



Guns, Gloves, and Tasers: Perceptions of Police Officers and Their Use of Weapon as a Function of Race and Gender

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Abstract

The purpose of the present studies was to examine how officer characteristics influenced mock jurors' judgments in a police use of force case. In study 1 ($N = 356$), we examined officer race, suspect race, and weapon type (gun vs. taser vs. assault gloves), and in study 2 ($N = 352$) we examined officer gender, weapon type, and whether the officer was on or off duty. In both studies, participants read a case summary concerning police use of force where the suspect/victim died from his injuries. In study 1, mock jurors were more likely to vote guilty when the officer was White as well as when a gun was used. The officer was perceived most favorably when he was Black and a taser or assault gloves were used compared to a gun. Mock jurors' attitudes toward the police also were examined and were found to be related to mock jurors' guilt ratings and perceptions of the officer. In study 2, mock jurors were more likely to vote guilty for the defendant when the officer was male, off duty, and the weapon used was a gun. Mock jurors also viewed the police officer more negatively when he was off duty as well as when a gun was used. Overall, this study is the first to our knowledge to systematically vary both officer characteristics and suspect/victim characteristics and the results suggest that both have the capacity to influence how use of force cases are perceived by potential jurors.

Keywords Use of force · Juror decision-making · Officer race · Victim race · Gender · Police legitimacy

Use of force can be defined as “that amount of effort required by police to compel compliance from an unwilling suspect” (International Association of Chiefs of Police, 2012, p. 14). Highly publicized instances of police use of force have led the public to question what situations justify a police officer's decision to use deadly force and whether officer and suspect characteristics, either consciously or subconsciously, influence the officers' decisions. The majority of research examining use of force examines (1) archival data concerning actual use of force, or (2) public perceptions of use of force, with limited research examining how jurors perceive use of force cases, even though cases of this nature may end up before the courts and decided by jurors. The purpose of the current program of research was to examine key variables that are

prevalent in real-life high-profile cases that may influence mock jurors' decision-making in a use of force case.

Increasingly, cell phones are being used to record interactions between police officers and members of the public. It is not uncommon for video recordings of lethal interactions to end up on the Internet for public dissection. These recordings may shape the public's perception around the factors that give rise to a police officer's use of force. For example, in July 2016, Philando Castile was shot and killed during a traffic stop with his girlfriend, and her four-year-old daughter, in the car; the girlfriend live-streamed part of the interaction with the officer on Facebook (Raddatz, 2019). Castile was pulled over and informed the officer that he did have a firearm in his vehicle, and while reaching for his license and registration—while also informing the officer that was what he was reaching for—the officer shot Castile seven times. When examining general perceptions of police use of force incidents, such as the incident with Castile, researchers find that those who report hearing about police misconduct on the news are more likely to believe that it is more prevalent than those who do not report hearing about it on the news (Weitzer & Tuch, 2004). While the current study did not examine the influence of media, it is

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important to examine the common variables in the highly publicized cases of use of force and how they may influence juror decision-making.

Recent, highly publicized events in which White police officers have used force against Black suspects, resulting in the suspect's death, have brought discussions of racism and use of force in policing to the forefront of social media in North America. For example, an 18-year-old African American teenager named Michael Brown was shot and killed by a White police officer, sparking protests and riots in the city of Ferguson, Missouri. Eric Garner, a 43-year-old African American man, was selling cigarettes when a White police officer placed him in a chokehold, resulting in his death (De Pinto, Dutton, Salvanto, & Backus, 2014). These are two examples that have contributed to the #BlackLivesMatter movement, social unrest, and calls for reform in policing.

These incidents of police use of force are not unique to the USA. Between 2000 and 2017, there were a reported 460 *fatal* interactions between civilians and police in Canada, with Toronto having the highest number (Kim, 2019). In Vancouver, Canada, in 2015, Myles Gray was a victim of a violent altercation with eight police officers that resulted in Gray having many serious injuries which later led to his death (Kim, 2019). Gray was unarmed in his backyard when the altercation took place, and the officers showed up due to a complaint of a distraught man causing a disturbance (Olver, 2016). Throughout the altercation, Gray was becoming agitated due to the fact police were there to arrest him. Roughly four years later, the case is at a standstill and no charges have been brought.

Perceptions of Police

Instances such as those described above can influence public perceptions of police. While they tend to be positive, various contextual factors can shift positive views of police toward more negative views. For example, teenagers and younger adults tend to view police more negatively than older adults (Hurst & Frank, 2000; Hurst, Frank, & Browning, 2000; Mbuba, 2010). Suspect demographics such as race, socioeconomic status, and education also have been shown to impact perceptions of police officers (Callanan & Rosenberger, 2011; National Institute of Justice, 2003). Furthermore, prior contact with police—particularly, prior negative contact—can also impact public perceptions of police competency and fairness.

For example, Alalehto and Larsson (2016) examined the trust in police across 27 European countries to determine whether the perception of police corruption influenced perceptions of trust in the police, procedural justice, and police competence. Kautt (2011) examined the public's confidence in the British police. Both Alalehto and Larsson (2016), as well as Kautt (2011), found that having negative experiences

with police and having higher perceptions of police corruption does lead to a decreased trust in the police and confidence in their procedural justice. Li, Ren, and Luo (2016) drew upon the negativity bias theory (i.e., a bad event is stronger than a good event) and examined how the nature and quality of police-citizen encounters influenced public satisfaction with police. As predicted, Li and colleagues found that when citizens reported negative experiences with police, their ratings of the police were much lower regardless of whether the police or citizen initiated the contact; however, the effect was stronger when the police initiated the contact.

