Arrest Efficiency and the Fourth Amendment

L. Song Richardson
Article

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INTRODUCTION

In recent years, scholars have demonstrated that judges often construct legal theories based upon inaccurate assumptions about human behavior.¹ Often, the behavioral assumptions embedded in legal doctrine are unstated. In fact, because "these assumptions seem self-evidently correct, even when they are wrong . . . judges sometimes incorporate empirically testable social science claims into their legal reasoning without even noticing that they are doing so."²

Behavioral realist scholars argue that judges should not base their theories of human behavior on a purely conceptual, a priori process, but rather on the best empirical scientific evi-

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2. Krieger & Fiske, supra note 1, at 1002.
dence that exists.\(^3\) These scholars primarily utilize the science of implicit social cognition to test the embedded behavioral assumptions about human decisionmaking and judgments contained within legal doctrine.\(^4\) This science combines the lessons of social psychology, cognitive psychology, and cognitive neuroscience\(^5\) to examine mental processes that occur outside of conscious awareness and that operate without conscious control.\(^6\) Employing this science, these scholars critique legal doctrine and challenge courts to take accurate theories of human behavior into account or to explain their failure to do so.\(^7\)

Largely absent from the behavioral realist conversation thus far are Fourth Amendment scholars.\(^8\) The void is surprising because at the core of the Fourth Amendment rests concerns about police-citizen interactions. The science of implicit social cognition (the science) can contribute much to the understanding of police behavior, especially as it relates to the treatment of nonwhites.

3. Id. at 1001.
8. But see Andrew E. Taslitz, Police Are People Too: Cognitive Obstacles to, and Opportunities for, Police Getting the Individualized Suspicion Judgment Right, 8 OHIO ST. J. CRIM. L. 7 (2010). Other criminal procedure scholars have highlighted the need to pay more attention to social science. See, e.g., Tracey L. Meares & Bernard E. Harcourt, Transparent Adjudication and Social Science Research in Constitutional Criminal Procedure, 90 J. CRIM. L. & CRIMINOLOGY 733, 736 (2000) (“The most current and reliable empirical and social scientific evidence must inform the normative judgments at the heart of constitutional criminal procedure.”); see also David A. Harris, What Criminal Law and Procedure Can Learn from Criminology Symposium, 7 OHIO ST. J. CRIM. L. 1, 3 (2009); Eric J. Miller, Putting the Practice into Theory, 7 OHIO ST. J. CRIM. L. 31, 33 (2009).
Consider hit rates or “arrest efficiency”\(^9\) as an example. Hit rates are the rates at which the police find contraband or other evidence of criminal activity when they conduct a stop and search.\(^{10}\) Hit-rate data, when available,\(^{11}\) consistently demonstrate that stops and searches of whites are more successful in yielding evidence of criminal activity than stops of blacks, or that the rates are at least equal. In Minnesota, for example, the hit rates for finding contraband are 11.17 percent for blacks and 23.53 percent for whites.\(^{12}\) In Los Angeles, frisked blacks are forty-two percent less likely than whites to be found with weapons, twenty-five percent less likely to be found with drugs, and thirty-three percent less likely to be found with other contraband.\(^{13}\) Similar results have been obtained in New York.\(^{14}\)

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14. Statistics gathered by the New York Police Department for the first nine months of 2009 demonstrate that eighty-four percent of pedestrians stopped were either black or Hispanic. Bob Herbert, *Jim Crow Policing*, N.Y. TIMES, Feb. 2, 2010, at A26, available at 2010 WLNR 2156316. Yet, only 1.6 percent of the blacks and 1.5 percent of the Hispanics stopped were found in possession of contraband. Police stopped whites far less (about sixteen percent of the time), but found contraband 2.2 percent of the time. Id. In 2006, the hit rate for white suspects was 6.4 percent compared to 5.7 percent for black suspects. Jim Dwyer, *Whites Smoke Pot, but Blacks Are Arrested*, N.Y. TIMES, Dec. 23, 2009, at A24, available at 2009 WLNR 25781059 (noting that in 2008, blacks were seven times more likely and Latinos four times more likely than whites to be arrested for marijuana possession, even though whites were the heaviest users of marijuana); see also Amanda Geller & Jeffrey Fagan, *Pot as Pretext: Marijuana, Race and the New Disorder in New York City Street Policing*, 7 J. EMP. LEGAL STUD. 591, 604–24 (2010) (analyzing data on marijuana arrests in New York City and finding unwarranted disparities).
Illinois, Rhode Island, Missouri, and West Virginia. Yet, the police consistently stop and search blacks at higher rates than whites.

I do not dispute the fact that conscious racial bias against blacks can explain why the police continue to disproportionately stop and search blacks despite the hit-rate data. However,

15. ALEXANDER WEISS & DENNIS P. ROSENBAUM, ILLINOIS TRAFFIC STOPS STATISTICS STUDY 12–13 (2008), available at http://www.dot.state.il.us/travelstats/ITSS%202008%20Annual%20Report.pdf ("[P]olice are 1.6 times more likely to find contraband in the vehicle driven by a Caucasian driver.").

16. “African Americans and Latinos were much more likely to be stopped by police and much more likely to be searched once stopped, even though Whites were more likely to be found with contraband.” ACLU, THE PERSISTENCE OF RACIAL AND ETHNIC PROFILING IN THE UNITED STATES 62 (2009) (citing AMY FARRELL & JACK MCDEVITT, RHODE ISLAND TRAFFIC STOP STATISTICS DATA COLLECTION STUDY 2004–2005, at 79 (2006)), available at http://www.aclu.org/pdfs/humanrights/cerd_finalreport.pdf.

17. A 2007 report found that blacks were sixty-six percent more likely than whites to be stopped, and 1.79 times more likely to be searched than whites. The hit rates for contraband were twenty-three percent for whites and 17.6 percent for blacks. Executive Summary on 2007 Missouri Vehicle Stops, MO. ATT’Y GEN., http://ago.mo.gov/racialprofiling/2007/racialprofiling2007.htm (last visited May 6, 2011).

18. Blacks and Latinos are 1.5 times more likely to be stopped than whites, and 2.5 times more likely to have their vehicles searched despite the fact that minority drivers are less likely to have contraband. West Virginia Traffic Stop Study: 2009 Final Report, W. VA. DIVISION JUST. & COMMUNITY SERVICES, http://www.djcs.wv.gov/SAC/Pages/WVTrafficStopStudy.aspx (last visited May 6, 2011).

19. In New York, for example, blacks were stopped twenty-three percent more often than whites and this proportion of stops was not explained by previous arrest rates. Gelman et al., supra note 9, at 817. In Los Angeles, blacks were more than twice as likely as whites to be stopped. ÁYRES & BOROWSKY, supra note 13, at 5; see also Rudovsky, supra note 11, at 340–42 (describing a study of stops and frisks on the streets of Pennsylvania showing disproportionate stops of black pedestrians, especially in white-dominated areas). Moreover, there is reason to believe that hit rates, where available, may actually underrepresent the number of innocent blacks who are stopped because officers may fail to accurately report the number of innocents they encounter. See, e.g., Rudovsky, supra note 11, at 312 (giving the example of police officers falsifying records of the race of those stopped and searched).

20. Economists and civil liberties scholars both provide this explanation when the hit rate is lower for blacks than for whites. See Harcourt, supra note 10, at 1276–78 nn.2–14. Professor Harcourt argues that economic models are flawed because their definition of “success” relates to maximizing the rates of successful searches. He argues that “[t]he proper goal for the police is to minimize the social cost of crime.” Id. at 1295; see also Donna Coker, Addressing the Real World of Racial Injustice in the Criminal Justice System, 93 J. CRIM. L. & CRIMINOLOGY 827, 836–39 (2003) (describing a study showing that while officers sought search warrants for drugs more often for blacks, the success rates for finding drugs was higher for whites).
the operation of implicit biases can create similar results. The science of implicit social cognition demonstrates that individuals of all races have implicit biases in the form of stereotypes and prejudices that can negatively and nonconsciously affect behavior towards blacks.\textsuperscript{21} The implicit stereotype consists of the cultural stereotype of blacks, especially young men, as violent, hostile, aggressive, and dangerous.\textsuperscript{22} In the policing context, implicit stereotypes can cause an officer who harbors no conscious racial animosity and who rejects using race as a proxy for criminality to unintentionally treat individuals differently based solely upon their physical appearance.

As a result of implicit biases, an officer might evaluate behaviors engaged in by individuals who appear black as suspicious even as identical behavior by those who appear white would go unnoticed. In other words, even when officers are not intentionally engaged in conscious racial profiling, implicit biases can lead to a lower threshold for finding identical behavior suspicious when engaged in by blacks than by whites.\textsuperscript{23}

Conscious racial profiling likely multiplies the effects of implicit bias on police behavior. Assume for a moment that of-
ficers engaged in profiling will only approach and question those blacks whose behavior they deem suspicious. The problem is that focusing attention on blacks with the assumption that they are more likely to be engaged in criminal activity activates implicit biases. These biases then influence how officers interpret the ambiguous behaviors they observe. Consequently, whether or not officers are engaged in conscious racial profiling, they may stop more blacks than whites, but they will be more accurate when they stop whites because more unambiguous evidence of criminal activity is necessary before they will evaluate the behavior as suspicious.

This Article argues that the behavioral-realism approach is important to the study of Fourth Amendment jurisprudence and policing. The Amendment is primarily concerned with protecting individual privacy against arbitrary government intrusion.\(^\text{24}\) In their efforts to protect privacy, judges often make assumptions related to police decisionmaking, judgments, and perceptions. To the extent that courts construct Fourth Amendment doctrine based upon behaviorally unrealistic assumptions about an officer's abilities in these areas, the resulting doctrine will not adequately protect privacy.

This Article demonstrates the efficacy of behavioral realism in the Fourth Amendment context by utilizing its framework to scrutinize the Court's stop-and-frisk jurisprudence. My primary focus is on pedestrian stops rather than traffic stops. Traffic stops and the Supreme Court's decision in *Whren v. United States*\(^\text{25}\) will be the subject of a future article.

The Court's stop-and-frisk doctrine allows invasions upon individual privacy when police officers judge that an individual's actions are reasonably suspicious. The Court's assumptions about an officer's ability to make these judgments do not withstand empirical scrutiny when tested against the science. The failure to be behaviorally realistic leads to policing that inadequately protects privacy while simultaneously failing to further effective law enforcement.

This Article argues that if the Fourth Amendment is to realize its normative commitment to obtain the appropriate balance between privacy and security, courts should reconsider their behavioral assumptions about police decisionmaking and judgments of criminality. Otherwise, the privacy protections of-

\(^{24}\) See infra Part II.

fered by the Fourth Amendment will be a scarce commodity for those communities most affected by the operation of implicit biases on the police. This Article offers specific suggestions for “[r]eckon[ing] with” implicit bias in policing and the Fourth Amendment.

This Article proceeds in three parts. Part I introduces the science of implicit bias, including a discussion of how implicit biases can affect police-citizen interactions. Since blacks have been the focus of implicit social cognition research, this Article focuses on them. Part II applies the behavioral realist framework to the Fourth Amendment’s stop-and-frisk doctrine, revealing the doctrine’s perverse effects on privacy and policing. It ends with some tentative proposals for doctrinal reform. Part III suggests structural changes within police departments to ameliorate the effects of implicit bias on police behavior. This Article concludes that the behavioral realist approach is important to the study of the Fourth Amendment and urges criminal procedure scholars to utilize its methods.

26. This phrase is borrowed from Charles R. Lawrence III, The Id, the Ego, and Equal Protection: Reckoning with Unconscious Racism, 39 Stan. L. Rev. 317 (1987). In his groundbreaking article, Professor Lawrence introduced the science of unconscious racism based upon psychoanalytic theory and discussed its application to the law. As the title of his article suggests, he urged scholars and judges to “[r]eckon[] with unconscious racism.” Id. In contrast, this Article does not address Freud’s psychoanalytic theory. Rather, it focuses on the new science of implicit social cognition. This Article joins many prior scholars who have used this science to explore contemporary racial bias. See, e.g., Katharine T. Bartlett, Making Good on Good Intentions: The Critical Role of Motivation in Reducing Implicit Workplace Discrimination, 95 Va. L. Rev. 1893, 1908–11 (2009); Kang & Banaji, supra note 6, at 1064; Kang, supra note 7; Krieger & Fiske, supra note 1; Cynthia Lee, The Gay Panic Defense, 42 U.C. Davis L. Rev. 471, 536–49 (2008); Justin D. Levinson, Forgotten Racial Equality: Implicit Bias, Decisionmaking, and Misremembering, 57 Duke L.J. 345, 354 (2007); Justin D. Levinson et al., Guilty by Implicit Racial Bias: The Guilty/Not Guilty Implicit Association Test, 8 OHIO ST. J. CRIM. L. 187, 190–98 (2010); Rigel C. Oliveri, Between a Rock and a Hard Place: Landlords, Latinos, Anti-Illlegal Immigrant Ordinances, and Housing Discrimination, 62 Vand. L. Rev. 55, 74–77 (2009); Symposium on Behavioral Realism, supra note 4. For a recent critique of unconscious bias, see Ralph Richard Banks & Richard Thompson Ford, (How) Does Unconscious Bias Matter? Law, Politics, and Racial Inequality, 58 Emory L.J. 1053 (2009).

I. OVERVIEW OF IMPLICIT BIASES

Research in the field of implicit social cognition repeatedly demonstrates that individuals of all races have nonconscious or implicit biases that have behavioral consequences. This Part provides an overview of the science, with an emphasis on those behavioral consequences of relevance to police interactions with citizens.

A. RACIAL CATEGORIZATION

Human beings categorize people and objects “in order to make sense of experience. Too many events occur daily for us to deal successfully with each one on an individual basis; we must categorize in order to cope.” Racial categorization, similar to the general categorization process, is largely automatic; in other words, it occurs unintentionally and without conscious awareness.

Racial categorization activates stereotypes and attitudes. Psychologists distinguish between stereotypes, which

28. Lawrence III, supra note 26, at 337.
30. Kunda, supra note 29, at 266. Many processes contain both automatic and controlled features. Id. at 267; see also Frederica R. Conrey et al., Separating Multiple Processes in Implicit Social Cognition: The Quad Model of Implicit Task Performance, 89 J. PERSONALITY & SOC. PSYCHOL. 469, 470 (2005) (arguing that most tasks involve both automatic and controlled processes); Patricia G. Devine & Lindsay B. Sharp, Automaticity and Control in Stereotyping and Prejudice, in HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION 61, 76–77 (Todd D. Nelson ed., 2009) (describing how increased control by gathering additional information or correction by overcoming bias can lead to reduced automatic stereotypical activation).
31. Activation refers to “the extent to which a stereotype is on one’s mind.” Ziva Kunda & Lisa Sinclair, Motivated Reasoning with Stereotypes: Activation, Application, and Inhibition, 10 PSYCHOL. INQUIRY 12, 14 (1999).
32. Professor Jerry Kang coined the phrase “racial mechanics” to describe the process of racial categorization and the ascription of racial meanings to individuals. Kang, supra note 7, at 1497. For a discussion of the categorization process and its relationship to race, see David L. Hamilton & Jeffrey W. Sherman, Stereotypes, in 2 HANDBOOK OF SOCIAL COGNITION 1, 40–42 (Robert S. Wyer, Jr. & Thomas K. Srull eds., 2d ed. 1994).
are beliefs about a social group, and attitudes, which are feelings or evaluations about a social group. Stereotypes and attitudes can be both explicit (conscious) and implicit (nonconscious). While the processes are distinct, each process contains some elements of the other.

The science reveals that individuals have implicit beliefs and attitudes about racial groups that might conflict with their explicit or consciously held thoughts and feelings. Once activated, implicit stereotypes and attitudes can negatively influence individuals’ judgments and behaviors towards racial minorities in ways that they are unaware of and largely unable to control. Studies related to these implicit biases are discussed in the next section. Later, in Part III, this Article will consider the circumstances under which individuals can control and correct for the operation of implicit biases.

