

# The Impact of Suspect Race and Precipitating Incident on Community Members' Assessments of Deadly Force Reasonableness

Homicide Studies

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Lorie A. Fridell<sup>1</sup>  and Christopher J. Marier<sup>2</sup> 

## Abstract

The contrast between many community members' views about the extent to which force used by police is excessive and the criminal justice system's determination of same suggests a "reasonableness divide." Using survey data from 3,600 nationally representative adults, this study assessed one possible reason for this divide—that community members evaluate the reasonableness of deadly force using factors that are not considered in legal assessments. The results affirmed this divide—finding that community members' evaluations of deadly force incidents are impacted by the race of the subject and by the precipitating event. Policy and research implications are presented.

## Keywords

public perceptions, use of deadly force, force reasonableness

## Introduction

Much turmoil in U.S. society—as reflected in demonstrations and riots—emanates from concerns about the police use of deadly force. While significant portions of community members perceive that many incidents of deadly force are unjustified,

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<sup>1</sup>University of South Florida, Tampa, USA

<sup>2</sup>Appalachian State University, Boone, NC, USA

### Corresponding Author:

Lorie A. Fridell, University of South Florida, 4202 East Fowler Avenue, Mail Code SOC 107, Tampa, FL 33620, USA.

Email: [lfridell@usf.edu](mailto:lfridell@usf.edu)

police agencies and the criminal courts rarely find that force is legally unreasonable. One possibility for this “divide” is that officers are not held to account when they violate the law by using excessive deadly force. Another possibility is that community members assess the reasonableness of deadly force using factors that do not match the law.

In their seminal book, *Evaluating Police Uses of Force*, Stoughton et al. (2020) suggest various perspectives or factors that might reflect the “community expectations standard” (p. 125) based on public discourse; community member consideration of these factors would be counter to legal assessments. The purpose of the current study is to assess whether community members use extra-legal factors to assess force reasonableness. Using survey data from over 3600 adults who represent the U.S. population with regard to gender, age, and race/ethnicity, this study tests experimentally the impact of two extra-legal factors on community members’ assessments of force reasonableness: (1) the race of the subject in the encounter and (2) the seriousness of the offense that precipitated the encounter between the officer and subject.

Study participants were presented with a scenario describing an incident in which force was used by an officer in an encounter with a subject. In addition to providing their views of the reasonableness of the force, participants provided demographic data and information on their political orientation and confidence in police. These data allow for an empirical assessment of the “community standards” for police use of force to determine if, in fact, community members assess reasonableness using factors that are not recognized in legal analyses. The results provide important information related to one of the most divisive issues facing U.S. society today.

## The “Reasonableness Divide”

Perceptions of excessive use of police force were the chief cause of the riots in the 1960s (U.S. National Advisory Committee on Civil Disorders, 1968). Unrest linked to police use of force continues to this day. Four different national polls estimated that between 15 and 26 million people in the U.S. participated in demonstrations during the month after George Floyd’s death, making the protests the largest movement in U.S. history (Buchanan et al., 2020).

Polls indicate that the community concerns that lead to these demonstrations and riots include perceptions that officers are not held to account for misuses of force (Pew Research Center, 2016; Stafford & Fingerhut, 2020). These perceptions are consistent with data on the frequency with which officers’ force is adjudged as reasonable by law enforcement agencies (Hickman, 2006; Hickman & Poore, 2016; IACP, 2001) and the criminal courts (Stinson & Wentzlof, 2019; see also Mapping Police Violence, 2021.) This contrast between community views about the extent to which force used by police is excessive and the criminal justice system’s determination of the same suggests a “reasonableness divide.” One possible contributor to this divide is that community members, when assessing force reasonableness, use factors that are not considered in legal assessments.

## Community Standards for Evaluating the Reasonableness of Force

Stoughton et al. (2020) describe several perspectives that result in analyses that are critical of police force. These authors argue, for instance, that some community members evaluate force based on the necessity of it. Those citizens would be likely to find force unreasonable if they believed an officer did not use the minimum amount of force available to him or her. Two other perspectives are relevant to the current study and pertain to (1) officer motivations and (2) the underlying governmental interest.

### *Evaluating Force Reasonableness Based on Officer Motivation*

A community member may find force unreasonable if s/he believes that the officer's motives are inappropriate. One aspect of this criticism pertains to a community member's evaluation of whether the officer's use of force was motivated by the race of the subject. Stoughton et al. (2020) argue that if a community member perceives that an officer is motivated to use force during an incident based on the fact that the subject is Black, s/he will be more likely to regard the force as unreasonable.

The perceptions of disparate treatment that community members might apply to a scenario would be based, not necessarily on the specific scenario, but on the knowledge of and perceptions of other force incidents (Stoughton et al., 2020). Widespread perceptions of unjust use of force against Blacks are documented by national polling data that show a majority of the U.S. population believes that police use force in a disparate fashion against Blacks, and that the proportions have increased significantly over the last several years. An AP-NORC poll (Stafford & Fingerhut, 2020) found that 6 in 10 U.S. adults believe police are more likely to use deadly force against a Black person than a White person. (The corresponding figure in 2015 was 49%.) Two-thirds of the 2020 poll respondents reported that race of subject affects officers' decisions to use force. (The corresponding percent in 2015 was 50%.) Similarly, in their 2020 poll, Monmouth University (2020) focused specifically on *excessive* force and found that over half (57%) of U.S. adults believed that, when faced with a dangerous situation, police are more likely to use excessive force against Blacks than Whites. (A similar poll from 4 years earlier (2016) had a corresponding percentage of 34%.) These poll data lend support to the Stoughton perspective, which would predict that community members consider race of subject when assessing force and, specifically, are less likely to find force reasonable when it is used against a Black subject.

There is another body of research, however, that similarly predicts that community members consider race of subject, but in the opposite direction. Research on stereotypes, including implicit associations, predicts that community members will be more likely to find that force is *reasonable* against a Black subject. Social psychologists have confirmed that many people have implicit associations between Black individuals and threat or aggressiveness (Correll et al., 2002, 2006; Eberhardt et al., 2004; Payne, 2001; Payne et al., 2002; Plant & Peruche, 2005). Most relevant to the current study is the research assessing whether race of a target affects the "shoot, don't shoot" decisions of the study

participants (e.g., Correll et al., 2002; Plant & Peruche, 2005). As one example, in their study, Correll et al. (2002) had their participants determine very quickly (measured in milliseconds) whether the man pictured on the computer screen was a threat or not a threat. Some of the pictured males were White and others were Black; they held either a gun or a “neutral” (i.e., non-threatening) object. The study participants were instructed to push the “shoot” button if the person held a gun and the “don’t shoot” button if he held a neutral object. Correll et al. (2002) measured both time-to-decision (in milliseconds) and errors to see if the race of the target impacted perceptions of threat. With both outcome measures, the results supported a Black-threat implicit bias.

