
Article

Arrest Efficiency and the Fourth Amendment

L. Song Richardson[†]

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-

[†] Associate Professor, DePaul University College of Law. J.D., Yale Law School; B.A., Harvard College. The author is indebted to Al Alschuler, Adam Benforado, John Bronsteen, Dorothy Brown, Jack Chin, Angela Davis, Mary Fan, James Forman, Lorie Fridell, Andrew Gold, Michele Goodwin, Aya Gruber, Angela Harris, Cynthia Ho, Tonja Jacobi, Cynthia Lee, Wayne Logan, Eric Miller, Wadie Said, Nirej Sekhon, Terry Smith, Andrew Taslitz, Deborah Tuerkheimer, and faculty members who attended workshops at Northwestern University Law School, Washington University in St. Louis Law School, University of Akron Law School, and St. Louis University School of Law for helpful comments and discussions of earlier drafts. I am grateful for the excellent research assistance provided by Andrea Martinez and Myra Lieb. In addition, I am appreciative of the excellent work performed by Jordan Shepherd, Daniel Block, and the *Minnesota Law Review* on this Article. All errors are my own. Copyright © 2011 by L. Song Richardson.

1. See, e.g., Linda Hamilton Krieger & Susan T. Fiske, *Behavioral Realism in Employment Discrimination Law: Implicit Bias and Disparate Treatment*, 94 CALIF. L. REV. 997, 1002 (2006). For related work exploring the effects of situational factors on behavior, see, for example, Adam Benforado, *Frames of Injustice: The Bias We Overlook*, 85 IND. L.J. 1333 (2010) and Jon Hanson & David Yosifon, *The Situational Character: A Critical Realist Perspective on the Human Animal*, 93 GEO. L.J. 1 (2004).

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 neuroscience⁵ 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.

4. See generally *Symposium on Behavioral Realism*, 94 CALIF. L. REV. 945 (2006).

5. Jerry Kang & Kristin Lane, A Future History of Implicit Social Cognition and the Law 2 (Aug. 12, 2009) (unpublished manuscript), available at <http://ssrn.com/abstract=1458678>; see also Nilanjana Dasgupta, *Implicit In-group Favoritism, Outgroup Favoritism, and Their Behavioral Manifestations*, 17 SOC. JUST. RES. 143, 144 (2004) (describing the evolution of social cognition). For a comprehensive history of the science of implicit bias and critiques, see John T. Jost et al., *The Existence of Implicit Bias Is Beyond Reasonable Doubt: A Refutation of Ideological and Methodological Objections and Executive Summary of Ten Studies that No Manager Should Ignore*, 29 RES. ORGANIZATIONAL BEHAV. 39, 42–46 (2009).

6. See Jerry Kang & Mahzarin R. Banaji, *Fair Measures: A Behavioral Realist Revision of Affirmative Action*, 94 CALIF. L. REV. 1063, 1064 (2006).

7. See, e.g., Christine Jolls & Cass R. Sunstein, *The Law of Implicit Bias*, 94 CALIF. L. REV. 969 (2006); Kang & Banaji, *supra* note 6, at 1064–65; Kang & Lane, *supra* note 5, at 14–16; Jerry Kang, *Trojan Horses of Race*, 118 HARV. L. REV. 1489, 1571–72 (2005); Krieger & Fiske, *supra* note 1.

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

9. This phrase is borrowed from Andrew Gelman et al., *An Analysis of the New York City Police Department’s “Stop-and-Frisk” Policy in the Context of Claims of Racial Bias*, 102 J. AM. STAT. ASS’N 813, 821 (2007).

10. Bernard E. Harcourt, *Rethinking Racial Profiling: A Critique of the Economics, Civil Liberties, and Constitutional Literature, and of Criminal Profiling More Generally*, 71 U. CHI. L. REV. 1275, 1276 (2004).

11. Most jurisdictions do not gather data on police stops, searches, and frisks, and thus do not have the data necessary to calculate hit rates. R. Richard Banks, *Race-Based Suspect Selection and Colorblind Equal Protection Doctrine and Discourse*, 48 UCLA L. REV. 1075, 1102 (2001); David Rudovsky, *Law Enforcement by Stereotypes and Serendipity: Racial Profiling and Stops and Searches Without Cause*, 3 U. PA. J. CONST. L. 296, 304–06 (2001). In fact, law enforcement agencies frequently and vociferously object to data collection efforts. Rudovsky, *supra*, at 305.

12. UNIV. OF MINN. INST. ON RACE & POVERTY, MINNESOTA STATEWIDE RACIAL PROFILING REPORT 36 (2003), available at <http://www1.umn.edu/irp/racialprof/aggregate%20report%2092303.pdf>.

13. IAN AYRES & JONATHAN BOROWSKY, A STUDY OF RACIALLY DISPARATE OUTCOMES IN THE LOS ANGELES POLICE DEPARTMENT 8 (2008), available at <http://www.aclu-sc.org/documents/view/47>.

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,¹⁵ Rhode Island,¹⁶ Missouri,¹⁷ and West Virginia.¹⁸ Yet, the police consistently stop and search blacks at higher rates than whites.¹⁹

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.²⁰ 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. ATTY 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. AYRES & 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 under-represent 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.²¹ The implicit stereotype consists of the cultural stereotype of blacks, especially young men, as violent, hostile, aggressive, and dangerous.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.²³

Conscious racial profiling likely multiplies the effects of implicit bias on police behavior. Assume for a moment that of-