Brandl, Frank, Worden, and Bynum (1994) examined global and specific attitudes toward police between 1990 and 1991. The authors found that global and specific attitudes toward the police share a reciprocal relationship, where each attitude influences the other; however, the relationship between the impacts of global attitudes on specific attitudes is stronger. Global attitudes toward police may be shaped by the highly publicized use of force cases described above, which in turn can impact how people perceive specific interactions with police.

Perceptions of Police Use of Force

When specifically examining public perception of use of force, the public is more supportive of it when the interaction is violent, threatening to the police officer, and the suspect had displayed prior dangerousness (Cullen et al., 1996). While research has primarily focused on suspect characteristics and perceptions of use of force, far less research has examined *officer* characteristics. Research examining race and police use of force has found that people of color are disproportionately more likely to have force used against them than their White counterparts (Fryer, 2018; Ross, 2015). Fryer (2018) empirically examined racial differences in police use of force from the New York City's Stop and Frisk program and Police-Public Contact Survey as well as event summaries of officer-involved shootings across the USA and civilian-police interactions in Houston, Texas. When examining non-lethal use of force, both Black and Hispanic individuals were more than 50% likely to have experienced some form of use of force. However, when examining officer-involved shootings, no racial differences were found (Fryer, 2018). Other researchers, however, have found a racial bias in police homicide of men of color who are also unarmed (Ross, 2015). Using the US Police-Shooting Database (USPSD), Ross (2015) found that Black or Hispanic men who are unarmed have a greater probability of being shot by police than White men who are unarmed.

Khram and Tillyer (2010) conducted a content analysis of use of force studies published between 1995 and 2008 and found that suspect race and officer gender were poor

predictors of whether use of force would be used. Male suspects, those who were intoxicated, offered resistance, or arrested during their encounter with police were much more likely to experience police force (Khlam & Tillyer, 2010, p. 227). Bolger (2015) conducted a meta-analytic review of police officer use of force ($k = 19$) and factors that may influence the officers' decisions to engage in use of force. In regard to suspect race, Bolger found that minorities are more likely to have force used against them. Although people of color are more likely to have force used against them, it is unclear how jurors may *perceive* the use of force in conjunction with officer race.

Research examining general perceptions of use of force and suspect race have produced mixed results. For example, Girgenti-Malone, Khoder, Vega, and Castillo (2017) found that college students' perceptions of use of force did not vary when the suspect was White, Black, or Hispanic. However, when participant race is taken into account, researchers have found that this is predictive of how the police are viewed with Black individuals being more likely than Whites to display negative attitudes toward the police (e.g., Weitzer & Tuch, 1999, 2004). Huff, Alvarez, and Miller (2018) examined mock jurors' perceptions of police use of force when the shooting was justified vs. unjustified and the suspect/victim was White vs. Black. Huff and colleagues found a pro African American suspect/victim bias whereby mock jurors were more certain in their guilty verdicts, viewed the shooting as unjustified, and held more favorable perceptions of the suspect/victim. Huff and colleagues attribute this to *The Bandwagon Effect* which suggests that strongly held public attitudes result in more strongly held individual attitudes (Myers, Wojcicki, & Aardema, 1977).

While the majority of researchers have examined suspect race, it is also important to examine how the officers' race influences perceptions of use of force. Extrapolating from the juror decision-making literature, minority defendants (non-officers) are typically given more guilty verdicts and harsher sentences (Devine & Caughlin, 2014; Mitchell, Haw, Pfeifer, & Meissner, 2005; Pfeifer & Ogloff, 2003). Early research examining use of force incidents has produced mixed results. For example, some research has found no role of officer or suspect race in use of force incidents (Garner et al., 1996) or that officers were more likely to use force in their own racial groups (Alpert and Dunham, 2004). To our knowledge, very few researchers have examined how the race of an officer influences perceptions of police use of force when suspect race also is varied. Levin and Thomas (1997) did, however, examine how the race of the officer influenced perceptions of use of force when the suspect was a Black male. Participants, both Black and White, were more likely to perceive the altercation as violent and illegal when both of the arresting officers were White.

The type of weapon used also may influence how jurors perceive use of force by an officer. For example, the highly publicized cases where police use force, resulting in death, typically involve a firearm; what happens when the weapon used during the incident involves a taser or assault gloves? For example, in an Ontario city in 2016, a police officer used force when he was called to a location where a man was allegedly groping people (CBC News, 2019). When attempting to apprehend the suspect, a fight ensued and the officer was wearing assault gloves that contain hard carbon fiber plating in the knuckles and fingers; the officer used these gloves, punching the victim twice in the head. The suspect later died the next day due to a fatal heart attack that the Crown suggests was caused by the blows to the head (CBC News, 2019). The officer has been charged with manslaughter, aggravated assault, and assault with a weapon. Given that death can result from excessive force with something other than a firearm, it begs the question whether mock jurors will see the excessive force similarly regardless of weapon choice.

