Implicit Bias, Science, and the Racial Justice Act

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INTRODUCTION

In attempts to explain persistent racial disparities in important outcomes and conditions, including in the realm of criminal justice, much attention has been given to implicit bias. California's Racial Justice Act (RJA) explicitly references this phenomenon, explaining that "[i]mplicit bias, although often unintentional and unconscious, may inject racism and unfairness into proceedings similar to intentional bias."[1] The statute continues, "It is the intent of the Legislature to ensure that race plays no role at all in seeking or obtaining convictions or in sentencing."[2] As an expert on the relationship between implicit bias and criminal justice,[3] I have been approached by defense attorneys and organizations asking about whether and how implicit bias can be incorporated in RJA claims.

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1 Assemb. B. No. 2542 § 2(i), Reg. Sess. 2019-20 (Cal. 2020) (hereinafter "A.B. 2542").

2 *Id*.

3 *See generally* JACK GLASER, SUSPECT RACE: CAUSES AND CONSEQUENCES OF RACIAL PROFILING (2015); Katherine B. Spencer, Amanda K. Charbonneau & Jack Glaser, *Implicit Bias and Policing*, 10 SOC. & PERSONALITY PSYCH. COMPASS 50 (2016).

In this Article, I will first provide a description of the science behind implicit bias to inform consideration of its applicability to RJA. Next, I arrive at the general conclusion that implicit bias, as defined and measured in the ample and rigorous body of psychological science, would be difficult and problematic to utilize in criminal defense. This is because its defining feature—implicitness—renders it unobservable in individual instances. No doubt, implicit bias is a *cause* of disparate treatment, but it is not an observable indicator of it. Nevertheless, there may be some hope for applying the science of implicit bias to individual RJA cases. By examining aggregate data on the ambient levels of implicit bias within specific jurisdictions, one can assess the likelihood of racially biased application of the law. Finally, I will comment on the use of "statistical significance" in the RJA; how the application of the standard as conventionally employed in science could undermine justice; and how further modification to the California Penal Code in AB 256, which extends the RJA retroactively, likely addresses the problem if employed effectually.

I. IMPLICIT BIAS IS REAL.

As I and other social psychologists have explained, implicit biases—attitudes toward groups (e.g., racial, ethnic) that are stored outside of conscious awareness (i.e., in implicit memory) and are automatically activated without subjective experience or control[4]—are real and influential.[5] Implicit bias is a concept built on decades of rigorous science in Cognitive Psychology. This science has demonstrated that much of human mental life, including attention, perception, encoding, storage, and retrieval of information to and from memory, operates implicitly and automatically—outside of conscious awareness and control. Social psychologists extended these findings to perception and memory of people. Just as when you see, hear, or even think about your friends, their names pop spontaneously and effortlessly into your consciousness, implicit attitudes or beliefs that reflect mental associations between social groups and traits activate in the presence of (or whenever we are caused to think about) members of those groups.

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[4] Anthony G. Greenwald & Mahzarin R. Banaji, *Implicit Social Cognition: Attitudes, Self-Esteem, and Stereotypes*, 102 PSYCH. REV. 4, 4–5 (1995).

[5] *See, e.g.*, Jack Glaser, *Disrupting the Effects of Implicit Bias: The Case of Discretion & Policing*, 153 DÆDALUS J.AM. ACAD. ARTS & SCI. 151, 152 (2024); 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 RSCH. ORG. BEHAV. 39, 46–53 (2009).

That said, implicit bias effects tend to be "small" by the conventions of social science. In other words, measures of implicit bias typically account for only part of the variation in outcomes that are theorized to be affected by implicit bias. However, as Greenwald and his colleagues,[6] and Kang[7] have persuasively argued, small effects can be important. In particular, because implicit biases are pervasive and operate continuously, their cumulative effects can be considerable. As an example, if, all else being equal, implicit bias causes police officers to be only 10 percent[8] more likely to regard a Black man's behavior as suspicious relative to the same behavior of a White man, and if, as in many urban settings, Black men are observed repeatedly by police officers, their cumulative chances of being stopped and searched over time will be substantial.

