, Emery, & Elliott, 2012; Leding, 2011). Thus, we included it here as an exploratory predictor.

Identification with Police Scale (IPS). Tyler and Fagan's (2008) identification with police scale measures the degree to which individuals identify with police (Cronbach's alpha = .87). We used a modified version of the IPS developed by Granot et al. (2014; see Appendix). Higher scores indicate a greater identification with police.

Right Wing Authoritarianism Scale (RWA). The RWA measures right wing authoritarianism ideals for three primary constructs: adherence to legitimate authority, adherence to societal conventions and norms, and hostility and punishment to those that violate those norms (Altemeyer, 1981). We used a shortened version of the RWA developed by Zakrisson (2005; 15 items; Cronbach's alpha = .80).

Juror Bias Scale (JBS). The JBS is a 16-item measure of pre-trial biases toward the prosecution or defense side of a case (Kassin & Wrightsman, 1983). The scale measures participants' implicit threshold for (a) the a priori probability that a defendant committed a crime without any knowledge of the case and (b) the degree of certainty needed to convict (Cronbach's alpha = .81).

Need for Cognition Scale (NFC). We used the revised 18-item NFC scale from Cacioppo, Petty, and Kao (1984) to test peoples' desire to engage in and enjoy effortful thinking (Cronbach's alpha = .90).

Procedure. We told participants that our goal was to understand interactions that occur between police officers and community citizens. We clarified that participants would learn about a real event and answer questions about it. After providing consent, half of the participants (evenly distributed across experimental conditions) responded to the IPS, RWA, JBS, and NFC measures. Participants who did not complete these measures here did so at the end of the survey. We manipulated the position of these surveys to detect any interactions between the experiment's materials and the scales. However, we found no significant interactions, and thus collapse across scale order in our primary analyses.

Next, participants read a short paragraph detailing the outcome of the police–citizen interaction in accordance with their condition assignment (*negative civilian outcome* or *negative officer outcome*). Participants then learned about the interaction by reading the officer's report, watching the BWC footage, or both. Participants in the *report + video* or *video + report* conditions received the first source of evidence, completed a card-flipping task (for 120 s), and then received the second source of evidence. After participants received their assigned source of evidence, all participants completed the same card-flipping task (for 300 s) prior to answering our *fact*, *perception*, *misinformation*, and *responsible party* questions (a diagram of the survey flow is available on OSF at https://osf.io/ynzyv/).

Table 1
Misinformation Items and Responses

Item	Inconsistent with BWC	Consistent with BWC
Which of the following contributed the most to the officer striking the civilian with his baton?	The civilian struck the officer. The civilian had a weapon.	The civilian was uncooperative. The civilian was intoxicated.
Why might the officer have been afraid of the civilian?	Because the civilian had a knife. Because the civilian was verbally threatening the officer.	Because the civilian was drunk. Because the civilian refused to cooperate.
Which of the following do you think contributed the most to the officer's decision to arrest the civilian?	The civilian attacked the officer.	The civilian was very drunk. The civilian was uncooperative. The civilian was trespassing.
Why might civilian feel sorry for the incident?	For attacking the officer.	For walking away from the officer. For drinking too much. For trespassing.
Why was the officer out of breath?	The officer was tired from the civilian's attack.	The officer was out of shape. The officer was tired from arresting the civilian.
What weapon, if any, did civilian have?	A knife.	No weapon.

Results and Discussion

Recall that our primary goals were to test whether people would rely more heavily on BWC footage to glean information about a police–citizen interaction when faced with a discrepant officer's report and whether misinformation would influence people's perceptions of the actors. To address these questions, we first examine participants' general memory for the event via their responses to the *fact questions*. We then turn to our primary dependent measures: *misinformation* and participants' *perceptions of the actors*.[1] Across all of our regression analyses, the *report + video* and *video + report* conditions did not yield significantly different results; however, we did not combine these conditions to avoid large differences in cell sizes. For all analyses, the reference group for Source of Evidence is *report*. We chose this reference category to examine how the addition of BWC footage influenced peoples' understanding of police-encounters.

Fact questions. Overall, participants accurately remembered the key details about the interaction and expressed high confidence ($M_{confidence} = 4.49$, 95% CI [4.43, 4.55]) in their responses; however, participants who received both the report and video were somewhat more confident than participants who only received the BWC video (confidence analyses are available on OSF at osf.io/7dprs/). Over 80% of participants selected the correct answer for each of the four fact question items. A 2×4 ANOVA, however, revealed that participants' responses to the *fact questions* differed between the Source of Evidence conditions, $F(3, 400) = 3.83$, $p < .001$, $\eta^2 = .028$, 90% CI [0.004, 0.05] (for an explanation on 90% CI's see Steiger, 2004). Post hoc comparisons, with Bonferroni adjustment, revealed that *report + video* participants were slightly more accurate in their responses than *video* participants, $M_{diff} = 0.32$, $p = .010$, $d = .386$, 95% CI [0.27, 0.50]. The participants included in the final sample passed all our attentional checks; therefore, although it is still possible video participants paid less attention to the materials, we believe the more likely explanation is that some details were not as obvious in the BWC footage. For example, to answer the question "Why did the officer want to arrest the civilian?" participants who received the officer's report learned exactly what the officer's rationale was for the arrest (public intoxication); by contrast, participants in the video were not given an explicit reason and were left to make their own judgments.

Misinformation. Here, we turn to the extent to which participants relied on the misleading information available in the officer's report. As shown in the two right-most columns of Table 2, under the misinformation heading, *video* participants almost never made a reference to misinformation. By contrast, in the *report* condition, the average misinformation score was approximately 3.5 ($SD_{pooled} = 1.2$) out of six. When participants saw both sources of evidence their scores were in between (at approximately 2; $SD_{pooled} = 1.4$).