Hypotheses

We predicted that the officer would be viewed more negatively when the weapon used was a gun compared to a taser or assault gloves. Given the highly publicized incidents of use of force on a Black individual from a White police officer, we predicted that mock jurors would be more likely to find the White officer guilty, based, in part, on the availability heuristic (i.e., a strategy for making judgments based on how available it is in one's memory; APA Dictionary of Psychology, 2018), compared to the Black officer. We also predicted an interaction between officer and victim race whereby when the officer was White and the victim was Black, there would be more guilty verdicts for the officer compared to when the victim was White, regardless of officer race (see Levin & Thomas, 1997). Last, we predicted an exploratory three-way interaction whereby the officer would be judged guilty more so when the officer is White, the suspect/victim is Black, and a gun was used compared to when the officer is Black and a taser was used, regardless of suspect/victim race.

Method

Participants Participants ($N = 356$; 66% female) were undergraduate students recruited from a university in Eastern Ontario, Canada. All participants were juror eligible in Ontario (i.e., Canadian citizen and over the age of 18). Participants' age ranged from 18 to 70 years old ($M = 20.10$, $SD = 4.30$). The majority of participants (69.1%) identified themselves as White/Caucasian, with a considerable number of Asians (13.3%), a small number of Black/African-

Americans (7.0%), Latino/Latinas (1.4%), Indigenous (1.7%), and those who identified themselves as either mixed or “other” (6.4%).¹ Participants received course credit for their participation in the study.

Design A 2 (officer race: Black vs. White) × 2 (victim race: Black vs. White) × 3 (weapon used: assault gloves vs. gun vs. taser) between-subjects factorial design was used.

Materials

Case Summary

Twelve versions of a case summary involving police use of force were created that varied the officer’s race, victim’s race, and the type of weapon used during the altercation. The remaining details in the case summary remained constant. The case summary described the events leading up to altercation, the altercation itself, and that the police officer was charged with manslaughter.

Juror Questionnaire

Participants were asked to determine a verdict for the defendant, perceptions of the defendant on 1–7 Likert scales. Questions concerned perceptions as to whether the officer was justified in using the weapon, that the officer did not intend to harm the victim, that the officer is the only one to blame, and perceptions of control. Additionally, mock jurors were asked to rate their perceptions of the officer’s trustworthiness, reliability, and credibility. Lastly, participants were asked to rate their perceptions of the legal system with the General Attitudes toward the Legal System Scale (Schiffhauer and Wrightsman, 1995) and attitudes toward police legitimacy with an adapted police legitimacy scale (Tankebe et al., 2016). The scale consists of four subscales: *lawfulness* which refers to the perception of police being seen as working within established rules; *procedural fairness* which refers to the extent to which the authoritative nature of police is exercised in a fair, respectful, and even-handed manner; *distributive fairness* which refers to the variation in police fairness in the different outcomes and allocations of their resources; lastly, there is *police effectiveness* which refers

¹ The breakdown of ethnocultural identity is similar to that of the Canadian population. For example, in 2016 22.3% of the Canadian population identified as a visible minority (Statistics Canada, 2016). Individuals who identify as South Asian was the largest visible minority group representing 5.6% of the Canadian population. This was followed by Chinese (4.6% of the population), Black (3.5%), Filipino (2.3%), Arab (1.5%), and Latin American (1.3%) (Statistics Canada, 2016). Indigenous peoples accounted for 4.9% of the Canadian population in 2016 (Statistics Canada, 2017). Approximately 77.7% of the population did not identify as a visible minority in 2016.

to the ability of police to respond to citizens’ safety and security needs (Tankebe et al., 2016).

Procedure Data were collected with the online survey tool Qualtrics. Upon signing up for the study, participants were given a unique study URL. Each participant then was randomly assigned to one of the 12 conditions. To complete the entire study, participants were instructed to read through the case summary prior to filling out a series of questionnaires. Once all questionnaires were completed, participants were debriefed and thanked for their participation.

Results and Discussion

Dichotomous Verdict A sequential logistic regression was conducted to determine whether officer race, victim race, or type of weapon used influenced jurors’ judgments. Model 1, which only included the main effects, was significant, $\chi^2(4) = 32.69$. There was a significant main effect of officer race, $B = 0.71$, $SE = 0.23$, $p = 0.002$; mock jurors were more likely to vote guilty for the officer when he was White compared to Black. There also was a significant effect of type of weapon used, $Wald = 21.84$, $df = 2$, $p < 0.001$. Specifically, jurors were more likely to vote guilty for the defendant when the weapon used was a gun (0.53) compared to the assault gloves (0.31), $\chi^2(1, N = 240) = 11.30$, $p = 0.001$, Cramer’s $v = 0.22$. Additionally, jurors were more likely to vote guilty for the defendant when the weapon used was a gun (0.53) compared to a taser (0.24), $\chi^2(1, N = 234) = 19.94$, $p < 0.001$, Cramer’s $v = 0.29$. There was no difference in guilty verdicts when the weapon was a taser or the assault gloves. There was no main effect of victim race, $B = -0.22$, $SE = 0.23$, $p = 0.35$.