21. See, e.g., Sandra Graham & Brian S. Lowery, *Priming Unconscious Racial Stereotypes About Adolescent Offenders*, 28 LAW & HUM. BEHAV. 483, 500 (2004) (finding that both black and white probation and police officers have implicit biases against black juveniles); Anthony G. Greenwald & Linda Hamilton Krieger, *Implicit Bias: Scientific Foundations*, 94 CALIF. L. REV. 945, 949–52 (2006); Kang, *supra* note 7, at 1499–506; Kristin A. Lane et al., *Implicit Social Cognition and Law*, 3 ANN. REV. L. & SOC. SCI. 427, 439–44 (2007); Brian A. Nosek et al., *Pervasiveness and Correlates of Implicit Attitudes and Stereotypes*, 18 EUR. REV. SOC. PSYCHOL. 1, 20 (2007); Jeffrey J. Rachlinski et al., *Does Unconscious Racial Bias Affect Trial Judges?*, 84 NOTRE DAME L. REV. 1195, 1197–201 (2009). For a fascinating discussion on the myriad of ways to conceptualize racial bias and the absence of definitional consensus, see R. Richard Banks et al., *Discrimination and Implicit Bias in a Racially Unequal Society*, 94 CALIF. L. REV. 1169, 1182–89 (2006).

22. See Joshua Correll et al., *The Police Officer's Dilemma: Using Ethnicity to Disambiguate Potentially Threatening Individuals*, 83 J. PERSONALITY & SOC. PSYCHOL. 1314, 1325 (2002) [hereinafter Correll, *Dilemma*]; Patricia G. Devine & Andrew J. Elliot, *Are Racial Stereotypes Really Fading? The Princeton Trilogy Revisited*, 21 J. PERSONALITY & SOC. PSYCHOL. 1139, 1146–49 (1995); John F. Dovidio et al., *Racial Stereotypes: The Contents of Their Cognitive Representations*, 22 J. EXPERIMENTAL SOC. PSYCHOL. 22, 32–36 (1986); Joachim Krueger, *Personal Beliefs and Cultural Stereotypes About Racial Characteristics*, 71 J. PERSONALITY & SOC. PSYCHOL. 536, 545–47 (1996).

23. See Birt L. Duncan, *Differential Social Perception and Attribution of Intergroup Violence: Testing the Lower Limits of Stereotyping of Blacks*, 34 J. PERSONALITY & SOC. PSYCHOL. 590, 591 (1976); *infra* Part II.

fficers 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-realist 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.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*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.

25. 517 U.S. 806 (1996).

ferred 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”²⁶ 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.²⁷ 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-Illegal 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).

27. See, e.g., Jamie L. Flexon et al., *Exploring the Dimensions of Trust in the Police Among Chicago Juveniles*, 37 J. CRIM. JUST. 180, 182 (2009) (noting the “paucity of research on Latinos’ responses to police contacts”).

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.”²⁸ Racial categorization, similar to the general categorization process, is largely automatic;²⁹ in other words, it occurs unintentionally and without conscious awareness.³⁰

Racial categorization activates³¹ stereotypes and attitudes.³² Psychologists distinguish between stereotypes, which

28. Lawrence III, *supra* note 26, at 337.

29. ZIVA KUNDA, SOCIAL COGNITION 17–18 (1999); Susan T. Fiske & Steven L. Neuberg, *A Continuum of Impression Formation, from Category-Based to Individuating Processes: Influences of Information and Motivation on Attention and Interpretation*, 23 ADVANCES EXPERIMENTAL SOC. PSYCHOL. 1, 4, 23–24 (1990) (describing studies which demonstrate that categorization occurs immediately). For a summary of automaticity, including methods for testing it, see Irene V. Blair, *The Malleability of Automatic Stereotypes and Prejudice*, 6 PERSONALITY & SOC. PSYCHOL. REV. 242 (2002).

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,³³ and attitudes, which are feelings or evaluations about a social group.³⁴ Stereotypes and attitudes can be both explicit (conscious) and implicit (nonconscious). While the processes are distinct, each process contains some elements of the other.³⁵

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.³⁶ 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.³⁷ 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.³⁸ First, implicit biases can result in increased scrutiny

33. Stereotypes are “mental association[s] between a social group or category and a trait. The association may reflect a statistical reality, but it need not.” Greenwald & Krieger, *supra* note 21, at 949; *see also* KUNDA, *supra* note 29, at 315 (defining stereotypes as “cognitive structures that contain our knowledge, beliefs, and expectations about a social group”); Duncan, *supra* note 23, at 591 (defining stereotypes as “the general inclination to place a person in categories according to some easily and quickly identifiable characteristic such as age, sex, ethnic membership, nationality, or occupation, and then to attribute to him qualities believed to be typical of that category”).

34. Kang, *supra* note 7, at 1500 (referring to attitudes as “emotions, feelings, and evaluations”); *see also* Greenwald & Krieger, *supra* note 21, at 948 (defining attitudes as “an evaluative disposition—that is, the tendency to like or dislike, or to act favorably or unfavorably toward, someone or something. Explicit expressions of attitudes occur frequently, whenever we say we like or dislike someone or something.”).

35. *See* Laurie A. Rudman et al., “Unlearning” Automatic Biases: The Malleability of Implicit Prejudice and Stereotypes, 81 J. PERSONALITY & SOC. PSYCHOL. 856, 857 n.1 (2001).

36. *See* John A. Bargh et al., *Automaticity of Social Behavior: Direct Effects of Trait Construct and Stereotype Activation on Action*, 71 J. PERSONALITY & SOC. PSYCHOL. 230 (1996); Kang & Lane, *supra* note 5, at 8.

37. KUNDA, *supra* note 29, at 266; *see also* Jerry Kang, *Cyber-Race*, 113 HARV. L. REV. 1130, 1144–45 (2000); Jerry Kang, *Denying Prejudice: Internment, Redress, and Denial*, 51 UCLA L. REV. 933, 956 (2004); Kang, *supra* note 7, at 1503; Kang & Banaji, *supra* note 6, at 1085.

38. Psychologists define behaviors as including “differential evaluations, judgments, and physical behaviors.” Kang & Lane, *supra* note 5, at 21 n.98.