These stereotypes or implicit associations could lead individuals to perceive subject resistance in a police encounter as more serious or more threatening when performed by a Black subject than when performed by a White subject. The research would predict that community members would consider race of subject when assessing force but (in contrast to the Stoughton perspective) would be more likely to find the force *reasonable* when it is used against a Black subject.

*Reasonableness studies examining the Stoughton versus implicit bias hypotheses.* Of the 30 published studies wherein participants were asked to assess the reasonableness of real or hypothetical uses of force by police, six have examined the effect of subject race as Black or White on assessments of reasonableness. One study produced null results and five of the studies found support for the Stoughton hypothesis regarding racial motivation, although only three of the six studies tested this relationship directly and provided overall results for the main effect.<sup>1</sup> Of these three studies, two produced results supporting the Stoughton hypothesis (Huff et al., 2018; Porter et al., 2018), and the other produced null findings (Girgenti-Malone et al., 2017).<sup>2</sup>

While the weight of the (sparse) literature supports the Stoughton effect, two sets of researchers reported results that lend support for the implicit-bias hypotheses. Johnson and Kuhns (2009) found that, among their White respondents, anti-Black stereotyping correlated with approval for force against Black subjects. Similarly, Strickler and Lawson (2020) found that, among White participants, there was a correlation between high racial resentment and the likelihood of approval for force against Black subjects.

The current study tests whether race of subject affects community members’ assessments of force reasonableness and, if it does, whether a Black subject in an incident increases or decreases the likelihood that force is found to be reasonable. The study builds on the current body of work and remedies some of the weaknesses of prior research with data from a large sample of subjects that reflect the demographics of the U.S. adult population with regard to gender, age, and race/ethnicity. Only one of the six previous studies utilized a large nationally representative sample (Johnson & Kuhns, 2009)<sup>3</sup>; the others used samples produced by Mechanical Turk (Porter et al., 2018; Strickler & Lawson, 2020)<sup>4</sup> or convenience samples (Girgenti-Malone et al., 2017; Huff et al., 2018; Kahn et al., 2016). None of the studies were conducted after the murder of George Floyd although the national poll results described above provide documentation that views of police force, including views of biased police use of

force, have changed considerably in recent years (Monmouth University, 2020; Stafford & Fingerhut, 2020).

### *Evaluating Police Force Based on the Precipitating Incident*

Stoughton et al. (2020) also suggest that some community members criticize police uses of force based on the perceived underlying government interest, or lack thereof. Community members taking this perspective may equate the government's interest in using force with the offense that led to the encounter. Such evaluations may lead community members to be more critical of force that occurs in encounters precipitated by low-level offenses versus high-level offenses, regardless of subject actions during the encounter. Reflecting this perspective is the headline that claimed that Eric Garner "was choked to death for selling loosies" (Gillespie, 2014, headline).

The current study is the first to examine the potential impact of precipitating event on community members' evaluations of use of force reasonableness. Consistent with the writings of Stoughton et al. (2020), we expect that the seriousness of the precipitating event will affect community members' assessments of force reasonableness. Specifically, they will be more likely to find force reasonable when the precipitating event is serious versus not serious.

### *Community Standards Versus Legal Standards*

A determination that community members consider race of subject and/or precipitating event would indicate a discrepancy across standards in that neither of these factors are considered in legal assessments of force reasonableness. In any U.S. court of law, the use of force by police officers must minimally meet the "reasonableness" standard set by the U.S. Supreme Court in *Graham v. Connor*, meaning the force must be objectively reasonable considering the totality of the circumstances.<sup>5</sup> The Supreme Court in *Graham* identified several facts and circumstances relevant to reasonableness inquiries, including whether the suspect posed an immediate threat to the safety of the officers or others, and whether they actively resisted arrest or attempted to evade arrest by fleeing.

Community member consideration of subject race in evaluating force would be contrary to use-of-force jurisprudence. If community members consider race—regardless of the direction—this would be contrary to legal standards, which do not allow for the consideration of the race of the subject.

If community members consider precipitating event when they assess the reasonableness of force, this too would be contrary to legal analysis, although the relevant law is a bit more nuanced. As above, *Graham* set forth the various factors that could be considered when analyzing the reasonableness of use of force. Even though the Court in *Graham* listed "severity of crime" as one of the factors to be considered, Stoughton et al. (2020) point out that, in legal analyses of reasonableness, the severity of the crime becomes subordinate within the "totality of the circumstances" if the suspect (no matter how minor his/her crime) poses a threat to officers or others. The government retains an

interest in seizing offenders who are accused of even minor crimes (Stoughton et al., 2020) and a priority government interest in an encounter is the safety of officers and others. Thus, if community members consider precipitating event, their assessments do not align with contemporary legal analysis.

## **Methodology**

A nationally representative group of adults completed a survey wherein they assessed the reasonableness of a police officer's use of force as described in a hypothetical vignette. Respondents were randomly assigned to versions that varied regarding the race of the suspect (Black vs. White) and the seriousness of the offense that precipitated the encounter (broken taillight vs. felony warrant for burglaries). Participants also assessed the seriousness of the precipitating event and provided information on demographics, political orientation, and their confidence in the police.

### *Participants*

Participants for this study were a nationally representative sample of 3,601 U.S. adults selected from the population of individuals who have signed up to participate regularly in online surveys administered for researchers by Qualtrics.<sup>6</sup> While this was not a stratified random sample, Qualtrics produced a sample that reflected the demographics of U.S. adults regarding gender, age, race, and ethnicity.<sup>7</sup> Qualtrics-administered surveys have been used to study a variety of criminological topics (see DeLuca et al., 2018; Fox et al., 2018; Moule et al., 2019) including community member assessments of police use of force (see Baker & Bacharach, 2017; Kahn et al., 2016; Strickler & Lawson, 2020). Qualtrics' online recruitment has been shown to provide more demographically and politically representative samples when compared to the survey-recruitment procedures of Facebook and Mechanical Turk (Boas et al., 2018).