Continuous Guilt An analysis of variance was conducted to determine whether officer race, victim race, or type of weapon used influenced mock jurors’ continuous guilt ratings (see Table 1 for descriptive statistics). Only main effects emerged. Mock jurors were more likely to assign higher guilt ratings for the defendant when he was a White officer compared to when he was a Black officer, $F(1, 329) = 12.67$, $\eta_p^2 = 0.04$. Mock jurors also were more likely to assign higher guilt ratings to the defendant when the victim was White compared to Black, $F(1, 329) = 4.45$, $p = 0.04$, $\eta_p^2 = 0.01$. Lastly, there also was a significant effect of type of weapon used, $F(2, 329) = 10.28$, $p < 0.001$, $\eta_p^2 = 0.06$. Follow-up Tukey tests revealed that mock jurors were more likely to assign higher guilt ratings to the defendant when the weapon used was a gun compared to assault gloves ($M_{diff} = 10.55$, $SE = 3.56$, $p = 0.009$) as well as a taser ($M_{diff} = 16.37$, $SE = 3.64$, $p < 0.001$).

Perceptions of the Defendant (Officer) An analysis of variance was conducted to determine whether officer race, victim race,

Table 1 Descriptive statistics for continuous guilt and officer perceptions in study 1

	White officer continuous guilt	White officer perceptions	Black officer continuous guilt	Black officer perceptions
White suspect				
Assault gloves	47.42 (31.09)	4.35 (1.16)	40.91 (24.80)	4.82 (0.85)
Gun	54.68 (26.42)	4.02 (1.08)	46.62 (33.24)	4.52 (1.06)
Taser	41.57 (23.67)	4.78 (0.86)	28.89 (23.68)	4.12 (0.96)
Black suspect				
Assault gloves	52.74 (26.07)	4.42 (1.29)	39.89 (26.03)	4.83 (0.99)
Gun	64.47 (22.81)	3.52 (1.04)	56.24 (27.07)	4.44 (0.88)
Taser	50.52 (30.27)	4.28 (1.27)	34.69 (28.50)	4.05 (1.10)

or type of weapon used influenced mock jurors' perceptions of the defendant (see Table 1 for descriptive statistics). There was a significant effect of officer race; mock jurors perceived the defendant more positively when he was Black compared to White, $F(1, 343) = 25.73, p < 0.001, \eta_p^2 = 0.07$. There also was a significant effect of type of weapon used, $F(2, 343) = 12.98, p < 0.001, \eta_p^2 = 0.07$. Follow-up Tukey tests revealed that mock jurors perceived the defendant more positively when the weapon used was a taser ($M =$ compared to a gun ($M_{diff} = 0.69, SE = 0.14, p < 0.001$)). Additionally, the defendant was perceived more positively when the assault gloves were used compared to a gun ($M_{diff} = 0.49, SE = 0.14, p = 0.001$). There was no difference between the use of a taser or the assault gloves.

Attitudes Toward the Legal System The first subscale has scores that can range from -45 to 45 ; in the current study, after reverse coding where necessary, the mean score was -5.33 ($SD = 11.87$). The second subscale has scores that can range from -33 to 33 ; in the current study, after reverse coding where necessary, the mean score was 4.71 ($SD = 7.45$). Bivariate correlations were conducted to determine whether mock jurors' beliefs were related to their continuous guilt rating and perceptions of the officer. There was a significant relationship between the system works subscale and perceptions of the officer, $r(336) = 0.15, p < 0.01$ suggesting that those who believed that the system does work were more likely to perceive the officer more favorably. Additionally, there was a significant relationship between the system works subscale and mock jurors' continuous guilt rating, $r(324) = -0.65, p < 0.001$ suggesting that those who lack faith in the legal system assigned higher guilt ratings to the defendant. No relationships were observed for the second subscale. A binary logistic regression was then conducted to determine whether mock jurors' scores on each of the subscales predicted mock jurors' dichotomous verdicts. There was a significant effect for the *system works* subscale, $B = 0.03, SE = 0.01, p = 0.002, \exp(B) = 1.03, 95\% \text{ CI } [1.01, 1.05]$. The *system is too lenient* subscale had no predictive utility.

Police Legitimacy Scale Bivariate correlations were conducted to determine whether mock jurors' scores on the subscale were related to their continuous guilt rating and perceptions of the officer (see Table 2). Mock jurors attributed higher guilt ratings toward the police officer when they viewed police officers, in general, to not be lawful not engage in distributive and procedural fairness. Mock jurors also held more positive views of the police officer when they viewed police officers, in general, to be lawful and engage in distributive and procedural fairness. Regression analyses were then conducted to determine whether the police legitimacy subscales moderated the relationships between officer race and victim race and mock jurors' continuous guilt ratings; no moderating effects were found.

The results of this study suggest that weapon type is indeed influential. When a gun was used, mock jurors viewed the police officer more negatively and were more likely to determine him to be guilty as well as assign higher guilt ratings compared to when a taser was used. This suggests that perhaps the perceived "*intention*" behind the use of a weapon may be influential. When examining officer race, mock jurors were more likely to find him guilty and assign higher guilt ratings when he was White as opposed to Black, thus supporting our hypothesis. Mock jurors were more likely to attribute higher guilt ratings to the police officer when the victim was White compared to Black. Mock jurors also held more favorable views of the Black officer compared to the White officer. Overall, the results of study 1 suggest that factors related to the police officer and characteristics of the job impact how mock jurors perceive police defendants in use of force cases.