To test whether our variables significantly predicted participant's reliance on *misinformation*, we ran a linear regression. Our model included Source of Evidence, negative outcome information, IPS, RWA, JBS, and NFC, and it explained a large amount of the variance in participant's *misinformation* scores, $R^2 = .51$, $F(8, 399) = 52.23$, $p < .001$. Importantly, participants who received the BWC footage on its own or in conjunction with the officer's report selected significantly fewer responses containing *misinformation* than participants who only received the misleading report. Although *report + video* participants reported less *misinformation* than *report* participants, their scores were significantly different from those who were never misled, suggesting the misleading information shaped their inferences about the encounter.

There was no effect of negative outcome information on participants' *misinformation* scores, nor were IPS or RWA significant predictors. NFC and JBS, however, were significant predictors. Greater NFC and JBS scores were associated with participants' recalling more *misinformation*, $t(399) = 2.23$, $p = .026$ and $t(399) = 2.39$, $p = .017$, respectively. The 95% CIs for these predictors, however, were wide and approached zero,

[1] A correlation matrix that describes the relationship between all variables is available on OSF at osf.io/zanx8/.

Table 2
Means and 95% Confidence Intervals for Perception of Civilian, Perception of Officer, and Misinformation for Experiment 1

	Perceptions of civilian		Perceptions of officer		Misinformation	
Source of Evidence	Negative civilian outcome	Negative officer outcome	Negative civilian outcome	Negative officer outcome	Negative civilian outcome	Negative officer outcome
R	4.06	4.29	6.88	5.76	3.60	3.41
	[3.84, 4.28]	[4.04, 4.54]	[6.45, 7.31]	[5.24, 6.28]	[3.26, 3.94]	[3.07, 3.75]
V	4.83	5.37	5.32	4.09	0.31	0.24
	[4.59, 5.05]	[5.04, 5.70]	[4.79, 5.85]	[3.43, 4.75]	[0.06, 0.56]	[0.08, 0.40]
R + V	4.79	4.99	4.95	4.65	2.04	1.80
	[4.51, 5.07]	[4.68, 5.29]	[4.33, 5.57]	[4.04, 5.26]	[1.62, 2.46]	[1.45, 2.15]
V + R	4.76	5.11	5.18	4.49	2.43	2.26
	[4.45, 5.06]	[4.78, 5.44]	[4.56, 5.80]	[3.83, 5.15]	[2.05, 2.81]	[1.90, 2.62]

Note. R = report, V = video, R + V = report + video, and V + R = video + report.

Table 3
Intercorrelations, Means, and Standard Deviations for Scores on the IPS, JBS, RWA, and NFC Scales for Experiment 1

Measure	1	2	3	4	*M*	*SD*
1. IPS	–	.40*	.33*	.09	34.01	8.44
2. JBS	−.08*	–	.61*	−.21	45.48	8.82
3. RWA	.38*	−.20*	–	−.23*	47.15	19.80
4. NFC			–		64.95	14.58
M	35.00	48.27	49.05			
SD	8.61	6.26	18.00			

Note: Intercorrelations for Experiment 1 are presented above the diagonal and intercorrelations for Experiment 2 are presented below the diagonal. Means and standard deviations for Experiment 1 are presented in the columns. Means and standard deviations for Experiment 2 are presented in the rows.
* $p < .01$.

and thus may not be reliable effects. When we excluded NFC from the model, IPS became a significant predictor, suggesting a potential suppression effect, $B = .12$, $SE = .05$, 95% CI [0.02, 0.23], $t(400) = 2.26$, $p = .025$. NFC and IPS, however, were not correlated with one another and both effects were small (see Table 3 for an intercorrelation matrix of the attitudinal scales for both Experiment 1 and 2), so it remains unclear what relationship these variables have to participant's *misinformation* scores. In sum, when participants were exposed to both sources of evidence, the BWC footage appeared to buffer against participant's reliance on the officer's *misinformation*, but it did not eliminate it. Moreover, participants' biases predicted their *misinformation* scores (see Table 4 for regression coefficients).

Moderation of misinformation. We next examined whether our attitudinal scales moderated the relationship between Source of Evidence and *misinformation* scores. We followed Hayes and Preacher's (2014) approach for multicateogrical variables, which revealed a significant Source of Evidence by IPS interaction for *misinformation* scores for the *report + video* condition ($\beta = 0.22$, $t(402) = 2.02$, $p = .044$). This result suggests that participants with higher IPS scores recalled more misinformation than those with average or low scores. No other significant moderation emerged.

Perceptions of the actors. Recall that the *perceptions of the civilian* and *officer* measures tested participants' overall impressions of their actions. The two measures were strongly negatively correlated ($r = -.84$; $p < .001$). Consistent with our predictions, *report* participants formed the most negative impressions of the civilian and the most positive impressions of the officer (see

Table 4
Multiple Regression Analyses Predicting Perception of Civilian, Perception of Officer, and Misinformation for Experiment 1

	Perception of civilian					Perception of officer					Misinformation				
Source of Evidence	*B*	*SE B*	95% CI for *B*		*p*	*B*	*SE B*	95% CI for *B*		*p*	*B*	*SE B*	95% CI for *B*		*p*
			Lower	Upper				Lower	Upper				Lower	Upper	
C	6.37	0.36	5.63	7.07	<.001	2.01	0.75	0.54	3.47	.007	1.70	0.48	0.77	2.64	<.001
V	0.82	0.12	0.57	1.06	<.001	−1.40	0.26	−1.91	−0.90	<.001	−3.21	0.17	−3.53	−2.88	<.001
R + V	0.77	0.12	0.53	1.01	<.001	−1.64	0.25	−2.14	−1.14	<.001	−1.61	0.16	−1.93	−1.30	<.001
V + R	0.79	0.12	0.54	1.03	<.001	−1.55	0.26	−2.06	−1.05	<.001	−1.20	0.17	−1.52	−0.87	<.001
Officer	0.28	0.09	0.11	0.45	.002	−0.74	0.18	−1.10	−0.38	<.001	−0.10	0.18	−0.33	−0.13	.379
IPS	−0.25	0.04	−0.33	−0.17	<.001	0.51	0.09	0.35	0.68	<.001	0.10	0.05	−0.01	0.20	.078
RWA	−0.01	0.04	−0.09	0.08	.909	0.01	0.09	−0.16	0.19	.902	−0.05	0.06	−0.16	0.06	.372
JBS	−0.50	0.11	−0.71	−0.29	<.001	0.99	0.22	0.56	1.42	<.001	0.36	0.14	0.06	0.61	.017
NFC	0.09	0.06	−0.02	0.20	.108	−0.18	0.12	−0.42	0.51	.125	0.17	0.08	0.02	0.32	.026
Adj R^2			.33					.32					.50		

