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The Correlates of Law Enforcement Officers' Automatic and Controlled Race-Based Responses to Criminal Suspects

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The current work explored law enforcement officers' racial bias in decisions to shoot criminal suspects as well as their self-reported beliefs about Black versus White suspects. In addition, this work examined what factors contribute to officers' racial biases and the likelihood of having these biases eliminated. Examination of the officers' explicit attitudes toward Black people and their beliefs about the criminality and difficulty of Black suspects revealed strong relationships with the quality of their contact with Black people on the job and in their personal lives. In addition, officers with negative compared to more positive beliefs about the criminality of Black people were more likely to tend toward shooting unarmed Black suspects on a shooting simulation. However, officers with positive contact with Black people in their personal lives were particularly able to eliminate these biases with training on the simulation. The findings are discussed in terms of their implications for the training of law enforcement personnel.

In recent years there has been growing interest in the influence of race on law enforcement officers' responses to criminal suspects. For many, the concern is that police officers are more likely to focus on minority group members, particularly Black and Latino people, in their investigations, leading them to target minority group members when making decisions about behaviors such as traffic stops, searches, and questioning. There is also concern that police officers may be more aggressive in their responses to minority compared to White suspects (Lusane, 1991; Quinney, 1970). Such responses may be influenced by stereotypic expectations. For example, it is possible that the stereotype that Black men are more likely to be violent and hostile may create expectations that Black people, particularly Black men, are more likely to be violent criminals than are White people (Brigham, 1971; Devine & Elliot, 1995). If law enforcement officers harbor such expectations, then decisions about whether a suspect is dangerous may be biased and result in more antagonistic responses to Black compared to White suspects, including decisions about the amount of force necessary to restrain a suspect and whether to shoot a suspect.

Recent research has examined whether race influences people's decisions to shoot criminal suspects (e.g., Correll, Judd, Park, & Wittenbrink, 2002; Greenwald, Oakes, & Hoffman, 2003; Plant & Peruche, 2005; Plant, Peruche, & Butz, 2005). These examinations have revealed that people are more likely to mistakenly decide that a Black suspect is in possession of a weapon compared to a White suspect. For example, in the work conducted by Correll and colleagues (2002), undergraduate students completed a computer simulation where they had to decide whether to shoot at a male suspect who appeared on the computer screen. Their decision was supposed to be based upon whether the suspect was holding a gun or neutral object (e.g., wallet, cell phone). The results indicated that college students were more likely to misinterpret neutral objects as weapons and mistakenly shoot when the suspect was a Black person compared to a White person.

Given the potentially disastrous implications of these biases, recent attention has focused on the elimination of biased responses toward criminal suspects (Plant & Peruche, 2005; Plant et al., 2005). Plant and her colleagues (2005) asked undergraduate participants to complete a computer simulation similar to that of Correll et al. (2002) where participants made a decision as quickly as possible whether to shoot Black and White male suspects who appeared on a computer screen. The decision was based on whether a gun or a neutral object was present in the picture. In this computer simulation the race of the suspect was unrelated to the presence of a weapon and being influenced by the race of the sus-

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pect would only impair performance. Upon initial exposure to the program, participants were more likely to mistakenly shoot unarmed Black suspects than unarmed White suspects. However, after extensive practice with the program where the race of suspect was unrelated to the presence of a weapon, this racial bias was eliminated immediately after training and 24 hr later.

These findings indicate that repeated exposure to stimuli where race is unrelated to the presence or absence of a gun can eliminate race bias. Plant and her colleagues (2005) argued that over the course of multiple trials on the shooting task, participants came to inhibit the activation of the racial category because race was not diagnostic of weapon possession. As a result, the participants eliminated the automatic influence of race on their responses. In an important extension of this work, Plant and Peruche (2005) demonstrated that law enforcement officers also respond with racial bias in decisions to shoot suspects on computer simulations but that this bias can be eliminated with exposure to their program where race was unrelated to weapon possession.