II. IMPLICIT BIAS MEASURES ARE NOT CLINICALLY DIAGNOSTIC TOOLS.

One of the scientific innovations that gave rise to the broad attention to implicit bias was the development of replicable methods for measuring implicit bias.[9] The most widely employed of these methods is the Implicit Association Test (IAT), which has now been used in thousands of studies and has proven to have desirable psychometric properties for the purposes of research. For example, the IAT has decent test-retest reliability,[10] convergent validity (i.e., IAT measures correlate

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[6] *See generally* Anthony G. Greenwald et al., *Statistically Small Effects of the Implicit Association Test Can Have Societally Large Effects*, 108 J. PERSONALITY & SOC. PSYCH. 553 (2015).

[7] *See generally* Jerry Kang, *Little Things Matter a Lot: The Significance of Implicit Bias, Practically & Legally*, 153 DÆDALUS J. AM. ACAD. ARTS & SCI. 193 (2024).

[8] A 10% greater likelihood of an event occurring roughly corresponds to a "small" 0.1 correlation, Robert Rosenthal, *Binomial Effect Size Display*, *Wiley StatsRef: Statistics Reference Online* 2 (2014), which is smaller than the average size of implicit bias effects on behavioral outcomes, based on rigorous meta-analyses, *see* Greenwald et al., *infra* note 12.

[9] Mahzarin Banaji, *Implicit Attitudes Can Be Measured*, *in* THE NATURE OF REMEMBERING: ESSAYS IN HONOR OF ROBERT G. CROWDER 117, 150 (Henry L. Roediger III, James S. Nairne, Ian Neath & Aimée M. Surprenant eds., American Psychological Association 2001); *see generally* Russell H. Fazio et al., *Variability in Automatic Activation as an Unobtrusive Measure of Racial Attitudes: A Bona Fide Pipeline?*, 69 J. PERSONALITY & SOC. PSYCH. 1013 (1995); Anthony G. Greenwald et al., *Measuring Individual Differences in Implicit Cognition: The Implicit Association Test*, 74 J. PERSONALITY & SOC. PSYCH. 1464 (1998).

[10] William A. Cunningham et al., *Implicit Attitude Measures: Consistency, Stability, and Convergent Validity*, 12 PSYCH. SCI, 163, 169 (2001).

with, for instance, direct questionnaire measures of related constructs),[11] and predictive validity with respect to behavioral outcomes.[12] These features, as well as implicit bias measures' advantageous ability to gauge attitudes that most people are unable or unwilling to acknowledge they hold, make it very tempting to use them to assess individuals' risks of acting in a biased manner (i.e., discriminating). However, there is a broad (if not official) consensus among implicit bias researchers that these methods should not be used diagnostically at the individual level.

Measures of implicit bias are not designed as diagnostic tools in the same manner as clinical psychological measures like depression inventories. They pose numerous problems for the purposes of predicting an individual's pattern of behavior,[13] including statistical "noise." Measures like the IAT calculate an individual's level of bias by taking the average response latency (in milliseconds) to numerous words or images that are paired in different ways (e.g., Black with Good and White with Bad vs. Black with Bad and White with Good). These response latencies reflect finger presses of computer keys that are meant to index differential perceptual and neurological activation (processes that operate far faster than fine motor movement). Reaction time differences are divided by each individual's standard deviation in reaction time in order to standardize them. To further complicate matters, every test-taker gets a different (randomized) ordering of stimuli, so they are not all doing the same task.

Because the measures are noisy, and because the process they aim to index is subtle and only one of many potential influences on behavior, their influence can be diluted or overwhelmed by other forces, including conscious goals. In fact, one of the original and most influential formulations of implicit and automatic bias, by Patricia Devine, was primarily based on the notion that implicit biases (in particular, racial stereotypes) are so pervasive and embedded in our environments that they are virtually universal.[14] Devine also concluded that what differentiates

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[11] Wilhelm Hofmann et al., *A Meta-Analysis on the Correlation Between the Implicit Association Test and Explicit Self-Report Measures*, 31 PERSONALITY & SOC. PSYCH. BULL. 1369 (2005); Brian A. Nosek, *Moderators of the Relationship Between Implicit and Explicit Evaluation*, 134 J. EXPERIMENTAL PSYCH.: GEN. 565 (2005).

[12] Anthony G. Greenwald et al., *Understanding and Using the Implicit Association Test: III. Meta-Analysis of Predictive Validity*, 97 J. PERSONALITY & SOC. PSYCH. 17, 20 (2009); Jost et al., *supra* note 5.