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.³⁹ Finally, implicit biases can cause individuals to treat members of different racial groups disparately.⁴⁰

1. Increased Scrutiny

Researchers consistently find that blacks, especially young black men, capture attention before whites do.⁴¹ This occurs nonconsciously and automatically.⁴² Scientists attribute this difference in attention to the fact that people have automatic and rapid threat reactions toward black men.⁴³ 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.⁴⁴

For a discussion of the behavioral effects of implicit bias, see David M. Amodio & Patricia G. Devine, *Stereotyping and Evaluation in Implicit Race Bias: Evidence for Independent Constructs and Unique Effects on Behavior*, 91 J. PERSONALITY & SOC. PSYCHOL. 652, 653–54 (2006).

39. See *infra* Part II.B.2.

40. See *infra* Part II.B.3.

41. Sophie Trawalter et al., *Attending to Threat: Race-Based Patterns of Selective Attention*, 44 J. EXPERIMENTAL SOC. PSYCHOL. 1322, 1326–27 (2008).

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 (2008) (noting that amygdala activation is

Surprisingly, conscious racial attitudes do not predict attentional bias.⁴⁵ Rather, what predicts how quickly an individual's attention is automatically (nonconsciously) drawn to blacks is the strength of the perceiver's implicit association between blacks and danger.⁴⁶ Those for whom the implicit black-danger association is highly accessible⁴⁷ are quicker to pay attention to black faces than white faces. These individuals also tend to pay attention for longer periods of time to black individuals, though this increase in attentional holding of black faces versus white faces is marginal.⁴⁸ Those for whom the danger stereotype is not as accessible do not demonstrate attentional bias.⁴⁹

2. Biased Evaluations

For over sixty years, social psychologists have demonstrated that black men are stereotyped as violent, criminal, and dangerous.⁵⁰ That these cultural stereotypes affect the evaluation of behaviors performed by blacks was powerfully demonstrated in a study that required participants to rate ambiguous

associated with fear). *But see* Mary E. Wheeler & Susan T. Fiske, *Controlling Racial Prejudice: Social-Cognitive Goals Affect Amygdala and Stereotype Activation*, 16 PSYCHOL. SCI. 56, 61 (2005) (demonstrating that amygdala activation to outgroup members is not inevitable). Researchers have also found that a variety of physiological responses occur when whites are exposed to blacks, including sweating, increased heart rate, facial twitches, and increased eye blink. Jennifer L. Eberhardt, *Imaging Race*, 60 AM. PSYCHOL. 181, 183 (2005) [hereinafter Eberhardt, *Imaging Race*].

45. Eberhardt, *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).

46. Nicole C. Donders et al., *Danger Stereotypes Predict Racially Biased Attentional Allocation*, 44 J. EXPERIMENTAL SOC. PSYCHOL. 1328, 1332 (2008).

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, *SOCIAL COGNITION: FROM BRAINS TO CULTURE* 60 (2008) (“[F]requently activated ideas come to mind more easily than ideas that have not been activated.”).

48. Donders et al., *supra* note 46, at 1331.

49. *Id.* at 1332.

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.

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).

65. H. Andrew Sager & Janet Ward Schofield, *Racial and Behavioral Cues in Black and White Children's Perceptions of Ambiguously Aggressive Acts*, 39 J. PERSONALITY & SOC. PSYCHOL. 590, 595–96 (1980).

66. Kurt Hugenberg & Galen V. Bodenhausen, *Ambiguity in Social Categorization: The Role of Prejudice and Facial Affect in Race Categorization*, 15 PSYCHOL. SCI. 342, 342–45 (2004); see also Kurt Hugenberg & Galen V. Bodenhausen, *Facing Prejudice: Implicit Prejudice and the Perception of Facial Threat*, 14 PSYCHOL. SCI. 640, 643 (2003) (demonstrating that implicit bias scores predicted how long it took white participants to judge when a hostile expression on a black face became nonhostile).

67. Correll, *Dilemma*, *supra* note 22, at 1317–18; B. Keith Payne, *Weapon Bias: Split-Second Decisions and Unintended Stereotyping*, 15 CURRENT

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

DIRECTIONS PSYCHOL. SCI. 287, 287 (2006) (noting that split-second decisions limit individual ability to control for racial bias caused by racial stereotypes).

68. Joshua Correll et al., *Across the Thin Blue Line: Police Officers and Racial Bias in the Decision to Shoot*, 92 J. PERSONALITY & SOC. PSYCHOL. 1006, 1020–22 (2007) [*hereinafter* Correll, *Thin Blue Line*] (finding that although police officers activate negative black stereotypes, they do not exhibit shooter bias to the same extent as civilians, and suggesting that this is the result of their extensive training). For a fuller discussion, see *infra* notes 250–66 and accompanying text.

69. Phillip Atiba Goff et al., *Not Yet Human: Implicit Knowledge, Historical Dehumanization, and Contemporary Consequences*, 94 J. PERSONALITY & SOC. PSYCHOL. 292, 293 (2008).

70. *Id.* at 302.

71. *Id.*

72. *Id.* at 304.

applicants.”⁷³ 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.⁷⁴ 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.⁷⁵ Researchers concluded that these behavioral differences resulted from the negative stereotypical beliefs the white interviewers held about the black job applicants.⁷⁶

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.⁷⁷ Before each trial, the participants were primed⁷⁸ 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.⁷⁹

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.⁸⁰ This occurred, the researchers concluded, because those

73. Carl O. Word et al., *The Nonverbal Mediation of Self-Fulfilling Prophecies in Interracial Interaction*, 10 J. EXPERIMENTAL SOC. PSYCHOL. 109, 112 (1974).