B. BEHAVIORAL EFFECTS

This section discusses three ways in which implicit biases, specifically the operation of implicit stereotypes, can affect behaviors. First, implicit biases can result in increased scrutiny...
of certain citizens based upon their racial appearance. Second, these biases can affect the evaluation of ambiguous behavior, causing identical behavior to be interpreted differently depending upon the racial appearance of the person performing the act. Finally, implicit biases can cause individuals to treat members of different racial groups disparately.

1. Increased Scrutiny

Researchers consistently find that blacks, especially young black men, capture attention before whites do. This occurs nonconsciously and automatically. Scientists attribute this difference in attention to the fact that people have automatic and rapid threat reactions toward black men. Indeed, brain scans demonstrate that people show more activation of the amygdala, a portion of the brain associated with fear, when viewing faces of black men versus white men.


39. See infra Part II.B.2.
40. See infra Part II.B.3.
42. Jennifer L. Eberhardt et al., Seeing Black: Race, Crime, and Visual Processing, 87 J. PERSONALITY & SOC. PSYCHOL. 876, 881, 883, 885–87 (2004) (finding that research subjects, primed with crime-related words or photographs below the level of conscious awareness, were drawn to black faces earlier and for longer time periods than to white faces).
43. Trawalter et al., supra note 41, at 1322.
44. E.g., Matthew D. Lieberman et al., An fMRI Investigation of Race-Related Amygdala Activity in African-American and Caucasian-American Individuals, 8 NATURE NEUROSCIENCE 720, 721 (2005). The strength of amygdala activation correlates with implicit bias scores related to racial attitudes. Elizabeth A. Phelps et al., Performance on Indirect Measures of Race Evaluation Predicts Amygdala Activation, 12 J. COGNITIVE NEUROSCIENCE 729, 730–33 (2000). Researchers found stronger amygdala responses when they presented the pictures of black faces subliminally. William A. Cunningham et al., Separable Neural Components in the Processing of Black and White Faces, 15 PSYCHOL. SCI. 806, 809 (2004) (finding that the stronger reactions were correlated significantly with scores from the Implicit Association Test (IAT)—a test which reveals implicit biases); Allen J. Hart et al., Differential Response in the Human Amygdala to Racial Outgroup vs Ingroup Face Stimuli, 11 NEUROREPORT 2351, 2353 (2000) (demonstrating that subjects showed greater amygdala activation to outgroup faces); Andreas Olsson et al., The Role of Social Groups in the Persistence of Learned Fear, 309 SCIENCE 785, 785–86 (2005) (demonstrating that humans more readily show a fear response to outgroup members); Damian Stanley et al., The Neural Basis of Implicit Attitudes, 17 PSYCHOL. SCI. 164, 165 (2006) (noting that amygdala activation is
Surprisingly, conscious racial attitudes do not predict atten-
tional bias.\textsuperscript{45} Rather, what predicts how quickly an individ-
ual’s attention is automatically (nonconsciously) drawn to
blacks is the strength of the perceiver’s implicit association be-
tween blacks and danger.\textsuperscript{46} Those for whom the implicit black-
danger association is highly accessible\textsuperscript{47} are quicker to pay at-
tention to black faces than white faces. These individuals also
tend to pay attention for longer periods of time to black indi-
viduals, though this increase in attentional holding of black
faces versus white faces is marginal.\textsuperscript{48} Those for whom the
danger stereotype is not as accessible do not demonstrate at-
tentional bias.\textsuperscript{49}

2. Biased Evaluations

For over sixty years, social psychologists have demonstrat-
ed that black men are stereotyped as violent, criminal, and
dangerous.\textsuperscript{50} That these cultural stereotypes affect the evalua-
tion of behaviors performed by blacks was powerfully demon-
strated in a study that required participants to rate ambiguous

\begin{itemize}
\item \textsuperscript{45} Eberhardt, \textit{Imaging Race}, supra note 44, at 183–84; Eberhardt et al., supra note 42, at 884–85 (finding no correlation between the explicit biases and reaction times of study participants).
\item \textsuperscript{46} Nicole C. Donders et al., \textit{Danger Stereotypes Predict Racially Biased Attentional Allocation}, 44 J. EXPERIMENTAL SOC. PSYCHOL. 1328, 1332 (2008).
\item \textsuperscript{47} Accessibility refers to how quickly and easily a particular idea or concept comes to mind, consciously or nonconsciously. SUSAN T. FISKE & SHELLEY E. TAYLOR, \textit{SOCIAL COGNITION: FROM BRAINS TO CULTURE} 60 (2008) ("[F]requently activated ideas come to mind more easily than ideas that have not been activated.").
\item \textsuperscript{48} Donders et al., supra note 46, at 1331.
\item \textsuperscript{49} \textit{Id.} at 1332.
\item \textsuperscript{50} Eberhardt et al., supra note 42, at 876 ("The stereotype of black Americans as violent and criminal has been documented by social psychologists for almost 60 years." (citations omitted)); Trawalter et al., supra note 41, 1322 ("There is overwhelming evidence that young black men are stereotyped as violent, criminal, and dangerous, . . . both implicitly as well as explicitly." (citations omitted)); see also Devine & Elliot, supra note 22, at 1139; Duncan, supra note 23, at 591.
\end{itemize}
physical contact between two people. The researcher hypothesized:

If one believes that blacks are more prone to violent acts than whites, it is reasonable to assume that the concept of violence is more accessible when viewing a black than when viewing a white committing the same act. In other words, the threshold for labeling an act as violent [would be] lower when viewing a black actor than when viewing a white actor.51

To test this hypothesis, researchers had white subjects watch a video of two men engaged in a discussion that grew increasingly heated.52 The subjects were unaware that the men were actors following a script. Instead, they were told that they were observing a discussion occurring in another room.53

Researchers asked the subjects to rate the behavior of the two men at various points during the discussion. Eventually, one man pushed the other and the subjects had the option of rating the contact as horsing around, dramatic, aggressive, or violent.54 Researchers manipulated the race of the pusher and the victim in the videos to test whether race would affect the subjects’ perceptions of the push.55

Remarkably, the actor’s race significantly influenced how subjects evaluated the contact. When the victim was white and the person initiating the physical contact was black, seventy-five percent of the subjects interpreted the shove as violent.56 Only six percent described it as horsing around or dramatic.57 The results were markedly different when the victim was black and the pusher was white. In this scenario, only seventeen percent of the subjects labeled the contact as violent.58 Instead, forty-two percent of the subjects rated the white perpetrator as horsing around or being dramatic.59 Finally, when the two actors were black, the perpetrator’s behavior was rated as more aggressive than when the two individuals were white—sixty-nine percent versus thirteen percent.60

51. Duncan, supra note 23, at 591 (citation omitted).
52. Id. at 592.
53. Id.
54. Id. at 594–95.
55. Id. at 595.
56. Id.
57. Id.
58. Id.
59. Id.
60. Id.
The race of the individuals also affected whether the research subjects attributed the shove to an individual’s disposition or to situational factors. Again, researchers observed statistically significant differences. When the harmdoer was black, subjects attributed the shove to dispositional characteristics.61 Yet, when the harmdoer was white, subjects more often attributed the shove to situational factors.62

The researchers concluded that negative stereotypes associating blacks with violence explained why the subjects evaluated ambiguous behaviors as more aggressive when performed by a black actor as opposed to a white actor.63 The presence of a black individual automatically brought negative black stereotypes such as violence to the forefront of the subject’s memory, making the trait more available for use in evaluating ambiguous behavior.64

Other studies support the finding that individuals evaluate blacks more negatively than whites engaged in identical behavior. In one study, black and white school-age children rated an ambiguous bump in the hallway as more aggressive when performed by a black actor rather than a white actor.65 In another, subjects evaluated the same facial expression as more hostile on a black face than on a white face.66 In a third study using buttons labeled “shoot” and “don’t shoot” as a weapon’s trigger, the nonconscious activation of negative black stereotypes caused individuals more quickly to shoot a potentially hostile black than a potentially hostile white.67 Importantly, a recent

61. Id. at 596.
62. Id. at 597.
63. Id.
64. See, e.g., Patricia G. Devine, Stereotypes and Prejudice: Their Automatic and Controlled Components, 56 J. PERSONALITY & SOC. PSYCHOL. 5, 7–8 (1989) (demonstrating that nonconscious activation of negative black racial stereotypes results in evaluating ambiguous behavior as aggressive).
study demonstrates that extensive training can reduce this effect in police officers. 68

Negative black stereotypes also influence the evaluation of police behavior toward blacks. For instance, in one study, researchers wanted to determine whether the stereotype associating blacks with apes would affect how research subjects evaluated police behavior. 69 The researchers found that white research subjects who had been shown images of apes subliminally (below the level of conscious awareness) were more likely to conclude that the police were justified in beating a black suspect than when they were not shown images of apes. 70 However, viewing images of apes did not affect the subjects’ evaluation of the police beating a white suspect. 71

Taken together, the science provides evidence that how people evaluate the behavior of others can depend on the race of the individual observed. This effect occurs without the evaluators being aware of the impact of race on their interpretation of behavior. 72 This realization demonstrates the need to be cognizant of implicit biases and to address them when thinking about solutions to the disparate treatment of blacks within the criminal justice system.

3. Biased Treatment and Behavioral Confirmation

Negative stereotypes and unfavorable attitudes toward blacks can cause individuals to treat them differently than nonstereotyped group members. One of the first experiments demonstrating this involved white subjects interviewing “job
applicants.” Researchers trained the purported applicants to respond to interview questions in a standard format so that any differences in the treatment they received from the interviewer would be attributable to race.

The results demonstrated that white interviewers treated black and white job applicants differently. When the applicant was black, the white interviewer maintained greater physical distance, made more speech errors, and ended the interview sooner than when the applicant was white. Researchers concluded that these behavioral differences resulted from the negative stereotypical beliefs the white interviewers held about the black job applicants.

This interview study did not specifically test whether implicit bias caused the negative treatment of blacks. However, more recent experiments make this connection. In one, researchers asked participants to complete an exceedingly tedious computer task consisting of 130 trials. Before each trial, the participants were primed subliminally with photos of either black or white faces. On the 130th trial, as planned, the computer program crashed and researchers told the participants that they would have to begin the entire task from the beginning.

Researchers videotaped the participants’ reactions to this news and later coded their reactions for hostility. The results demonstrated that subjects primed with black faces reacted with more hostility to the news than those primed with white faces. This occurred, the researchers concluded, because those

74. Id. at 114–15.
75. Id.
76. Id. at 119.
77. Bargh et al., supra note 36, at 238.
78. Priming makes concepts temporarily more accessible from memory and therefore facilitates a person’s ability to evaluate similar concepts more quickly. John A. Bargh & Paula Pietromonaco, Automatic Information Processing and Social Perception: The Influence of Trait Information Presented Outside of Conscious Awareness on Impression Formation, 43 J. PERSONALITY & SOC. PSYCHOL. 437, 438–39 (1982); Devine, supra note 64, at 8–9. Here, the priming was subliminal, which means it occurred below the level of conscious awareness. Bargh et al., supra note 36, at 238. Subliminal priming can be achieved by flashing words or pictures on a screen so quickly that subjects are unaware that they have seen images or words. Id.
79. Bargh et al., supra note 36, at 238.
80. Id. at 239.
primed with black faces automatically activated negative black stereotypes that then affected their behavior.\(^{81}\) Surprisingly, subjects acted more aggressively after the black-face prime, regardless of whether they had negative attitudes toward blacks.\(^{82}\)

This study does not suggest that individuals will inevitably respond with aggression whenever black stereotype activation occurs. Rather, stereotype activation can cause aggressive behavior in situations where aggression is one possible appropriate response. For example, when the computer crashed after approximately ten minutes of tedious work, reacting with aggression or patience were both appropriate behavioral responses. The activation of negative black stereotypes tipped the balance in favor of an aggressive response.

The negative treatment that blacks receive can cause them to respond in kind. This is known as the self-fulfilling prophecy or behavioral confirmation effect.\(^{83}\) Returning to the job interview study discussed at the beginning of this section, researchers conducted a follow-up experiment to test whether a job applicant would reciprocate the interviewer’s negative nonverbal behaviors, causing the applicant “to behave in a way that confirms the original false definition.”\(^{84}\) The researchers trained white interviewers to give white job applicants either the “black treatment” or the “white treatment.”\(^{85}\) The “black treatment” replicated how the black job applicants had been treated in the earlier study.\(^{86}\) Thus, interviewers who gave applicants the black treatment maintained greater physical distance, made more speech errors, and ended the interview more quickly.\(^{87}\) Interviewers who gave subjects the white treatment did the opposite.\(^{88}\)

The job interviews were videotaped and, later, individuals who were unaware of the nature of the experiment viewed the tapes and rated the applicant’s competence for the job. Just as

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\(^{81}\) Id.

\(^{82}\) Id.


\(^{84}\) Word et al., *supra* note 73, at 109.

\(^{85}\) Id. at 115–19. The phrases “black treatment” and “white treatment” are my words for the experimental conditions.

\(^{86}\) Id.

\(^{87}\) Id. at 116–17.

\(^{88}\) Id.
the researchers predicted, the interviewer’s behavior toward the applicant affected the applicant’s behavior, which in turn affected how he was judged.89 Those applicants receiving the white treatment obtained better competence ratings.90 The study provides evidence that racial stereotypes influence interpersonal interactions, causing stigmatized groups to react in ways that confirm the stereotype.91

In another study testing self-fulfilling prophecy effects, researchers paired white subjects to take part in a word-guessing game.92 Before beginning, one member of the pair was subliminally primed with either a black face or a white face. Later, individuals unaware of the priming judged the subjects for hostility. The results demonstrated that not only was the player primed with the black face judged as more hostile, but the player paired with that subject was also rated as acting with greater hostility.93

Numerous researchers note that the originators of negative behavior will likely be “blissfully unaware . . . of the causal role that their own activities play in generating the behavioral evidence that erroneously confirms their expectations.”94 One researcher puts it thus:

[B]ecause the effect of the stereotype on behavior was nonconscious—the perceiver would have no conscious experience of choosing that mode of behavior. Thus, the perceiver’s subjective, phenomenal experience, and hence memory of the event, would be of the stereotyped group member’s unprovoked initial hostility. . . . But because one is not aware of one’s own role in provoking it, one may attribute it to the stereotyped group member (and, hence, the group).95

89. Id. at 117–19.
90. Id. at 118.
91. Id. at 119–20.
92. Chen & Bargh, supra note 83, at 548.
93. Id. at 552.
94. Id. at 544 (omission in original) (citation omitted); David L. Hamilton & Tima K. Trolier, Stereotypes and Sterotyping: An Overview of the Cognitive Approach, in PREJUDICE, DISCRIMINATION, AND RACISM 150, 150 (John F. Dovidio & Samuel L. Gaertner eds., 1986) (“Given the perceiver’s awareness of the confirmatory nature of the target’s behavior and lack of awareness of his or her own role in producing it, it would seem particularly difficult to convince the perceiver that his or her stereotypic beliefs are wrong.”).
95. Bargh et al., supra note 36, at 242; see also Eric J. Vanman et al., The Modern Face of Prejudice and Structural Features that Moderate the Effect of Cooperation on Affect, 73 J. PERSONALITY & SOC. PSYCHOL. 941, 947 (1997) (demonstrating that whites asked to imagine working with black partners rated blacks more favorably, yet their involuntary physical responses, as measured with electromyography (EMG), were indicative of negative affect).
This behavioral confirmation effect “provide[s] a powerful mechanism by which stereotypes and prejudicial behavior are maintained, propagated and justified” since “the perceiver interprets the target’s behavior in line with the expectancy and encodes yet another instance of stereotype-consistent behavior.”

In conclusion, the results of over three decades of research provide disturbing evidence that implicit biases can influence how individuals respond to and interact with black Americans. These effects can occur spontaneously and without conscious intention. Individuals are often unaware that race had any effect on their behavior. Whether one consciously subscribes to negative stereotypes or holds racist attitudes, the mere presence of a black individual, or reminders of things stereotypically associated with blacks, can cause the automatic activation of negative stereotypes. This automatic activation makes traits associated with the stereotype, such as violence or aggression, more accessible and available for use in making judgments or evaluating behavior.