[13] Christian Unkelbach & Klaus Fiedler, *The Challenge of Diagnostic Inferences From Implicit Measures: The Case of Non-Evaluative Influences in the Evaluative Priming Paradigm*, 38 SOC. COGNITION 208, 218–20 (2020).

[14] Patricia G. Devine, *Stereotypes and Prejudice: Their Automatic and Controlled Components*, 56 J. PERSONALITY & SOC. PSYCH. 5, 10–12 (1989).

people's behavior is the conscious control they assert.[15] Building on this thesis, social psychologists have demonstrated that the relationship between implicit and explicit racial bias is moderated by a *motivation to control prejudice*.[16] Those low in these relatively conscious motives (i.e., those who report having little intrinsic concern about being biased) show positive relations between their implicit bias and their explicit bias.[17] That said, others have demonstrated that implicit biases most strongly relate to relatively spontaneous behaviors,[18] implicating the importance of having not only egalitarian motivation, but awareness, time, and processing capacity to override the influence of implicit bias.

III. IMPLICIT BIAS AND THE RACIAL JUSTICE ACT

The principal challenge of applying implicit bias concepts to legal proceedings is that implicit bias, by its very nature, does not show itself. Therefore, measures like the IAT have been developed to *indirectly* assess implicit bias, making inferences about the presence and strength of bias through differential response (and, ostensibly, processing) speed. The limited predictive power of implicit bias measures does not suggest that implicit bias is itself not influential and important. Particularly in fraught circumstances, such as ones that involve police use of lethal force, where there is time pressure, emotional distress, and often sensory confusion, an unconscious bias (e.g., the deeply rooted association between Black people and violent crime) can be the difference between life and death. Implicit biases are likely operative, and, despite their subtlety, the ubiquity and continuousness of their influence can be cumulative, even in more routine and potentially more deliberative circumstances. Such

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[15] *Id*.

[16] Russell H. Fazio et al., *Variability in Automatic Activation as an Unobtrusive Measure of Racial Attitudes: A Bona Fide Pipeline?*, 69 J. PERSONALITY & SOC. PSYCH 1013, 1013 (1995).

[17] E. Ashby Plant & Patricia G. Devine, *Internal and External Motivation to Respond Without Prejudice*, 75 J. PERSONALITY & SOC. PSYCH. 811, 815 (1998); Bridget C. Dunton & Russell H. Fazio, *An Individual Difference Measure of Motivation to Control Prejudiced Reactions*, 23 PERSONALITY & SOC. PSYCH. BULL. 316, 325 (1997). In research with colleagues, I have explored an "implicit motivation to control prejudice" that does appear to moderate the relation between an implicit Black-weapon stereotype and a behavioral measure, the "shooter task." Jack Glaser & Eric D. Knowles, *Implicit Motivation to Control Prejudice*, 44 J. EXPERIMENTAL SOC. PSYCH. 164, 169–170 (2008); Sang Hee Park, Jack Glaser & Eric D. Knowles, *Implicit Motivation to Control Prejudice Moderates the Effect of Cognitive Depletion on Unintended Discrimination*, 26 SOC. COGNITION 401, 411–413 (2008).

[18] John F. Dovidio et al., *Implicit and Explicit Prejudice and Interracial Interaction*, 82 J. PERSONALITY & SOC. PSYCH. 62, 66–67 (2002).

circumstances can include police decisions to surveil, stop, search, or arrest; situations that involve prosecutor decisions to charge defendants or challenge jurors; or even juror and judge appraisals of credibility or culpability. Nevertheless, implicit biases in these contexts cannot be directly observed; they can only be inferred. Reliance on evidence of implicit bias in any single instance is likely to be futile.

Given the inherent difficulty in demonstrating the influence of implicit bias in any specific instance, discrimination can be better understood and combatted by recognizing that 1) implicit bias is pervasive, 2) implicit bias is activated automatically and uncontrollably, and 3) some decisions and behaviors are particularly vulnerable to being skewed by implicit bias. The conditions that make decisions and actions most vulnerable to the influence of implicit bias (and therefore prone to being discriminatory) include time pressure, ambiguity or uncertainty, and constrained cognitive resources. The conditions required to mitigate the influence of implicit bias principally include motivation to respond or behave without bias and opportunity to invoke more-conscious processing. This is consistent with Fazio's MODE (Motivation and Opportunity as DEterminants) model of attitude-behavior consistency.[19] In the specific case of moderating the effects of *implicit* attitudes, we can add to the MODE model that the invocation of affirmative strategies may be necessary.[20] "Opportunity" refers to either time to engage controlled processes (careful thought) or the cognitive capacity (lack of fatigue,

[19] *See generally* Russell H. Fazio, *Multiple Processes by Which Attitudes Guide Behavior: The MODE Model as an Integrative Framework*, *in* 23 ADVANCES IN EXPERIMENTAL SOC. PSYCH 75 (Mark P. Zanna ed., 1990).