### *Materials and Procedure*

Participants who provided consent using the IRB-approved online form, completed a 7- to 10-minute survey that included a scenario wherein the officer pulled over a vehicle in an area that had recently been experiencing multiple traffic crashes. As the officer exited his car, so too did the driver who was described as very agitated. The officer commanded the driver to stay back and to provide his driver's license, registration, and insurance documentation. Moving quickly, the driver reached into his vehicle and emerged with "something in his hand." As he stretched his hand toward the officer, the officer shot twice. The use of force in this scenario was intended to be ambiguous—that is, it was neither clearly excessive, nor clearly reasonable. (The vignette is presented in Appendix A.)

We utilized a randomized factorial experimental design to study the factors that might affect community members' assessments of force reasonableness. Factorial

experiments are research designs in which the researcher selects a fixed number of discrete values for at least two factors (variables) before running experiments with all possible combinations (Box et al., 2005). Such a design enables researchers to analyze the effects of each factor on the dependent variable in addition to interactions between the factors and outcome variable. Further, randomization is expected to eliminate spurious explanations for the observed effects, allowing for causal conclusions (Box et al., 2005). This study utilized a  $2 \times 2$  design in which participants were randomly assigned to the precipitating event and suspect race conditions.

To assess the effect of precipitating event on community members' assessments of force reasonableness, respondents were randomly assigned to use-of-force vignettes that varied based on whether the precipitating incident was a broken taillight or outstanding warrant for several burglaries. The legally-relevant factors, such as danger to the officer, were held constant in the scenario.

To manipulate the suspect's race, the person who emerged from the car was presented as either Black or White using both names and photos to denote race. The selection of "Jamal Washington" for the Black subject and "Seth Becker" for the White subject was based on research in which nearly 8,000 individuals identified the race/ethnicity (White, Black, and Hispanic) they associated with a series of names (Gaddis, 2017). The photographs that were used to indicate the race of the subject were drawn from the Chicago Face Database. This database, developed by psychologists at the University of Chicago, allowed us to select pictures of a White male and a Black male that were equivalent in terms of clothes, lighting and background, and matched on expression (neutral), age, attractiveness, threatening appearance, anger, and racial prototypicality. The pictures used in this study are provided in Appendix A.

After reading the use-of-force vignette, participants indicated how reasonable they thought the police officer's use of deadly force was on a 6-point scale that ranged from "not at all reasonable" (1) to "very reasonable" (6). This item (force reasonableness), measured at the ordinal-level, served as the study's dependent variable.

Survey respondents provided information on their race, gender, age, education, and income. The response options for these variables appear in Table 1. Respondents were also asked about their political orientation and confidence in police. For political orientation, respondents responded to an item that asked, "Where do you fall on the continuum between liberal and conservative," with responses that ranged from "very liberal" (1) to "very conservative" (6). To measure confidence in police, respondents were asked, "How much confidence do you have in police," and responses ranged from "none at all" (1) to "a great deal" (6).<sup>8</sup>

## Results

Descriptive statistics of study variables are reported in Table 1. In their evaluations of the reasonableness of the officer's use of lethal force in the given scenario, survey participants recorded a mean value of 2.944 on the 6-point scale, a median value of 3, and a modal value of 1, demonstrating some right skew. Participants reported an

**Table 1.** Descriptive Statistics of Study Variables ( $n=3,601$ ).

| Variables                         | Percentage (%)        |
|-----------------------------------|-----------------------|
| <b>Race/ethnicity</b>             |                       |
| White, non-Hispanic               | 59.4                  |
| Black                             | 14.4                  |
| Hispanic, any race                | 18.4                  |
| Asian                             | 4.2                   |
| Hawaiian or pacific islander      | 0.3                   |
| Native American                   | 1.0                   |
| Bi-racial/multi-racial            | 2.5                   |
| <b>Gender</b>                     |                       |
| Male                              | 51.5                  |
| Female                            | 48.2                  |
| Non-binary/third gender           | 0.3                   |
| <b>Age</b>                        |                       |
| 18–34                             | 33.0                  |
| 35–55                             | 31.7                  |
| Over 55                           | 35.3                  |
| <b>Education</b>                  |                       |
| Less than high school             | 2.3                   |
| High school graduate              | 21.9                  |
| Some college                      | 24.6                  |
| 2-year degree                     | 10.9                  |
| 4-year degree                     | 23.7                  |
| Some graduate school              | 2.8                   |
| Professional degree               | 12.4                  |
| Doctorate                         | 1.5                   |
| <b>Income</b>                     |                       |
| <\$15K                            | 11.4                  |
| \$15K–\$37,999                    | 23.6                  |
| \$38K–\$63,999                    | 25.5                  |
| \$64K–\$99,999                    | 22.1                  |
| \$100K–\$225K                     | 15.7                  |
| >\$225K                           | 1.6                   |
|                                   | <i>M (SD) [Range]</i> |
| Force reasonableness <sup>a</sup> | 2.944 (1.603) [1–6]   |
| Suspect race (Black)              | 0.503 [0–1]           |
| Offense seriousness (warrant)     | 0.500 [0–1]           |
| Confidence in police              | 4.060 (1.431) [1–6]   |
| Conservatism                      | 3.500 (1.459) [1–6]   |

<sup>a</sup>Higher scores indicate more reasonableness.

average confidence in police of 4.060 on the 6-point scale, indicating slightly more favorable than unfavorable attitudes. On a 6-point scale of conservatism, participants averaged 3.500, indicating a balanced political orientation in the overall sample.



**Table 2.** Bivariate Correlations of Study Variables.

| Variables                   | 1       | 2     | 3     | 4      | 5     | 6     | 7      | 8     | 9     |
|-----------------------------|---------|-------|-------|--------|-------|-------|--------|-------|-------|
| 1 Reasonableness of force   |         |       |       |        |       |       |        |       |       |
| 2 Black suspect             | -.084*  |       |       |        |       |       |        |       |       |
| 3 Serious offense           | .073*   | .007  |       |        |       |       |        |       |       |
| 4 Black participant         | -.096 * | .001  | .002  |        |       |       |        |       |       |
| 5 Male participant          | .123*   | -.007 | -.004 | -.126* |       |       |        |       |       |
| 6 Age                       | .031    | .002  | .001  | -.006  | .363* |       |        |       |       |
| 7 Education                 | -.010   | .003  | -.007 | -.059* | .098* | .121* |        |       |       |
| 8 Conservatism              | .230*   | .016  | .031  | -.116* | .114* | .164* | -.075* |       |       |
| 9 Income                    | .025    | -.014 | .016  | -.122* | .142* | .095* | .400*  | .007  |       |
| 10 Confidence in the police | .339*   | .002  | .015  | -.224* | .160* | .213* | .063*  | .447* | .112* |

\* $p < .001$ .