The present work expands upon the previous literature and explores law enforcement officers' racial bias in decisions to shoot criminal suspects as well as self-reported racial bias in response to criminal suspects. Another goal of the current work was to examine the factors that may contribute to police officers' racial biases and the likelihood of having these biases eliminated. It is currently unclear, for example, whether positive and negative contact with Black people on the job or in an officer's personal life is related to law enforcement officers' beliefs regarding Black suspects or their split-second decisions whether to shoot criminal suspects. The current work explored the impact of a range of factors on law enforcement officers' responses to criminal suspects.

The present work examined law enforcement officers' explicit attitudes and beliefs about Black suspects and their more implicit responses because both types of responses are likely important in influencing reactions to criminal suspects. Previous research has revealed that White people's self-reported racial attitudes predict the degree of racial bias in their verbal behavior whereas their implicit attitudes relate to nonverbal friendliness and perceived friendliness of an interaction partner (Dovidio, Kawakami, & Gaertner, 2002). To date, we know very little about the self-reported attitudes and beliefs of police officers regarding Black people. These explicit responses may have important implications for their responses and interactions with Black citizens when on the job. For example, if a law enforcement officer believes that Black suspects are more likely to be violent and hostile than White suspects, Black suspects may be under greater scrutiny by the officer. In addition, the officer may interpret the behavior of the suspect through the lens of his or her stereotypic expectations, which could lead the officer to interpret the behavior of Black suspects as more aggressive and dangerous than the same behavior performed by White suspects. This in turn may lead to a more aggressive response from the law enforcement officer toward Black suspects compared to White suspects. Also, if a law enforcement officer believes that a Black person is more likely to be a dangerous criminal than is a White person, the officer may be more likely to subject Black suspects compared to White suspects to searches and may be less likely to give them warnings in lieu of tickets or citations.

One potentially important factor in understanding law enforcement officers' responses to Black suspects is the officers' previous contact with Black people both on the job and in their personal lives. The intergroup contact hypothesis suggests that when certain criteria are met, contact between members of outgroups improves intergroup attitudes (Allport, 1954). Pettigrew (1997) demonstrated that people who have intergroup friends are less likely to exhibit implicit and explicit intergroup bias. However, law enforcement officers frequently encounter citizens who are angry, frustrated, or frightened. Therefore, if the officers' contact with Black people is primarily on the job, then repeated exposure to upset or antagonistic Black citizens may reinforce stereotypes about Black people and exacerbate negative attitudes and responses to Black suspects. However, positive experiences with Black people on the job or in their personal lives may help to eliminate racial biases and counteract officers' negative stereotypes about Black people. Therefore, the current work examined the implications of law enforcement officers' contact with Black people both on the job and in their personal lives.

In addition to contact, it may also be important to consider whether other experiences on the job influence racial bias in responses to suspects. For example, most officers have some form of diversity training, which is intended to improve attitudes toward people from other racial and ethnic groups and decrease intergroup bias. If such training is effective, then the amount of diversity training should be negatively related to the degree of bias. In addition, it is possible that merely being on the force will influence the officers' responses based on race. For example, one could imagine that law enforcement officers with more experience may exhibit less bias than newer officers because they have more training and have learned to control the influence of stereotypes and base their responses in the field on the specific situation at hand. Alternatively, it may be that those individuals with more years in the area of law enforcement exhibit more bias than officers with less experience because over time, experiences on the job may strengthen negative stereotypic expectations. Another factor that may influence the degree of bias of a law enforcement officer is the frequency with which the officer has had to draw a weapon on a suspect in the recent past. For example, law enforcement officers who are frequently involved in situations where they must draw their weapon and point it at a suspect may be more likely to interpret the behavior of suspects as threatening, which could influence their degree of racial bias.