C. IMPLICATIONS FOR POLICE-CITIZEN INTERACTIONS

Based on the science, it is reasonable to conclude that the police target, stop, and search blacks more often than whites based upon the operation of implicit biases. Implicit biases affect whether behavior catches attention in the first place and whether the observer will interpret that behavior as sufficiently suspicious to warrant further investigation. The science demonstrates that people can interpret identical behavior differently depending upon the racial appearance of the individual engaged in it.

96. Chen & Bargh, supra note 83, at 542.
Hence, police attention may be drawn to black individuals in general, and to young men who look stereotypically black in particular, regardless of whether these individuals are engaged in suspicious behavior. Once their attention is captured, automatic stereotype activation can cause officers to interpret behavior as aggressive, violent, or suspicious even if identical behavior performed by a white individual would not be so interpreted. When officers approach the individual to confirm or dispel their suspicions, implicit biases can cause officers to behave aggressively without realizing it. The confronted individual may respond in kind, fulfilling officers' beliefs that the individual is suspicious and aggressive. This entire series of events, triggered not by conscious racial animus but by implicit racial biases, will likely result in officers conducting a frisk. All the while, officers will be unaware that the behavioral effects of their implicit bias triggered the entire chain of events. In the end, officers may stop and frisk black individuals, whom they would not have deemed suspicious if they had been white, not because of bigotry or conscious considerations of race, but because of implicit cognitions.

98. In one study, not only did police officers choose black faces more often than white faces when asked “Who looks criminal?,” but they also chose more stereotypically black faces more often. Eberhardt et al., supra note 42, at 888–89. The same significant effects did not occur when officers were asked to identify white faces. Id. Officers (mis)remembered black individuals despite the fact that the officers paid more attention to the black faces than the white faces. Id. at 887–88. The ratings of how stereotypical an individual appeared were obtained from participants (who were not involved in the final study) who were asked to view a series of photographs of black and white individuals and to rate them based upon the physical criteria most often associated with either race. Id. at 888.

In another study examining sentencing patterns in death cases, researchers found that the more stereotypically black features a criminal defendant had (broad nose, dark skin, thick lips), the more likely he was to receive a death sentence or a longer sentence. Jennifer L. Eberhardt et al., Looking Deathworthy: Perceived Stereotypicality of Black Defendants Predicts Capital-Sentencing Outcomes, 17 PSYCHOL. SCI. 383, 385 (2006); see also Irene V. Blair et al., The Influence of Afrocentric Facial Features in Criminal Sentencing, 15 PSYCHOL. SCI. 674, 677 (2004) (finding that intrarace inmates with more Afrocentric features received longer sentences despite the same criminal histories); Robert W. Livingston & Marilynn B. Brewer, What Are We Really Priming? Cue-Based Versus Category-Based Processing of Facial Stimuli, 82 J. PERSONALITY & SOC. PSYCHOL. 5, 17 (2002) (finding that individuals showed more implicit bias when viewing blacks who had more “prototypic” features).

99. See supra Part I.B.
100. See supra Part I.B.
Importantly, although empirical evidence demonstrates that implicit biases are ubiquitous, they are also malleable. It is possible to exacerbate or moderate their effects on behavior. Generally, an individual’s motivations and goals, as well as situational factors, can influence implicit biases. For instance, implicit biases can be reduced through conscious awareness, conscious motivation and commitments to egalitarianism, and intentional decisions to react a certain way upon encountering a stereotyped individual. Even asking people to be nonprejudiced can reduce implicit biases. Consequently, courts and police departments may be able to implement strat-

101. See, e.g., Irene V. Blair et al., Imagining Stereotypes Away: The Moderation of Implicit Stereotypes Through Mental Imagery, 81 J. PERSONALITY & SOC. PSYCHOL. 828, 837 (2001) (discussing mental imagery studies that demonstrate that stereotypes are malleable); Blair, supra note 29 (reviewing literature that tests whether automatic stereotypes are malleable); Jost et al., supra note 5, at 44–45; Kunda & Sinclair, supra note 31, at 18–20 (“[R]esearch provides suggestive but not indisputable evidence for the possibility that people may inhibit the activation of stereotypes in some circumstances.”); Wheeler & Fiske, supra note 44, at 61–62 (demonstrating that amygdala activation to outgroup members is not inevitable). Evidence of malleability is also found in neuroscientific studies. Devine & Sharp, supra note 30, at 76–80. In fact, certain studies demonstrate that some people who are low in prejudice may not activate racial stereotypes at all. Kunda & Sinclair, supra note 31 at 15–16. One study demonstrated that exposure to positive examples of outgroup members could reduce implicit biases. Nilanjana Dasgupta & Anthony G. Greenwald, On the Malleability of Automatic Attitudes: Combating Automatic Prejudice with Images of Admired and Disliked Individuals, 81 J. PERSONALITY & SOC. PSYCHOL. 800, 806–07 (2001). But see Jennifer A. Joy-Gaba & Brian Nosek, The Surprisingly Limited Malleability of Implicit Racial Evaluations, 41 SOC. PSYCHOL. 137, 137 (2010) (finding that while malleability was shown after exposure to counterstereotypical racial group members, the effects were weak).

102. Blair, supra note 29. One well-known researcher in the field of social cognition has identified five motives that may influence automatic processes: belonging (the motivation to conform to the ingroup’s social norms), understanding (the motivation to share understandings with an ingroup), controlling (the motivation to individuate others in an attempt to accurately predict outcomes), enhancing the self (the motivation to protect one’s self-image), and trusting (the motivation to trust one’s ingroup, which usually means distrust- ing the outgroup). Susan T. Fiske, Intent and Ordinary Bias: Unintended Thought and Social Motivation Create Casual Prejudice, 17 SOC. JUST. RES. 117, 123–24 (2004).


egies for reducing their effects on behavior. More specifically, concerning the factors affecting the malleability of implicit biases are considered in Part III.

Although the scientific evidence has much to contribute to understandings of police decisionmaking and judgment, judges continue to employ common-sense, intuitive theories of human behavior in crafting Fourth Amendment legal standards. As a result, the Court’s stop-and-frisk jurisprudence not only fails to achieve the appropriate balance between privacy and security, but also exacerbates the effects of implicit bias on behavior, leading to arrest inefficiencies. Part II examines the Court’s

105. For an extended and thoughtful discussion of techniques to increase “accountability-based policing” to address racial profiling, including suggestions for police training, see DAVID A. HARRIS, PROFILES IN INJUSTICE 145–207 (2002). In many important ways, Harris’s suggestions acknowledge the importance of “situationism,” the recognition in social psychology that the situation and the pressures they impose have a more influential effect on behavior than a person’s “disposition” or personality. See generally Jon Hanson & David Yosifon, The Situation: An Introduction to the Situational Character, Critical Realism, Power Economics, and Deep Capture, 152 U. PA. L. REV. 129 (2003); Hanson & Yosifon, supra note 1. Part IV of this Article builds from and adds to Harris’s significant work. Importantly, however, social psychologists are skeptical that accountability alone is sufficient to reduce implicit biases. See Jost et al., supra note 5, at 50, 62.

106. Some argue that the differential treatment of blacks is not evidence of explicit or implicit bias. Rather, it simply reflects differential crime rates. See, e.g., Gregory Mitchell & Philip E. Tetlock, Antidiscrimination Law and the Perils of Mindreading, 67 OHIO ST. L.J. 1023, 1036 n.41 (2006). There are a number of responses to this. First, the statistics on hit rates suggest that we should be cautious about making this claim. Second, as Angela Davis has argued, it is difficult to use arrest statistics as evidence of criminality when the process of arrest involves so much discretion that “arrest statistics may both overestimate and underestimate actual criminal behavior. Furthermore, because no uniform method of documenting an officer’s decision not to arrest exists, we cannot know the extent to which such decisions skew the arrest statistics currently used as evidence of criminality within particular racial groups.” Angela J. Davis, Benign Neglect of Racism in the Criminal Justice System, 94 MICH. L. REV. 1660, 1662 (1996); see also Coker, supra note 20, at 831–44 (critiquing reliance on crime statistics). In any case, even if the differential treatment of blacks based upon the accuracy of the stereotype is rational, it may still be unconstitutional. See, e.g., Samuel R. Bagenstos, “Rational Discrimination,” Accommodation, and the Politics of (Disability) Civil Rights, 89 VA. L. REV. 825, 848 (2003) (“The prohibition of rational discrimination is a central component of antidiscrimination doctrine—and it may be the most important aspect of antidiscrimination law on the ground.”). For additional responses in the literature challenging the claim that it is rational to focus law enforcement attention on blacks because there is a relationship between race and crime, see generally KATHERYN RUSSELL-BROWN, THE COLOR OF CRIME 53–74 (2d ed. 2009), and Jody D. Armour, Race Ipoa Logquitur: Of Reasonable Racists, Intelligent Bayesians, and Involuntary Negrophobes, 46 STAN. L. REV. 781, 790–801 (1994).
stop-and-frisk jurisprudence using the tools of behavioral realism.

II. EXPOSING THE DOCTRINE

This Part examines the behavioral assumptions embedded in the Fourth Amendment’s stop-and-frisk doctrine and tests them against the scientific evidence. Section A studies *Terry v. Ohio*, the case that scrutinized and sanctioned police stop-and-frisk practices. Section B unmask the flawed behavioral assumptions contained in the doctrine and section C traces the outlines of some new doctrinal approaches that take into account the best empirical social-science evidence concerning decisionmaking and judgment.

A. *TERRY V. OHIO*

In *Terry v. Ohio*, the Court, for the first time, permitted officers to seize individuals and conduct a limited frisk for weapons in the absence of probable cause but with the suspicion that the individual was armed and engaged in criminal activity.\(^{107}\) The facts of *Terry* are as follows.\(^{108}\) Officer McFadden was on the lookout for shoplifters and pickpockets in the middle of the afternoon in downtown Cleveland.\(^{109}\) At some point, he noticed Terry and Chilton standing on a street corner.\(^{110}\) McFadden could not articulate “precisely what first drew his eye to them.”\(^{111}\) They just “didn’t look right,”\(^{112}\) he testified, even though they were dressed in topcoats, customary attire at the time.\(^{113}\) “[T]o be truthful,” he admitted, “I didn’t like them.”\(^{114}\)

Both Terry and Chilton were black.\(^{115}\) McFadden watched the two men for ten minutes as they took turns walking down the street, looking into a store win-

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108. I only discuss the facts important to my analysis.
110. *Id*.
dow, and returning. Their behavior led McFadden to suspect that the two were casing a store in preparation for a daytime robbery. Without probable cause, McFadden grabbed Terry, spun him around, frisked him, and found a concealed weapon.

The issue before the Court was whether the Fourth Amendment permitted officers to seize and frisk individuals in the absence of probable cause. The Court answered the question in the affirmative. It held that reasonable suspicion, and not the traditional probable cause standard, authorized officers to detain individuals for questioning and to conduct a limited search for weapons. In order to justify what is colloquially known as a “stop and frisk,” the reasonable suspicion test requires an officer “to point to specific and articulable facts which lead[] him reasonably to conclude in light of his experience that criminal activity may be afoot” or that the individual with whom he is interacting is armed and dangerous.

At the time Terry was decided, police stop-and-frisk practices were under intense scrutiny primarily because of their role in aggravating racial tensions between black communities and the police. Professor Tracey Maclin points out that the Court decided Terry only three months after a presidential

117. See id. at 432–33.
119. See Terry v. Ohio, 392 U.S. 1, 7 (1968) (describing the search of Terry).
120. See id. at 4.
121. As other scholars have noted, Chief Justice Warren’s opinion was not crystal clear on the appropriate standard for conducting a stop and frisk. See, e.g., Tracey Maclin, Terry v. Ohio’s Fourth Amendment Legacy: Black Men and Police Discretion, 72 ST. JOHN’S L. REV. 1271, 1308–09 (1998) [hereinafter Maclin, Legacy]. However, the Terry decision now stands for the proposition that reasonable suspicion is the guiding standard for stops and frisks. See, e.g., John J. Bursch, Note, The 4 R’s of Drug Testing in Public Schools, 80 MINN. L. REV. 1221, 1227 n.39 (1996).
122. Terry, 392 U.S. at 12. This was distinguished from other searches under the Fourth Amendment. See id. at 37 (Douglas, J., dissenting) (“In other words, police officers up to today have been permitted to effect arrests or searches without warrants only when the facts within their personal knowledge would satisfy the constitutional standard of probable cause.”). Probable cause is the “traditional standard” of the Fourth Amendment. Arizona v. Hicks, 480 U.S. 321, 326 (1987).
123. Terry, 392 U.S. at 21, 30.
124. Id. at 27.
commission examining the 1967 race riots concluded that “hostility between the police and the black community was a contributing factor, and in some places, the factor, precipitating riots in several urban centers.” The Justices were also aware of the 1967 Report of the President’s Commission on Law Enforcement and Administration of Justice that criticized policing practices, including the “aggressive patrol tactics” used in communities of color.

On the one hand, then, the Justices did not have “universal trust in the neutrality of the authorities.” Clearly, allowing officers to detain and frisk individuals solely on suspicion of criminal activity was a power subject to abuse. In fact, the decision represents one of the few instances in which the Court acknowledged issues of race in the Fourth Amendment context. On the other hand, the Court did not want to be “agents who tied the hands of the police in dealing with intensely dangerous and recurring situations on city streets.”

Through the reasonable suspicion standard, the Court attempted a delicate balance, granting police the discretion to stop and frisk suspicious individuals while attempting simultaneously to protect individuals from unjustified encroachments upon their liberty and bodily integrity. The Court specifically noted that its decision should not “be taken as indicating approval of police conduct outside the legitimate investigative sphere . . . . [C]ourts still retain their traditional responsibility to guard against police conduct which is overbearing or harassing, or which trenches upon personal security without the ob-

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125. Tracey Maclin, Race and the Fourth Amendment, 51 VAND. L. REV. 333, 363–65 (1998) [hereinafter Maclin, Race] (citations omitted). The Kerner Commission found that “[n]egroes firmly believe that police brutality and harassment occur repeatedly in Negro neighborhoods. This belief is unquestionably one of the major reasons for intense Negro resentment against the police.” Id. (quoting REPORT OF THE NATIONAL ADVISORY COMMISSION ON CIVIL DISORDERS 158 (1968)).

126. Dudley Jr., supra note 118, at 893; see also Terry, 392 U.S. at 14 n.11 (citing the report).

127. Dudley Jr., supra note 118, at 893.

128. Id.

129. Terry, 392 U.S. at 14; see also Maclin, Race, supra note 125, at 364–65 (“[T]he Court signaled, albeit in an enigmatic footnote, that the judiciary must consider racial impact when determining the constitutional reasonableness of an intrusion.”).

130. Dudley, supra note 118, at 893.
jective evidentiary justification which the Constitution re-
quires.”

In keeping with its goal of cabining police discretion while simultaneously allowing the police to act on their suspicions in appropriate cases, the Court attempted to craft a test that prohibited officers from acting on their “inchoate and unparticularized suspicion[s] or ‘hunch[es],’” including racial hunches. Instead, “in justifying the particular intrusion the police officer must be able to point to specific and articulable facts.” “Any-thing less,” the Court cautioned, “would invite intrusions upon constitutionally guaranteed rights based on nothing more substantial than inarticulate hunches, a result this Court has consistently refused to sanction.”

The next section exposes and examines the implicit behavioral theories of police judgment and decisionmaking embedded in Terry and its progeny. It tests these theories against the available scientific evidence and reveals their flaws. The section demonstrates that when the influence of implicit biases on policing is considered, the reasonable suspicion test may not be up to the task of preventing intrusions based upon nothing more than hunches. Rather, the test may facilitate policing that inadequately protects liberty while simultaneously failing to further effective law enforcement.