Correlations appear in Table 2. At the bivariate level, evaluations of the officer’s use of lethal force are significantly related to suspect race, offense seriousness, participant race, participant gender, political ideology, and pre-existing confidence in the police. Importantly, there were no correlations between the two experimental manipulations and other variables, suggesting no systematic bias. Other correlations behave as expected. For instance, trust in the police is associated with Whites, males, conservatism, wealth, and older participants, and income is significantly correlated with education.

Analyses began with parametric and nonparametric tests of study manipulations. Perceptions of force reasonableness significantly varied by suspect race according to both parametric and nonparametric tests, as reported in Tables 3 and 4. Specifically, as predicted by Stoughton et al. (2020), participants found use of lethal force more reasonable when it was directed at White suspects. A *t*-test indicated a higher average reasonableness score when force was used against White suspects (3.081) than Black suspects (2.808), a difference which is statistically significant at  $p < .001$ . A Wilcoxon rank-sum test indicated that force is deemed significantly more reasonable when it is directed at White suspects than Black suspects ( $z = 4.898, p < .001$ ).

Public perceptions of force reasonableness also varied with the seriousness of the precipitating event, as hypothesized by Stoughton et al. (2020). Reasonableness was rated lower when the reason for the stop was manipulated to be a non-criminal traffic violation (2.827) rather than a felony warrant (3.061), a difference which is significant at  $p < .001$ . A Wilcoxon rank-sum test also found a significant difference, where  $z = 4.472$ , and  $p < .001$ .

The data permitted the analysis of interactive or contextual effects using two-way ANOVA. First, we evaluated the effect of suspect race and seriousness of the precipitating event on perceptions of the use of lethal force. The results appear in Table 5. A two-way ANOVA revealed there was not a significant interaction between the effects of suspect race and offense seriousness [ $F(1, 3,432) = 0.570, p = .450$ ]. Consistent with

**Table 3.** Results of T-tests, "How Reasonable Was the Officer's Use of Force?"

| Variables       | Control group mean (SD) | Experimental group mean (SD) | t-Statistic |
|-----------------|-------------------------|------------------------------|-------------|
| Black suspect   | 3.081 (1.626)           | 2.808 (1.569)                | 5.008***    |
| Serious offense | 2.827 (1.602)           | 3.061 (1.596)                | 4.290***    |

Note.  $n = 3,436$ .

\*\*\* $p < .001$ .

**Table 4.** Results of Wilcoxon Rank-Sum Tests, "How Reasonable Was the Officer's Use of Force?"

| Variables       | Control group |             | Experimental group |             | z-Statistic |
|-----------------|---------------|-------------|--------------------|-------------|-------------|
|                 | Rank sum      | Expected    | Rank sum           | Expected    |             |
| Black suspect   | 3,076,636.5   | 2,936,916.5 | 2,828,129.5        | 2,967,849.5 | 4.898***    |
| Serious offense | 2,823,090.5   | 2,950,664.5 | 3,081,675.5        | 2,954,101.5 | 4.472***    |

Note.  $n = 3,436$ .

\*\*\* $p < .001$ .

**Table 5.** Results of Two-Way ANOVA, Effects of Suspect Race and Serious Offense.

| Variables       | SS        | df    | MS     | F        |
|-----------------|-----------|-------|--------|----------|
| Black suspect   | 64.283    | 1     | 64.283 | 25.31*** |
| Serious offense | 47.227    | 1     | 47.227 | 18.59*** |
| Interaction     | 1.451     | 1     | 1.451  | 0.570    |
| Error           | 8,716.489 | 3,432 | 2.540  |          |
| Total           | 8,829.271 | 3,435 | 2.571  |          |

Note.  $n = 3,436$ .

\*\*\* $p < .001$ .

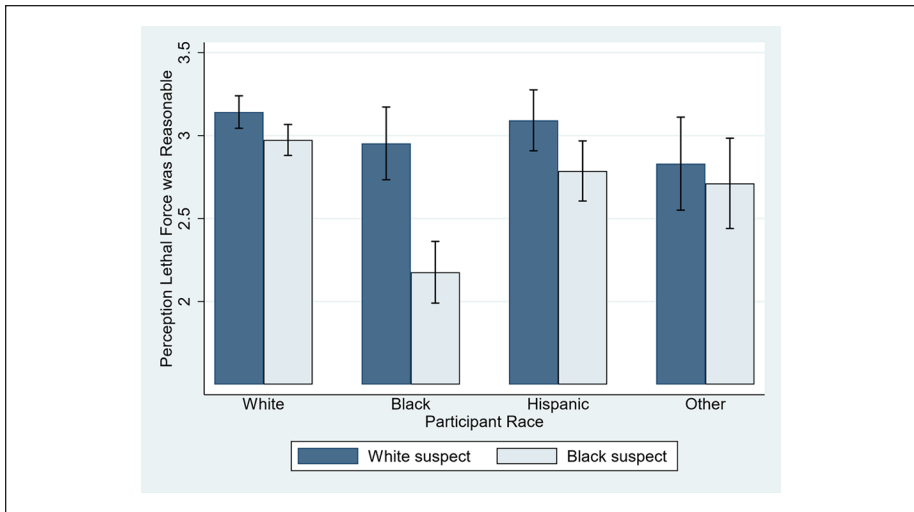
the prior analyses, simple main effects analysis showed that suspect race and offense seriousness demonstrated significant effects on perceptions of reasonableness ( $p < .001$ ).

Next, we evaluated whether the reasonableness of the use of lethal force varied whether the suspect was White or Black and whether the participant was White, Black, Hispanic, or some other race, as reported in Table 6. A two-way ANOVA revealed that there was a significant interaction, wherein participant race significantly moderated the effect of suspect race on evaluations of reasonableness [ $F(3, 3428) = 4.950$ ,  $p < .01$ ]. The analysis therefore identified an important contextual effect that the direct effects (above) obscure: while participants of all races, on average, believed that force was less reasonable when used against a Black suspect, Black participants were much more likely to say so. These effects are illustrated graphically in Figure 1. Participants

**Table 6.** Results of Two-Way ANOVA, Effects of Suspect Race and Participant Race.

| Variables        | SS        | df    | MS     | F        |
|------------------|-----------|-------|--------|----------|
| Black suspect    | 59.741    | 1     | 59.741 | 23.75*** |
| Participant race | 102.717   | 3     | 34.239 | 13.61*** |
| Interaction      | 37.345    | 3     | 12.448 | 4.95**   |
| Error            | 8,624.122 | 3,428 | 2.516  |          |
| Total            | 205.149   | 7     | 29.307 |          |

Note.  $n = 3,436$ .  
 \*\* $p < .01$ . \*\*\* $p < .001$ .