Study 2

The purpose of study 2 was to expand on the findings in study 1 by including another demographic, and gender of the officer, as well as whether the officer was on or off duty at the time of the altercation. Typically, female defendants are treated more leniently than male defendants (e.g., Doerner & Demuth, 2012); however, it is not yet understood whether the same

Table 2 Relationships between Police Legitimacy subscales and dependent variables in study 1

	Continuous guilt	Perceptions	Lawfulness	Procedural justice	Distributive justice	Police effectiveness
Continuous guilt	–	–0.65**	–0.26**	–0.24**	–0.22**	–0.02
Perceptions	–0.65**	–	0.37**	0.37**	0.31**	0.07
Lawfulness	–0.26**	0.37**	–	0.74**	0.62**	0.22**
Procedural justice	–0.24**	0.37**	0.74**	–	0.76**	0.28**
Distributive justice	–0.22**	0.31**	0.62**	0.76**	–	0.26**
Police effectiveness	–0.02	0.07	0.22**	0.27**	0.26**	–

** $p < 0.01$

would hold true when the defendant is a police officer. While the majority of research examining the influence of gender in the courtroom focuses on defendants who are not police officers, some research has examined the relationship between police officer gender and use of force. When examining officer gender, researchers have found contradictory results with some research finding that officer gender typically is not related to his or her use of force (Khlam and Tillyer, 2010), and other research finding that male officers may use higher levels of force against male suspects with no differences in female officer use of force (Garner, Maxwell, & Heraux, 2002; Kop & Euwema, 2001; Paoline & Terrill, 2004). Rabe-Hemp (2008) found that female officers were less likely to use controlling, coercive-like behaviors compared to male officers. While these studies are helpful in determining how often police use of force is exhibited by male and female officers, it does not help in determining how they will be perceived in the courtroom.

On the Job Whether the police officer is actively on duty may affect jurors’ perceptions in use of force cases. In real cases, police officers have used deadly use of force while they were off duty. For example, an off-duty police officer in Los Angeles, California, used his police-issued weapon to shoot a disabled man while shopping in Costco (NBC News, 2019). The shooting lead to the victim’s death. In another case, a female off-duty police officer shot and killed an unarmed Black man in his own home in Dallas, Texas, after mistakenly believing that he was an intruder in her own home (Andone & McLaughlin, 2019). This case has gone to trial. To our knowledge, there is no research examining perceptions of use of force when the officer is on or off duty, making it difficult to determine how jurors may perceive these cases. It is possible that jurors may perceive off-duty use of force cases more negatively than on-duty use of force cases, as use of force by off-duty police officers may appear to be less justified when compared to on-duty police officers. Given the lack of research on this topic, the goal of the current study was to

examine use of force cases when police officers were either on duty or off duty.

Hypotheses

In study 2, we predicted that male officers would be found more guilty, and perceived less favorably, than female officers based on the research of Garner et al. (2002), Kop and Euwema (2001), and Paoline and Terrill (2004). We also had an exploratory hypothesis concerning whether the officer was on or off duty whereby we predicted that the officer would be found guilty more often, given higher guilt ratings, and perceived less favorably when he or she was *off* duty as opposed to on duty. Lastly, we predicted that when the officer used a gun, he or she would be given higher guilt ratings and perceived less favorably compared to when the assault gloves or taser were used. We also had exploratory hypotheses regarding the interactions between our variables. Specifically, it was hypothesized that mock jurors would be more likely to vote guilty and have more negative perceptions when the police officer was a male, was off duty, and used a gun, compared to when the police office was a female, was on duty, and used assault gloves or a taser.

Method

Participants Participants ($N = 352$; 74.7% female) were undergraduate students recruited from a university in Eastern Ontario, Canada. All participants were juror eligible in Ontario (i.e., Canadian citizen and over the age of 18). Participants’ age ranged from 18 to 51 years old ($M = 20.90$, $SD = 5.88$). The majority of participants (72.4%) identified themselves as White/Caucasian, with a considerable number of Asians (13%), a small number of Black/African-Americans (5.4%), Latino/Latinas (0.9%), Indigenous (1.4%), and those who identified themselves as either mixed or “other” (6.8%).

Participants received course credit for their participation in the study.

Design A 2 (officer gender: male vs. female) \times 2 (officer status: on duty vs. off duty) \times 3 (weapon used: assault gloves vs. gun vs. taser) between-subjects factorial design was used.

Materials and Procedure The materials were identical to those of study 1 with the exception of officer gender and whether the officer was on duty in place of officer and victim race. Participants followed the same procedure as study 1.

Results

Dichotomous Verdict A sequential logistic regression was conducted with dichotomous guilt as the dependent variable and the officer's gender, officer status, and the type of weapon used were the independent variables. The main effects were entered into model 1, the main effects and two-way interactions in model 2, and the main effects, two-way interactions, and the three-way interactions in model 3. All three models were significant; as such, model 3 was retained, $\chi^2(11) = 34.67, p < 0.001$. There was a significant main effect of officer gender, officer status, and the type of weapon used (see Table 3). A significant two-way interaction between officer gender and type of weapon used was found, Wald = 6.37, $df = 2, p = 0.04$. The two-way interaction between officer status and type of weapon used also was significant, Wald = 5.83, $df = 0.05$ (see Table 2 for summary statistics).