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

81. *Id.*

82. *Id.*

83. Mark Chen & John A. Bargh, *Nonconscious Behavioral Confirmation Processes: The Self-Fulfilling Consequences of Automatic Stereotype Activation*, 33 J. EXPERIMENTAL SOC. PSYCHOL. 541, 542 (1997).

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. Troler, *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.”⁹⁶

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.⁹⁷

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.

97. Duncan, *supra* note 23, at 591; *see also* John A. Bargh, *The Automaticity of Everyday Life*, 10 ADVANCES SOC. COGNITION 3 (1997); John A. Bargh, *The Four Horsemen of Automaticity: Awareness, Intention, Efficiency, and Control in Social Cognition*, in 1 HANDBOOK OF SOCIAL COGNITION, *supra* note 32, at 1, 1–2; Chen & Bargh, *supra* note 83, at 545–46; Daniel T. Gilbert, *Thinking Lightly About Others: Automatic Components of the Social Inference Process*, in UNINTENDED THOUGHT 189, 194 (James S. Uleman & John A. Bargh eds., 1989); James S. Uleman et al., *People as Flexible Interpreters: Evidence and Issues from Spontaneous Trait Inference*, 28 ADVANCES EXPERIMENTAL SOC. PSYCHOL. 211, 215–16 (1996) (describing and reviewing literature on spontaneous trait inference). For a more recent treatment discussing both automatic and controlled processes from a dual-process model perspective, *see generally* Timothy D. Wilson et al., *A Model of Dual Attitudes*, 107 PSYCHOL. REV. 101 (2000).

Hence, police attention may be drawn to black individuals in general, and to young men who look stereotypically black in particular,⁹⁸ 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.⁹⁹ When officers approach the individual to confirm or dispel their suspicions, implicit biases can cause officers to behave aggressively without realizing it.¹⁰⁰ 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 & Marilyn 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.¹⁰¹ 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.¹⁰² 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.¹⁰³ Even asking people to be nonprejudiced can reduce implicit biases.¹⁰⁴ 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 distrusting 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).

103. Kunda & Sinclair, *supra* note 31, at 18–20.

104. See, e.g., Brian S. Lowery et al., *Social Influence Effects on Automatic Racial Prejudice*, 81 J. PERSONALITY & SOC. PSYCHOL. 842, 852 (2001); see also Nilanjana Dasgupta, *Mechanisms Underlying the Malleability of Implicit Prejudice and Stereotypes: The Role of Automaticity and Cognitive Control*, in HANDBOOK OF PREJUDICE, STEREOTYPING, AND DISCRIMINATION, *supra* note 30, at 267, 278–79.

egies for reducing their effects on behavior.¹⁰⁵ More specifics 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.¹⁰⁶ 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 Ipsa Loquitur: 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 unmaskes 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-

107. *Terry v. Ohio*, 392 U.S. 1, 30 (1968).

108. I only discuss the facts important to my analysis.

109. *Terry*, 392 U.S. at 5.

110. *Id.*

111. *Id.* For McFadden's full testimony, see *State of Ohio v. Richard D. Chilton and State of Ohio v. John W. Terry: The Suppression Hearing and Trial Transcripts*, 72 ST. JOHN'S L. REV. 1387, 1449 (1998) [hereinafter *Suppression Hearing*].

112. *Terry*, 392 U.S. at 5.

113. Lewis R. Katz, *Terry v. Ohio at Thirty-Five: A Revisionist View*, 74 MISS. L.J. 423, 430 (2004).

114. *Suppression Hearing*, *supra* note 111, at 1456.

115. Anthony C. Thompson, *Stopping the Usual Suspects: Race and the Fourth Amendment*, 74 N.Y.U. L. REV. 956, 964 (1999).

dow, and returning.¹¹⁶ Their behavior led McFadden to suspect that the two were casing a store in preparation for a daytime robbery.¹¹⁷ Without probable cause,¹¹⁸ McFadden grabbed Terry, spun him around, frisked him, and found a concealed weapon.¹¹⁹

The issue before the Court was whether the Fourth Amendment permitted officers to seize and frisk individuals in the absence of probable cause.¹²⁰ 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.¹²¹ In order to justify what is colloquially known as a “stop and frisk,”¹²² 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”¹²³ or that the individual with whom he is interacting is armed and dangerous.¹²⁴

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

116. See Katz, *supra* note 113, at 431.

117. See *id.* at 432–33.

118. Earl C. Dudley, Jr., *Terry v. Ohio, The Warren Court, and the Fourth Amendment: A Law Clerk's Perspective*, 72 ST. JOHN'S L. REV. 891, 894 (1998) (“[N]o one really suggested that Officer McFadden in *Terry* had ‘probable cause’ to believe much of anything.”).

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.”¹²⁵ 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.¹²⁶

On the one hand, then, the Justices did not have “universal trust in the neutrality of the authorities.”¹²⁷ Clearly, allowing officers to detain and frisk individuals solely on suspicion of criminal activity was a power subject to abuse.¹²⁸ In fact, the decision represents one of the few instances in which the Court acknowledged issues of race in the Fourth Amendment context.¹²⁹ 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.”¹³⁰

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-

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 requires.”¹³¹

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.¹³² Instead, “in justifying the particular intrusion the police officer must be able to point to specific and articulable facts.”¹³³ “Anything 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.”¹³⁴

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.¹³⁵ 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 Suspicion: When Black and Poor Means Stopped and Frisked*, 69 IND. L.J. 659, 681 (1994) [hereinafter Harris, *Factors*] (describing the profiling of high-crime neighborhoods); David A. Harris, *Frisking Every Suspect: The Withering of Terry*, 28 U.C. DAVIS L. REV. 1, 6 (1994) [hereinafter Harris, *Frisking*]; Lenese C. Herbert, *Bête Noire: How Race-Based Policing Threatens National Security*, 9 MICH. J. RACE & L. 149, 155–57 (2003) (critiquing doctrinal failures to address race-based policing); Katz, *supra* note 113, at 424; Andrew D. Leipold, *Objective Tests and Subjective Bias: Some Problems of Discriminatory Intent in the Criminal Law*, 73 CHI.-KENT L. REV. 559, 568–69 (1998); Maclin, *Race*,

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

supra note 125, at 340–41; Maclin, *Legacy*, *supra* note 121, at 1272–73; Thompson, *supra* note 115, at 961; Floyd D. Weatherspoon, *Racial Profiling of African-American Males: Stopped, Searched, and Stripped of Constitutional Protection*, 38 J. MARSHALL L. REV. 439, 443 (2004).