**Figure 1.** Perception of force reasonableness by suspect race and participant race.

of all races generally agree about the reasonableness of force when used against White suspects. However, Black participants found the use of force significantly less reasonable than others when police used deadly force against a Black suspect rather than a White suspect under identical circumstances.

Next, ordered logistic regression was performed in order to evaluate the simultaneous effects of experimental manipulations and various personal characteristics on citizen perceptions of officer use of lethal force. The results appear in Table 7. Models 1 and 2 differ only by the inclusion of a Black suspect  $\times$  Black participant interaction, guided by the results found in the previous two-way ANOVA. The results of Model 1, which were consistent with the previous results, revealed that participants were significantly more likely to rate an officer’s use of lethal force as more reasonable if the reason for the stop was more serious ( $b = 0.256, p < .001$ ); the participant was male ( $b = 0.388, p < .001$ ); the participant was more conservative ( $b = 0.161, p < .001$ ); and

**Table 7.** Ordered Logistic Regression of Perceived Reasonableness of Use of Force.

| Variables                                     | Model 1    |       | Model 2     |       |
|---|------------|-------|-------------|-------|
|   | <i>b</i>   | SE    | <i>b</i>    | SE    |
| Black suspect                                 | -0.333***  | 0.062 | -0.242***   | 0.066 |
| Serious precipitating offense                 | 0.256***   | 0.062 | 0.263***    | 0.062 |
| Black participant                             | -0.088     | 0.097 | 0.283*      | 0.134 |
| Male participant                              | 0.388***   | 0.068 | 0.390***    | 0.068 |
| Age   | -0.233***  | 0.042 | -0.231***   | 0.042 |
| Education scale                               | -0.010     | 0.020 | -0.010      | 0.020 |
| Conservatism                                  | 0.161***   | 0.024 | 0.162***    | 0.024 |
| Income  | -0.038     | 0.027 | -0.038      | 0.027 |
| Confidence in the police                      | 0.422***   | 0.027 | 0.421***    | 0.027 |
| Black suspect × Black participant interaction | —          | —     | -0.750***   | 0.188 |
| Thresholds                                    | 0.358      | 0.168 | 0.480       | 0.172 |
|   | 1.273      | 0.169 | 1.403       | 0.173 |
|   | 2.157      | 0.171 | 2.285       | 0.176 |
|   | 3.145      | 0.176 | 3.276       | 0.180 |
|   | 4.169      | 0.183 | 4.305       | 0.188 |
| Pseudo <i>R</i> <sup>2</sup>                  | 0.048      |       | 0.049       |       |
| Log likelihood                                | -5,559.508 |       | -5,551.5248 |       |
| <i>n</i>                                      | 3,371      |       | 3,371       |       |

\* $p < .05$ . \*\*\* $p < .001$ .

if the participant had more confidence in the police ( $b = 0.421$ ,  $p < .001$ ). On the other hand, a Black suspect ( $b = -0.333$ ,  $p < .001$ ) and higher age bracket ( $b = -0.233$ ,  $p < .001$ ) predicted significantly lower evaluations of reasonableness. Three variables had no direct effect on evaluations of an officer's use of lethal force: income, education, and a Black study participant.

Generally, the same overall pattern of results emerges in Model 2. The Black suspect × Black participant interaction predicted a lower evaluation of an officer's use of lethal force ( $b = -0.750$ ,  $p < .001$ ). However, the presence of a statistically significant coefficient for an interaction term in a nonlinear model (such as the ordered logit model reported here) cannot be interpreted in the same way as in linear models and is *not* an indication of significant interaction effects (Mize, 2019). We therefore examined nonlinear predictions, first differences, and tests of second differences, as suggested by Mize (2019). These results appear in Table 8 and report all six levels of the outcome variable. When holding all other variables in the model at their means, a non-Black participant assigned to the White suspect condition had a 23.3% likelihood of saying that the officer's use of deadly force was not at all reasonable ( $y = 1$ ). Assigned to the Black suspect condition, a non-Black participant had a 27.1% likelihood of saying the use of force was not at all reasonable. This difference of 3.9% (first difference:

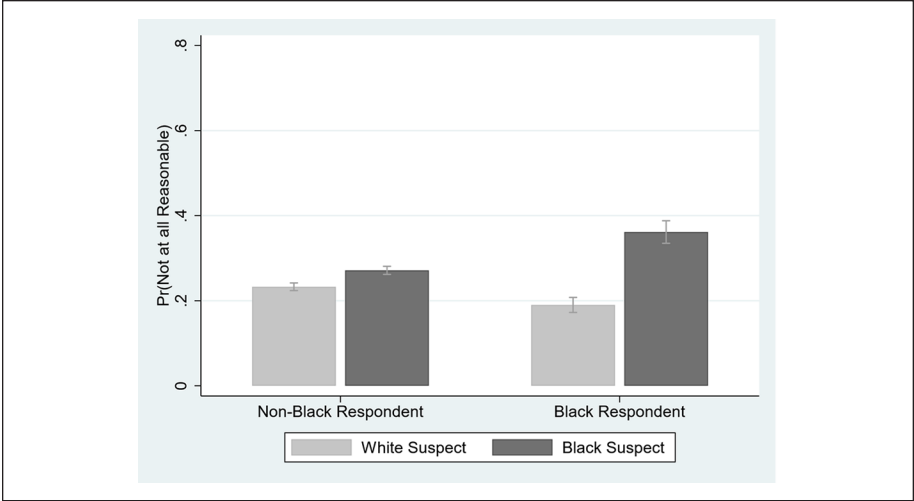
**Table 8.** Predictions, First Differences, and Second Difference Tests of Reasonableness Perceptions by Suspect and Respondent Race.