Follow-up analyses revealed that mock jurors were more likely to find female officers guilty when she used the assault gloves (0.67) compared to a taser (0.33), $\chi^2(1, 123) = 6.76, p = 0.009$. Additionally, when the officer was female, mock jurors were more likely to find her guilty when she used a gun (0.62) compared to a taser (0.38), $\chi^2(1, 113) = 5.34, p = 0.02$. There were no significant differences between the three weapons for male officers. Additionally, mock jurors were more likely to vote guilty for the officer when the assault gloves were used when he or she was off duty (0.70) compared to when the officer was on duty (0.30), $\chi^2(2, 121) = 11.96, p = 0.001$. There were no significant differences observed for the gun or taser conditions.

Continuous Guilt Rating An analysis of variance (ANOVA) was conducted to determine whether the officer's gender, officer status, or the type of weapon used influenced mock jurors' continuous guilt ratings (see Table 4 for summary statistics). There was a significant main effect of officer status, $F(1, 325) = 18.89, p < 0.001, \eta_p^2 = 0.06$. Mock jurors were more likely to assign higher guilt ratings if the officer was off duty compared to if the officer was on duty. There also was a significant main effect of weapon used, $F(2, 325) =$

$4.06, p = 0.02, \eta_p^2 = 0.02$. Tukey post hoc analyses revealed that mock jurors were significantly more likely to assign higher guilt ratings if the weapon used was a gun compared to a taser ($M_{diff} = 10.57, SE = 3.70, p = 0.01$). The remaining effects were not significant.

Perceptions of the Defendant (Officer) An ANOVA was conducted to determine whether the officer's gender, whether he or she was on duty, or the type of weapon used influenced mock jurors' perceptions of the officer (see Table 4 for summary statistics). These questions were all significantly correlated with each other ($p < 0.001$); as such, a composite scale was created.² When analyzing the perceptions in the composite scale, there was a significant effect officer status $F(1, 338) = 8.38, p = 0.004, \eta_p^2 = 0.02$. Mock jurors held more favorable perceptions of the officer when he or she was on duty compared to off duty. There also was a significant main effect of the type of weapon used, $F(2, 338) = 6.12, p = 0.002, \eta_p^2 = 0.04$. Tukey post hoc analyses revealed that mock jurors held significantly more negative perceptions if the weapon used was a gun compared to a taser ($M_{diff} = -0.48, SE = 0.13, p = 0.001$). The remaining effects were not significant. A second ANOVA was conducted to examine whether the independent variables influenced mock jurors' perceptions as to whether the officer was the only one responsible for the victim's death. There was no influence of any of the independent variables on mock jurors' perceptions.

Attitudes Toward the Legal System The first subscale has scores that can range from -45 to 45 ; in the current study, after reverse coding where necessary, the mean score was -4.65 ($SD = 12.22$). The second subscale has scores that can range from -33 to 33 ; in the current study, after reverse coding where necessary, the mean score was 5.36 ($SD = 8.21$). Bivariate correlations were conducted to determine whether mock jurors' beliefs were related to their continuous guilt rating and perceptions of the officer. There was a significant relationship between the system works subscale and perceptions of the officer, $r(337) = 0.45, p < 0.001$, suggesting that those who believed that the system does work were more likely to perceive the officer more favorably. There was a significant relationship between the system works subscale and mock jurors' continuous guilt rating, $r(324) = -0.21, p < 0.001$, suggesting that those who lack faith in the legal system assigned higher guilt ratings to the defendant. A binary logistic regression was then conducted to determine whether mock jurors' scores on the *system works* subscale predicted mock jurors' dichotomous verdicts, which it significantly did, $B = 0.04, SE = 0.01, p = 0.006, \exp(B) = 1.03, 95\% \text{ CI } [1.01,$

² The reliability of the scale increased with the removal of one question, "The officer is the only one responsible for the victim's death"; as such, this question was removed from the composite scale and analyzed on its own ($\alpha = 0.76$).

Table 3 Statistics for sequential logistic regression model 3 in study 2

	B	S.E.	Wald	df	Sig	Exp(B)	95% CI for Exp(B)	
							Lower	Upper
Gender	-3.93	1.52	6.71	1	0.01	0.02	0.001	0.38
Weapon			7.41	2	0.03			
Gun	-8.38	3.25	6.66	1	0.01	0.00	0.00	0.13
Taser	-7.91	3.34	5.60	1	0.02	0.00	00	26
Duty	-4.75	1.53	9.68	1	0.002	0.01	0.00	0.17
Gender*weapon			6.37	2	0.04			
Gender*gun	4.27	1.92	4.96	1	0.03	71.64	1.67	3077.83
Gender*taser	4.56	2.00	5.26	1	0.02	95.88	1.94	4737.74
Duty*weapon			5.83	2	0.05			
Duty*gun	4.39	1.93	5.20	1	0.02	80.63	1.85	3505.53
Duty*taser	3.99	1.97	4.10	1	0.04	54.14	1.14	2577.20
Duty*gender	2.12	.88	5.82	1	0.02	8.34	1.49	46.77
Duty*gender*weapon			4.37	2	0.11			
Duty*gender*gun	-2.38	1.16	3.72	1	0.05	0.11	0.01	1.04
Duty*gender*taser	-2.08	1.19	3.04	1	0.08	0.13	0.01	1.30
Constant	8.64	2.69	10.31	1	0.001	5641.68		

SE = standard error. *Duty* = whether officer was on or off duty

¹ Denotes reference group (i.e., assault gloves)

1.05]. The *system is too lenient* subscale had no predictive utility.