Note. C = constant, V = video, R + V = report + video, V + R = video + report, and Officer = negative officer outcome. Report is the reference group. Negative officer outcome is compared to negative civilian outcome.

Table 5
Estimated Coefficients from PROCESS for Perceptions of the Actors for Experiment 1

Outcome:		*M*			*Y*				
		Coefficient (*SE*)	*p*		Coefficient (*SE*)	*p*		Coefficient (*SE*)	*p*
Civilian									
Constant	i_1	3.50 (0.12)	<.001	i_3	4.17 (0.10)	<.001	i_2	5.14 (0.17)	<.001
Video	a_1	−3.22 (0.17)	<.001	c_1	0.92 (0.14)	<.001	c'_1	0.03 (0.19)	.877
Report + Video	a_2	−1.58 (0.16)	<.001	c_2	0.71 (0.14)	<.001	c'_2	0.27 (0.15)	.065
Video + Report	a_3	−1.16 (0.17)	<.001	c_3	0.76 (0.14)	<.001	c'_3	0.44 (0.14)	.003
Misinformation							b	−0.28 (0.04)	<.001
Officer									
Constant	i_1	3.50 (0.12)	<.001	i_3	6.32 (0.21)	<.001	i_2	4.42 (0.36)	<.001
Video	a_1	−3.22 (0.17)	<.001	c_1	−1.61 (0.30)	<.001	c'_1	0.14 (0.39)	.720
Report + Video	a_2	−1.58 (0.16)	<.001	c_2	−1.52 (0.29)	<.001	c'_2	−0.66 (0.31)	.034
Video + Report	a_3	−1.16 (0.17)	<.001	c_3	−1.50 (0.30)	<.001	c'_3	−0.87 (0.30)	.004
Misinformation							b	0.54 (0.08)	<.001

Note: Civilian = perception of civilian scores, Officer = perception of officer scores, c = relative total effects, and c' = relative direct effects. Standard errors in parentheses are from PROCESS.

Table 2 for means and CIs). Conversely, *video* participants—who were never misled—formed the most positive impressions of the civilian and most negative perceptions of the officer. When participants received both sources of evidence, their *perception* scores were in between, indicating the officer's report influenced participants' impressions of the actors even when they also saw the BWC footage.

To examine the relationship between Outcome Information, Source of Evidence, our attitudinal scales, and *misinformation* scores on participants' overall *perceptions of the officer and perceptions of the civilian*, we ran two identical linear regressions. For both regressions, our predictors were the Outcome Information, Source of Evidence, and the attitudinal scales.

The models explained a large amount of the variance in both *perceptions of the civilian* and *perceptions of the officer* ($R^2 = .34$, $F(8, 399) = 26.10$, $p < .001$ and $R^2 = .38$, $F(8, 399) = 24.51$, $p <$. 001, respectively). Participants in all other Source of Evidence conditions significantly differed from the reference group (*report* condition) and Outcome Information significantly predicted participants' perceptions of the actors. Specifically, participants viewed the civilian more favorably and the officer more negatively when they received the BWC footage (either alone or in conjunction with the report; see Table 4 for *B*s) and when they learned that the officer was fired and charged with assault, civilian: $t(399) = 3.20$, $p = .002$; officer: $t(399) = -4.05$, $p < .001$. Regarding the attitudinal scales, both increasing IPS and JBS scores predicted less favorable views of the civilian, $t(399) = -6.17$, $p < .001$ and $t(399) = -4.75$, $p < .001$, respectively, and more favorable views of the officer, $t(399) = 6.05$, $p < .001$ and $t(399) = 4.50$, $p < .001$, respectively. Thus, the models demonstrated that the (mis)information participants received and their biases significantly predicted their perceptions of the civilian and officer.

Moderation of perceptions of the actors. None of the attitudinal scales moderated the misinformation-perception of the actors relationship.

Influence of misinformation on perceptions of the actors. Next, we examined whether *misinformation* scores mediated the relationship between Source of Evidence and *perception of the actors*. With *perceptions of the civilian* the dependent measure, we observed significant indirect effects relative to the control (*report*) for *video* ($b = 0.89$), *report + video* ($b = 0.44$), and *video + report* ($b = 0.32$) conditions. *Misinformation* scores fully mediated the Source of Evidence–*perception of civilian* relationship for *video* and *report + video* conditions (see Table 5 for estimated coefficients). With perceptions of the officer the dependent measure, we again observed significant indirect effects relative to the *report* condition for *video* ($b = -1.75$), *report + video* ($b = -0.86$), and *video + report* ($b = -0.63$) conditions. Here, *misinformation* scores fully mediated the relationship between BWC video and *perceptions of the officer* (see Table 5 for estimated coefficients).

Thus, relative to the *report* condition, people who saw the BWC footage formed more positive attitudes toward the civilian and more negative attitudes toward the officer as a result of their lower misinformation scores. This result demonstrates that how people learned about the event (i.e., the source of evidence) and the information people remember (i.e., *misinformation* scores) influence judgments of individuals recorded in a police-encounter.