THE CURRENT WORK

The goal of the current work was to examine the factors that are related to police officers' racial bias in decisions to shoot suspects as well as their explicit attitudes about Black people in general and beliefs about Black suspects in particular. To this end, certified police patrol officers first completed Plant and her colleagues' (2005) shoot/don't shoot computer simulation task. Examination of the officer's responses to the simulation allowed us to determine the officer's initial level of racial bias on the simulation and whether exposure to the simulation reduced this racial bias. Next, participants completed a traditional measure of attitudes toward Blacks (ATB, Brigham, 1993) and a measure of their beliefs about the criminality and danger of Black compared to White suspects. In addition, we explored the implications of the officers' contact with Black people both on the job and in their personal lives, the extent of their diversity training, their years on the force, and the number of times they had drawn their weapon on a suspect for their explicit and automatic responses to Black suspects. Based on previous work, officers with more positive contact experiences should have more positive implicit and explicit responses to Black people (Pettigrew, 1997; Tropp & Pettigrew, 2005). In addition, positive contact with Black people may be vital for counteracting negative experiences on the job and may increase officers' ability to eliminate racial biases. In contrast, negative contact with Black people on the job may increase racial biases or impede the elimination of racial biases. Further, it was possible that the more time on the force and the more time spent in diversity training, the more positive the officers' automatic and controlled responses to Black suspects.

METHOD

Participants

Fifty certified sworn law enforcement personnel in the state of Florida (83% men; 84% White, 10 % Black, 2% Native American, and 4% Hispanic) volunteered to participate in the study. It is important to note that the sample in the current study was the same as in Plant and Peruche (2005). Due to space restrictions, in Plant and Peruche's brief report, they presented only the basic findings (errors and latencies) from the shoot/don't shoot simulation. They did not report on the explicit attitude measures or the association between the self-report responses and the responses to the shoot–don't shoot simulation. The mean age of participants was 37 years (SD = 7.82) and law enforcement experience ranged from 2 to 32 years (M = 11.13, SD = 5.94). Two officers made too few valid responses to the computer simulation (i.e., responded to less than 20% of trials in the time limit), and two participants did not complete the self-report measures, leaving a sample of 46 officers.

Materials

To investigate the present hypotheses, we used the computer simulation from Plant et al.'s (2005) work. The program instructed participants to decide whether to shoot at suspects that appeared on a computer screen. This decision was to be based on whether a gun or neutral object was present in the picture. The stimuli consisted of pictures of Black and White college-aged men matched for attractiveness (Malpass, Lavigueur, & Weldon, 1974) with a picture of a gun or a neutral object (e.g., cell phone, wallet) superimposed on the picture (see Plant et al., 2005, for a full description of the program). Each participant completed 20 practice trials followed by 160 test trials. Participants were instructed to hit the "shoot" key if a gun was present, and they were instructed to hit the "don't shoot" key if a neutral object was present. To determine whether exposure to the program reduced racial bias in decisions to shoot, the trials were split in half and responses to the first half of the trials were compared to responses to the second half of the trials. Of interest was the number of errors (mistaken responses) that participants made as a function of the race of suspect, the object that the suspect was holding, and training (early vs. late trials).

Following the computer simulation, participants completed a questionnaire packet that included Brigham's (1993) ATB Scale. This scale contained 20 questions assessing attitudes toward Black people (e.g., "I would not mind at all if a Black family with about the same income and education as me moved in next door"). Responses were given on a 7-point scale and were averaged with higher scores indicating more positive attitudes toward Black people (α = .84). Participants also completed a questionnaire we created specifically for law enforcement personnel asking about their experiences on the job. The questionnaire included 15 items assessing perceptions regarding the criminality and violent behavior of Black compared to White suspects (e.g., "White suspects are less likely to be violent than Black suspects," "Black males are more likely to possess weapons compared to any other group") that were averaged with higher scores indicating more negative perceptions of Black suspects (α = .93). The packet also included questions regarding the quality of the officers' contact with Black people at work and in their personal lives. These questions were similar with the exception of the context of the contact (personal vs. work). Four separate contact indexes were created based on factor analysis: positive personal contact (PPC; e.g., "My interactions with Black people over the last couple weeks have been very pleasant"; α = .76), negative personal contact (NPC; e.g., "In the last couple of weeks, I have had arguments with Black people," α = .79), positive work contact (PWC; α = .67), and negative work contact (NWC; α = .87). Officers were also

asked to report how many times over the previous 6 months they had drawn their weapon on a suspect ($M = 1.59$, $SD = 3.89$).[1] Finally, the officers were asked to report the number of hours of human diversity training they had completed ($M = 50.76$ hr, $SD = 30.94$ hr).