Police Legitimacy Scale Bivariate correlations were conducted to determine whether mock jurors’ scores on the subscale were related to their continuous guilt rating and perceptions of the officer (see Table 5). Mock jurors attributed higher guilt ratings toward the police officer when they viewed police officers, in general, to not be lawful not engage in distributive and procedural fairness. Mock jurors also held more positive views of the police officer when they viewed police officers, in general, to be lawful and engage in distributive and procedural fairness.

Regression analyses were then conducted to determine whether the police legitimacy subscales moderated the relationships between officer gender and mock jurors’ continuous guilt ratings. No moderating effects of the distributive fairness, procedural fairness, or police effectiveness subscales were found. However, *lawfulness* subscale was found to significantly moderate the relationship between officer gender and mock jurors’ continuous guilt ratings, $B = 12.32$, $SE = 5.34$, $t = 2.31$, $p = 0.02$, 95% CI [1.81, 22.83]. When examining simple slopes, the police officers’ gender was significantly more influential when the officer was female compared to male at both low lawfulness scores (i.e., -1 SD), $B = 23.78$, $SE = 12.13$, $t = 1.96$, $p = 0.05$, and high lawfulness scores (i.e., +1 SD), $B = 37.70$, $SE = 15.62$, $t = 2.41$, $p = 0.02$ with the effect most pronounced at high scores of lawfulness.

The results of study 2 support our first two hypotheses where male officers, and officers who were off duty, were found guilty more often compared to female officers and officers on duty. This is consistent with past research that has found female defendants are generally treated with more leniency than male defendants (e.g., Dean, Wayne, Mack, & Thomas, 2000), suggesting that this pattern is also found when the defendant is a police officer. Additionally, given that it is generally expected for men to be more aggressive than women across a variety of situations, due to gender-stereotypes, similar results were obtained for male police officer defendants (Weist and Duffy, 2013). Use of force was viewed more negatively when the police officer was off duty compared to on duty, as mock jurors may have viewed the on-duty police officer as just “doing his/ her job” at the time, which does not hold true for off-duty police officers. When police are off duty, it is possible that any use of force would be perceived as unnecessary and violent. The type of weapon used also was influential and was most pronounced for female officers. Specifically, when the female officer used a gun or assault gloves, compared to a taser, she was found guilty more often. This suggests that perhaps the “intention” of a weapon may be influential. For example, when a gun is used, it is easier to assume that the use of a gun could be fatal; however, a taser does not necessarily have the “intention” to kill; rather, it is usually used just to stun and stop the suspect from what he or she is doing. It is unclear why there is a distinction made between the assault gloves and taser; however, assault gloves are more personal whereby the officer physically touches the

Table 4 Descriptive statistics for continuous guilt and officer perceptions in study 2

	Female officer continuous guilt	Female officer perceptions	Male officer continuous guilt	Male officer perceptions
On duty				
Assault gloves	41.41 (30.51)	4.99 (0.91)	28.61 (26.08)	4.96 (0.65)
Gun	54.69 (25.28)	4.31 (1.18)	49.03 (29.81)	4.49 (1.20)
Taser	36.93 (31.13)	5.22 (0.96)	42.86 (26.88)	4.51 (1.15)
Off duty				
Assault gloves	57.09 (25.72)	4.19 (1.23)	59.40 (25.18)	4.33 (1.00)
Gun	57.12 (25.65)	4.02 (1.01)	64.29 (25.00)	3.97 (1.21)
Taser	54.71 (26.72)	4.85 (1.17)	55.68 (27.83)	4.41 (1.07)

suspect whereas a taser can be used from feet away. Overall, the results of study 2 suggest that factors related to the police officer and characteristics of the job impact how mock jurors perceive police defendants in use of force cases.

General Discussion

While research has examined how various personal characteristics influence the public's perceptions of police (e.g., Simpson, 2017), little research has looked at how these characteristics may impact jurors' judgments, and more specifically, how officer demographics and characteristics may influence perceptions. While there is a general sentiment that the public perceives White police officers as using unjustified use of force against Black individuals (e.g., Michael Brown, Eric Garner, etc.), especially among people of color, it is unclear how other factors such as officer gender, weapon used, and whether the officer was on or off duty are influential. It is imperative to understand whether society believes that use of force is driven by gender and/or race given that trust in the police is an important foundation for police–citizen interactions.

Table 5 Relationships between Police Legitimacy subscales and dependent variables in study 2

	Continuous guilt	Perceptions	Lawfulness	Procedural justice	Distributive justice	Police effectiveness
Continuous guilt	–	–0.52**	–0.22**	–0.21**	–0.21**	–0.08
Perceptions	–0.52**	–	0.33**	0.31**	0.28**	0.06
Lawfulness	–0.22**	0.33**	–	0.69**	0.62**	0.19**
Procedural Justice	–0.21**	0.31**	0.69**	–	0.75**	0.30**
Distributive justice	–0.21**	0.28**	0.62**	0.75**	–	0.28**
Police effective- ness	–0.08	0.06	0.19**	0.30**	0.28**	–

** $p < 0.01$

Officer and Suspect/Victim Characteristics

Race impacted mock jurors' judgments in study 1 such that they were more likely to vote guilty for the officer, and attribute higher guilt ratings, when he was White compared to Black. This may be due to the heightened awareness of police use of force against people of color, and the availability heuristic, given the media's reporting on these incidents. Contradictory to our hypothesis, when the victim was White, mock jurors were more likely to vote guilty for the defendant, regardless of his race. This is consistent with research examining victim race in non-officer involved cases (e.g., Devine & Caughlin, 2014; Lynch & Haney, 2011), suggesting that these findings also extend to when police officers are the defendant. There appears to be a pattern for how defendant race is viewed in the courtroom.