Finally, *misinformation* scores did not mediate any relationship between negative outcome information and *perceptions of the actors*.

Summary. To summarize our results, people were misled by information in the officer's report even when it was not corroborated by the BWC video: participants still reported that the civilian attacked the officer and that the civilian was carrying a knife. These results demonstrate that, to some extent, people rely upon and give weight to information from a written police report even when it is inconsistent with a seemingly more objective source. Moreover, greater identification with police was associated with conclusions about the police–citizen interaction that relied on misinformation from the officer's report.

Table 6
Means and 95% Confidence Intervals for Perception of Civilian, Perception of Officer, and Misinformation for Experiment 2

Source of Evidence	Perceptions of civilian			Perceptions of officer			Misinformation		
	None	Neg. civ.	Neg. off.	None	Neg. civ.	Neg. off.	None	Neg. civ.	Neg. off.
R	4.11 [3.96, 4.26]	3.99 [3.84, 4.14]	4.22 [4.03, 4.41]	6.64 [6.28, 7.0]	6.62 [6.29, 6.95]	5.98 [5.58, 6.38]	3.48 [3.20, 3.76]	3.64 [3.40, 3.88]	3.52 [3.22, 3.82]
V	4.96 [4.73, 5.19]	4.97 [4.77, 5.17]	5.38 [5.16, 5.60]	5.09 [4.60, 5.58]	4.83 [4.37, 5.29]	3.82 [3.39, 4.25]	0.48 [0.28, 0.68]	0.34 [0.13, 0.55]	0.22[0.06, 0.38]
R + V	4.57 [4.35, 4.79]	4.72 [4.51, 4.93]	4.69 [4.46, 4.92]	5.77 [5.30, 6.24]	5.59 [5.12, 6.06]	5.27 [4.80, 5.74]	2.40 [2.05, 2.75]	2.42 [2.07, 2.77]	2.0 [1.68, 2.32]
V + R	4.66 [4.46, 4.86]	4.79 [4.55, 5.03]	4.88 [4.65, 5.11]	5.39 [4.96, 5.82]	5.29 [4.81, 5.77]	4.46 [3.53, 5.39]	2.80 [2.48, 3.12]	2.38 [2.06, 2.70]	2.21 [1.90, 2.52]

Note. R = report, V = video, R + V = report + video, and V + R = video + report. None = no outcome information, Neg. Civ. = negative civilian outcome, and Neg. Off. = negative officer outcome.

Importantly, we found that *misinformation* scores mediated the relationship between Source of Evidence and participants' *perceptions of the actors*. This finding signifies that what people remember, which is partially determined by individual biases, contributes to their understanding of the demeanor and actions of the recorded actors.

Experiment 2

Here, we sought to replicate and extend our findings with an Outcome Information control condition, so that some participants received no negative outcome information. In addition, we asked participants questions to explore whether they noticed inconsistencies between the report and the video and whether those inconsistencies affected their opinion of the police–citizen interaction.

Method

Participants. We recruited 1465 participants from MTurk. Again, we restricted data collection to the United States. We excluded participants who did not follow instructions (e.g., took notes or used the web browser during the experiment) or experienced technical difficulties (e.g., no sound or video buffering; $n = 257$) or failed our attentional checks ($n = 203$; Oppenheimer, Meyvis, & Davidenko, 2009). Additionally, we excluded participants who did not meet juror qualification criteria ($n = 149$). The final sample ($N = 947$) consisted of 336 males and 611 females aged 18–79 ($M = 37.7$, $SD = 12.0$). The sample was somewhat more diverse than Experiment 1: 756 (79.8%) identified as White, 51(5.4%) identified as Hispanic/Latino, 81 (8.6%) identified as Black/African American, 35 (3.7%) identified at Asian, 2 (0.21%) identified as Pacific Islander, and 22 (2.3%) identifying as Other. Our sample size was based on results from a G*Power analysis (Faul et al., 2007) to test for interactions and main effects, estimating a small effect ($f = 0.125$) and 80% power. Our analysis required a total sample of 879 (110 per cell); we increased the sample by 33% to account for a predicted 25% (based on prior MTurk studies) exclusion rate.

Design. The design of Experiment 2 generally replicated Experiment 1 but with the addition of a *no outcome* condition. We added this condition to determine participants' unbiased opinions of the report and video. Thus, Experiment 2 followed a 3 (Outcome Information: negative officer outcome, negative civilian outcome, or no outcome) × 4 (Source of Evidence: report, video, report + video, or video + report) between-subjects factorial design. The cell sizes for our 12 conditions ranged from 74 to 82 participants. *No outcome information* and *report* conditions served as our reference groups.

Measures. In addition to the experimental measures described in Experiment 1, we asked participants about their overall impressions of the officer's report and the BWC footage. We were primarily interested in participants' judgments about the consistency between the report and BWC video and their confidence that the evidence sufficiently described the interaction. We also did not include the NFC to allow time for our

additional experimental measures. Participants answered the new measures at the end of the experiment, prior to debriefing.

Consistency between report and video. For participants who received a second source of evidence (report or BWC video), we examined the extent to which they thought the first source was consistent with the second by asking, "To what extent was the report [BWC footage] consistent with the BWC footage [report]?" Response options ranged from 1 (*Not at all consistent*) to 5 (*Very consistent*).

Confidence. We asked two questions to examine the extent to which participants were confident that the report described what actually happened and the extent to which participants were confident that the video captured everything that happened, 1 (*Not at all confident*) to 5 (*Very confident*). These analyses are available on OSF at osf.io/7dprs/.

Opinion change. Participants who received both forms of evidence were asked if the second source of evidence changed their opinion of the first. Participants were asked to respond "No" or "Yes" and, if they responded in the affirmative, they were prompted to explain why the information altered their opinion.