Procedure

The experimenter met participants in a private office at their department headquarters. The officers were run individually and were seated at a desk with a laptop computer. After the participants read the consent form, the experimenter provided instructions regarding the computer simulation and the participants completed the program. After the simulation, participants completed the questionnaire packet. They were then debriefed and thanked for their participation.

RESULTS

We were interested in whether the police officers' contact with Black people and their experiences on the job were related to their attitudes toward Black people in general and Black suspects in particular. Therefore, we conducted multiple linear regression analyses on the officers' attitudes toward Black people and their beliefs about Black suspects with contact on each of the four contact measures (e.g., PWC, NPC), hours of cultural diversity training, time in the law enforcement profession, and the number of times the officers had drawn their weapon on a suspect in the last 6 months all simultaneously included as predictors. This approach allowed us to examine the independent influence of each of the predictors on the attitude measures. Those effects not explicitly mentioned were not significant.

Analysis of Explicit Responses

The analysis of the general attitudes toward Black people (i.e., ATB scores) revealed an effect of PPC such that participants with more PPC reported more positive attitudes toward Black people than those with less PPC, $F(1, 38) = 9.18$, $p < .004$ ($\beta = .55$). There was also an effect of NPC, such that participants with more NPC with Black people reported more negative attitudes toward Black people, $F(1, 38) = 4.12$, $p = .05$ ($\beta = -.35$). In addition, there was a marginal effect of NWC with high compared to low levels of recent negative contact with Black people at work being associated with negative attitudes toward Black people generally, $F(1, 38) = 3.94$, $p < .06$ ($\beta = -.30$).

The analysis of the officers' beliefs about the criminality and violent behavior of Black suspects revealed an effect of PPC whereby officers that reported more PPC with Black people reported more positive beliefs about Black suspects than did those with less PPC, $F(1, 38) = 8.24$, $p < .008$ ($\beta = -.50$). Further, there was an effect of NWC such that officers with high levels of negative contact with Black people at work reported more negative expectations regarding Black criminal suspects than did officers with less negative work contact, $F(1, 38) = 8.53$, $p < .005$ ($\beta = .42$).

Analysis of Responses to Shooting Simulation

As reported in Plant and Peruche (2005), examination of the officers' errors on the shooting simulation revealed that, consistent with previous work using undergraduate samples (e.g., Correll et al., 2002; Plant et al., 2005), the officers were initially more likely to mistakenly shoot unarmed Black suspects compared to unarmed White suspects but were no more likely to mistakenly not shoot armed Black suspects than White armed suspects. However, on the later trials, after extensive exposure to the program, this racial bias was eliminated such that the officers responded similarly to the Black and White suspects.[2] Thus, although on the early trials the officers were biased toward mistakenly shooting unarmed Black suspects compared to unarmed White suspects, on the later trials this bias was eliminated.

Having established that the officers were initially racially biased in their responses to the program but were able to overcome these biases, we were interested in identifying who was more or less able to overcome biased responses on the shoot/don't shoot computer simulation. To examine this issue, we created an assessment of participants' degree of bias reduction on the shooting simulation. Specifically, we created a bias score for both the early and late trials of the shooting simulation using a procedure similar to that used in previous work (e.g., Correll et al., 2002). Responses by participants were considered biased if they made more errors when Black faces were paired with neutral objects than when White faces were paired with neutral objects and made more

[1]The variable of the number of times the officers drew their weapons was somewhat skewed; however, the findings from all analyses using a transformed version yielded basically identical results. Therefore, we chose to use the more easily interpretable untransformed variable.