B. BEHAVIORAL ASSUMPTIONS

From the beginning, Terry has been the subject of sustained critiques. I join those critiques because they reveal

131. Terry, 392 U.S. at 15.
132. Id. at 27.
133. Id. at 21.
134. Id. at 22.
135. See, e.g., I. Bennett Capers, Policing, Race, and Place, 44 HARV. C.R.-
C.L. L. REV. 43, 43 (2009) (arguing that Terry and Whren help create and maintain racialized spaces); Devon W. Carbado, (E)racing the Fourth Amendment, 100 MICH. L. REV. 946, 1035–36 (2002); Frank Rudy Cooper, “Who’s the Man?: Masculinities Studies, Terry Stops, and Police Training, 18 COLUM. J. GENDER & L. 671, 675 (2009); David A. Harris, Factors for Reasonable Suspi-
that *Terry* allows officers to act on conscious racial biases. However, largely absent from these prior critiques and suggestions for *Terry* reform is consideration of the effects of nonconscious racial biases on police behavior.136

Considering the effects of implicit biases on police behavior and decisionmaking is important for several reasons. First, doing so reveals that even officers who do not consciously consider race while policing may unintentionally treat blacks more harshly and with more suspicion than whites. Furthermore, for those officers who do engage in race-conscious policing, implicit biases will exacerbate the effects of race on their judgments and behavior. Thus, doctrinal solutions that only address the problems of conscious racial profiling while ignoring the effects of implicit bias will likely fail to remedy arbitrary policing.

Second, basing the doctrine on erroneous assumptions about police decisionmaking and judgment has the unintended effect of strengthening implicit biases. This is problematic because implicit biases can cause real harm. As a result of such biases, police officers in simulations were more likely to shoot unarmed black suspects than unarmed white suspects,137 and to misidentify black suspects more readily than white suspects.138 Thus, the harm created by current doctrine is greater than scholars have previously recognized; the doctrine not only encourages racial stereotyping by supporting the idea that race is relevant to assessing criminality, but it also makes reducing the effects of implicit biases on behavior more difficult.139

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136. But see Thompson, supra note 115, at 983–86 (using cognitive psychology to examine Fourth Amendment jurisprudence). This Article builds from Thompson’s approach by introducing the science of implicit bias, which was not fully developed at the time of his article. See Alex Geisinger, *Rethinking Profiling: A Cognitive Model of Bias and Its Legal Implications*, 86 OR. L. REV. 657, 678 (2007) (discussing cognitive biases and the regulatory response to racial profiling).

137. E. Ashby Plant & B. Michelle Peruche, *The Consequences of Race for Police Officers’ Responses to Criminal Suspects*, 16 PSYCHOL. SCI. 180, 182 (2005); see also Correll, *Dilemma*, supra note 22, at 1325 (same, but with civilians). But see Correll, *Thin Blue Line*, supra note 68, at 1020 (finding that police performed better than civilians and attributing this result to training).


139. See infra Part III.A (discussing studies that demonstrate how practicing stereotypical associations can increase implicit bias).
Finally, the failure to consider the effects of implicit biases on behavior can result in suggestions for doctrinal reform that unintentionally exacerbate arbitrary policing. For example, in his groundbreaking article utilizing cognitive psychology to examine the racial component of *Terry* stops, Professor Anthony Thompson recommended that courts should, in some instances, permit officers to utilize race to justify *Terry* stops.\(^{140}\) Race would be used “not [as] a predictor of criminality . . . [but as] a rough but workable proxy for suspicion in certain circumstances.”\(^{141}\) Judges would then “scrutinize the officer’s motivations to determine if the circumstances in a given case warranted this reliance on race.”\(^{142}\)

While the proposal seems sensible, a number of problems remain when viewed from the perspective of implicit bias. First, the proposal is underinclusive because it only affects those cases where an officer consciously relies on race. Hence, this solution does not address cases involving an officer who is genuinely unaware that race influenced his behaviors, perceptions, and judgments. Second, the proposal encourages the police to intentionally and consciously associate race with criminal suspicion, which may tend to exacerbate or strengthen implicit biases.

The sections that follow scrutinize the flawed behavioral assumptions contained in current doctrine. These faulty assumptions result in a jurisprudence that fails to protect non-whites from arbitrary policing.

1. Interpretation of Ambiguous Behavior

In *Terry*, the Court constructed a test that allows officers to stop and frisk an individual based upon their interpretation of the individual’s ambiguous behavior.\(^{143}\) The test requires officers to justify stops and frisks by articulating the facts that led them to be reasonably suspicious of the individual.\(^{144}\) Given the Court’s acknowledgement that stop-and-frisk practices could be used to harass blacks, the articulation requirement can be interpreted, in part, as the Court’s attempt to cabin officer discretion to stop and frisk blacks based upon racial hunches.\(^{145}\) In-

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140. Thompson, *supra* note 115, at 1005.
141. *Id.*
142. *Id.*
144. See *id.* at 21, 30.
145. *Id.* at 14.
Instead, officers can only stop and frisk individuals when their behavior is objectively suspicious, regardless of their race.\textsuperscript{146}

The behavioral assumption underlying the reasonable suspicion test is that a well-intentioned officer\textsuperscript{147} is capable of interpreting identical behavior similarly, regardless of the race of the individual they are observing. While this behavioral assumption is intuitively appealing, it does not withstand scientific scrutiny. Officers may nonconsciously use a more lenient standard when judging the behavior of whites versus blacks.

The science demonstrates that race can affect an officer’s interpretation of ambiguous behavior.\textsuperscript{148} Nonconscious stereotype activation in the presence of black individuals can cause officers to interpret ambiguous behaviors performed by blacks as suspicious, aggressive, and dangerous while similar behaviors engaged in by whites would go unnoticed.\textsuperscript{149} Implicit biases may affect even officers who do their best to avoid (consciously) treating people differently based upon race.

The implicit racial bias that may cause an officer to interpret ambiguous behaviors engaged in by blacks as suspicious can be understood as an inarticulable racial hunch. That is because the officer’s feelings of suspicion are not based upon some objective and unambiguously suspicious behavior that he would inevitably have considered suspicious regardless of the race of the person engaged in it. Rather, his evaluation of the behavior as suspicious may be unintentionally influenced by nonconscious, inarticulable racial biases—in other words, a nonconscious racial hunch.

Upon feeling suspicious, an officer easily can articulate the specific facts that he believes led him to feel suspicious without realizing that his initial feelings of suspicion may have been based on a racial hunch caused by the operation of implicit racial bias. In other words, the officer will not realize that if the individual he had observed had been white, he may not have noticed the behavior or may have interpreted it as horseplay. By allowing officers to act on their interpretation of ambiguous

\textsuperscript{146} Id. at 30 (holding that officers may stop and frisk when “criminal activity may be afoot”).

\textsuperscript{147} I focus on the well-intentioned officer because, as the Terry Court acknowledged, the exclusionary rule of the Fourth Amendment is likely ill equipped to deter officers who choose to harass blacks with little regard for whether evidence will be admissible in court.

\textsuperscript{148} See Duncan, supra note 23, at 591.

\textsuperscript{149} Id.
behaviors, the reasonable suspicion test actually permits, rather than prevents, actions based upon racial hunches.

2. Officer Experience

When determining whether an officer’s stop and frisk is justified by reasonable suspicion, the Terry Court wrote that “due weight must be given . . . to the specific reasonable inferences which [an officer] is entitled to draw from the facts in light of his experience.”\textsuperscript{150} This deference is justified by the belief that an experienced officer can “draw[] inferences and make[] deductions [from facts] . . . that might well elude an untrained person.”\textsuperscript{151}

The Court’s behavioral assumption is that officers, based upon their experiences, are better than civilians at distinguishing innocent from guilty conduct. Presumably, as frequent observers of behavior, officers are better equipped to predict whether an individual’s behavior signals involvement in criminal activity.\textsuperscript{152} However, as with many common-sense beliefs about human behavior, this assumption goes too far. As the following two sections demonstrate, the nature of their jobs may lead officers to perform no better than civilians when it comes to differentiating criminal from noncriminal activity. They perhaps may perform even worse in situations where nonwhites are involved.

a. Thinking About Crime

First, research demonstrates that thinking about crime can trigger nonconscious thoughts about blacks, which in turn activates negative black stereotypes.\textsuperscript{153} Researchers have found

\textsuperscript{150} Terry, 392 U.S. at 27.

\textsuperscript{151} United States v. Cortez, 449 U.S. 411, 418 (1981); see also Ornelas v. United States, 517 U.S. 690, 699 (1996) (“[A] reviewing court should take care . . . to give due weight to inferences drawn from those facts by . . . local law enforcement officers . . . . Through the lens of his police experience and expertise.”); Brown v. Texas, 443 U.S. 47, 52 n.2 (1979) (deference is due to the “observations of a trained, experienced police officer who is able to perceive and articulate meaning in given conduct which would be wholly innocent to the untrained observer”).

\textsuperscript{152} Brown, 443 U.S. at 52 n.2 (“This situation is to be distinguished from the observations of a trained, experienced police officer who is able to perceive and articulate meaning in given conduct which would be wholly innocent to the untrained observer.”).

\textsuperscript{153} See, e.g., Eberhardt et al., supra note 42, at 876 (“The stereotype of Black Americans as violent and criminal has been documented by social psychologists for almost 60 years.”).
that the connection between blacks and crime has become entrenched and ubiquitous. Disturbingly, not only does seeing a black individual bring negative racial stereotypes to mind nonconsciously, but simply thinking about crime triggers implicit thoughts about blacks in police officers and civilians alike. The researchers concluded that 

\begin{quote}
\text{“[n]ot only are Blacks thought of as criminal, but also crime is thought of as Black.”}
\end{quote}

This means that automatic associations [between Blacks and crime] may be activated and practiced substantially more than previously recognized—even in the absence of initial exposure to a social group member. In a crime-obsessed culture, for example, simply thinking of crime can lead perceivers to conjure up images of Black Americans that “ready” these perceivers to register and selectively attend to Black people who may be present in the actual physical environment.

Officers performing their job-related duties are necessarily thinking about crime, which activates implicit stereotypes of blacks.

Once activated, these implicit stereotypes can cause officers nonconsciously to pay more attention to blacks than to whites. Then, these implicit biases may cause officers to interpret the ambiguous behaviors of blacks as suspicious and criminal.

For instance, when looking for drug couriers at an airport, an officer nonconsciously may pay more attention to blacks and view their behaviors as suspicious while failing to notice similar behavior engaged in by whites. United States v. Mendenhall provides an example of this phenomenon. In that case, two Drug Enforcement Agency agents were at an airport in Detroit on the lookout for illegal drug trafficking. They became suspicious of twenty-two-year-old Sylvia Mendenhall as she disembarked from a plane arriving from Los An-

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154. See id. (describing the association between blacks and crime as “strong,” “consistent,” “frequent,” and “automatic”).
155. See supra Part II.B.
156. Eberhardt et al., supra note 42, at 877–78.
157. Id. at 883.
158. Id. at 877.
159. Id. at 877–78, 886–87.
160. Id.
162. Id.
163. Id. at 547.

According to their testimony, they found her suspicious because she was the last person to leave the plane, she “appeared to be very nervous,” and she “completely scanned the whole area” before proceeding to baggage claim. Their suspicions were sufficiently aroused that they followed her. The officers testified that they became more suspicious when she walked past the baggage claim area without retrieving any luggage and when they overheard her obtain a boarding pass from the ticket counter of another airline.

Although the agents’ suspicions had been aroused, all of Mendenhall’s actions were consistent with innocence. She was engaged in “the kind of behavior that could reasonably be expected of anyone changing planes in an airport terminal.” She could have been the last person to disembark because the airline had assigned her a seat in the last row. She might have appeared nervous because she was afraid of missing a connecting flight. Perhaps she scanned the arrival area after disembarking to find signs leading her to baggage claim, to the exit, or to another terminal. The fact that Los Angeles is a source city for heroin is only important to the extent that it explains why the agents were watching arrivals from this particular plane. Standing alone, it does not sufficiently explain the agents’ specific focus on Mendenhall since everyone leaving that plane would have been arriving from Los Angeles. The fact that she had tickets to another city could explain why she did not pick up any luggage at baggage claim. Indeed, one of the agents later admitted that he only found her failure to pick up luggage suspicious before he learned that she was changing planes.

I give these explanations simply to highlight that the officers’ interpretation of her behavior as suspicious was not the

164. Id. at 547, 558.
165. Id. at 547 n.1.
166. Id.
167. Id. at 547.
168. Id. at 547 n.1.
169. Id. at 564 (Powell, J., concurring). The DEA agent heard the ticket agent tell Mendenhall that “her ticket to Pittsburgh already was in order and that all she needed was a boarding pass for the flight.” Id. at 573 (White, J., dissenting).
170. Id. at 572.
171. Id. at 573 n.9.
only plausible one. Certainly, the conditional probability that Mendenhall was engaged in criminal behavior is greater when her actions are considered cumulatively. However, even when viewed as a whole, Mendenhall's behavior was also consistent with innocence.

While neither agent mentioned the fact that Mendenhall was black, her race is relevant. The automatic activation of negative racial meanings upon seeing Mendenhall could have affected the agents' interpretation of her behavior. Of course, the agents could have been engaged in conscious racial profiling. However, implicit bias also could explain their behavior. In fact, conscious racial profiling would only exacerbate the operation of implicit biases.

The operation of implicit biases also can explain the "chameleon-like way [that drug courier profiles have] of adapting to any particular set of observations." Former Supreme Court Justice Thurgood Marshall gave examples of inconsistent explanations given by law enforcement officers as conduct fitting the drug courier profile. He noted that in different cases, officers testified that a suspect was suspicious because he was the first to get off the plane, the last to get off, or because he got off in the middle. The science of implicit bias provides an explanation for these inconsistent accounts that does not require the assumption that the officers engaged in intentional and deceitful after-the-fact explanations. Rather, the operation of implicit bias can cause individuals to evaluate behaviors differently depending upon the race of the individual under scrutiny. What may seem suspicious in one instance may not seem so in another simply depending upon whether racial stereotypes are nonconsciously activated. Since officers constantly are on the lookout for criminal activity, they likely are steeped in non-

172. See id. at 558 (Stewart, J., plurality opinion) (explaining that Mendenhall was black).
174. Id.; see also DAVID COLE, NO EQUAL JUSTICE 47–51 (1999).
175. Commentators and Supreme Court Justices alike have expressed skepticism about the seeming malleability of drug courier profiles. See, e.g., Sokolow, 490 U.S. at 12 (Marshall, J., dissenting); COLE, supra note 176, at 47–51. Drug courier profiles were created originally by the Drug Enforcement Agency for use at airports. See Sheri Lynn Johnson, Race and the Decision to Detain a Suspect, 93 YALE L.J. 214, 235–34 (1983). These profiles often contain race as a relevant factor. Id. at 234. Their use has expanded to highways. Morgan Cloud, Search and Seizure by the Numbers: The Drug Courier Profile and Judicial Review of Investigative Formulas, 63 B.U. L. REV. 843, 854 (1983).
conscious black stereotypes that influence their judgments and behaviors.

b. Urban Environments

Second, police often view blacks in environments that are urban and poor. Officers and courts typically describe these areas as “high crime” neighborhoods without empirical proof that they are actually high in crime.176 Research confirms that perceptions of disorder increase when a community is majority black instead of majority white, even when the neighborhoods are otherwise similarly situated.177

Encountering blacks in stereotypical urban and poor environments increases implicit biases by activating racial stereotypes.178 In fact, researchers have found that officers working in urban environments exhibit higher levels of implicit bias than those who do not.179 Thus, an officer patrolling a poor, urban, majority-black neighborhood is more prone to judge ambiguous behaviors as suspicious, causing him to stop more individuals who are innocent. Judges may assume that—all things being equal—the police will be equally suspicious of a white individual in a white, urban, poor neighborhood as a black individual in a black, urban, poor neighborhood. However, the social-science evidence demonstrates that this is not necessarily so.180

In sum, officers’ experiences do not necessarily make them better able to distinguish guilty from innocent conduct. The nature of their jobs requires them to think constantly about crime and they often encounter blacks in stereotypical environments.

176. See, e.g., Harris, Factors, supra note 135, at 672 n.134 (noting that police often attempt to justify their reasonable suspicion explanation by relying upon the moniker high-crime neighborhood); Johnson, supra note 175, at 255 (arguing that courts can become complicit with officer prejudices and stereotypes when they unquestioningly accept police conclusions that an area is high crime); Katz, supra note 113, at 500 (noting that the phrase “high crime neighborhood” is often a proxy for race).