Results and Discussion

Fact questions. Overall, 84% of participants accurately answered the four fact questions and were confident in their responses, ($M_{\text{confidence}} = 4.55$, 95% CI [4.51, 4.58]). As in Experiment 1, participants who received both sources of evidence were significantly more confident than participants who only received the video (confidence analyses are available on OSF at osf.io/7dprs/). An ANOVA on accuracy of participants' responses to the *fact questions* indicated a significant main effect of Source of Evidence, $F(3, 935) = 3.38$, $p < .018$, $\eta^2 = .011$, 90% CI [0.001, 0.022]. Pairwise comparisons with Bonferroni adjustment revealed *video* participants were significantly less accurate than *video + report* participants ($M_{\text{diff}} = 0.07$, $d = .127$, 95% CI [0.078, 0.177], $p = .046$). This finding provides support for the notion that some information was less salient, or more ambiguous, in the BWC video.

Misinformation. In line with the results from Experiment 1, and demonstrated in the two right-most columns in Table 6, *video* participants almost never referred to *misinformation*. *Report* participants had the highest *misinformation* scores, approximately 3.5 ($SD_{\text{pooled}} = 1.2$) out of six. Participants in the *report + video* and *video + report* conditions had *misinformation* scores that were in between (at approximately 2; $SD_{\text{pooled}} = 1.5$) *report* only and *video* only participants.

To determine the relationship between *misinformation* scores and Source of Evidence, Outcome Information, IPS, RWA, and JBS, we conducted a multiple linear regression. The model explained 47% of the variance of *misinformation* scores, $R^2 = 0.47$, $F(8, 938) = 103.69$, $p < .001$. Replicating Experiment 1, *report + video* and *video + report* participants relied less on the misleading information from the officer's report than *report* participants, yet these participants still referred to some of the misinformation to make sense of the interaction. Here, however, negative outcome information influenced participants' *misinformation* scores, such that when participants learned that the officer was fired and charged with assault, they relied less on the information provided in his report, $t(938) = -2.84$, $p = .005$. Conversely, participants who more strongly self-identified with police, as indicated by their IPS scores, had larger *misinformation* scores, suggesting that people who identified with police were more likely to rely on information provided by the officer $t(938) = 4.51$, $p < .001$ (see Table 7 for *B*s). Importantly, these results suggest that the BWC footage helped correct misinformation in the officer's report but did not entirely eliminate it from participants' inferences about the recorded altercation. Moreover, participants' biases still influenced what they remembered.

Moderators of misinformation. Unlike Experiment 1, the attitudinal scales did not moderate the relationship between Source of Evidence and *misinformation* scores.

Perceptions of the actors. Consistent with the results of Experiment 1, *perceptions of the civilian* and *perceptions of the officer* shared a strong negative relationship ($r = -.80$; $p < .001$). Again, *video* (see Table 6 for means and CIs) participants formed the most favorable *perceptions of the civilian* and least favorable *perceptions of the officer*, while *report* participants reversed that pattern. Participants who received both the report and video formed impressions of the civilian and the officer that were in between *video* only and *report* only *perception* scores.

To determine the relationship between our experimental manipulations and *misinformation* scores on *perceptions of the actors*, we regressed *perception of civilian* and *perceptions of the officer* onto Outcome Information, Source of Evidence, IPS, RWA, and JBS in two regressions. The two models fit the data well, explaining 29% of the variance in *perception of the civilian*, $R^2 = .28$, $F(8, 938) = 47.51$, $p < .001$ and 31% of the variance in *perception of the officer*, $R^2 = .31$, $F(8, 938) = 53.44$, $p < .001$. The results replicated Experiment 1: compared to participants who did not receive information about the outcome, participants who learned the officer was fired perceived him more negatively and the civilian more positively, officer: $t(938) = -4.87$, $p < .001$; civilian: $t(938) = 2.87$, $p = .004$. On the other hand, information that the civilian was arrested likely did not influence participants' perceptions because they may have assumed that outcome from watching the BWC footage. For our Source of Evidence manipulation, all conditions significantly differed from the *report* condition in both models (see Table 7 for *B*s). These findings suggest that watching the BWC footage in conjunction with reading the officer's report influenced people's *perceptions of the actors* and their roles in the altercation. Although participants who received both the report and video viewed the actors differently than participants who only received the misleading report, their *perceptions of the actors* still differed from participants who were never misled. For our attitudinal scales, both IPS and RWA significantly predicted *perception of the actors* scores. That is, higher IPS and RWA scores were associated with more negative impressions of the civilian, $t(938) = -8.64$, $p < .001$ and $t(938) = -6.72$, $p < .001$, respectively, and more positive impressions of the officer, $t(938) = 11.06$, $p < .001$ and $t(938) = 6.56$, $p < .001$, respectively.

Moderators of perceptions of the actors. We ran moderations to determine whether the attitudinal scales moderated the

Table 7
Multiple Regression Analyses Predicting Perception of Civilian, Perception of Officer, and Misinformation for Experiment 2

Source of Evidence	Perceptions of civilian					Perceptions of officer					Misinformation				
	B	*SE B*	95% CI for *B*		*p*	*B*	*SE B*	95% CI for *B*		*p*	*B*	*SE B*	95% CI for *B*		*p*
			Lower	Upper				Lower	Upper				Lower	Upper	
C	5.55	0.27	5.03	6.07	<.001	2.87	0.54	1.80	3.94	<.001	2.47	0.40	1.69	3.26	<.001
V	0.95	0.08	0.79	1.10	<.001	−1.71	0.16	−2.02	−1.40	<.001	−3.18	0.12	−3.41	−2.95	<.001
R + V	0.54	0.08	0.39	0.69	<.001	−0.85	0.16	−1.16	−0.54	<.001	−1.27	0.12	−1.50	−1.04	<.001
V + R	0.60	0.08	0.45	0.75	<.001	−1.03	0.16	−1.35	−0.72	<.001	−1.05	0.17	−1.28	−0.82	<.001
Civ.	0.02	0.07	−0.11	0.15	.741	−0.10	0.14	−0.37	0.17	.450	−0.08	0.10	−0.28	0.12	.427
Off.	0.19	0.07	0.06	0.32	.004	−0.67	0.14	−0.93	−0.40	<.001	−0.28	0.10	−0.48	−0.09	.005
IPS	−0.21	0.02	−0.25	−0.16	<.001	0.55	0.05	0.45	0.64	<.001	0.16	0.04	0.09	0.23	<.001
RWA	−0.17	0.03	−0.22	−0.12	<.001	0.34	0.05	0.24	0.44	<.001	0.05	0.04	−0.03	1.22	.200
JBS	0.03	0.07	−0.11	0.17	.638	−0.03	0.15	−0.32	0.26	0.825	0.07	0.11	−0.14	0.28	.522
Adj. R^2			.28					.31					.46		