As female officers tend to engage in use of force less than their male officer counterparts, study 2 sought to examine whether mock jurors perceived any differences between male and female officers. Mock jurors were more likely to vote guilty for the police officer when he was male (vs. female) whereas previous research with non-officer defendants has found few gender effects for violent crimes (e.g., Blais & Forth, 2014; Cox & Kopkin, 2016; Rodriguez et al., 2006).

The authority of the police officer defendant may change the dynamic in how they are viewed. For example, they could be held to a higher standard than non-officer defendants. The status liability effect (Shaw & Skolnick, 1996) could help explain this. The status liability effect occurs when a person of high status, in this instance, a police officer, is treated more harshly for severe crimes due to the higher expectations held of higher status individuals. Conversely, police officers are trained to use lethal force and are given the right to legally do so in Canada (Criminal Code, RSC, 1985, c. C-46, s. 25). Because of this right, police officer defendants may not be viewed similarly to non-officer defendants even though in both cases a person has died.

The type of weapon used by police impacted judgments. In both studies, mock jurors rated the defendant as more guilty and viewed the defendant more genitively when a gun was used. Given that a gun has more of a “finality” to it when used and has an increased likelihood to cause serious harm compared to a taser or assault gloves, mock jurors may have believed it was unnecessary to fire the gun in this situation. Previous research also has found that when weapons are present, mock jurors are more likely to be harsher in their judgments (Dienstbier et al., 2010). Mock jurors may have perceived the gun as a more threatening weapon with a likelihood of causing severe harm and the taser and assault gloves more so as tactics to deescalate situations (i.e., it is less likely gloves or tasers will result in death).

Participant Attitudes

Police legitimacy is an important factor in how the public perceives police interactions and as such, it is important to examine how legitimacy attitudes may influence mock jurors’ judgments. In both studies, mock jurors attributed higher guilt ratings to the defendant when they believed that the officer was not acting lawfully or engaging in procedural and distributive practices. Mock jurors also held more positive perceptions of the police officer when they believe that officers do act within the law, work within a fair, respectful manner (i.e., procedural fairness), and act fairly with the different allocations of their resources (i.e., distributive fairness). In study 2, mock jurors’ lawfulness scores significantly moderated the relationship between officer gender and their continuous guilt ratings and was more impactful when the officer was a female. Gender stereotypes (i.e., women are more passive than males; Weist & Duffy, 2013) may explain this finding. Mock jurors may have believed that female officers may not act within the law (i.e., lawfulness) in a use of force scenario because it is out of the norm for women to be acting aggressively, especially aggressive enough to a point where use of force must be used. In other words, there may be a belief that women should never act aggressively (i.e., use force) *despite* the fact that they are

also police officers. This could result in a perception that any use of force by a female police officer is too much force.

Limitations and Future Directions

This program of research is the first to our knowledge to systematically vary *both* officer characteristics and suspect/victim characteristics. In our studies, we found that both race and gender can impact mock jurors’ perceptions of use of force, as well as the type of weapon utilized by police. These findings are an important step in understanding how officer and suspect characteristics impact jurors when officers are brought to trial in use of force cases.

Few methodological limitations warrant discussion. First, an implicit measure of racial bias could have shown whether participants were more likely to believe a White suspect/victim to be innocent as opposed to a Black suspect/victim given the stereotype that Black individuals are more often associated with criminal activity (e.g., Welch, 2007). Given that we did not measure implicit bias, we are unable to determine whether underlying racial attitudes may be driving some of our findings. In a similar vein, we did not measure implicit attitudes toward gender, which may have provided some insight into gender stereotypes and its relation to female officers’ use of force. Measuring implicit biases in future research can help to solidify our understanding of how race and gender impact mock juror decision-making. Additionally, the current studies did not examine mock juror race as the sample was predominately White; this would not have given us an adequate representation of how mock juror race influenced these decisions. Given that prior research has found mock juror race to be impactful, future researchers should include this variable to determine how influential mock juror race is in the perceptions of police use of force when officer and suspect demographic variables are varied. Researchers have found this to be especially true when specific use of force incidents are examined (Kaminski & Jefferis, 1998).

While undergraduate students were used in the current study, Bornstein et al. (2017) conducted a meta-analysis on sample type (i.e., student vs. community) and found both samples produced comparable verdicts, culpability ratings, and damage awards (in civil trials). Lastly, in study 2, the officer did not identify as being an off-duty police officer; presenting this information may have resulted in different results. Future researchers may want to examine whether announcing off-duty status (compared to not announcing) is influential in mock jurors’ judgments.

Social media movements such as #BlackLivesMatter have flourished in the face of perceived injustices—specifically in use of force cases. Similar to pre-trial publicity, it is possible that exposure to social media movements can affect how jurors perceive a case and the culpability of a defendant.

Although exposure to social media was not measured in the current study, future research may also want to incorporate a scale examining participants' media exposure concerning use of force to determine whether this moderates the relationship between officer and suspect demographics and the dependent measures.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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