[20] Systematic scientific efforts have been made to test the most promising strategies for controlling implicit bias, finding that only some work to partially reduce implicit bias as measured on the IAT. Calvin K. Lai et al., *Reducing Implicit Racial Preferences: I. A Comparative Investigation of 17 Interventions*, 143 J. EXPERIMENTAL PSYCH.: GEN. 1765, 1769–75 (2014). In addition, these effects are fleeting. Calvin K. Lai et al., *Reducing Implicit Racial Preferences: II. Intervention Effectiveness Across Time*, 145 J. EXPERIMENTAL PSYCH.: GEN. 1001, 1014 (2016); *see also* Patrick S. Forscher et al., *A Meta-Analysis of Procedures to Change Implicit Measures*, 117 J. PERSONALITY & SOC. PSYCH. 522, 545 (2019) (finding "little evidence" that "change in implicit measures will result in changes for explicit measures or behavior"). It should also be noted that trainings designed to mitigate the impact of implicit bias in law enforcement have been shown at best to have no effect on the racial distribution of those stopped, searched, arrested, and subjected to the use of force. ROBERT E. WORDEN ET AL., THE IMPACTS OF IMPLICIT BIAS AWARENESS TRAINING IN THE NYPD 155 (John F. Finn Inst. for Pub. Safety, Inc. & Center for Police Rsch. & Pol. at Univ. of Cincinnati 2020). Even the self-reported utilization of learned strategies for mitigating bias is not improved by training. Calvin K. Lai & Jaclyn A. Lisnek, *The Impact of Implicit-Bias-Oriented Diversity Training on Police Officers' Beliefs, Motivations, and Actions*, 34 PSYCH. SCI. 424, 432 (2023).

overload, or distraction) to do so. Even with optimal conditions of motivation, opportunity, and strategy, implicit biases are likely to influence judgments and behaviors, if only at the margins. The chronic vigilance it would require to evoke egalitarian motives, maintain temporal and cognitive capacity, and recall and apply strategies makes combating implicit bias a veritable juggling act.

Given the great prevalence of implicit biases, their cumulative effects, and the inherent difficulty of controlling them, it may be that, in any given case involving a Black or Hispanic subject, a prior assumption that the individual was treated neutrally would be incorrect. Rather, we should perhaps assume a high likelihood that the subject was regarded with greater suspicion because of their race or ethnicity, irrespective of their behavior. In the context of the RJA, it should be noted that among the most consistently documented implicit and explicit biases in psychological science are the Black-crime and, specifically, Black-weapon associations.[21] To wit, this prevalence is reflected in the opening declaration of the RJA: "The Legislature has acknowledged that all persons possess implicit biases . . . that these biases impact the criminal justice system . . . and that negative implicit biases tend to disfavor people of color . . . ."[22] This is also reflected, albeit less directly, in the RJA's application of the preponderance of evidence standard to cases in which the state is accused of having "[sought] or obtain[ed] a criminal conviction or [sought], obtain[ed], or impose[d] a sentence on the basis of race, ethnicity, or national origin."[23] The authors of the law may have done better to use a term like "subtle forms of bias" in order to capture a broader category of biases that could include criminal justice actors' conscious, if not explicitly expressed, assumptions about race and crime. The statement that implicit bias is "*often* unintentional and unconscious" reveals a misconception that implicit bias is a broader phenomenon than what is strictly defined in the psychological science as *necessarily* unintentional and unconscious.[24]

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[21] *See generally* Joshua Correll et al., *The Police Officer's Dilemma: Using Ethnicity to Disambiguate Potentially Threatening Individuals*, 83 J. PERSONALITY & SOC. PSYCH. 1314 (2002); Joshua Correll et al., *Across the Thin Blue Line: Police Officers and Racial Bias in the Decision to Shoot*, 92 J. PERSONALITY & SOC. PSYCH. 1006 (2007); Jennifer L. Eberhardt et al., *Seeing Black: Race, Crime, and Visual Processing*, 87 J. PERSONALITY & SOC. PSYCH. 876 (2004); Glaser & Knowles, *supra* note 17; B. Keith Payne, *Prejudice and Perception: The Role of Automatic and Controlled Processes in Misperceiving a Weapon*, J. PERSONALITY & SOC. PSYCH. 181 (2001).