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).

138. Eberhardt et al., *supra* note 42, at 887–88.

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-

140. Thompson, *supra* note 115, at 1005.

141. *Id.*

142. *Id.*

143. *Terry v. Ohio*, 392 U.S. 1, 30 (1968).

144. *See id.* at 21, 30.

145. *Id.* at 14.

stead, officers can only stop and frisk individuals when their behavior is objectively suspicious, regardless of their race.¹⁴⁶

The behavioral assumption underlying the reasonable suspicion test is that a well-intentioned officer¹⁴⁷ 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.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.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

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

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.

148. *See* Duncan, *supra* note 23, at 591.

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."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."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.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.¹⁵³ Researchers have found

150. *Terry*, 392 U.S. at 27.

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").

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").

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.¹⁵⁴ Disturbingly, not only does seeing a black individual bring negative racial stereotypes to mind non-consciously,¹⁵⁵ but simply thinking about crime triggers implicit thoughts about blacks in police officers and civilians alike.¹⁵⁶ The researchers concluded that “[n]ot only are Blacks thought of as criminal, but also crime is thought of as Black.”¹⁵⁷ 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.¹⁵⁸

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.¹⁵⁹ Then, these implicit biases may cause officers to interpret the ambiguous behaviors of blacks as suspicious and criminal.¹⁶⁰

For instance, when looking for drug couriers¹⁶¹ 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.¹⁶² In that case, two Drug Enforcement Agency agents were at an airport in Detroit on the lookout for illegal drug trafficking.¹⁶³ They became suspicious of twenty-two-year-old Sylvia Mendenhall as she disembarked from a plane arriving from Los An-

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.*

161. These profiles consist of an “informally compiled abstract of characteristics thought typical of persons carrying illicit drugs.” *United States v. Mendenhall*, 446 U.S. 544, 547 n.1 (Stewart, J., plurality opinion) (1980).

162. *Id.*

163. *Id.* at 547.

geles,¹⁶⁴ a source city for much of the heroin brought into Detroit.¹⁶⁵

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.¹⁶⁶ Their suspicions were sufficiently aroused that they followed her.¹⁶⁷ The officers testified that they became more suspicious when she walked past the baggage claim area without retrieving any luggage¹⁶⁸ and when they overheard her obtain a boarding pass from the ticket counter of another airline.¹⁶⁹

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.”¹⁷⁰ 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.¹⁷¹

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,¹⁷² 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."¹⁷³ 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.¹⁷⁴ 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 non-consciously activated.¹⁷⁵ 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).

173. *United States v. Sokolow*, 490 U.S. 1, 13 (1989) (Marshall, J. dissenting) (citing *United States v. Sokolow*, 831 F.2d 1413, 1418 (9th Cir. 1987)).

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, 233–34 (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*, 65 *B.U. L. REV.* 843, 854 (1985).

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).

177. See Robert J. Sampson & Stephen W. Raudenbush, *Seeing Disorder: Neighborhood Stigma and the Social Construction of “Broken Windows,”* 67 *SOC. PSYCHOL. Q.* 319, 336 (2004) (concluding that race plays a stronger role in perception of disorder than does actual observations of disorder).

178. Jamie Barden et al., *Contextual Moderation of Racial Bias: The Impact of Social Roles on Controlled and Automatically Activated Attitudes*, 87 *J. PERSONALITY & SOC. PSYCHOL.* 5, 21 (2004) (noting that the effect of viewing stereotyped individuals in certain settings increases implicit bias).

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.¹⁸¹ Not surprisingly then, police officers sometimes rely upon race to justify *Terry* seizures. In *United States v. Weaver*,¹⁸² 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 unpleasant—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.¹⁸³

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.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.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.¹⁸⁶ As stated by noted social psychologist Ziva Kunda, “[m]uch of what we ‘learn’ from experience may reflect our prior theories about re-

exhibit a degree of nervousness more pronounced than innocent airline passengers and that young black males from Los Angeles were more prone to be drug couriers than young white males. *Id.* at 397 (Arnold, C.J., dissenting).

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, *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. See, e.g., *United States v. Laymon*, 730 F. Supp. 332 (D. Colo. 1990); *State v. Graciano*, 653 P.2d 683 (Ariz. 1982).

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 . . .” *Id.*

186. Myron Rothbart et al., *Recall for Confirming Events: Memory Processes and the Maintenance of Social Stereotypes*, 15 J. EXPERIMENTAL SOC. PSYCHOL. 343, 343–44 (1979); see also Claudia E. Cohen, *Person Categories and Social Perception: Testing Some Boundaries of the Processing Effects of Prior Knowledge*, 40 J. PERSONALITY & SOC. PSYCHOL. 441, 444–48 (1981) (describing a study in which subjects were more likely to remember stereotype-consistent information).

ality rather than the actual nature of reality.”¹⁸⁷ 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.¹⁸⁸

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.¹⁸⁹ The same significant effects were not demonstrated when officers were asked to identify white individuals.¹⁹⁰ In fact, the officers misremembered black individuals despite the fact that they paid more attention to the black faces than to the white faces.¹⁹¹

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.¹⁹² These illusory correlations¹⁹³ between race and criminality can “persist even in the face of data in which these correlations are nonexistent.”¹⁹⁴ 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).