| Outcome | Suspect race | Respondent race | Predicted probability | First differences | Second differences |
|---------|--------------|-----------------|-----------------------|-------------------|--------------------|
| y= 1    | White        | Non-Black       | .233 (.009)           | .039***           | .133***            |
|         | Black        | Non-Black       | .271 (.010)           |                   |                    |
|         | White        | Black           | .190 (.018)           | .171***           |                    |
|         | Black        | Black           | .361 (.027)           |                   |                    |
| y= 2    | White        | Non-Black       | .175 (.007)           | .012***           | .029***            |
|         | Black        | Non-Black       | .187 (.007)           |                   |                    |
|         | White        | Black           | .159 (.010)           | .041***           |                    |
|         | Black        | Black           | .200 (.008)           |                   |                    |
| y= 3    | White        | Non-Black       | .193 (.007)           | -.001             | -.012              |
|         | Black        | Non-Black       | .192 (.007)           |                   |                    |
|         | White        | Black           | .191 (.007)           | -.013*            |                    |
|         | Black        | Black           | .178 (.008)           |                   |                    |
| y= 4    | White        | Non-Black       | .185 (.007)           | -.014***          | -.048***           |
|         | Black        | Non-Black       | .171 (.007)           |                   |                    |
|         | White        | Black           | .200 (.009)           | -.063***          |                    |
|         | Black        | Black           | .137 (.011)           |                   |                    |
| y= 5    | White        | Non-Black       | .119 (.006)           | -.017***          | -.050***           |
|         | Black        | Non-Black       | .103 (.006)           |                   |                    |
|         | White        | Black           | .140 (.011)           | -.067***          |                    |
|         | Black        | Black           | .073 (.008)           |                   |                    |
| y= 6    | White        | Non-Black       | .094 (.006)           | -.018***          | -.052***           |
|         | Black        | Non-Black       | .076 (.005)           |                   |                    |
|         | White        | Black           | .119 (.014)           | -.070***          |                    |
|         | Black        | Black           | .050 (.007)           |                   |                    |

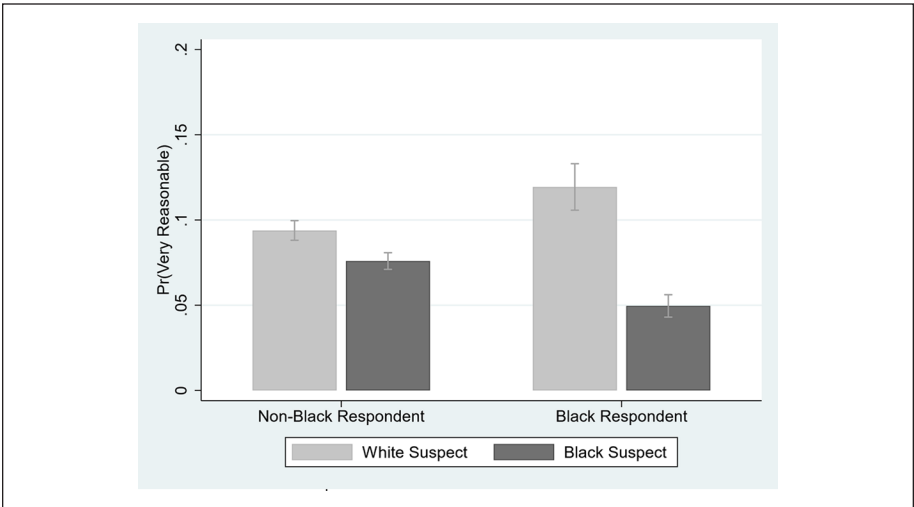
Note. Standard errors of the predictions in parentheses.  
 \* $p < .05$ . \*\*\* $p < .001$ .

0.271–0.233=0.039) was statistically significant at  $p < .001$ , indicating that non-Black participants were significantly more likely to find the officer’s conduct not at all reasonable when the person it was used against was Black.<sup>9</sup> Black participants were also significantly more likely to find the officer’s conduct not at all reasonable when the suspect was Black (36.1%) versus White (19%), a substantial 17.1% difference that was statistically significant at  $p < .001$ . The effect of suspect race on perceptions of reasonableness was much larger for Black citizens than White citizens (second difference: 0.171–0.039=0.133;  $p < .001$ ).

The overall results in Table 8 reflect this general pattern: all else held equal, all participants were significantly more likely to say that police use of deadly force fell into lower categories of reasonableness ( $y=1$  and 2) and significantly less likely to say that it fell into higher categories of reasonableness ( $y=4, 5,$  and 6) when the suspect



**Figure 2.** Predicted probability of evaluating use of force as “not at all reasonable,” by suspect and respondent race.



**Figure 3.** Predicted probability of evaluating use of force as “very reasonable,” by suspect and respondent race.

was Black, but this shift was significantly larger for Black respondents than non-Black respondents. This is illustrated graphically in Figures 2 and 3, which depict the data from Table 8 for outcomes  $y=1$  (Not at all reasonable) and  $y=6$  (Very Reasonable). The figures visually demonstrate that the effect of suspect race on perceptions of force

reasonableness are conditioned by the race of the participant. Table 8 and Figures 2 and 3 therefore provide evidence of a significant and meaningful interaction effect between suspect race and evaluator race in perceptions of police use of deadly force.

## Discussion

This study confirms that community members use factors to assess reasonableness that are not recognized in the law. Their evaluations of deadly force incidents are impacted by the race of the subject and by the precipitating event. The effect of suspect race is moderated by the race of the respondent.

### *Race of Subject Affects Assessments of Force Reasonableness*

Stoughton et al. (2020) suggest that community members' assessments of force reasonableness could be impacted by the race of the subject against whom force is used. These authors suggest that community members might view use of force against Blacks as *less reasonable* if they believe that officers are motivated (unjustly) by the demographic characteristics of the subject. The literature on bias, however, predicts that, the widespread Black-threat implicit association would lead community members to find force against Blacks as *more reasonable*. Our results are consistent with the Stoughton hypothesis. Overall, deadly force is deemed less reasonable when it is used against a Black rather than White suspect. This finding is consistent with the poll results reported above, such as the Monmouth University poll (2020) that found over half (57%) of U.S. adults believed that when faced with a dangerous situation, police are more likely to use excessive force against Blacks than Whites (see also Stafford & Fingerhut, 2020.) We found this result, not just for Black study participants, but *also* for non-Black participants. As reported above, three previous studies examined the effect of respondent race on the relationship between subject race and assessments of reasonableness and produced disparate findings, ranging from (a) White participants are more likely to find force against Black subjects as unreasonable (Strickler & Lawson, 2020)<sup>10</sup> to (b) only Black participants are more likely to find force against Blacks subjects as unreasonable (Johnson & Kuhns, 2009). Our finding of this effect for both Blacks and non-Blacks could be due to changes in community members' perceptions over recent years. The polling research above—showing that community members think force against Blacks is more likely to be excessive—has documented *increasing* percentages holding this perspective over time. For instance, Monmouth University, which found in 2020 that 57% of US adults believed that police used excessive force against Blacks, had 4 years earlier in a corresponding poll found this perspective was held by just 34%. Thus, our findings—the only ones produced after the murder of George Floyd—may reflect the increase in recent years in the proportion of community members that believe police are more likely to use excessive force against Black subjects.