[2]The findings for the error analysis of the shooting simulation for the current sample, which doesn't include 2 participants who did not complete the self-report measures, were almost identical to those reported by Plant and Peruche (2005). Most important, the analysis revealed the key Race of Suspect × Object by Trial interaction, $F(1, 45) = 4.93$, $p < .04$. Specifically, the officers were more likely to mistakenly shoot at an unarmed suspect when the suspect was Black ($M = 3.63$, $SD = 2.51$) compared to when the suspect was White ($M = 2.70$, $SD = 2.17$), $t(1, 45) = -2.92$, $p < .007$. In contrast, when the suspect was armed, the officers were somewhat but not significantly more likely to mistakenly not shoot an armed suspect when he was White ($M = 3.54$, $SD = 2.65$) compared to Black ($M = 3.04$, $SD = 2.18$), $t(1, 45) = 1.50$, $p = .14$. On the later trials, the participants were no more likely to mistakenly shoot an unarmed Black suspect ($M = 2.61$, $SD = 1.94$) than an unarmed White suspect ($M = 2.41$, $SD = 1.84$), $t < 1$. In addition, they were equally likely to mistakenly not shoot armed White ($M = 3.11$, $SD = 2.17$) and Black suspects ($M = 3.28$, $SD = 2.83$), $t < 1$.

errors when White faces were paired with guns than when Black faces were paired with guns. Specifically, the number of errors for Black/gun trials was subtracted from the number of errors for Black/neutral trials. In addition, the number of errors for White/neutral trials was subtracted from the number of errors for White/gun trials. These two scores were added together for the early and late trials separately. To assess the amount that participants improved, that is, their degree of bias reduction, we created an overall improvement score that assessed the degree to which participants responded with less racial bias on the later trials than the early trials.[3]

We conducted multiple linear regression analyses on the officers' bias reduction score as well as on their early and late bias scores with the measures of attitudes, contact, diversity training, years on the force, and times a weapon was drawn all simultaneously included as predictors. Initial analyses revealed that the PPC measure was the only contact measure that was a significant predictor of the performance on the simulation. Therefore, to conserve degrees of freedom, it was the only contact measure included in the reported analyses.

The analysis of the bias reduction score revealed an effect of beliefs about the criminality of Black suspects such that participants with negative beliefs about the criminality of Black people exhibited a greater reduction in bias ($\hat{Y} = 3.60$) compared to those that reported more positive beliefs ($\hat{Y} = -.73$), $F(1, 39) = 6.80$, $p < .02$ ($\beta = .50$). In addition, there was an effect of PPC whereby participants that reported more PPC with Black people exhibited a greater reduction in bias ($\hat{Y} = 3.12$) than those with less PPC with Black people ($\hat{Y} = -.26$), $F(1, 39) = 6.23$, $p < .02$ ($\beta = .39$).

Having established that the officers with more negative attitudes toward Black suspects and more PPC with Black people showed a larger reduction in racial bias on the simulation, we were interested in understanding these effects. For example, it may have been that officers with more negative attitudes toward Black suspects compared to those with positive attitudes had larger bias reduction scores because they had more racial bias on the early trials to be eliminated. Alternatively, they may have responded with less racial bias on the later trials than those with more positive attitudes.

The analysis of the degree of bias in the early trials revealed an effect of beliefs about the criminality of Black suspects, such that participants with negative beliefs about Black criminal suspects exhibited more racial bias in their responses to the shooting simulation (i.e., erred toward shooting Black suspects and erred away from shooting White suspects) in the early trials compared to those with more positive beliefs about Black criminal suspects, $F(1, 39) = 12.36$, $p < .002$ ($\beta = .66$). This finding indicates that the effect of negative attitudes toward Black suspects on the bias reduction score was likely due to the officers with negative attitudes toward Black suspects responding with more initial racial bias on the simulation.