[22] A.B. 2542 § 2(g) (referencing Assemb. B. No. 242, Reg. Sess. 2018-19 (Cal. 2019)).

[23] *Id.* § 3, adding Section 745(a) to CAL. PENAL CODE.

[24] *Id.* § 2(i) (emphasis added).

As discussed above, "implicit bias" is a scientific term with a very specific meaning that precludes conscious awareness. To be clear, there is hardly scientific consensus that implicit and explicit cognitive systems are entirely separate.[25] However, when referencing *implicit* biases, social psychologists, building on the basic memory research of cognitive psychologists, are considering beliefs and attitudes that are not subjectively experienced nor consciously recognizable. Such beliefs are therefore likely to influence our judgments and behaviors without our awareness and with relative immunity to our intentional control. If a social psychologist were asked to testify under oath as to whether implicit bias influenced a particular judgment or action, the correct response would be that the expert cannot know or, at most, that such influence is plausible.

Measures of implicit bias should not be applied "diagnostically" at the individual level, and there are no validated methods for identifying the operation of implicit bias in any real action in situ. Therefore, the application of the concept of implicit bias to RJA cases may be limited to shifting expectations about the likelihood that criminal justice decisions are biased. However, one empirical angle holds promise as an analytic method with relevance to specific cases: research shows that aggregate levels of implicit bias (measured at, for example, the county level) correlate with racially discriminatory behaviors. Leveraging the availability of implicit racial bias scores from millions of American respondents through projectimplicit.org, researchers have found that racial disparities in police stop rates are correlated with implicit and explicit bias at the county level.[26] Similarly, relatively high rates of implicit (but not explicit) racial bias among White people is associated with relatively high rates of police use of lethal force against Black people.[27] These results offer some important insights: first, the ambient

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[25] *See, e.g.*, Jeffrey W. Sherman, *Controlled Influences on Implicit Measures: Confronting the Myth of Process-Purity and Taming the Cognitive Monster*, *in* ATTITUDES 411, 420 (Psych. Press 2008) (arguing that "the extent to which implicit attitudes are subject to control has been underestimated substantially").

[26] Pierce D. Ekstrom et al., *Racial Demographics Explain the Link Between Racial Disparities in Traffic Stops and County-Level Racial Attitudes*, 33 PSYCH. SCI. 497, 506–07 (2022); Marleen Stelter et al., *Racial Bias in Police Traffic Stops: White Residents' County-Level Prejudice and Stereotypes Are Related to Disproportionate Stopping of Black Drivers*, 33 PSYCH. SCI. 483, 483 (2022).

[27] Eric Hehman et al., *Disproportionate Use of Lethal Force in Policing is Associated with Regional Racial Biases of Residents*, 9 SOC. PSYCH. & PERSONALITY SCI. 1, 7–9 (2018). The magnitude of racial disparities at the county level in school discipline is also associated with implicit bias. Travis Riddle & Stacey Sinclair, *Racial Disparities in School-Based Disciplinary Actions are Associated with County-Level Rates of Racial*

rate of implicit bias across geographical locations varies meaningfully;[28] and second, where that bias is relatively high, police officers take disproportionate action against Black people. These studies are correlational, and there are no identifiable police officers in these samples (and even if there were, there probably would not be a sufficient number of them). So, given the current state of the science, we cannot yet conclude that the implicit bias of White residents *causes* criminal justice discrimination. However, the correlation indicates a relationship, and it is probably safe to infer that living someplace where the residents have relatively strong implicit bias is a risk factor for discrimination. Longitudinal research could test for causal effects of implicit bias on criminal justice outcomes, and defense attorneys could team up with researchers to estimate the location-specific relative risk of discrimination as a function of aggregate implicit bias (i.e., the bias milieu).