179. Correll, Thin Blue Line, supra note 68, at 1015.

180. Thompson, supra note 115, at 959 n.5.
Consequently, officers may be more likely to be influenced by the operation of implicit biases than civilians, which may cause officers to incorrectly interpret ambiguous behavior as suspicious when engaged in by blacks as opposed to whites. For this reason, the Court's assumption that officers are better than civilians at distinguishing guilty from innocent conduct may not withstand scientific scrutiny when race is involved.

3. Race Salience

Since Terry, the Supreme Court has established that race can be relevant to determining if a reasonable suspicion of criminality exists so long as it is not the sole factor. Not surprisingly then, police officers sometimes rely upon race to justify Terry seizures. In United States v. Weaver, for example, an officer indicated that he became suspicious of Mr. Weaver in part because Weaver was a “roughly dressed young Black male.” While acknowledging that “large groups of our citizens should not be regarded by law enforcement officers as presumptively criminal based upon their race,” the Eighth Circuit approved the officer’s reliance on race:

[F]acts are not to be ignored simply because they may be unpleas-ant—and the unpleasant fact in this case is that . . . race, when coupled with the other factors Hicks relied upon, was a factor in the decision to approach and ultimately detain Weaver. We wish it were otherwise, but we take the facts as they are presented to us, not as we would like them to be.

181. See, e.g., United States v. Martinez-Fuerte, 428 U.S. 543, 563 (1975) (holding that referrals based largely on ancestry to secondary inspection areas at traffic checkpoints are permissible); United States v. Brignoni-Ponce, 422 U.S. 873, 885–87 (1974) (noting that ancestry is a relevant factor when combined with others, but not standing alone); see also Banks, supra note 11, at 1086–87 n.47 (acknowledging this view); Samuel R. Gross & Katherine Y. Barnes, Road Work: Racial Profiling and Drug Interdiction on the Highway, 101 MICH. L. REV. 651, 733 (2003) (same); David A. Harris, Using Race or Ethnicity as a Factor in Assessing the Reasonableness of Fourth Amendment Activity: Description, Yes; Prediction, No, 73 MISS. L.J. 423, 428–35 (2003) (same). But see United States v. Montero-Camargo, 208 F.3d 1122, 1135 (9th Cir. 2000) (en banc) (“Hispanic appearance is, in general, of such little probative value that it may not be considered as a relevant factor where particularized or individualized suspicion is required. Moreover, we conclude, for the reasons we have indicated, that it is also not an appropriate factor.”).

182. United States v. Weaver, 966 F.2d 391, 394 (8th Cir. 1992).

183. Id. at 394 n.2. Other factors the officer relied upon were his “own experience and . . . intelligence reports he had received from the Los Angeles authorities that young male members of Black Los Angeles gangs were flooding the Kansas City area with cocaine.” Id. In his dissent, Judge Arnold noted the lack of empirical evidence to support the agent’s claim that drug courier passengers
Other courts have similarly affirmed the use of race to establish criminal suspicion.\textsuperscript{184} When courts allow officers to utilize race to overcome shortcomings in demonstrating reasonable suspicion, they assume that officers accurately remember their experiences and make sound correlations between race and criminality. The empirical evidence on memories and illusory correlations should lead courts to be more cautious.\textsuperscript{185}

Stereotypes about black criminality can affect memories about contacts with blacks. This can occur because people are more likely to encode events into memory that are consistent with their preexisting beliefs and expectations.\textsuperscript{186} As stated by noted social psychologist Ziva Kunda, “[m]uch of what we ‘learn’ from experience may reflect our prior theories about re-

\begin{footnotesize}
\textsuperscript{184} See, e.g., United States v. Meza-Meza, No. 99-10198, 2000 WL 286284, at *1 (9th Cir. Mar. 16, 2000) (providing that “race can be one factor considered in establishing reasonable suspicion under all of the circumstances” (citation omitted)); United States v. Moss, No. 99-6510, 2000 WL 33121240, at *2–3 & n.1. (6th Cir. Jan. 8, 2000) (same); United States v. Travis, 837 F. Supp. 1386, 1391 (E.D. Ky. 1993) (“[T]he agents are of the belief that only a minute percentage of the air traveling public are couriers and that focusing on minorities from the Los Angeles flights is an effective use of law enforcement resources as indicated by the number of successful prosecutions.”). Courts also allow consideration of race when they permit officers to rely on drug courier profiles. These profiles often contain race as a relevant factor. Angela J. Davis, Race, Cops, and Traffic Stops, 51 U. MIAMI L. REV. 425, 430 (1997); Johnson, \textit{supra} note 175, at 234. Although courts do not always countenance the use of race by police officers to establish criminality, these cases demonstrate that officers do consider race in determining whether a reasonable suspicion exists. \textit{See}, e.g., United States v. Laymon, 730 F. Supp. 332 (D. Colo. 1990); State v. Graciano, 653 P.2d 683 (Ariz. 1982).

\textsuperscript{185} There is one study that supports the idea that more experienced officers may rely less on stereotypes in their judgments. See B. Michelle Peruche & E. Ashby Plant, The Correlates of Law Enforcement Officers’ Automatic and Controlled Race-Based Responses to Criminal Suspects, 28 BASIC & APPLIED SOC. PSYCHOL. 193, 198 (2006). In this study, “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 . . . .” \textit{Id}.

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ality rather than the actual nature of reality.” Because of both implicit and conscious biases, officers are likely to have better memories of individuals who confirm their suspicions of criminality than for those who do not.

One study has demonstrated that implicit stereotypes can affect the memory of police officers. In this study, implicit stereotypes caused officers to unintentionally misidentify individuals with more stereotypically black features as people they had seen before. The same significant effects were not demonstrated when officers were asked to identify white individuals. In fact, the officers misremembered black individuals despite the fact that they paid more attention to the black faces than to the white faces.

Flawed memories can cause officers to see correlations between blacks and crime that do not exist and to miss correlations between behavior and crime that actually do exist. These illusory correlations between race and criminality can “persist even in the face of data in which these correlations are nonexistent.” This can explain why officers continue to stop

187. KUNDA, supra note 29, at 130 (1999); see also Jonathan A. Fugelsang & Kevin N. Dunbar, A Cognitive Neuroscience Framework for Understanding Causal Reasoning and the Law, 359 PHIL. TRANSACTIONS ROYAL SOC'Y LONDON 1749, 1751 (2004), available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1693458/pdf/15590615.pdf (“Several studies have found that individuals appear to have great difficulty evaluating evidence that is inconsistent with their beliefs . . . . The typical finding is that people are more likely to attend to, seek out and evaluate evidence that is consistent with their beliefs and ignore or downplay evidence that is inconsistent with their beliefs.” (citations omitted)). Remarkably, cognitive neuroscientists have found that different brain structures are involved in evaluating evidence that is consistent with prior expectations versus evidence that is inconsistent. KUNDA, supra note 29, at 130.

188. See Charles M. Judd & Bernadette Park, Definition and Assessment of Accuracy in Social Stereotypes, 100 PSYCHOL. REV. 109, 112 (1993) (noting that people remember more information about others that confirms their stereotypes than information that is either irrelevant or disconfirms their preconceptions).


190. See id. (noting that these difficulties were most acute when officers perceived pictures of black people).

191. Id. at 886–97.

192. KUNDA, supra note 29, at 127.

193. Linda Hamilton Krieger, The Content of Our Categories, 47 STAN. L. REV. 1161, 1195 (1995) (defining an “illusory correlation” as “the report by observers of a correlation between two classes of events which, in reality, (a) are not correlated, or (b) are correlated to a lesser extent than reported, or (c) are correlated in the opposite direction from that which is reported” (citation omitted)).

194. KUNDA, supra note 29, at 128.
blacks at higher rates than whites despite the fact that hit rates demonstrate that the practice is flawed. Officers simply do not accurately remember their failed searches. This can occur because people unintentionally search their memories for evidence that confirms an existing hypothesis rather than engaging in a balanced search for evidence that either confirms or refutes it.\textsuperscript{195}

In fact, encountering counterstereotypical individuals—that is, blacks who are not involved in criminal activity—may actually result in strengthening stereotypes through a process known as subtyping: “[b]y allocating counterstereotypic individuals . . . to a subtype that is considered atypical and unrepresentative of the group as a whole, one may be able to maintain one’s global stereotype of the group even though one knows that some group members do not fit the bill.”\textsuperscript{196} Indeed, the more a counterstereotypical person deviates from the stereotype, the easier it is to subtype that individual.\textsuperscript{197} Thus, officers’ correlations between race and criminality may say more about their preexisting stereotypes than about the accuracy of their beliefs.

This section reveals that the failure to be realistic about police decisionmaking and judgment has pernicious effects on policing and privacy. Fourth Amendment jurisprudence is primarily concerned with prohibiting arbitrary invasions of privacy by the government.\textsuperscript{198} In constructing the doctrine to protect

\textsuperscript{195} See id. at 128 (describing experiments highlighting this phenomena). For a general discussion, see Joshua Klayman & Young-Won Ha, Confirmation, Disconfirmation, and Information in Hypothesis Testing, 94 PSYCHOL. REV. 211 (1987).

\textsuperscript{196} KUNDA, supra note 29, at 384.

\textsuperscript{197} Id. at 390 (“[T]he more inaccurate our stereotype of a group, the less likely it is to change spontaneously following encounters with group members. This is because the more inaccurate our stereotype, the more discrepant it will be from the typical group member. Put differently, the typical group member will deviate more extremely from more inaccurate stereotypes, and so will be dismissed more readily as an exception.”).

\textsuperscript{198} See, e.g., Camara v. Mun. Court, 387 U.S. 523, 528 (1967) (“The basic purpose of [the Fourth] Amendment, as recognized in countless decisions of this Court, is to safeguard the privacy and security of individuals against arbitrary invasions by governmental officials.”); Anthony G. Amsterdam, Perspectives on the Fourth Amendment, 58 MINN. L. REV. 349, 417 (1974) (“A paramount purpose of the [F]ourth [A]mendment is to prohibit arbitrary searches and seizures as well as unjustified searches and seizures.”); Tracey Maclin, The Central Meaning of the Fourth Amendment, 35 WM. & MARY L. REV. 197, 201 (1993) [hereinafter Maclin, Central Meaning] (“[T]he central meaning of the Fourth Amendment is distrust of police power and discretion.”); David A.
against arbitrary invasions, the Court made inaccurate behavioral assumptions about police behavior that actually under-
mines this core value. This leads to policing that fails to protect equally the privacy rights of all individuals regardless of their race.

To realize the normative goal of the Fourth Amendment, courts should take accurate understandings of decisionmaking into account rather than basing their legal standards on assumptions that are empirically unsupportable. In the next section, I explore how the doctrine might look if courts replaced their flawed behavioral assumptions with accurate accounts of human behavior. These tentative suggestions will be developed in a future article.

C. PRELIMINARY THOUGHTS ON DOCTRINAL REFORMS

"[T]he 'touchstone' of the Fourth Amendment 'is reasonableness.'" As Professor Maclin observes, "reasonableness is a malleable concept." It is judged by taking into account the "totality of the circumstances." The Court has considered a wide variety of circumstances under the rubric of reasonableness:

\[\text{The text of the amendment; history; threats to police safety; the use of standardized police procedures; subjective and objective expectations of privacy; the presence of police coercion; the fact that privacy interests are only marginally protected; the potential danger to the public at large; the severity of the alleged criminal conduct a suspect has committed; whether a suspect poses a threat to the community or actively resists an officer's seizure; and a whole host of other factors depending on the circumstances.}\]

Surely, considering how implicit biases can cause arbitrary invasions of privacy is an appropriate consideration under the


199. Krieger & Fiske, supra note 1, at 1016–17 (discussing the use of behavioral theories to shape legal incentives).


201. Maclin, Race, supra note 125, at 371.


203. Maclin, Race, supra note 125, at 370–71. Professor Maclin argues that consideration of racial impact should be added to this list. Id. at 371; see also Robinette, 519 U.S. at 35 (rejecting "any litmus-paper test" or single "sentence or... paragraph... rule," in recognition of the "endless variations in the facts and circumstances implicating the Fourth Amendment" (citations omitted)).
category of reasonableness. While I am not the first to suggest that reasonableness should include consideration of racial effects,204 I am the first to suggest that the reasonableness inquiry should include consideration of the behavioral effects of implicit social cognitions. Importantly, I am not arguing that courts should conduct an inquiry into the subjective intentions of individual officers. Such inquiry is unhelpful because officers will be unaware of the effects of nonconscious biases on their behavior. Since, as is discussed more fully in Part III, implicit biases are malleable, police departments and legal doctrine can create a situation that reduces the effects of implicit biases on behavior.

The Court often determines the reasonableness of a police action by balancing the government’s interest in effective law enforcement against the individual’s interest in privacy and security.205 When the effects of implicit social cognitions on behavior are considered, it is apparent that allowing officers to act on their interpretations of ambiguous behavior and to rely on memories of their experiences to justify encroachments on privacy is unreasonable. First, these actions do not serve the government’s interest in effective law enforcement. As the data on hit rates206 demonstrate, police waste resources subjecting

204. See, e.g., Akhil Reed Amar, Fourth Amendment First Principles, 107 HARV. L. REV. 757, 808 (1994) (“Even if racially disparate impact alone does not violate the Constitution, surely equal protection principles call for concern when Blacks bear the brunt of a government search or seizure policy. Thus, in a variety of search and seizure contexts, we must honestly address racially imbalanced effects and ask ourselves whether they are truly reasonable.”); Maclin, Race, supra note 125, at 371 (arguing that reasonableness should include consideration of racial impact); Sklansky, supra note 198, at 329 (“What is most troubling about the recent vehicle stop decisions are ‘all the circumstances’—including the continuing and destructive role of race in American policing, the injuries other than forced disclosures suffered at roadside detentions, and the shortcomings of direct restrictions on police abuse and generalized guarantees of equality—that the Supreme Court overlooked.”).

205. Florida v. Royer, 460 U.S. 491, 514 (1983) (Blackmun, J., dissenting) (“[T]he key principle of the Fourth Amendment is reasonableness—the balancing of competing interests.” (citation omitted)); Delaware v. Prouse, 440 U.S. 648, 654 (1979) (“[T]he permissibility of a particular law enforcement practice is judged by balancing its intrusion on the individual’s Fourth Amendment interests against its promotion of legitimate governmental interests.”); see also Maclin, Central Meaning, supra note 198, at 198–99 (“The central meaning of the Fourth Amendment is ‘reasonableness.’ . . . Whether a particular search or seizure is reasonable is generally determined by balancing the competing interests at stake—the government’s interest in effective law enforcement versus the individual’s interest in privacy and personal security.”).

206. See supra notes 9–19 and accompanying text for a discussion of hit rates.
countless innocent blacks to humiliating stops and frisks\textsuperscript{207} while failing to stop many whites who are engaged in criminal activity.

Second, these actions hurt law enforcement interests by fostering mistrust. Many within black communities perceive the constant stopping, questioning, and searching of innocent individuals as harassment, which results in distrust, anger, and other feelings not conducive to fostering good community-police relationships or perceptions of legitimacy in the criminal justice system.\textsuperscript{208} Growing numbers of individuals in these communities already view the police “as just another gang.”\textsuperscript{209} Attitudes towards the police “begin crystallizing during adolescence when youths have greater opportunities for direct and indirect contact with officers and other agents of the juvenile justice system. By early adulthood, most people’s views of the police are fairly well developed, including their perceptions of officers’ trustworthiness.”\textsuperscript{210} Lack of trust in the police and in the legitimacy of the criminal justice system can result in communities being less safe.\textsuperscript{211} Researchers have found that when citizens distrust the police, not only are they hesitant to report crimes and to help with police investigations, but police officers are also more at risk of verbal abuse and physical confrontations.\textsuperscript{212}

The implications for police-citizen trust are particularly disturbing based on recent evidence that distrust of the police can result vicariously. A recent study found that amongst blacks, learning about negative police encounters of other

\textsuperscript{207} E.g., Thompson, supra note 115, at 959 & n.5 (citing evidence of police conducting tens of thousands of fruitless stops and frisks, mostly against blacks and Latinos); see supra notes 9–19 and accompanying text.