189. Eberhardt et al., *supra* note 42, at 877, 887–88.

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.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.”¹⁹⁶ Indeed, the more a counterstereotypical person deviates from the stereotype, the easier it is to subtype that individual.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.¹⁹⁸ In constructing the doctrine to protect

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).

196. KUNDA, *supra* note 29, at 384.

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.”).

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 undermines 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 unsupported.¹⁹⁹ 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.’”²⁰⁰ As Professor Maclin observes, “reasonableness is a malleable concept.”²⁰¹ It is judged by taking into account the “totality of the circumstances.”²⁰² The Court has considered a wide variety of circumstances under the rubric of reasonableness:

[T]he 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.²⁰³

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

Sklansky, *Traffic Stops, Minority Motorists, and the Future of the Fourth Amendment*, 1997 SUP. CT. REV. 271, 286.

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

200. *Ohio v. Robinette*, 519 U.S. 33, 39 (1996) (citing *Florida v. Jimeno*, 500 U.S. 248, 250 (1991)).

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

202. *Maryland v. Wilson*, 519 U.S. 408, 411 (1997); *Robinette*, 519 U.S. at 39; *Whren v. United States*, 517 U.S. 806, 816 (1996); *Ornelas v. United States*, 517 U.S. 690, 695–96 (1996).

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 ("[T]he 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 frisks²⁰⁷ 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.²⁰⁸ Growing numbers of individuals in these communities already view the police “as just another gang.”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.”²¹⁰ Lack of trust in the police and in the legitimacy of the criminal justice system can result in communities being less safe.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.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

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.

208. *See* I. Bennett Capers, *Crime, Legitimacy, and Testifying*, 83 IND. L.J. 835, 843 (2008) (noting the Clinton Administration’s recognition of this perception); Harcourt, *supra* note 10, at 1329–30 (noting the deleterious effect of disproportionate police contact on minority communities); Alexandra Natapoff, *Snitching: The Institutional and Communal Consequences*, 73 U. CIN. L. REV. 645, 646 (2004) (noting these problems and their effect on predominantly black, low-income communities); Tom R. Tyler & Jeffrey Fagan, *Legitimacy and Cooperation: Why Do People Help the Police Fight Crime in Their Communities?*, 6 OHIO ST. J. CRIM. L. 231, 237 (2008) (noting that minorities have low levels of trust and confidence in the police). *See generally* PAUL BUTLER, LET’S GET FREE (2009).

209. David K. Shipler, *Living Under Suspicion*, N.Y. TIMES, Feb. 7, 1997, at A33, available at 1997 WLNR 4891728.

210. Flexon et al., *supra* note 27, at 181 (citations omitted).

211. Capers, *supra* note 208, at 800; Natapoff, *supra* note 208, at 687–90.

212. Flexon et al., *supra* note 27, at 180 (citations omitted).

blacks was significantly related to their attitudes.²¹³ 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.”²¹⁴ 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.²¹⁵

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 Disrespect: 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.”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.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.²¹⁸

Other commentators have suggested a return to probable cause.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.²²⁰ A further problem with this approach is that the probable cause standard is

216. Johnson, *supra* note 175, at 216.

217. See, e.g., Devine & Sharp, *supra* note 30, at 72 (noting that people can avoid stereotyping by engaging in individuation—the gathering of more information); Margo J. Monteith et al., *Suppression as a Stereotype Control Strategy*, 2 PERSONALITY & SOC. PSYCHOL. REV. 63, 72 (1998) (describing individuation as “actively seeking out individuating information about a person and forming impressions of the person based on this information”). See generally Andrew E. Taslitz, *What Is Probable Cause, and Why Should We Care? The Costs, Benefits, and Meaning of Individualized Suspicion*, 73 LAW & CONTEMP. PROBS. 145 (2010), available at <http://ssrn.com/abstract=1549898> (discussing the importance of individualized suspicion). For an inventive rethinking of the probable cause standard that might prevent its dilution, see Max Minzner, *Putting Probability Back into Probable Cause*, 87 TEX. L. REV. 913 (2009).

218. Gross & Barnes, *supra* note 181, at 692.

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).

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.”²²¹ 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 exists²²² 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.²²³ The Ninth Circuit “essentially rejected the use of inferences based on common sense and the shared experience of agents in the field.”²²⁴ It held that, absent empirical proof of the profile’s reliability, the evidence was insufficient to justify a seizure.²²⁵

221. *Illinois v. Gates*, 462 U.S. 213, 230–32 (1983).

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).

224. Brief for the United States at 35, *United States v. Sokolow*, 490 U.S. 1 (1989) (No. 87-1295).

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.²²⁶ 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."²²⁷

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.²²⁸ 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.²²⁹ 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.²³⁰ 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.²³¹

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.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.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.²³⁴ To the extent that this motivates officers to individuate, it will decrease the effects of implicit bias on police behavior.

pression of the opposite." Taslitz, *supra* note 217, at 33 n.172 (citations omitted). For a more complete discussion of this proposal, see L. Song Richardson, *Police Efficiency and the Fourth Amendment*, 87 IND. L.J. (forthcoming 2012).

232. See Christopher Slogobin, *The World Without a Fourth Amendment*, 39 UCLA L. REV. 1, 82–84 (1991) (noting and responding to this critique). But see Bernard E. Harcourt & Tracey L. Meares, *Randomization and the Fourth Amendment* 75–76 (John M. Loin Law & Econ., Working Paper No. 530, 2010), available at <http://www.ssrn.com/abstract=1665562> (arguing that the phrase "individualized suspicion" should be abandoned because it is inaccurate). See generally ANDREW E. TASLITZ, RECONSTRUCTING THE FOURTH AMENDMENT: A HISTORY OF SEARCH AND SEIZURE, 1789–1868 (2006) (examining the importance of individualized justice in the history of the Fourth Amendment).