Note. C = constant, V = video, R + V = report + video, V + R = video + report, Civ. = negative civilian outcome, and Off. = negative officer outcome. Report and no outcome information are the reference groups.

relationship between *misinformation* scores and *perceptions of the actors*. Here, a *misinformation* by RWA interaction was a significant predictor of participants' *perceptions of the officer*, $\beta = -0.09$, $t(943) = -3.04$, $p = .002$. *Misinformation* was a positive and significant predictor of *perceptions of the officer* at each level of the moderator, but the effect was the largest for those with lower RWA scores, $\beta = 0.59$, $t(943) = 11.99$, $p < .001$. Although our regressions revealed that IPS was a significant predictor of both participants' *misinformation* and *perceptions of the actors* scores, IPS might not have significantly moderated the relationship between these variables because IPS scores were negatively skewed ($M = 4.99$, $Mdn = 5.14$).

Influence of misinformation on perceptions of the actors. Next, we investigated whether *misinformation* mediated the relationship between Source of Evidence and *perceptions of the actors*. With *perceptions of the civilian* the dependent measure, we observed significant indirect effects relative to the control (*report* condition) for those assigned to *video* ($b = 0.74$), *report + video* ($b = 0.30$), and *video + report* ($b = 0.25$) conditions. The direct effect remained significant for all conditions, indicating that *misinformation* partially mediated the Source of Evidence–perceptions of the civilian relationship (see Table 8 for estimated coefficients). With perceptions of the officer the dependent measure, we observed significant indirect effects relative to the control for the *video* ($b = -1.59$), *report + video* ($b = -0.63$) and *video + report* ($b = -0.54$) conditions. Here, *misinformation* scores fully mediated the Source of Evidence–perceptions of the officer relationship for the *video* and the *report + video* conditions (see Table 8 for estimated coefficients).

Consistent with Experiment 1, relative to the *report* condition, those who saw the BWC footage formed attitudes toward the civilian that were more favorable and attitudes toward the officer that were more negative as a result of their lower *misinformation* scores. Unlike Experiment 1, a mediation revealed *misinformation* scores partially mediated the relationship between *negative officer outcome* and *perceptions of the officer*. Relative to the *no outcome* condition, participants who learned that the officer was fired formed more negative impressions of the officer as a result of lower misinformation scores ($b = -0.14$; direct effect = -0.57, $p < .001$).

Consistency. On average, participants expressed that the video was somewhat consistent with the police report ($M = 3.82$, 95% CI [3.72, 3.92]). No significant differences emerged between *report + video* and *video + report* conditions. Surprisingly, we found that IPS and RWA scores predicted participants' impressions of consistency between the evidence. Participants with greater identification with police officers were more likely to evaluate the report as consistent with the video, $t(382) = 4.88$, $p < .001$. Similarly, higher RWA scores predicted higher ratings of consistency, $t(382) = 2.83$, $p = .005$ (for a table of the results, see OSF at https://osf.io/gbkvz/).

Opinion change.

Report + video. We tested whether participants in our *report + video* condition felt that watching the film after reading the officer's report changed their opinion of the incident. A logistic regression revealed IPS and RWA were significant predictors (for a table of the results, see OSF at https://osf.io/gbkvz/). Both an increase in IPS (OR = 1.28, $p = .041$) and RWA (OR = 1.49, $p = .003$) multiplied the odds of a response that the video did not change their opinion of the incident. To summarize, participants who had pro-police attitudes seemed to rely most on the report.

Video + report. Next, we tested whether participants in our *video + report* condition felt that reading the report after watching the film changed their opinion of the incident. Again, RWA and IPS were significant predictors (for a table of the results, see OSF at https://osf.io/gbkvz/). Here, increasing IPS was associated with a greater likelihood of a response that the report did change their opinion of their incident (OR = 1.42, $p = .015$). Higher RWA scores, however, decreased the odds of a response that the report changed their opinion (OR = 0.66, $p = .004$). Again, participants who had pro-police attitudes appeared to rely most on the report; they indicated that the report changed their opinions when it was presented after the BWC video. Those with lower IPS scores seemed to show the opposite pattern: the BWC footage appeared to motivate their understanding of the

Table 8
Estimated Coefficients from PROCESS for Perceptions of the Actors for Experiment 2

Outcome:		*M*			*Y*				
		Coefficient (*SE*)	*p*		Coefficient (*SE*)	*p*		Coefficient (*SE*)	*p*
Civilian									
Constant	i_1	3.55 (0.08)	<.001	i_3	4.11 (0.06)	<.001	i_2	4.93 (0.10)	<.001
Video	a_1	−3.20 (0.12)	<.001	c_1	0.99 (0.08)	<.001	c'_1	0.25 (0.11)	.019
Report + Video	a_2	−1.27(0.12)	<.001	c_2	0.55 (0.08)	<.001	c'_2	0.26 (0.08)	.002
Video + Report	a_3	−1.08 (0.12)	<.001	c_3	0.67 (0.08)	<.001	c'_3	0.42 (0.08)	<.001
Misinformation							b	−0.23 (0.22)	<.001
Officer									
Constant	i_1	4.65 (0.21)	<.001	i_3	6.41 (0.13)	<.001	i_2	4.65 (0.21)	<.001
Video	a_1	−3.20 (0.12)	<.001	c_1	−1.82 (0.18)	<.001	c'_1	−0.23 (0.23)	.319
Report + Video	a_2	−1.27 (0.12)	<.001	c_2	−0.87 (0.18)	<.001	c'_2	−0.24 (0.18)	.187
Video + Report	a_3	−1.08 (0.12)	<.001	c_3	−1.20 (0.18)	<.001	c'_3	−0.66 (0.18)	<.001
Misinformation							b	0.50 (0.05)	<.001