\textsuperscript{210} Flexon et al., supra note 27, at 181 (citations omitted).

\textsuperscript{211} Capers, supra note 208, at 800; Natapoff, supra note 208, at 687–90.

\textsuperscript{212} Flexon et al., supra note 27, at 180 (citations omitted).
blacks was significantly related to their attitudes. In fact, for high-school-aged students, one of the greatest determinants of trust in the police was “observ[ing] other students stopped and treated with disrespect by the police.” Thus, policing affected by implicit biases does not serve law enforcement interests. Even if it did, the interests such policing serve are negligible compared to the violations caused to the dignity, privacy, and autonomy interests of individuals, particularly nonwhites.

The current Terry doctrine facilitates unreasonable police actions because it fails to account for the operation of implicit biases on behavior. Consideration of these biases should lead courts to question whether the reasonable suspicion test is up to the task of preventing intrusions on individual liberty based upon nothing more substantial than inarticulate hunches.

The following section suggests some tentative proposals for Terry reform that will serve both law enforcement and privacy interests by taking the empirical evidence about human behavior and decisionmaking seriously. Importantly, these suggestions are not concrete proposals, but rather some preliminary thoughts for future reflection. I hope to begin a conversation about how tinkering with Fourth Amendment doctrine may provide a mechanism for reducing the effects of implicit bias on police behavior.

1. Return to Probable Cause

The reasonable suspicion test fails to prevent the police from acting on racial hunches. By allowing officers to act on their interpretation of ambiguous behavior, the test underprotects the privacy rights of nonwhites; they will be stopped and frisked more often than similarly situated whites, not because they are acting more suspiciously, but because implicit biases likely will affect how police interpret and react to their behavior.

One solution is to return to the probable cause standard as the sole justification for stops and frisks. Probable cause is a tougher standard than reasonable suspicion. As Professor Sheri Lynn Johnson writes, “[t]he former reaches only completed or ongoing crimes, while the latter encompasses imminent crimi-

213. Id. at 182.
214. Id. at 187.
215. For a powerful discussion of dignitary harms and the Fourth Amendment, see generally Andrew E. Taslitz, Stories of Fourth Amendment Disspect: From Elian to the Internment, 70 FORDHAM L. REV. 2257 (2002).
nal activity. Probable cause also demands greater confidence in the interpretation of the facts observed.\textsuperscript{216}

The probable cause standard would require officers to gather more information and to observe more unambiguous behavior before seizing individuals. The science demonstrates that individuation (i.e., compiling more information about an individual) can reduce the effects of implicit cognitions on behavior.\textsuperscript{217} Reducing the effects of implicit bias may result in stops and searches that are more accurate.

Data from the Maryland State Police provide some evidence that requiring officers to have probable cause before acting increases accuracy. The data demonstrate that when officers conducted searches based upon probable cause, their hit rates were fifty-three percent. However, when officers asked individuals for consent to conduct a search, likely because they did not have probable cause, their hit rates dropped to twenty-two percent.\textsuperscript{218}

Other commentators have suggested a return to probable cause.\textsuperscript{219} In doing so, they recognized, as I do, that it is unlikely that courts would actually implement it. An additional problem is that even if implemented, courts might dilute the probable cause standard to such an extent that it would operate much as the reasonable suspicion test currently does.\textsuperscript{220} A further problem with this approach is that the probable cause standard is

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\textsuperscript{216} Johnson, supra note 175, at 216.


\textsuperscript{218} Gross & Barnes, supra note 181, at 692.

\textsuperscript{219} See, e.g., Harris, Frisking, supra note 135, at 3–6 (noting the hardships that stops and frisks supported by less than probable cause place on certain groups); Tracey Maclin, The Decline of the Right of Locomotion: The Fourth Amendment on the Streets, 75 CORNELL L. REV. 1258, 1332–33 (1990) (opining that the reasonable suspicion standard no longer has a place in Fourth Amendment jurisprudence).

\textsuperscript{220} Maclin, supra note 219, at 1331–32 (noting that this has already happened once).
not necessarily immune from the effects of implicit bias. Although it is theoretically more difficult to meet than the reasonable suspicion standard, the probable cause standard is “non-technical,” “fluid,” and based upon “common-sense.” Consequently, the standard still requires officers to evaluate ambiguous behavior unless they catch an individual red-handed.

2. No Automatic Deference

Currently, courts defer to officer judgments of criminality in determining whether a reasonable suspicion exists without requiring empirical evidence supporting the officer’s ability to make sound conclusions or the reliability of the evidence the officer used to make his judgment. For instance, in United States v. Sokolow, law enforcement agents relied in part upon a drug courier profile to justify a Terry seizure. The Ninth Circuit “essentially rejected the use of inferences based on common sense and the shared experience of agents in the field.” It held that, absent empirical proof of the profile’s reliability, the evidence was insufficient to justify a seizure.

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222. In fact, the Court shows deference even when those inferences are not based upon any actual experience of the officer. For instance, in Terry, the Court deferred to Officer McFadden’s conclusion that Terry and Chilton were about to commit a robbery despite the fact that the officer admitted having no experience observing individuals casing a joint. Suppression Hearing, supra note 111, at 1420.

The Court similarly defers to officer experience, without requiring proof of actual experience, when probable cause is at issue. In Ornelas v. United States, the Court “recognized that a police officer may draw inferences based on his own experience in deciding whether probable cause exists.” 517 U.S. 690, 700 (1996) (citation omitted). In that case, the Court noted that facts which “may suggest only wear and tear” to a layman, “to Officer Luedke, who had searched roughly 2,000 cars for narcotics, it suggested that drugs may be secreted inside the panel. An appeals court should give due weight to a trial court’s finding that the officer was credible and the inference was reasonable.” Id. The problem here is that although the officer searched 2000 cars in the past, there is no evidence of his rate of success. Other commentators similarly have questioned the Court’s reliance on officer expertise. See, e.g., Maclin, Legacy, supra note 121, at 1306–07. My proposal builds from Maclin’s critique by adding the lessons from implicit social cognition to provide an empirical basis for questioning this reliance.

223. United States v. Sokolow, 831 F.2d 1413, 1417 (9th Cir. 1987).
225. Sokolow, 831 F.2d at 1421.
The Supreme Court did not follow the Ninth Circuit’s lead. It agreed with the government that empirical proof was unnecessary. In doing so, it cited United States v. Cortez for the proposition that reasonable suspicion “does not deal with hard certainties, but with probabilities. Long before the law of probabilities was articulated as such, practical people formulated certain common sense conclusions about human behavior; jurors as factfinders are permitted to do the same—and so are law enforcement officers.”

The Court ruled without the benefit of scientific knowledge and empirical evidence on human decisionmaking and judgment. What the science demonstrates is that an officer’s common-sense conclusions about behavior are often wrong or, at the very least, may be nonconsciously influenced by the race of the person being observed. By deferring to an officer’s common-sense judgments, the Court assumes that officers’ memories of their experiences are pristine and accurate. However, the science refutes this assumption. Thus, by blindly deferring, the Court may underprotect the liberty of nonwhites and facilitate potentially inefficient policing.

In order to reduce the effects of implicit bias on policing, courts should not defer automatically to officer judgments of criminality in determining whether a reasonable suspicion exists. At the very least, courts should require officers to provide empirical support for their inferences before giving those inferences any weight in the reasonable suspicion calculus. This empirical support should be in the form of the individual officer’s hit rates. The officer should provide specific information that out of X number of seizures based upon criteria Y, this officer’s percentage of productive stops and frisks is Z. Providing this evidence avoids the problem of relying upon the accuracy of an officer’s memories of his experiences.

226. Sokolow, 490 U.S. at 8.
227. Id. (citing United States v. Cortez, 449 U.S. 411, 418 (1981)).
228. See supra Part II.B.
229. Id.
230. Requiring empirical proof should not be controversial. The Court already requires plaintiffs in selective enforcement claims to provide empirical proof that similarly situated individuals were treated differently. United States v. Armstrong, 517 U.S. 456, 463 (1996); see also United States v. Barlow, 310 F.3d 1007, 1012 (7th Cir. 2002) (requiring the plaintiff in a selective enforcement claim to demonstrate that DEA agents failed to stop whites who “look[ed] nervously over their shoulders—but chose not to approach them”).
231. In fact, scholars have noted that “few profiles have empirical support, and most leave police with unfettered discretion while creating the false im-
However, aggregate hit rates alone should be insufficient to justify a Terry stop because this would undermine the notion of individualized suspicion that is at the core of the Fourth Amendment.\textsuperscript{232} For instance, even if an officer demonstrated a hit rate of thirty percent for finding contraband when he stopped young white men, with close cropped hair, wearing baggy pants, and who live in high-income areas, this information alone should not entitle officers to stop all young white men who meet this description with impunity. Rather, additional evidence to support the officer’s inference that the particular individual stopped is likely engaged in criminal activity should be required. Thus, aggregate hit-rate data alone should not be a sufficient basis for finding a stop and frisk reasonable.

The important point here is that courts should not defer to officer judgments about when an individual’s actions denote criminality in the absence of any evidence of the particular officer’s reliability for making these judgments. When courts determine whether a reasonable suspicion exists, they should base their judgments, in part, on some form of empirically validated evidence rather than relying upon an officer’s personal experiences or common-sense conclusions, which the science demonstrates are often incorrect.\textsuperscript{233} Since unproductive stops will affect an officer’s aggregate hit rates, requiring officers to provide empirical evidence will likely create incentives for them to think carefully about the criteria they use before conducting Terry stops.\textsuperscript{234} To the extent that this motivates officers to individualize, it will decrease the effects of implicit bias on police behavior.


\textsuperscript{233} See supra notes 165–70 and accompanying text; see also TASLITZ, supra note 232, at 261 (“Nothing in antebellum and Reconstruction history lessens the central need for the state to justify intrusions on citizens’ privacy, property, and free movement absent a high quantity and quality of evidence of criminal wrongdoing.”).

\textsuperscript{234} For a similar point, see Taslitz, supra note 217, at 38–39 n.184.
3. No Reliance on Race or Race Proxies

Some courts currently allow officers to rely on race and proxies for race (such as consideration of high-crime neighborhoods) to justify Terry seizures. Courts assume that these considerations help officers ferret out criminal behavior. Without consideration of the science, some judges might believe that using race and race proxies to infer criminality would more often than not result in accurate judgments of criminality. However, the science demonstrates that consideration of race and race proxies may make officers less, not more, accurate.

By countenancing consideration of race to infer criminality, courts exacerbate implicit biases by solidifying the association between race and crime. First, purposefully focusing officer attention on blacks and their criminal stereotype makes negative stereotypes salient and thus more available for use in judging behavior. This predisposes officers to interpret ambiguous behaviors as more suspicious than they might otherwise.

While solidifying the association between race and crime occurs even when race is not consciously highlighted, focusing attention on the race-crime association exacerbates it. Thus, race salience encourages police encounters with blacks. It draws police attention to blacks with the assumption that they are involved in criminal activity. The nonconscious activation of negative racial stereotypes, then, may cause officers to interpret ambiguous behavior as suspicious.

Second, when approaching the individual to dispel or confirm their suspicions, implicit biases may cause officers to nonconsciously behave with aggression. This will trigger a similar response, solidifying the stereotype of blacks as aggressive. Officers may then interpret the aggressive behavior (that they unknowingly initiated) as indicating that the individual is armed and dangerous, resulting in an invasive, public, and humiliating frisk. If the officer then finds evidence of crimi-

235. See Harris, Factors, supra note 135, at 671–81 (discussing lower courts’ deference to police officers).
236. See supra Part I.B.
237. See supra Part I.
238. See infra Part III.
239. See infra Part III.
240. See Terry v. Ohio, 392 U.S. 1, 16–17 (1968) (“[I]t is simply fantastic to urge that [a frisk] performed in public by a policeman while the citizen stands helpless, perhaps facing a wall with his hands raised, is a ‘petty indignity.’ It is a serious intrusion upon the sanctity of the person, which may inflict great
nal activity, this confirms the stereotype and becomes a more memorable event than the occasions when he does not.

Third, by making race salient, the doctrine encourages officers to approach black individuals with the expectation of finding evidence of criminal activity. Conscious affirmation and practice of racial stereotypes facilitates the creation of automatic and nonconscious associations. The automatic activation of negative stereotypes then has behavioral effects, leading to increased scrutiny, negative evaluations of ambiguous behaviors, and negative treatment. Thus, conscious consideration of race can exacerbate the behavioral effects of implicit bias, negatively affecting nonwhites.

In order to protect individuals from the arbitrary policing caused by the operation of implicit bias, courts should decouple the association between race and crime. Courts can accomplish this by refusing to consider race and proxies for race in deciding whether the police acted reasonably in conducting a stop and frisk. In fact, courts should go further and clearly state that race is irrelevant to a determination of whether a Terry seizure is justified. By making this change, the doctrine can play an important normative role, potentially influencing an officer's indignity and arouse strong resentment, and it is not to be undertaken lightly.” (citations omitted)).

241. Devine, supra note 64, at 6 (“Automatic processes involve the unintentional or spontaneous activation of some well-learned set of associations or responses that have been developed through repeated activation in memory.” (emphasis added)); see also John A. Bargh et al., Automaticity of Social Behavior: Direct Effect of Trait Construct and Stereotype Activation on Action, 71 J. PERSONALITY & SOC. PSYCHOL. 230, 231 (1996) (“Preconscious activation of mental representations develops from their frequent and consistent activation in the presence of a given stimulus event in the environment.”). See generally Richard M. Shiffrin & Walter Schneider, Controlled and Automatic Human Information Processing: II. Perceptual Learning, Automatic Attending, and a General Theory, 84 PSYCHOL. REV. 127, 185 (1977) (describing the learning of automatic attending).

242. See supra Part I.

243. I am not dealing here with the situation in which a person of a particular race is identified as a criminal perpetrator. See, e.g., Banks, supra note 11, at 1081–82; Johnson, supra note 175, at 225–30. Furthermore, I am not arguing for a form of colorblindness. For insightful discussions detailing how colorblindness is not a form of race neutrality, but rather a form of racial burdening, see Carbado, supra note 135, at 975, and Neil Gotanda, A Critique of “Our Constitution is Color-Blind,” 44 STAN. L. REV. 1, 68 (1991). Interestingly, psychological experiments also support the view that advocating a colorblind perspective increases racial biases. See Galen V. Bodenhausen et al., Controlling Prejudice and Stereotyping, in HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION, supra note 30, at 111, 126–27 (citing studies).
beliefs about appropriate uses of race in policing. At the very least, if the refusal to consider race and race proxies makes it more difficult for officers to establish reasonable suspicion, officers will likely be more accurate in the stops they conduct. Courts might even consider scrutinizing stops and frisks more closely when the individual involved is a member of a racial minority in order to counteract the likely effects of implicit bias on the officer’s decision to conduct a seizure.

4. Rethinking the Exclusionary Rule

A final and perhaps more controversial solution that is to be taken up in a future article is to reconsider the Fourth Amendment’s exclusionary rule. Currently, only defendants in criminal cases have access to the exclusionary remedy. To the extent that allegedly guilty blacks are disproportionately represented amongst those seeking exclusion of evidence, the exclusionary remedy may have the perverse effect of exacerbating implicit biases by solidifying the coupling of race and criminality. Perhaps rethinking the exclusionary rule in order to reduce its potential effects on implicit biases is necessary, most importantly by considering ways to make innocent victims of Fourth Amendment violations more salient.

In conclusion, existing Fourth Amendment doctrine exacerbates the effects of implicit bias on policing by failing to take into account empirical evidence of human behavior and decisionmaking. Being sensitive to the behavioral effects of implicit bias will better protect all citizens from unreasonable searches and seizures. The tentative proposals suggested here may help propel courts along that path and prevent arbitrary invasions of privacy by reducing the effects of implicit bias and correcting for them.

However, reducing the behavioral effects of the automatic association between race and crime in proactive policing will take more than doctrinal fixes. As others have noted, the law

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245. See generally Taslitz, supra note 217, at 259 (noting that based upon the history of the Fourth Amendment, “[a]ny use of race to establish suspicion of crime should be judged skeptically and require strong justification”).