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.").

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.²³⁵ 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.²³⁶ 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.²³⁷

While solidifying the association between race and crime occurs even when race is not consciously highlighted,²³⁸ focusing attention on the race-crime association exacerbates it.²³⁹ 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.²⁴⁰ 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 Al Baker, *City Minorities More Likely to Be Frisked*, N.Y. TIMES, May 12, 2010, at A1, available at 2010 WLNR 9862586.

238. See *supra* Part I.

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.²⁴¹ The automatic activation of negative stereotypes then has behavioral effects, leading to increased scrutiny, negative evaluations of ambiguous behaviors, and negative treatment.²⁴² 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.²⁴³ 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.²⁴⁴ 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.²⁴⁵

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.²⁴⁶ 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.²⁴⁷ 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

244. See Richard H. McAdams, *An Attitudinal Theory of Expressive Law*, 79 OR. L. REV. 339, 340 (2000) (discussing how "law changes behavior by signaling the underlying attitudes of a community or society").

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").

246. The exclusionary rule, in certain situations, bars the use of evidence obtained in violation of the Constitution. See, e.g., *Herring v. United States*, 129 S. Ct. 695, 700–04 (2009) (considering when the exclusionary rule applies).

247. See *supra* discussion Part I.

alone may not be the most effective way to address nonconscious biases.²⁴⁸ 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.²⁴⁹ 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.²⁵⁰ 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.²⁵¹

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

on *Ethnic Stereotypes*, 29 PERSONALITY & SOC. PSYCHOL. BULL. 637, 647 (2003) (noting that darkness increases the activation of danger stereotypes); Taslitz, *supra* note 8, at 7–8.

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.²⁵⁶ Researchers then divided the subjects into three groups.²⁵⁷ 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.²⁵⁸ The second group was told to use race in its efforts to distinguish a tool from a weapon.²⁵⁹ The final group was given no instruction about the use of race.²⁶⁰

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.²⁶¹ Counterintuitively, those participants told to avoid using stereotypes in their judgments were unable to reduce the impact of race on their judgments.²⁶² In fact, the instruction to “avoid using race *increased* the extent to which participants made more stereotype congruent versus incongruent errors.”²⁶³ 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

J. EXPERIMENTAL SOC. PSYCHOL. 833, 833–34 (2008) (discussing how reduction in one type of stereotype can increase other stereotypes); C. Neil Macrae et al., *Out of Mind but Back in Sight: Stereotypes on the Rebound*, 67 J. PERSONALITY & SOC. PSYCHOL. 808, 808–09 (1994) (considering whether people can successfully suppress stereotypical thoughts); C. Neil Macrae et al., *Saying No to Unwanted Thoughts: Self-Focus and the Regulation of Mental Life*, 74 J. PERSONALITY & SOC. PSYCHOL. 578, 578 (1998) (discussing the ability to self-regulate stereotypical thoughts). *But see* Margo J. Monteith et al., *Suppression as a Stereotype Control Strategy*, 2 PERSONALITY & SOC. PSYCHOL. REV. 63, 70–72 (1998) (concluding that people with egalitarian values may be less susceptible to rebound effects).

256. B. Keith Payne et al., *Best Laid Plans: Effects of Goals on Accessibility Bias and Cognitive Control in Race-Based Misperceptions of Weapons*, 38 J. EXPERIMENTAL SOC. PSYCHOL. 384, 388 (2002).

257. *Id.*

258. *Id.*

259. *Id.*

260. *Id.*

261. *Id.* at 390.

262. *Id.*

263. *Id.*

it.”²⁶⁴ 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.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.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.²⁶⁷ However, subjects instructed either to individuate or to engage in a task that did not require categorization did not activate racial stereotypes.²⁶⁸ Thus, the science demonstrates that giving individuals a goal that encourages individuation rather than racial categorization may reduce activation of implicit stereotypes.

264. *Id.* at 391.

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.

266. Wheeler & Fiske, *supra* note 44, at 57.

267. *Id.* at 62.

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-

269. Gretchen B. Sechrist & Charles Stangor, *Perceived Consensus Influences Intergroup Behavior and Stereotype Accessibility*, 80 J. PERSONALITY & SOC. PSYCHOL. 645, 651 (2001).

270. See, e.g., R. Richard Banks, *Beyond Profiling: Race, Policing and the Drug War*, 56 STAN. L. REV. 571, 594 (2003) ("Drug enforcement efforts that burden some racial minorities may also disproportionately benefit those racial minorities whose neighborhoods are most plagued by drug dealing and its associated problems."); see also RANDALL KENNEDY, *RACE, CRIME AND THE LAW* 19 (1997) ("[T]he principal injury suffered by African-Americans in relation to criminal matters is not overenforcement but underenforcement of the laws."); Alexandra Natapoff, *Underenforcement*, 75 FORDHAM L. REV. 1715, 1775-76 (2006) (emphasizing the importance of recognizing the destructive implications of underenforcement).

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., *Preconscious Control of Stereotype Activation Through Chronic Egalitarian Goals*, 77 J. PERSONALITY & SOC. PSYCHOL. 167, 181–82 (1999) (activation of stereotypes can be controlled by egalitarian goals); 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.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,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.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.²⁷⁸ The idea is not to force officers to

275. Patricia G. Devine & Margo J. Monteith, *Automaticity and Control in Stereotyping*, in DUAL PROCESS THEORIES OF SOCIAL PSYCHOLOGY 346 (Shelly Chaiken & Yaacov Trope eds., 1999); Fiske, *supra* note 251, at 364; Jack Glaser & Eric D. Knowles, *Implicit Motivation to Control Prejudice*, 44 J. EXPERIMENTAL SOC. PSYCHOL. 164, 171 (2008); Jost et al., *supra* note 5, at 56–57; Lane et al., *supra* note 21, at 437; Leonard S. Newman & James S. Uleman, *Assimilation and Contrast Effects in Spontaneous Trait Inference*, 16 PERSONALITY & SOC. PSYCHOL. BULL. 224, 236 (1990); Fritz Strack et al., *Awareness of the Influence as a Determinant of Assimilation Versus Contrast*, 23 EUR. J. SOC. PSYCHOL. 53, 59 (1993).