Note: Civilian = perception of civilian scores. Officer = perception of officer scores. c = relative total effects. c' = relative direct effects. Standard errors in parentheses are from PROCESS.

encounter, regardless of whether it was presented before or after the report.

General Discussion

What do people remember about a police–citizen interaction when an officer's misinformation is not corroborated by BWC footage? Our results suggest BWC footage can prevent and correct misinformation up to a point. Participants who viewed both sources of evidence relied less on *misinformation* than those who only received the officer's report. Yet viewing BWC footage did not *eliminate* the effect of misinformation—a result consistent with previous work on the effect of retracted misinformation (cf. Lewandowsky et al., 2012). Some participants who saw the BWC video were still misled by the officer's report: they claimed the civilian had a knife and struck the officer, both of which were not shown in the video. Although the BWC footage did not depict evidence supporting the officer's claims, some of his account of the incident was nevertheless conceivable. Comparably, research on misinformation demonstrates that misleading information that provides a plausible and causal narrative is more likely to influence subsequent inferences (Hinze, Slaten, Horton, Jenkins, & Rapp, 2014; Johnson & Seifert, 1994). Here, the officer's incident report provided a causal explanation for his actions, which might have been easier for some to accept because it portrayed the officer in a favorable light.

For example, participants' attitudes toward police officers predicted their reliance on misinformation to explain the recorded encounter—a finding that is consistent with research that suggests that previously held beliefs influence how people process (mis)information (Kull, Ramsay, & Lewis, 2003; Nyhan & Reifler, 2010; Travis, 2010). In one experiment, Ecker, Lewandowsky, Fenton, and Martin (2014) found that people's pre-existing racial attitudes predicted their reliance on race-related misinformation. Likewise, these data fit with those reported by Granot, Balcetis, Schneider, and Tyler (2014): people who identified with police were more likely to indicate the officer was justified in his use of force when they fixated on the officer. In addition, Kahan, Hoffman, and Braman (2009) examined people's impressions of the dashboard footage at the heart of the *Scott v. Harris* (2007) Supreme Court case. Briefly, the video depicted the officer using his bumper to hit the rear of the suspect's car during a high-speed chase. The Supreme Court ruled that "no reasonable juror" would view the video and conclude that the officer's force violated the Fourth Amendment. By contrast, Kahan et al. (2009) demonstrated that people's conclusions were predicted by their demographics, cultural worldviews, and political ideologies.

Although these patterns of results are predictable, they are nonetheless important because people believe that BWC footage should eliminate biases from impacting peoples' judgments of police interactions. Yet, our results demonstrate that people do not view BWC footage in a vacuum; rather, contextual information and biases shape the information that people remember about a recorded police event, which in turn influences evaluations of both the involved actors. In other words, the presentation of evidence (i.e., misinformation) impacted what participants remembered, which in turn influenced their subsequent evaluations of the officer and civilian. Specifically, people who received the officer's misleading report relied more on misinformation, which led them to view the officer more favorably and the civilian less favorably. These results suggest that in addition to the presence of misinformation, the information that people encode and later recall—partially determined by people's biases—shapes the inferences drawn.

Similarly, participants who knew that the officer was charged with assault and fired formed more negative views of the officer as a consequence of recalling fewer details containing misinformation. Because negative information about the officer influenced each source of evidence condition, confirmation bias and discounting evidence from less credible sources could explain our results (Nickerson, 1998; Pornpitakpan, 2004). We suspect participants treated the outcome information as a hypothesis that the officer was at fault in the altercation and in turn relied more heavily on evidence from the BWC video to support their expectations (e.g., Charman, Gregory, & Carlucci,

2009; Lindsay, Lim, Marando, & Cully, 1986). Thus, cognitive and social factors interact to create a tangled path for understanding recorded police events that is based on existing biases, expectations, and accessibility of information in memory.

Our two experiments have several limitations. First, our goal was to replicate how people learn about altercations that occur between civilians and police, and thus we did not explicitly correct misleading information in the officer's statement (Johnson & Seifert, 1994). Instead, participants—assuming they noticed differences between the evidence—were left to judge the accuracy of the officer's report by comparing the facts in the statement to what was depicted in the BWC. If we had stated that the report contained inaccuracies, participants may have been less likely to rely on the officer's account to interpret the footage. However, research on retractions demonstrates that it is difficult to correct misinformation when there is no alternative account. Thus, providing the civilian's testimony of the incident might more effectively reduce reliance on misinformation (Ecker et al., 2014; Johnson & Seifert, 1994). Second, we cannot conclude that participants who justified the officer's use of force actually remembered seeing the civilian strike the officer or a knife in the BWC video. We did not specifically test participant's memory, only the inferences they drew. Therefore, we cannot speak to the mechanisms underlying participants' reports of the misinformation. It is certainly plausible that they mistakenly remembered seeing a knife, an error in source monitoring (Johnson et al., 1993; Lindsay, 2008). Alternatively, participants may have believed the officer that a knife was present even though they could not see it in the video. Of course, because participants' attitudes toward the police predicted the likelihood they would report the knife, not all participants were willing to give the benefit of the doubt. Future research should address whether people can separate evidence depicted in BWC footage from other sources of information. That is, are people able to distinguish information depicted by BWC footage from potentially more biased sources of evidence or are the sources sometimes conflated? If it is the latter—and people make source monitoring errors when camera footage is available—then the probative value of BWC footage could be limited.