247. See supra discussion Part I.
alone may not be the most effective way to address nonconscious biases. Furthermore, the association between blacks and criminality is so entrenched in our society that it would be naïve to assume that mere doctrinal changes would be sufficient to break it. For this reason, Part III concentrates on structural changes within the institution of the police for reducing the effects of implicit bias on their behavior.

III. STRUCTURAL REFORMS

Police departments likely have practices and internal structures in place that promote arbitrary policing by unintentionally strengthening implicit biases. However, since implicit biases are malleable, police departments may be able to implement strategies to moderate their effects. This Part offers suggestions for structural reforms to reduce the effects of implicit biases on police behavior and joins the call for more empirical work testing directly the behavioral effects of implicit bias on legal decisionmaking. One significant challenge is that officers function in precisely the type of environment that encourages and facilitates nonconscious processing; they often must make decisions quickly and in situations that are ambiguous, potentially dangerous, and where a possible suspect’s appearance, demeanor, and neighborhood are the primary sources of information.

248. See, e.g., Bartlett, supra note 26, at 1899–900 (advocating "caution[] against approaches to unconscious discrimination—whatever its prevalence and whatever the inadequacies of existing law—that rely principally on stronger legal coercion as the primary tool to fight implicit discrimination"); see also Kang & Banaji, supra note 6, at 1080 ("[W]e need a new model of discrimination for implicit bias . . . . This new model must promote proactive structural interventions that minimize harm without relying solely on potential individual litigation."); Susan Sturm, Second Generation Employment Discrimination: A Structural Approach, 101 COLUM. L. REV. 458, 460–61 (2001).

249. In fact, some even suggest that legal coercion may be counterproductive. See, e.g., Bartlett, supra note 26, at 1900 ("[C]oercion . . . can have a negative effect on people’s internalization of nondiscrimination norms.").

250. See, e.g., Levinson et al., supra note 26, at 390. In his ingenious study, Professor Levinson created a Guilty/Not Guilty IAT to determine whether implicit biases against blacks affect juror decisions of culpability. Perhaps an IAT test to determine whether implicit biases affect police officer decisionmaking related to suspicious behavior could also be devised.

251. See Susan T. Fiske, Stereotyping, Prejudice, and Discrimination, in THE HANDBOOK OF SOCIAL PSYCHOLOGY 364–67 (Daniel T. Gilbert et al. eds., 4th ed. 1998) (describing rapid and automatic categorization); see also Barden et al., supra note 178, at 19–21 (noting the effect of viewing stereotyped individuals in certain settings increases implicit bias); Mark Schaller et al., Fear of the Dark: Interactive Effects of Beliefs About Danger and Ambient Darkness
A. REVIEW OF EXISTING PRACTICES

Police departments should identify practices and procedures that have the potential to exacerbate implicit biases and then consider whether they can and should be changed. In some instances, safety concerns may counsel against elimination of an existing procedure even though it has the potential to strengthen implicit biases. In other instances, the need for change will be obvious and modification easy.

One easily implemented change is to eliminate the use of training videos that portray racial minorities as perpetrators.252 This type of video likely strengthens implicit biases by reinforcing the race-criminal stereotype. Likewise, training simulations and similar practices should be conducted in ways that do not bolster racial stereotypes.

Departments also should reconsider the techniques they employ to reduce racial profiling.253 Studies demonstrate that making race salient increases activation of implicit stereotypes, even when individuals are instructed to avoid using racial stereotypes in their judgments. This phenomenon is known as the “rebound effect” and demonstrates that attempts to suppress thoughts can make those thoughts “become hyperaccessible once people relax their efforts at suppression or become preoccupied with other tasks.”254 This rebound effect can explain why consciously trying to avoid considerations of race can lead to greater use of racial stereotypes.255

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252. See, e.g., HARRIS, supra note 105, at 48–49 (discussing training videos that utilize minority surnames for perpetrators).
253. See Maclin, Race, supra note 125, at 385 n.223; see also State v. Soto, 734 A.2d 350, 356 (N.J. Super. Ct. Law Div. 1996) ("[T]wo former troopers called by the defense who were not reappointed at the end of their terms ... said they were trained and coached to make race based 'profile' stops to increase their criminal arrests ... ."); HARRIS, supra note 105, at 240 (describing New Jersey police officers admitting to training to profile blacks and Hispanics); Weatherspoon, supra note 135, at 453 (discussing an internal Maryland state trooper memo encouraging officers to target blacks driving on I-68). Professor David Harris identifies myriad ways in which officers, even when not explicitly trained to consider race, are implicitly taught to do so through intelligence reports that feature race prominently. HARRIS, supra note 105, at 50.
254. Kunda & Sinclair, supra note 31, at 20 (citation omitted).
255. Daniel M. Wegner & Ralph Erber, The Hyperaccessibility of Suppressed Thoughts, 63 J. PERSONALITY & SOC. PSYCHOL. 903, 911 (1992); see also Sei Jin Ko et al., Sneaking in Through the Back Door: How Category-Based Stereotype Suppression Leads to Rebound in Feature-Based Effects, 44
Thus, both training officers to consider race and instructing officers to avoid considerations of race can increase arbitrary policing by augmenting the effect of implicit biases on judgment. For example, in one study, researchers informed participants that race could affect their ability to determine whether an object was a weapon or a tool. Researchers then divided the subjects into three groups. One group was instructed to do its best to avoid using race in making judgments about whether an object was a tool or a weapon. The second group was told to use race in its efforts to distinguish a tool from a weapon. The final group was given no instruction about the use of race.

In all three categories, individuals primed with an image of a black face were more likely to mistake a tool for a weapon, and individuals primed with a white face were more likely to mistake a weapon for a tool. Counterintuitively, those participants told to avoid using stereotypes in their judgments were unable to reduce the impact of race on their judgments. In fact, the instruction to “avoid using race increased the extent to which participants made more stereotype congruent versus incongruent errors.” In sum, the researchers concluded that “making race salient increased the tendency to stereotypically misidentify objects, regardless of whether race was focused on with the intent to avoid its influence, or the intent to employ..."
The researchers cautioned that their research investigated only the effects of temporary goals on implicit biases. Hence, they noted that repeated practice dissociating race from stereotypical traits might reduce the automatic association.\textsuperscript{265}

An important reason to avoid training officers to consider race in making judgments of criminality is its obvious effect of increasing the association between race and crime. It also encourages officers to consciously categorize individuals by race, which can increase automatic stereotype activation. For instance, in one study, researchers showed subjects photographs of both white and black faces.\textsuperscript{266} Researchers gave three sets of subjects different instructions to categorize the photographs. One instruction encouraged racial categorization, while another encouraged individuation by asking subjects to consider whether the individual pictured liked vegetables. The third did not encourage categorization at all, but rather asked individuals to determine whether a dot was present in the photograph. Researchers found that those subjects encouraged to engage in racial categorization showed implicit stereotype activation upon viewing the photos of black faces.\textsuperscript{267} However, subjects instructed either to individuate or to engage in a task that did not require categorization did not activate racial stereotypes.\textsuperscript{268} Thus, the science demonstrates that giving individuals a goal that encourages individuation rather than racial categorization may reduce activation of implicit stereotypes.

\textsuperscript{264} Id. at 391.
\textsuperscript{265} Id. at 395; see also Charles Stangor, The Study of Stereotyping, Prejudice, and Discrimination Within Social Psychology: A Quick History of Theory and Research, in HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION, supra note 30, at 1, 11 (citing studies demonstrating that conscious and implicit stereotyping can be reduced with practice denying stereotypical beliefs and by designing legal remedies to reduce reliance on stereotypes); infra Part III.B.2.
\textsuperscript{266} Wheeler & Fiske, supra note 44, at 57.
\textsuperscript{267} Id. at 62.
\textsuperscript{268} Id.; see also Fiske, supra note 251, at 358–60 (reviewing studies documenting that individuation reduces automatic stereotyping). Similarly, in another study, researchers discovered that when individuals were asked to decide whether a picture was an inanimate object or a woman, the subjects automatically activated gender stereotypes. However, when asked to determine whether a white dot was present in the photos, automatic gender stereotypes were not activated. C. Neil Macrae et al., On the Activation of Social Stereotypes: The Moderating Role of Processing Objectives, 33 J. EXPERIMENTAL SOC. PSYCHOL. 471, 482 (1997). Researchers surmised that the first task made gender salient, resulting in automatic stereotype activation.
An additional reason to avoid connecting race with criminality is that encouraging the race-crime connection can create a community that supports racial stereotyping. The motivation to conform one’s beliefs to those of the ingroup affects implicit stereotypes. In one study, individuals showed weaker automatic racial stereotype activation when they perceived a low degree of consensus within their group for stereotypical beliefs and vice versa.269

Another area of concern is police deployment patterns. Black neighborhoods are simultaneously underpoliced and overpoliced. They are underpoliced when it comes to the police responding to calls reporting criminal activity.270 Yet, these neighborhoods are overpoliced when it comes to proactive policing.271 Deploying officers to majority-black neighborhoods to engage in proactive policing does not seem to affect police responsiveness to citizen complaints. Studies show that implicit biases increase when individuals view blacks in contexts that trigger negative stereotypes, such as in poor urban neighborhoods.272 Hence, departments should consider whether it is bet-


271. See, e.g., COLE, supra note 174, at 44 (discussing the tendency toward “quality of life policing” in high-crime areas which includes stop-and-frisk tactics, pretext stops, and arrests for minor infractions); see also Kenneth B. Nunn, Race, Crime and the Pool of Surplus Criminality: Or Why the “War on Drugs” Was a “War on Blacks”, 6 J. GENDER RACE & JUST. 381, 391–412 (2002) (describing the disproportionate arrests and sentences of blacks during the war on drugs).

272. See, e.g., Bernd Wittenbrink et al., Spontaneous Prejudice in Context: Variability in Automatically Activated Attitudes, J. PERSONALITY & SOC. PSYCHOL. 815, 820 (2001) (noting that exposure to gang incidents increased implicit biases); see also Barden et al., supra note 178, at 11 (explaining the implicit bias that blacks are athletic but poor students); Laura A. Rudman & Matthew R. Lee, Implicit and Explicit Consequences of Exposure to Violent and Misogynous Rap Music, 5 GROUP PROCESSES & INTERGROUP REL. 133, 133 (2002) (finding that subjects exposed to violent rap music had increased automatic associations to underlying racial stereotypes).
ter to refrain from deploying officers to these neighborhoods solely to engage in proactive policing when it both strengthens implicit biases and does not significantly increase community safety.273

B. DEBIASING STRATEGIES

This section suggests a number of specific debiasing strategies that may increase arrest efficiency by reducing or negating the effects of implicit biases. The suggestions are based upon techniques that have shown promise in the research context.274 The proposals are divided into four general categories: increasing awareness, training, hiring, and incentivizing positive interactions.

273. Of course, it will be important to determine, as an empirical matter, whether the mere presence of the police reduces crime.

274. This section does not discuss all the studies that have implications for debiasing the police. For instance, some studies demonstrate that motivation can reduce stereotype activation. See, e.g., Patricia G. Devine et al., The Regulation of Explicit and Implicit Race Bias: The Role of Motivations to Respond Without Prejudice, 82 J. PERSONALITY & SOC. PSYCHOL. 835, 845 (2002) (showing people with high internal motivation were more nonprejudiced). These findings suggest that changing incentive structures within police departments may be an effective way to reduce implicit biases. Furthermore, people who are committed to egalitarian goals may be able to control stereotype activation. See, e.g., Michael Johns et al., Internal Motivation to Respond Without Prejudice and Automatic Egalitarian Goal Activation, 44 J. EXPERIMENTAL SOC. PSYCHOL. 1514, 1518 (2008) (“Together, these studies provide converging evidence that individuals who avoid prejudice because it is personally important to them, and not because of perceived social pressures, automatically activate egalitarian goals to help minimize expression of implicit race bias.”); William W. Maddux et al., Saying No to Negativity: The Effects of Context and Motivation to Control Prejudice on Automatic Evaluative Responses, 41 J. EXPERIMENTAL SOC. PSYCHOL. 19, 33 (2005) (those who are motivated to control prejudice reactions have automatized control strategies to avoid prejudice); Gordon B. Moskowitz et al., Preconsciously Controlling Stereotyping: Implicitly Activated Egalitarian Goals Prevent the Activation of Stereotypes, 18 SOC. COGNITION 151, 171 (2000) (showing that exposure to a member of a stereotyped group leads the egalitarian goal construct to be implicitly activated in some people); see also Leslie R.M. Hausmann & Carey S. Ryan, Effects of External and Internal Motivation to Control Prejudice on Implicit Prejudice: The Mediating Role of Efforts to Control Prejudiced Responses, 26 BASIC & APPLIED SOC. PSYCHOL. 215, 222 (2004) (finding that those with internal motivations to be nonprejudiced show decreased implicit biases compared to those who are only externally motivated).
1. Increasing Awareness

The possibility for moderating or overcoming implicit biases is at its highest when individuals are aware of the potential for bias and for controlling it.\textsuperscript{275} One way to increase officer awareness is to teach both police recruits and current officers about the results of research into the behavioral effects of implicit bias that may affect their interactions with citizens. For example, they should be instructed about the studies that demonstrate that their evaluations of behavior may be affected by implicit biases,\textsuperscript{276} and that these behavioral effects can have serious consequences such as causing them to shoot unarmed black men more readily than unarmed white men.\textsuperscript{277} At the police academy, a class on the science of implicit bias could be added to the curriculum. In police precincts, periodic classes could be held that would be mandatory for officers assigned to proactive patrols units.

Another way to increase awareness is to educate officers about hit-rate data. Explaining that implicit biases, rather than conscious racial animus, can account for the data may reduce defensiveness. Discussing the data can also facilitate a frank discussion about officer beliefs that racial disparities in seizures and frisks exist because of differential crime rates amongst ethnic groups.\textsuperscript{278} The idea is not to force officers to

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\item \textsuperscript{276} See \textit{supra} Part I.
\item \textsuperscript{277} See \textit{supra} Part I.
\item \textsuperscript{278} HARRIS, \textit{supra} note 105 at 15, 73–74. Sometimes officers admit that race is an important consideration in deciding who to stop and investigate. See, e.g., United States v. Taylor, 956 F.2d 572, 581 n.1 (6th Cir. 1992) (Keith, J., dissenting) (noting the testimony of a DEA agent who stated that at least seventy-five percent of the individuals stopped pursuant to the profile were black); Jones v. DEA, 819 F. Supp. 698, 723 (M.D. Tenn. 1993) (noting that Drug Interdiction Unit officers focused on defendants because they were “two Hispanic men . . . traveling in the company of a white woman”); David A. Harris, \textit{The Stories, the Statistics, and the Law: Why “Driving While Black” Matters}, 84 MINN. L. REV. 263, 268–69 (1999) (quoting two police officers).
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take problack attitudes,279 but to point out that in the proactive policing context, the hit-rate data demonstrate that their assumptions may be incorrect, and their preconceived notions may create a self-fulfilling prophecy. Professor David Harris puts it nicely:

If a police officer assumes people of color are more likely to commit crimes because he knows that African Americans and Latinos are overrepresented among people arrested and imprisoned, and he therefore investigates people of color more frequently as a result, his theory and preexisting beliefs will be confirmed. Of the drivers and pedestrians he stops and searches, most will be black or brown. Not surprisingly he will then end up arresting primarily black and brown individuals. He never stops to think about the rate at which he finds illegal behavior among this group versus the rate he might find it among a similar number of white drivers and pedestrians. Indeed, it has never occurred to him that he might find illegal behavior more often among a similar number of whites (as the data consistently show).

. . . His choice of where to look for criminal activity is informed by his own and society’s biases.280

Importantly, the tenor of this discussion should not be accusatory or critical because, unsurprisingly, police officers will likely become defensive if they perceive that they are being accused of intentional bigotry.281 Rather, the attitude should be one of collaboration and teamwork to increase the success rates of stops and searches.