IV. A NOTE ON STATISTICAL SIGNIFICANCE

In the 2020 RJA, the text specifies, "'More frequently sought or obtained' or 'more frequently imposed' means that statistical evidence or aggregate data demonstrate a significant difference in seeking or obtaining convictions or in imposing sentences . . . ."[29] This language may prove to be problematic because, like "implicit bias," "statistically significant" has a specific, unambiguous meaning in science; it refers to a standard that is, *by design*, difficult to meet. "Statistical significance" refers to the condition that an effect (a difference in two scores or probabilities, or a correlation between two variables) observed in a sample is highly unlikely to be a false positive (i.e., that the observed effect is not in fact present in the population the sample purports to represent). For the purpose of scientific inquiry, this standard is set very conservatively at a .05 probability (5% chance), meaning that most scientific studies do not put much stock in observed effects with a greater than one-in-twenty chance of being a false positive; studies that yield such results are also, consequently, unlikely to be published. This vaunted "*p*-value" (as in "$p < .05$") is largely a function of the size of the sample employed. Very small effects can be statistically significant in this manner with very large

Bias, 116 PROCEEDINGS OF THE NAT'L ACAD. OF SCIS. 8255, 8258 (2019).

[28] In fact, the variability at aggregate levels is considerably more stable and predictive than at individual levels. Eric Hehman et al., *Establishing Construct Validity Evidence for Regional Measures of Explicit and Implicit Racial Bias*, 148 J. EXPERIMENTAL PSYCH.: GEN. 1022, 1026 (2019); Heidi A. Vuletich & B. Keith Payne, *Stability and Change in Implicit Bias*, 30 PSYCH. SCI. 854, 858–60 (2019)

[29] A.B. 2542 § 3 (codified as CAL. PEN. CODE § 745(a)(h)(1)).

samples; conversely, very large effects can be statistically *non*significant ($p > .05$) if based on small samples. By placing a premium on avoiding false positives, science makes itself vulnerable to false negatives. This may be appropriate for science, where the pursuit of truth is slow, incremental, and ideally self-correcting. Encouraging, if not explicitly requiring, a stringent .05 "significant difference" for statistical evidence in legal cases will tend to skew against the defense in RJA claims, barring the reliable availability of very large samples.

Fortunately, AB 256 again amends the penal code to state, "Statistical significance is a factor the court may consider but is not necessary to establish a significant difference."[30] This language should make clear that the Legislature does not want "significant" in the context of "statistical" to necessarily require a meeting of conventional (scientific) standards of "statistical significance" (i.e., $p < .05$). Here, the Legislature is distinguishing between "significant" and "statistically significant," much like applied sciences distinguish between "statistically significant" and "clinically significant."[31] The former addresses the probability of false positive error when generalizing from a sample to a population and the latter reflects the importance or size of the effect (e.g., the racial disparity). This is a helpful, substantive clarification that reduces the likelihood that determinations of patterns of disparate treatment will be confounded by the inadequate availability of data.

CONCLUSION

The RJA presents opportunities to remedy the discriminatory impacts of group-based biases on criminal justice outcomes at least partially. This is, promisingly, a systemic response to a systemic problem—a problem at the heart of the American democratic experiment. References in the RJA to implicit bias rightly point to the challenges presented by racial stereotypes and prejudices that are deeply embedded in our collective culture and, consequently and recursively, in our individual nonconscious memory and information processing systems. However, as with any new law, the legislative intent will be the object of interpretation as criminal justice actors and stakeholders seek to implement the law. Attempts to bring evidence of the operation of implicit bias in any individual case will likely run into the problem that implicit bias is, by definition, unobservable even as its effects are very real.

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[30] Assemb. B. No. 256, Reg. Sess. 2021-22 (Cal. 2022).

[31] *See generally* Alan E. Kazdin, *The Meanings and Measurement of Clinical Significance*, 67 J. CONSULTING & CLINICAL PSYCH. 332 (1999).

Scientific advances allowing for strong inferences of the presence, operation, and impact of implicit bias lead to the conclusion that it is pervasive, but individual level implicit bias scores are inherently noisy and therefore of limited reliability. Compounding this challenge is the reference to a standard of "significance," which, if the careful corrective language of AB 256 is not heeded, could lead to the assumption of a standard of "statistical significance," which is one that science has long set very high, leaving little room for error when applied correctly. Legal actors seeking to apply the RJA meaningfully, effectively, and fairly will do well to invoke implicit bias as an important contextual factor illustrating the prevalence of, in particular, race-crime stereotypes. In turn, this understanding of the ubiquity and uncontrollability of implicit biases should both motivate efforts to improve impartiality and inform understanding of ex ante probability that any given criminal justice decision or action is racially impartial.