In addition, analysis of bias on the early trials revealed an effect of attitudes toward Black people more generally, such that participants with more negative attitudes toward Black people were more likely to exhibit racial bias in their responses to the early trials of the shooting simulation than were those with less negative attitudes, $F(1, 39) = 7.14$, $p < .02$ ($\beta = .50$). Further, a marginal main effect of years in the law enforcement profession was found such that the more years the participants had accumulated in the law enforcement profession, the less racial bias evident in their responses to the early trials of the shooting simulation, $F(1, 39) = 3.38$, $p < .08$ ($\beta = -.26$).

The analysis of the degree of bias on the late trials revealed a marginal main effect of PPC, $F(1, 39) = 3.16$, $p < .09$ ($\beta = -.30$). Specifically, high PPC participants' had less racial bias on the later trials of the shooting simulation compared to low PPC participants. This finding indicates that the reason why officers with higher levels of PPC had larger bias reduction scores was because they had less racial bias than the low PPC officers after training on the program. Together, these findings indicate that positive contact with Black people in their personal lives may have helped the officers to eliminate their racial bias on the shooting simulation.

DISCUSSION

The current work examined the factors that were related to police officers' explicit attitudes toward Black people and beliefs about the criminality of Black suspects as well as the factors that predicted their automatic racial biases in response to a shooting simulation. Examination of the officers' explicit attitudes revealed strong relationships with the quality of their contact with Black people. It is interesting that officers who had positive experiences with Black people in their personal lives had more positive attitudes toward Black people as well as more positive beliefs about the criminality and violence of Black suspects. These findings suggest that positive experiences with Black people outside of work may be important for counteracting negative experiences at work. That is, if officers do not have positive contact with Black people outside of work, then their only contact with Black people would be in work-related settings, which may be predominantly negative. Consistent with this idea, high levels of negative contact with Black people at work were related to negative expectations regarding Black suspects and marginally more negative attitudes toward Black people generally.

These findings suggest that the quality of contact that police officers have with Black people may have important implications for their attitudes and responses to Black people on

[3]A reviewer of this article suggested creating an average bias score across the early and late trials to examine which variables increased or decreased the average bias. We created such a score and found that it was unrelated to all of the other variables.

the job and in their personal lives. However, because of the methodological approach used in the current study, the causal relationships between contact and attitudes cannot be identified. Although officers who have negative contact with Black people at work may come to view Black suspects as more difficult than White suspects, it is also quite likely that officers who possess negative expectations about Black suspects may experience more negative interactions with Black people on the job. Similarly, although officers who have more positive experiences with Black people in their personal lives may have more positive expectations about Black suspects, it is also possible that officers with more positive beliefs about Black people may seek out and contribute to more positive experiences with Black people in their personal lives. Thus, attitudes and contact may influence and reinforce each other. To decrease negative responses to Black suspects and improve intergroup attitudes, it may be useful to create more opportunities for positive interactions between officers and citizens. For example, it may be helpful to expand opportunities where officers can take part and get involved in community events. In addition to providing more positive contact, this type of contact may help to improve the beliefs of officers about Black people generally and could have a positive impact on community attitudes about law enforcement officers. Indeed, mounting evidence indicates that intergroup contact is critical for improving responses to outgroup members (e.g., Tropp & Pettigrew, 2005).