276. *See supra* Part I.

277. *See supra* Part I.

278. HARRIS, *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, *The Stories, the Statistics, and the Law: Why “Driving While Black” Matters*, 84 MINN. L. REV. 265, 268–69 (1999) (quoting two police officers).

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,

279. Studies demonstrate that forcing people to take problack attitudes, for example, backfire. Rudman & Lee, *supra* note 272, at 857.

280. HARRIS, *supra* note 105, at 224–25; *see also* Glaser & Knowles, *supra* note 275, at 171 (discussing how an implicit belief that one holds implicit negative racial attitudes can reduce unconscious stereotyping effects).

281. *See, e.g.*, HARRIS, *supra* note 105, at 108 (describing an instance of law enforcement defensiveness).

282. For descriptions of how the IAT works, *see* Banks, *supra* note 11, at 1182, Greenwald & Krieger, *supra* note 21, at 954, and Kang & Lane, *supra* note 5, at 7–8. Paul Butler has noted that for “high-stakes” decisionmakers such as judges, some sort of assessment of implicit bias would be valuable. Paul Butler, *Rehnquist, Racism, and Race Jurisprudence*, 74 GEO. WASH. L. REV. 1019, 1042 (2006).

283. Greenwald & Krieger, *supra* note 21, at 952–53. The IAT tests for both implicit attitudes and implicit stereotypes. *See, e.g.*, Blair et al., *supra* note 101, at 837. This study also utilizes two other methods for testing implicit stereotypes. *Id.* at 829.

and “predict behavior.”²⁸⁴ The IAT will be easy to administer because it is available online.²⁸⁵ 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.²⁸⁶

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.²⁸⁷ 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.²⁸⁸ In this study, researchers found that officers as well as civilians activated negative black stereotypes upon viewing black individuals.²⁸⁹ As a result, both officers and civilians were quicker to shoot an unarmed black than an unarmed white.²⁹⁰

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.

285. PROJECT IMPLICIT, <http://implicit.harvard.edu/implicit> (last visited May 6, 2011).

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.”²⁹¹

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.²⁹² Other studies similarly demonstrate that repeatedly pairing race with a nonstereotypical trait resulted in reduced implicit race bias.²⁹³ 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.²⁹⁴ In the study, researchers asked subjects to “firmly commit” themselves to thinking “safe” each time they saw a black face.²⁹⁵ 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.²⁹⁶ 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.²⁹⁷ Other techniques that have worked in the lab to reduce the automatic activation of stereotypes include extensive practice denouncing stereotypes²⁹⁸ or affirming counterstereotypes,²⁹⁹ and the use of mental imagery.³⁰⁰

294. Brandon D. Stewart & B. Keith Payne, *Bringing Automatic Stereotyping Under Control: Implementation Intentions as Efficient Means of Thought Control*, 34 PERSONALITY & SOC. PSYCHOL. BULL. 1332, 1334, 1342 (2008).

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.

297. CYNTHIA LEE, MURDER AND THE REASONABLE MAN: PASSION AND FEAR IN THE CRIMINAL COURTROOM 224 (2003).

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.³⁰¹ 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.³⁰² 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-

Wronski et al., *When "Just Say No" Is Not Enough: Affirmation Versus Negation Training and the Reduction of Automatic Stereotype Activation*, 44 J. EXPERIMENTAL SOC. PSYCHOL. 370, 375 (2008) (finding that affirmation reduced automatic stereotype activation while negation training enhanced activation).

300. See Blair et al., *supra* note 101. The study dealt with reducing gender stereotypes and participants were asked "to take a few minutes to imagine what a strong woman is like, why she is considered strong, what she is capable of doing, and what kinds of hobbies and activities she enjoys." Then, they were asked to write a short paragraph describing their image. *Id.* at 830. According to psychologist Nilanjana Dasgupta:

[W]hen people engage in cognitive elaboration exercises that increase the salience of counterstereotypes or that encourage a different way of thinking, such directed thinking increases the accessibility of counterstereotypic associations linked to outgroups, which in turn temporarily alleviates implicit bias against outgroups [E]ven when implicit judgments are made in highly time-pressured situations they can be debiased if people acquire concrete strategies that allow them to override and modify their automatic responses. These strategies function as detailed action plans on how to exert control whereas the mere instruction to avoid bias is clearly not sufficient and sometimes even counterproductive.

Dasgupta, *supra* note 104, at 278. For a description of other techniques, including taking the perspective of others, see Devine & Sharp, *supra* note 30, at 73-74.

301. See Blair, *supra* note 29, at 242, 250, 252 (noting and discussing situations where focusing on completing goals reduces implicit bias effects).

302. See *supra* notes 94-100 and accompanying text.

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.³⁰³ 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.³⁰⁴ 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.³⁰⁵

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.³⁰⁶ Furthermore, positive personal contacts were the "only significant predictor" of a reduction in shooter bias.³⁰⁷

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

303. R. Richard Banks et al., *Race, Crime, and Antidiscrimination*, in BEYOND COMMON SENSE: PSYCHOLOGICAL SCIENCE IN THE COURTROOM 3, 16 (Eugene Borgida & Susan T. Fiske eds., 2008).

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-world 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.³⁰⁸ 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.³⁰⁹ Similarly, promoting nonwhites to positions of authority may also

308. Dasgupta, *supra* note 104, at 272 (“[L]ongterm 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; Nilanjana 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.