Although the race of the suspect affected reasonableness ratings for both Black and non-Black subjects, the effect is most pronounced for Black study participants, which is consistent with the literature showing that proportionately more Blacks than Whites believe police use force in a biased manner (Stafford & Fingerhut, 2020). This finding

indicates that the “reasonableness divide” is not just between community members and the law, but also reflects a divergence of opinion among U.S. communities—contributing to the conflicts we see today.

### *Precipitating Incident Affects Assessments of Force Reasonableness*

Stoughton et al. (2020) suggest community members may assess governmental interest at least in part based on the circumstances that led to the police-subject interaction. They predict that force used following a low-level precipitating incident will be considered less reasonable than the force used following a serious precipitating incident. Ours is the first study to assess this possibility. In support of the hypothesis of Stoughton et al. (2020), the seriousness of the offense leading to an officer’s stop is a significant predictor of citizens’ evaluations of the reasonableness of lethal force, even when the behavior of the suspect and officer are held constant. Respondents who read that the force incident was precipitated by a broken taillight were less likely to find the force reasonable compared to respondents who read that the reason for the encounter was an outstanding warrant for several burglaries.

### *Policy Implications*

The ramifications of a reasonableness divide are serious and could be impacting the behavior of both community members and police. That community members use extra-legal factors to assess reasonableness may explain community-member involvement in demonstrations, even riots, following incidents of police use of deadly force. Community standards that differ from the law may also affect police behavior to the extent that they perceive the higher standards set by the community. This could be constructive—producing safe use-of-force decisions that are consistent with both legal and community standards—or this could produce behavior that increases danger to the police and/or the public. Police may put themselves in danger if they, for instance, hesitate to shoot a seriously threatening, armed Black man because they fear that their use of force, although legally justified, will be judged as unreasonable by the public (James et al., 2013, James, Fridell, & Straub, 2016). The more stringent community standards could produce de-policing if police fear strong negative ramifications from using even legitimate force during an encounter (Mourtgos, et al., 2020; Wolfe & Nix, 2016).

How do we close the reasonableness divide? As previewed above this divide could be produced because police are not held to account and/or community members use different standards. Although our study only tested, and found support for, differing standards on the part of community members, we certainly haven’t ruled out the possibility that police are not held to account for excessive force. It is imperative that police be held to account and there are signs of enhanced accountability over recent years. We have seen an increase in criminal prosecutions of police (Stinson & Wentzlof, 2019) and the adoption of other accountability mechanisms.



One form of accountability emanates from the increased availability of cell phones in the hands of community members; cell phone videos have produced accounts of excessive force that may not otherwise have come to light (Stern, 2020). Agencies, too, have adopted technology—most notably body worn cameras—to enhance officer accountability. And, particularly in the wake of the George Floyd murder, we have seen legislatures and police agencies adopt a recommendation from the Task Force on Twenty-First Century Policing (President’s Task Force Report on 21st Century Policing, 2015) that investigations of deadly force incidents be conducted by outside, independent entities (Curtis, 2022; Kelty, 2022).

Regarding the standards that community members have that differ from legal standards, several options exist for bridging the gap including community education, changes to law/policy, training, and changes to police practice. Community members could be educated about the legal standards that are used to evaluate force reasonableness. Entities investigating use-of-deadly-force incidents could highlight the standards used in their review. For instance, prosecutors when announcing a result (particularly a “justified shooting” result) could be clear about the law that guided their decisions and explain how their decisions are consistent with it. Law enforcement agencies should post their policies on websites and otherwise educate the public on the parameters they place on their officers’ use of force. They could invite community stakeholders to observe training sessions and, as some departments do, put community members through “shoot/don’t shoot” video scenarios.

To bridge the gap, law and policy could be changed to more closely match community members’ standards. For some, but not all of the “Stoughton factors,” state law could be changed to align more closely with community standards. As an example, recall that Stoughton et al. (2020) suggest that community members evaluate force based on its necessity. That deadly force be “necessary” is not required per Fourth Amendment interpretations, which require only that the force be “reasonable.” In adopting AB 392, the state of California incorporated a “necessary” standard into state law. Law enforcement agencies, too, have modified their force policies and training to incorporate Stoughton factors such as the “necessary” and/or “minimum force” standards (Mazurek, 2021; Seraphin, 2021). Deciding on such revisions could be the result of agencies receiving community input, such as through a police-community advisory board.

Training could help to reduce the reasonableness divide for some of the Stoughton factors. Our finding that community members perceive that force against Black subjects is less reasonable could be due, as Stoughton et al. (2020) speculate, to community concerns about bias in the use of force against Blacks. To reduce these concerns, agencies could implement implicit bias training for all personnel and implement high-quality use-of-force training, based on implicit-bias concepts, that is designed to “take the demographics” out of split-second use-of-force decisions (Fridell, 2016).

De-escalation training is relevant to our findings regarding “precipitating events.” Our findings are likely based on community members’ awareness and concern about low-level encounters that end up with police using deadly force, such as the incidents

involving Philando Castile, Dijon Kizzzee, and Eric Garner. De-escalation training could help to reduce the likelihood that low-level encounters will result in force (Engel et al., 2022).

Agency enforcement strategies could be modified to reduce the number of low-level encounters. In part because of the community outcry following high-profile shootings precipitated by low-level events, we have seen some states and agencies reduce the number of low-level interactions (Grossman, 2021). Virginia was the first state in the wake of the George Floyd murder to prohibit officers from using as primary offenses low-level traffic violations, such as those associated with vehicle equipment (Weichselbaum et al., 2021). As of this writing, the legislatures in the states of Oregon and Washington are considering similar bills (Lehman, 2022; Tracy, 2022).

### Research Implications

The current study has both strengths and weaknesses. The first major strength is that this study uses primary data. Most research examining community views of force reasonableness has relied on secondary data, particularly the General Social Survey (GSS; see Arthur & Case, 1994; Carter & Corra, 2016; Simon et al., 2021). Items in the GSS (e.g., “Do you ever approve of police striking a citizen?”) are not as well suited as the items included in our survey to compare community views of police force to the law on reasonable force, as our items were collected for this specific purpose. Furthermore, the force described within our vignette was an ambiguous use of force, representing another strength of this study. Most studies that have examined community views of police force have presented respondents with scenarios in which the officer’s use of force was either clearly “justified” or “unjustified.” When a use of force is clearly justified or unjustified, differences in opinion will only exist among the staunchest critics and defenders of the police. A third major strength of the current study stems from our model’s inclusion of the various perspectives—introduced by Stoughton et al. (2020)—community members take when evaluating police uses of force. Our study is the second study with a representative sample, and the first after the George Floyd incident, to test the effect of subject race on assessments of reasonableness. Our study is the first to assess the effect of precipitating event.