The officers' beliefs about the criminality of Black suspects as well as the quality of their contact with Black people were important factors in determining their responses to the shooting simulation. These self-reported responses were related to both their degree of racial bias in responding to the program as well as their ability to overcome the racial bias with repeated exposure to the program. Upon initial exposure to the program, the officers who perceived Black criminal suspects as more dangerous than White suspects exhibited more of a racial bias in their split-second decisions to shoot than the officers with more positive beliefs about Black suspects. Specifically, the officers with negative attitudes toward Black criminal suspects tended toward shooting the Black suspects and tended to avoid shooting the White suspects compared to the officers with more positive attitudes toward Black criminal suspects. Similarly, the officers' with more negative attitudes toward Black people generally were more likely to exhibit bias in early trials than were those with less negative attitudes. These findings indicate that officers' beliefs about Black suspects as well as their attitudes toward Black people in general are both related to the degree of racial bias the officers initially exhibited when making split-second decisions whether to shoot Black and White suspects. These findings indicate that it may be critical to focus on changing police officers' attitudes and beliefs about Black people when attempting to reduce any racial bias in their decisions on the job.

On a more promising note, there was a marginally significant effect of years on the force in predicting the degree of racial bias on the shooting simulation. More years in the law enforcement profession was related to less racial bias on the early trials of the shooting simulation. This suggests that the experiences and training the officers receive in law enforcement may help to discourage racial bias. Over time the officers may learn that when making split-second decisions about whether a suspect is armed and dangerous it is critical to focus on the object that the suspect is holding as opposed to extraneous factors such as his or her race. As a result, they may be less influenced by race when making decisions on the shooting simulation.[4]

Further, on the later trials of the shooting simulation, the officers with more PPC with Black people in their personal lives responded with less racial bias compared to the officers with less PPC. In addition, examination of the improvement scores indicated that the officers with PPC with Black people were better able to eliminate their racial bias on the shooting simulation even after controlling for the officers' attitudes toward Black people. These findings suggest that contact with Black people outside of the job facilitated the elimination of biased responses and that officers with this type of contact were better able to learn that race is not an effective diagnostic tool when attempting to ascertain whether a suspect is potentially dangerous. Because so much of police officers' contact with citizens is negative, positive contact with people in their personal lives may be critically important to counteract this negativity. The primarily White officers in the current study were likely to have ample positive contact with White people. However, if they did not have contact with Black people outside of the work setting, their only contact with Black people may have been at work and negative. PPC with Black people may help offset negative experiences on the job. Further, officers with positive contact with Black people in their personal lives are more likely to have positive Black exemplars to draw upon to help them remove the influence of the negative cultural stereotype of Black people in their decisions to shoot on the computer simulation.

It is worth noting that diversity training was not related to either explicit attitudes or responses to the computer simulation. The lack of relationship may be due to the way we measured the diversity training (i.e., number of hours). However, it would likely be beneficial for law enforcement training programs to explore the efficacy of their diversity training procedures and work to determine whether changes can be made to increase the effectiveness of their current training.

[4]Of course, years on the force are also likely highly related to the officers' age ($r = .76$), which might seem to suggest that the relationship between years on the force and racial bias is a cohort effect, whereby officers from an older cohort are less likely to respond with this kind of racial bias. However, age was largely unrelated to the degree of bias on the early trials of the simulation ($r = -.10$).

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CONCLUSIONS

Our hope is that the current work may provide some early insight into the factors that help reduce any influence of race on law enforcement personnel's explicit and automatic responses to suspects. The present study highlights the importance of police officers' contact and training for their explicit and more automatic responses to criminal suspects. Law enforcement officials may want to consider encouraging positive personal contact with citizens from a range of racial and ethnic groups. This may be accomplished by encouraging officers to volunteer for local charities, outreach programs, or community projects. This may help give officers the opportunity to discuss community issues with Black, White, Hispanic, and Asian community members in more informal settings. Such contact may also diminish negative attitudes regarding law enforcement officers that citizens may harbor.

The ultimate goal of the current work is to help us better understand how to eliminate any racial bias in people's real-life responses to others. In addition, we hope to contribute to the understanding of what factors may influence officers' split-second decisions as well as their more explicit and overt responses to suspects. With this work, we want to help officers make correct, individuated decisions about suspects under the arduous circumstances in which they sometimes find themselves. Specifically, we want to help train officers to protect themselves and others from harm and at the same time train officers to accurately assess the potential threat and criminality of the citizens they encounter.

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