A final idea for increasing awareness is to have recruits and officers take the Implicit Association Test (IAT).282 Introduced in 1998, the IAT is the most widely used mechanism for revealing the existence of implicit attitudes and stereotypes.283 The test has produced consistent results demonstrating that implicit biases are “pervasive,” unrelated to conscious beliefs,
and “predict behavior.” The IAT will be easy to administer because it is available online. Officers should be assured that taking the IAT is solely for educational purposes and that their results will remain confidential. Importantly, those who developed the IAT oppose its use for selection decisions, including employment decisions.

For some officers, learning about hit rates and implicit bias research, as well as taking the IAT, will persuade them that implicit attitudes and stereotypes exist. However, there will be skeptics. Nonetheless, these three ideas for increasing awareness will educate many officers about implicit biases and their behavioral effects.

2. Training

A 2007 study involving police officers provides intriguing evidence that extensive training of officers to individuate may reduce the effects of implicit stereotyping. This study tested experimental shooter-bias situations in which individuals mistakenly shot unarmed blacks and mistakenly failed to shoot armed whites as a result of implicit social cognitions. In this study, researchers found that officers as well as civilians activated negative black stereotypes upon viewing black individuals. As a result, both officers and civilians were quicker to shoot an unarmed black than an unarmed white.

However, officers performed much better than civilians did. Officers were better able to exercise control over their automatic stereotypes and performed much better than civilians when

284. Kang & Lane, supra note 5, at 8. By a “conservative estimate . . . [s]eventy-five percent of Whites (and fifty percent of blacks) show anti-black bias.” Kang & Banaji, supra note 6, at 1072. A 2009 comprehensive study showed that behavioral effects can be predicted from implicit bias scores. Anthony G. Greenwald et al., Understanding and Using the Implicit Association Test: III, Meta-Analysis of Predictive Validity, 97 J. PERSONALITY & SOC. PSYCHOL. 17, 32 (2009). This meta-analysis included 122 studies and 14,900 research subjects and demonstrated that IAT scores predicted behaviors in the black-white discrimination context better than explicit reports individual’s did. Id. at 19–20, 32.


286. Kang & Lane, supra note 5, at 29.

287. Cf. Correll, Thin Blue Line, supra note 68, at 1020–22 (noting that something in police training procedures may make police less likely to act on implicit biases than the community at large).

288. Id.

289. Id.

290. Id.
making decisions whether to shoot. The researchers tentatively suggested that their training and experience “may allow officers to more effectively exert executive control in the shoot/don’t-shoot task, essentially overriding response tendencies that stem from racial stereotypes.”

An earlier shooter bias study involving police officers found that, after repeated exposure to pairings where race and having a weapon were unrelated, they exhibited reduced shooter bias relative to initial trials. Other studies similarly demonstrate that repeatedly pairing race with a nonstereotypical trait resulted in reduced implicit race bias. Importantly, then, it appears that training can reduce implicit biases.

Field exercises or simulations where officers are trained to dissociate race from criminality may capitalize on the effectiveness of training to reduce the behavioral effects of implicit bias. Of course, it is one thing to suggest such an idea and another to determine whether it is advisable. Ideas such as this one raise difficult questions. Is race always irrelevant to assessing criminality? If not, perhaps officers should not be trained to dissociate the two. On the other hand, to the extent that racial stereotypes do not associate whites with criminality, such training

291. Id. at 1021. For a summary of the study, see Jost et al., supra note 5, at 51. A recent law review article utilizes shooter bias studies to analyze gun control laws and policies. See Adam Benforado, Quick on the Draw: Implicit Bias and the Second Amendment, 89 OR. L. REV. 1 (2010).

292. Plant & Peruche, supra note 137, at 182. The researchers caution that “as of yet, there is no evidence that the elimination of bias in response to the simulation generalizes to other types of responses (e.g., decisions in the field).” Id. at 183.

293. See, e.g., E. Ashby Plant et al., Eliminating Automatic Racial Bias: Making Race Non-Diagnostic for Responses to Criminal Suspects, 41 J. EXPERIMENTAL. SOC. PSYCHOL. 141, 154 (2005). Note that in this study, participants were civilians and not officers. Id. at 144. The researchers believed that if they told the participants to avoid considering race this would have increased bias in that group compared to those who had not been told to avoid considering race. Id. at 154. The researchers surmised this was a result of subjects learning that race was nondiagnostic, rather than being told that they should not consider race that made the difference. Id. In another study, showing participants repeated pairs that linked black faces with nonathletic objects reduced the stereotype of blacks as athletes. B. Michelle Peruche & E. Ashby Plant, Racial Bias in Perceptions of Athleticism: The Role of Motivation in the Elimination of Bias, 24 SOC. COGNITION 438, 448–49 (2006). But see Anthony J. Bishara & B. Keith Payne, Multinomial Process Tree Models of Control and Automaticity in Weapon Misidentification, 45 J. EXPERIMENTAL. SOC. PSYCHOL. 524, 531 (2009) (concluding tentatively that controlled processes, more than automatic processes, control weapon misidentification).
may simply ensure that nonwhites are treated similarly to whites.

In another study, researchers found that it was possible to reduce the effects of implicit biases on behavior by asking individuals to develop a strategy for what they would do or think when they encounter a stereotyped group member. In the study, researchers asked subjects to “firmly commit” themselves to thinking “safe” each time they saw a black face. Remarkably, subjects who committed themselves to this “counterstereotypic . . . intention” reduced the effects of automatic stereotyping on their ability to accurately differentiate weapons from innocuous objects. This method holds the intriguing possibility that simply asking police officers to commit themselves to thinking, “If I see a black individual, I will think innocent” or some other appropriate counterstereotypic intent may reduce the effects of implicit bias on their behavior towards blacks. For example, officers might commit themselves to thinking, “If I see a black individual that I believe is acting suspiciously, I will first consider whether I would have viewed the same actions as suspicious if the individual was white” before conducting a Terry seizure. This idea builds from Professor Cynthia Lee’s race-switching jury instruction that would ask jurors if they would feel the same way about a homicide if the defendant was white and the victim was black. Other techniques that have worked in the lab to reduce the automatic activation of stereotypes include extensive practice denouncing stereotypes or affirming counterstereotypes, and the use of mental imagery.

295. Id. at 1336.
296. Id. at 1342–43. It is interesting that participants who simply tried to avoid bias, but who formed no specific plan for doing so, were unable to reduce automatic racial bias. See id. at 1344. Furthermore, this method of reducing implicit stereotypes did not result in the “rebound” effect that subjects showed in other experiments when they simply were told to avoid using stereotypes. See id. at 1342–44; see also Bodenhausen et al., supra note 243, at 118.
298. Kerry Kawakami et al., Just Say No (to Stereotyping): Effects of Training in the Negation of Stereotypic Associations on Stereotype Activation, 78 J. PERSONALITY SOC. PSYCHOL. 871, 876 (2000). The effect only lasted for twenty-four hours. Id.
299. Dasgupta, supra note 104, at 272. Affirming counterstereotypes may work more effectively than denouncing stereotypes. Id. But see Bertram Gaw-
Training officers to focus their attention on goals that encourage individuation may reduce implicit bias. How this is accomplished will be important. Asking officers to gather more evidence of suspicious behavior prior to engaging in a stop and frisk may actually cause officers to interpret the target’s behavior as more suspicious than he otherwise would because of the activation of implicit stereotypes. Instead, it may be more effective to ask officers in the field to determine whether the actions they observe are consistent with innocence. This formulation will focus attention away from criminality and guilt. In other words, instead of encouraging the gathering of evidence to substantiate suspicions of guilt (which will increase bias), it asks officers to ensure that innocent people are not wrongfully stopped. Thus, the officer’s point of view when observing people on the street is to interpret ambiguous behavior as evidence of innocence or to look for signs of innocence rather than signs of guilt.

This section has sketched the outlines of some training strategies that may moderate implicit biases amongst the police. However, we should exercise caution in directly translat-
ing lab results to the real world of policing. As noted by Professor Richard Banks, the question of how to translate laboratory findings into real-life policing is complicated. If, for example, nonwhites are more likely to have a weapon and to shoot officers, then the decision to train officers to disassociate race from the likelihood of having a weapon may make officers’ jobs more dangerous. This Article does not seek to answer these difficult policy questions. Rather, it simply highlights the need to think about reducing the effects of implicit bias on officer behavior and to identify ways of doing so.

Furthermore, a richer base of scientific knowledge addressing ways to alleviate implicit biases in general and within police departments in particular is necessary in order to propose more concrete solutions for training practices to debias the police. In particular, it will be important for social scientists and police departments to collaborate on future research to discover techniques that will work within the police culture. Police precincts have already participated in a number of studies, providing a useful roadmap for planning other successful collaborations.

3. Hiring

An individual’s cohort, both personally and at the workplace, may be important in reducing implicit biases. For instance, one study found that an officer reporting more positive personal contacts with blacks was less likely to have negative beliefs about the criminality and violence of blacks. Furthermore, positive personal contacts were the “only significant predictor” of a reduction in shooter bias.

This has implications for job interview questions. Perhaps potential hires should be asked to describe positive personal

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304. Dasgupta, supra note 104, at 279 (calling for more empirical research into “particular bias reduction strategies [that may] be translated from laboratory paradigms to real-word interventions”).

305. See, e.g., Correll, Thin Blue Line, supra note 68; Correll, Dilemma, supra note 22; Eberhardt et al., supra note 42; Peruche & Plant, supra note 185.

306. Peruche & Plant, supra note 185, at 196; see also Stephen C. Wright et al., The Extended Contact Effect: Knowledge of Cross-Group Friendships and Prejudice, 73 J. PERSONALITY & SOC. PSYCHOL. 73, 74 (1997) (having cross-racial friendships can improve racial attitudes).

307. Peruche & Plant, supra note 185, at 197.
experiences they have had with nonwhites. Certainly, such questions are job related to the extent that such contacts may affect officer assessments of nonwhite suspects. If potential officers have had no experience or no positive experience with blacks, for example, departments should consider this factor in hiring. If hired, this officer might require additional training or perhaps should not be deployed to black neighborhoods.

Additionally, there is evidence that exposure to counterstereotypic group members, especially over the long term, reduces implicit biases. Not only does this provide support for asking officers about their personal contacts with nonwhites, but it also supports increasing the diversity of police departments. Furthermore, increasing diversity will decrease implicit biases both by providing more opportunities for officers to work in cooperative relationships with peers of different races and by changing the social norms and attitudes of departments.

308. Dasgupta, supra note 104, at 272 (“Longterm immersion, then, in counterstereotypic social contexts may reduce the default accessibility of stereotypes or enhance the chronic accessibility of counterstereotypes, thereby decreasing the likelihood of biased automatic judgments and evaluations in the future.” (citations omitted)); Dasgupta & Greenwald, supra note 101; Nilanjan Dasgupta & Luis M. Rivera, When Social Context Matters: The Influence of Long-Term Contact and Short-Term Exposure to Admired Outgroup Members on Implicit Attitudes and Behavioral Intentions, 26 SOC. COGNITION 112, 119–21 (2008); David W. Johnson & Roger T. Johnson, The Three Cs of Reducing Prejudice and Discrimination, in REDUCING PREJUDICE AND DISCRIMINATION 239, 249 (Stuart Oskamp ed., 2000) (explaining that fostering cooperation versus competition helps to reduce racial bias).

309. See, e.g., Fletcher A. Blanchard et al., Condemning and Condoning Racism: A Social Context Approach to Interracial Settings, 79 J. APPLIED PSYCHOL. 993, 995 (1994) (finding that social influence strongly affects reactions to racism and noting that opinions of racism may derive from a lack of interracial experience); Fletcher A. Blanchard et al., Reducing the Expression of Racial Prejudice, 2 PSYCHOL. SCI. 101, 103 (1991) (noting that vocalization of biased attitudes can affect the behavior of others); Sechrist & Stangor, supra note 269, at 649–52 (finding that peer attitudes can influence racial attitudes and behaviors); see also Fiske & Neuberg, supra note 29, at 47–49 (working together can motivate people to make more accurate, nonstereotyped judgments); Norman Miller, Personalization and the Promise of Contact Theory, 58 J. SOC. ISSUES 387, 391–92 (2002); Linda R. Tropp & Thomas F. Pettigrew, Differential Relationships Between Intergroup Contact and Affective and Cognitive Dimensions of Prejudice, 31 PERSONALITY & SOC. PSYCHOL. BULL. 1145, 1154–56 (2005) (finding that contact between racial groups is an important factor in affecting responses to outgroup members). For a general discussion of the benefits of diversity in reducing implicit biases, see Bodenhausen et al., supra note 243, at 128–29.
be important because it may affect patrol officers' implicit biases.310

4. Incentivizing Positive Interactions

Efforts should be made to involve officers in positive interactions with members of the communities they police. One study involving police officers demonstrated that those who had had negative contacts with blacks reported higher levels of negative expectations of blacks, including about their propensity for violence and criminality, than those who had had positive experiences.311 Increasing the proportion of positive contacts between the community and the police—especially amongst those officers who will be patrolling those neighborhoods—will be important to minimize the stereotypical connection between blacks and criminality. Departments should find ways to create incentives to encourage officers to engage in positive experiences with community members. These community-police interactions should include opportunities for working together in ways that reduce status differences because this encourages individuals to make judgments that are less reliant on stereotypes.312

310. See, e.g., P.J. Henry & Curtis D. Hardin, The Contact Hypothesis Revisited: Status Bias in the Reduction of Implicit Prejudice in the United States and Lebanon, 17 PSYCHOL. SCI. 862, 867 (2006) (finding that contact with lower status outgroup members has a reduced effect in diminishing biases of higher status ingroup members); Jennifer A. Richeson & Nalini Ambady, Effects of Situational Power on Automatic Racial Prejudice, 39 J. EXPERIMENTAL SOC. PSYCHOL. 177, 181–82 (2003) (finding that the anticipation of interacting with a higher status outgroup member reduces bias, but anticipated interactions with lower status outgroup members does not); Stacey Sinclair et al., Social Tuning of Automatic Racial Attitudes: The Role of Affiliative Motivation, 89 J. PERSONALITY & SOC. PSYCHOL. 583, 584 (2005) (noting that those in superior positions are less likely to adjust their perceptions to match those in inferior positions). But see Jennifer A. Richeson & Nalini Ambady, Who's in Charge? Effects of Situational Roles on Automatic Gender Bias, 44 SEX ROLES 493, 506 (2001) (noting that when men interact with women in a superior position their bias increases); Linda Sinclair & Ziva Kunda, Reactions to a Black Professional: Motivated Inhibition and Activation of Conflicting Stereotypes, 77 J. PERSONALITY & SOC. PSYCHOL. 885, 888 (1999) (receiving criticism from an outgroup member can increase implicit biases).

311. Peruche & Plant, supra note 185, at 197.

312. See Fiske & Neuberg, supra note 29, at 44–46; Johnson & Johnson, supra note 308, at 249 (creating cooperation versus competition helps to reduce racial bias); Lowery et al., supra note 104, at 581–83 (motivating people to develop relationships with a stereotyped group can reduce stereotype activation); Miller, supra note 309, at 391 (greater observable differences between individuals may result in greater categorization).
CONCLUSION

The failure of judges to account for the effects of implicit bias on police behavior and decisionmaking has resulted in a Fourth Amendment legal regime that unintentionally strengthens the effects of implicit bias on police behavior. This Article argues that courts should take the science of implicit social cognition into account and attempt to construct legal doctrine in a manner that more effectively protects privacy against arbitrary government intrusion. Considering the science also provides a framework for engaging police departments in efforts to uncover institutional structures and practices that may hinder effective policing and for thinking creatively about institutional solutions.

Consideration of the science of implicit social cognition does not provide easy answers to complicated Fourth Amendment questions. Nor does consideration of this social science allow courts to avoid making difficult normative judgments. However, acknowledging the ways in which race can impact policing, even in the absence of conscious bias, will allow courts and other institutions to ask the right questions and to avoid unintended consequences.

This Article focused on the unintended and harmful consequences that result from a stop-and-frisk jurisprudence based upon unstated but behaviorally inaccurate assumptions about police decisionmaking capabilities. The failure to question these assumptions and to test them against the empirical social sciences results in doctrine that undermines the core values of the Fourth Amendment. This Article urges scholars to study other criminal procedure doctrines to determine whether the norms and rights sought to be protected are undermined by inaccurate behavioral assumptions.