Despite its strengths, the current study is not without limitations. These limitations, however, provide opportunities for future research. One limitation of the present study is its reliance on a single use-of-force scenario. In our scenario, a *lethal* use of force was depicted. While lethal force has greater salience within public discourse due to the powerful emotional reactions it generates, less-lethal force is employed by police to a far greater degree. Future research should include multiple scenarios, including ones that depict less-lethal force. Another potential limitation of the current study is our use of a written vignette. It has been argued that video vignettes are superior to written vignettes due to the former’s “realistic nature” (Jefferis et al., 2011, p. 85). While there is no evidence to support the superiority of video vignettes, there is evidence that

results vary by medium. It is possible, then, that participants' responses would have been different if they were shown a video or listened to audio.

Another limitation of the study is that we experimentally manipulated the extra-legal factors, but not the legal factors, which were held constant. Future research might assess the importance, ideally the *relative* importance, of both legal and extra-legal variables on community members' assessments of force reasonableness.

We tested the effect of race of subject on community members' assessments of reasonableness and found support for the Stoughton hypothesis. We did not, however, directly test that hypothesis, which assumes that a community member will be more likely to regard force as unreasonable if the subject in the encounter is Black *based on perceptions that police use force unjustly against this population*. Future research could similarly assess the effect of subject race on assessments of reasonableness and additionally assess the survey respondent's views regarding police bias in the use of force.

A weakness of the current study was our use of a national online opt-in sample of U.S. adults. Though our sample closely approximates the U.S. adult population across gender, race/ethnicity, and age, Qualtrics' quota sampling procedure is not a random probability sampling procedure. Ideally, future research on this topic would survey a nationally representative sample to strengthen generalizability. This future research should assess the Stoughton factors that were not measured here, examine the effect of *officer* race on community member assessments, and evaluate the effectiveness of the proposed interventions above to reduce the "reasonableness divide."

## Conclusion

One of the most divisive societal issues of our time can be traced at least as far back as the 1960s. The deadly riots that follow incidents of police use of force reflect the concern on the part of many community members that the police are taking life unjustly. The contrast between community views about the extent to which force used by police is excessive and the criminal justice system's determination of the same suggests a "reasonableness divide." In this article we assessed and confirmed that this divide could be explained at least in part by community members' use of factors to assess reasonableness that are not considered in legal assessments. Understanding this chasm is a first step toward closing it.

## Appendix A: Use-of-Force Vignette

Officer Williams was patrolling the Hunter Downs neighborhood in the city he has policed for 12 years. He had increased patrol in the area because of multiple recent traffic crashes. At 2 pm, Officer Williams [saw a vehicle with a broken taillight and pulled it over / pulled over a vehicle that was registered to a person for whom there was an outstanding warrant for several burglaries]. He exited his car and so did the very agitated driver—who began to walk toward him. "Stay back, asshole," yelled

Officer Williams. “Just get me your driver’s license, registration and proof of insurance.” The driver, later identified as [Seth Becker/Jamal Washington], moving quickly, reached inside the car and emerged with something in his hand. As he stretched his arm forward toward the officer, Officer Williams shot twice.



*Seth Becker, shown here, was shot twice by police.*



*Jamal Washington, shown here, was shot twice by police.*

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### **ORCID iDs**

Lorie A. Fridell  <https://orcid.org/0000-0003-3851-7147>

Christopher J. Marier  <https://orcid.org/0000-0002-2445-6315>

### **Notes**

1. Strickler and Lawson (2020) manipulated both officer and subject race simultaneously; Kahn et al. (2016) manipulated mental illness and race of subject simultaneously. Johnson and Kuhns (2009) did not report results for the overall main effect, but instead reported the results within conditions of participant race.

2. Girgenti-Malone et al. (2017) did not find a statistically significant effect of subject race on assessments of force reasonableness, but the findings tended to support the implicit bias hypotheses.
3. Three of the studies had fewer than 300 subjects (Girgenti-Malone et al., 2017; Huff et al., 2018; Kahn et al., 2016).
4. As reported by Boas et al. (2018), samples for surveys administered by Mechanical Turk are not representative of population demographics with regard to income, education, age, marital status, religious affiliation, and race/ethnicity.
5. In 1985 in *Tennessee v Garner*, the Supreme Court set forth the standards for evaluating the use of *deadly force* by police and then in 1989 it set standards for less-lethal force in *Graham*. In 2007, in *Scott v Harris*, the Court reinterpreted *Garner* to be an application of *Graham* (Stoughton et al., 2020). This made *Graham* the definitive case for Fourth Amendment assessments of police use of force.
6. Respondents receive various forms of compensation for their participation.
7. According to the 2020 Census, 50.8% of the U.S. population is female; 60.1% are white (non-Hispanic), 13.4% are Black, 18.5% are Hispanic, 5.9% are Asian, 0.2% are Hawaiian or Pacific Islander, 1.3% are Native American or Alaskan, and 2.8% are multiracial (U.S. Census Bureau, n.d.). See Boas et al. (2018) for further discussion of the representativeness of Qualtrics samples and their method of quota sampling.
8. This item was validated by Jackson and Bradford (2018) with a sample of more than 2,500 participants.
9. Additional analyses restricted the sample to Black and White participants only (rather than dichotomizing Black and non-Black participants), and the results were substantively similar.
10. Strickler and Lawson (2020) speculated that their finding that only Whites are more likely to find force against Blacks as unreasonable might have been produced by a social desirability effect. Kahn et al. (2016) found no impact of participant race on the relationship between subject race and assessments of force reasonableness.

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### **Author Biographies**

**Lorie A. Fridell** is a Professor of Criminology at the University of South Florida. Her primary interest areas are police use of force, biases in the criminal justice system, violence against police, and police deviance. She is the founder of *Fair and Impartial Policing*, a national law enforcement training program.

**Christopher J. Marier** is an Assistant Professor in the department of Government and Justice Studies at Appalachian State University. His research interests include policing, race and justice, and macrosocial theories of social control.