Despite these limitations, our findings have implications for BWC footage in the news and the courtroom. Given that we often learn about and view recorded police–citizen encounters in the news, the information that journalists and reporters provide in addition to the BWC footage could skew the inferences people form. Similarly, as BWC footage makes its way into the courtroom, information in an officer's testimony or learning the police department's response to an incident could bias jurors' interpretation of the BWC footage. While our results surely have consequences for how jurors consider BWC footage, we acknowledge that the majority of cases involve negotiations between prosecutors and defense attorneys during plea bargaining (Devers, 2011). In fact, reviews of the costs and benefits of implementing BWCs posit that BWC footage will increase the number of cases settled through guilty pleas (IACP, 2014; Miller et al., 2014; White, 2014). The results of our research suggest that lawyers' views of police officers could shape what they remember, which in turn could influence the negotiation process.

Here, we show that third party observers rely on their distorted memories and biases to understand BWC footage. Future research should investigate the extent to which motivated actors (such as officers or suspects) do the same. For example, could officers maintain or amplify misinterpretations of an encounter after viewing their BWC footage? Our results, along with other findings on memory, suggest they may—which is important because officer access to BWC footage is a point of contention: many police departments encourage officers to preview footage in use-of-force cases prior to making a statement so that their reports are consistent with video evidence (BWC Policy Scorecard, 2016). In direct contrast, civil liberty groups argue that such policies obstruct the truth-seeking process and give officers the opportunity to justify illegitimate actions (Stanley & Bibring, 2015). The Seattle Police Department, for example, stalled their BWC program because of disagreements on this issue (Miletich, 2017). In our view, and like other researchers have recognized, evidence should be independent and protected from contamination (Pezdek, 2015). Legal precedent asserts that the reasonableness of force depends upon officers' perceptions and expectations *in the moment* of an altercation, "rather than with the 20/20 vision of hindsight" (*Graham v. Connor*, 1989). Reviewing BWC footage is likely to irrevocably alter an officer's perceptions of an incident: officers may omit forensically useful information they remember that is not visible in the footage or provide information that was never encoded (Grady, Butler, & Loftus, 2016). For example, Hope et al. (2016) found that officers instructed to respond to a scenario showed increased stress and recalled fewer accurate details than officers instructed to observe the scenario. Thus, it is likely that discrepancies will arise between an officer's memory and incident report and the corresponding BWC footage.

In summary, our research suggests that BWC footage is ripe for interpretation. It appears difficult to set aside our general biases and any specific information we learn about the incident. We see what we believe we will see.

Conflict of Interest Statement

The authors declare no conflict of interest.

Author Contributions

All authors contributed to the study design. K.J. performed the data analysis and interpretation, with assistance from W.C. under the supervision of D.S.K.J. drafted the manuscript, and W.C. and D.S. provided critical revisions. All authors approved the final version of the manuscript for submission.

Appendix.

Fact Questions

Where did the altercation take place?
Why did the officer want the civilian to leave?
Where did civilian live?

Why did the officer arrest civilian?
Why couldn't the officer get a good grip on civilian? (filler)
What did the officer find in civilian's wallet? (filler)

Perceptions of Civilian Questions

How responsible was the civilian for escalating the situation? (Reverse scored)
On a scale of 1–9 how violent was the civilian in resisting arrest? (Reverse scored)
Overall, how cooperative was the civilian?
Overall, how threatening was civilian? (Reverse scored)

Perceptions of Officer Questions

On a scale of 1–9 how warranted do you think the officer's use of force on civilian was?
How responsible was the officer for escalating the situation? (Reverse scored)
Overall, how forceful was the officer? (Reverse scored)
Overall, how professional was the officer?
Overall, how reasonable was the officer?
Overall, how appropriate were the officer's actions?

Misinformation Questions

Which of the following do you think contributed the most to the officer's decision to arrest the civilian?
The civilian was very drunk
The civilian attacked the officer
The civilian was uncooperative
The civilian was trespassing

Which of the following contributed the most to the officer striking the civilian with his baton?
The civilian struck the officer
The civilian was uncooperative
The civilian was intoxicated
The civilian had a weapon

Why might civilian feel sorry for the incident?
For walking away from the officer
For drinking too much
For trespassing
For attacking the officer

Why was the officer out of breath?
The officer was out of shape
The officer ran up and down stairs (filler)
The officer was tired from civilian's attack
The officer was tired from arresting civilian

Why might the officer have been afraid of the civilian?
Because the civilian was drunk
Because the civilian was verbally threatening the officer (filler)
Because the civilian had a knife
Because the civilian refused to cooperate

What weapon, if any, did the civilian have?
A knife
A handgun (filler)
Pepper spray (filler)
No weapon
Information not mentioned (filler)

Responsible Party Question

What caused the officer to strike the civilian?
The officer was frustrated with civilian wouldn't cooperate
Civilian resisted arrest
Civilian assaulted the officer
The officer thought civilian was going to escape the situation

Consistency and Opinion Change Questions

How consistent was the body camera video with the police report?
How confident are you that the report describes what actually happened?
How confident are you that the video captured everything that happened?
Did reading the officer's report after watching the film change your opinion of the incident?
Did watching the film after reading the officer's report change your opinion of the incident?

Identification with Police Scale (IPS)

1. If you talked to most police officers, you think you would find that they have similar views to your own on many issues
2. Your background is similar to that of most police officers
3. You can usually understand why police officers, in general, are acting as they are in a particular situation.
4. You generally like most police officers that you encounter.
5. Most police officers would approve of how you live your life.
6. If most officers knew you, they would respect your values.
7. Most police officers would value what you contribute to your community.

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