DO BLACK INJURIES MATTER?: IMPLICIT BIAS AND JURY DECISION MAKING IN TORT CASES

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They say that black lives matter, but how much relative to white lives? Political activists and legal theorists have debated whether the injuries suffered by African Americans are devalued relative to the injuries of whites. This study is one of the first comprehensive experimental examinations of how race affects judgments of tort injuries. We tested the role of the litigant's race and the impact of implicit racial bias in tort case decision making. Using scenarios based on classic tort cases, we systematically varied the race of the plaintiff and the race of the defendant to create multiple versions of each scenario. Participants read one version of each scenario, judged whether the defendant ought to be legally responsible for the injury, and gave an award in money damages. As an added layer, participants also completed the Implicit Association Test ("IAT") for black and white races.

The results revealed that race—and implicit racial bias—matter in evaluating the responsibility and remedies for tort injuries. Participants who had high IAT scores attributed significantly more legal responsibility to black defendants than to white defendants and recommended higher awards for plaintiffs who sued black defendants. The dollar awards for the injuries

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suffered by black plaintiffs were lower than awards for the same injuries experienced by white plaintiffs. These results offer troubling new evidence of how race, responsibility, and injury are intertwined. The results are complex and nuanced, revealing once again that the role of implicit bias in legal decision making—particularly in the torts arena—is ripe for further study.

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INTRODUCTION

What do we know about the impact of a litigant's race in a tort case and about the effects of the decision maker's race and racial attitudes on tort case outcomes? A decade ago, one of the authors of this Article surveyed the existing literature in law and social science and concluded that systematic examination into such questions was a "relatively open field."[1] A decade later, the body of research on race and racism in tort cases remains surprisingly thin. Much of the previous work on race and the law, including implicit racial bias, has focused on criminal law and trials.[2] Work in the areas of civil law and litigation has largely focused on exploring various forms of race discrimination in employment, voting, and housing.[3] In these domains, research has documented the pervasive influence of race in decision making.[4] By comparison, tort law has received much less attention.[5]

Motivated by insights from prior research on the strong influence of the race of the parties and racial bias in criminal law and in other civil law contexts, our objective in the present study is to examine the role of a

1. W. Jonathan Cardi, *The Search for Racial Justice in Tort Law*, *in* CRITICAL RACE REALISM 115, 124 (Gregory S. Parks et al. eds., 2008).

2. *Id*. at 115; *see also, e.g.*, Justin D. Levinson et al., *Devaluing Death: An Empirical Study of Implicit Racial Bias on Jury-Eligible Citizens in Six Death Penalty States*, 89 N.Y.U. L. REV. 513, 545–53 (2014); Justin D. Levinson et al., *Guilty by Implicit Racial Bias: The Guilty/Not Guilty Implicit Association Test*, 8 OHIO ST. J. CRIM. L. 187, 189–90 (2010).

3. *See, e.g.*, ELLEN BERREY ET AL., RIGHTS ON TRIAL 32–33 (2017) (discussing employment discrimination); Zoltan Hajnal et al., *Voter Identification Laws and the Suppression of Minority Votes*, 79 J. POL. 363, 376–77 (2017) (discussing differential racial impact of strict voter identification laws on voting); Jerry Kang, *Trojan Horses of Race*, 118 HARV. L. REV. 1489, 1515–17 (2005) (showing links between implicit bias and employment). As for housing, see John Yinger, *Measuring Racial Discrimination with Fair Housing Audits: Caught in the Act*, 76 AM. ECON. REV. 881, 892 (1986) (concluding that the use of housing audits, which involves sending white and black individuals to real estate or rental agents and observing their treatment, demonstrated substantial discrimination).

4. BERREY ET AL., *supra* note 3, at 30–34 (employment discrimination); Hanjal et al., *supra* note 3 (voting discrimination); Yinger, *supra* note 3 (housing discrimination).

5. *See* Jennifer S. Hunt, *Race, Ethnicity, and Culture in Jury Decision Making*, 11 ANN. REV. L. & SOC. SCI. 269, 282 (2015). As Hunt observed, "more research should examine how race and ethnicity influence judgments in civil cases." *Id*. She noted that racial stereotypes could affect judgments of harm, negligence, and damages. *Id*.

litigant's race and the impact of implicit racial bias in tort case decision making. Using scenarios based on classic tort cases, we explore whether experimentally varying plaintiff race and defendant race makes a difference in judgments of legal responsibility and money damages. We also examine whether participants' implicit racial biases play a role in their reactions to the tort scenarios.

I. RESEARCH BACKGROUND: RACE AND TORT CASES

For context, it is useful to have a sense of the field of related work. The most readily accessible question in this area is whether the race of the litigants and decision makers in a tort case—the parties, the lawyers, the jurors, and the judges—affects case outcomes.

A. PREVIOUS RESEARCH ON THE RACE OF THE PARTIES IN TORT CASES

In the most comprehensive analysis of the effect of party race on tort outcomes, Martha Chamallas and Jennifer Wriggins's book, *The Measure of Injury: Race, Gender and Tort Law*, argues that the structure of U.S. tort law devalues injuries suffered by women and racial and ethnic minorities.[6] Their analysis concluded that (1) our social construction of harms is influenced by the identity of the parties, (2) our unconscious cognitive biases influence legal reasoning in tort case, and (3) our monetary measures of human suffering devalue the injuries of women and minorities.[7] Although empirical research on these issues is limited, it nevertheless tends to support Chamallas and Wriggins's analysis.

Task forces in Connecticut, Iowa, New York, Oregon, and Washington throughout the mid-1990s reported the popular perception in the legal community that African-American plaintiffs and defendants lost more frequently than Caucasians.[8] These studies also revealed a perception that African-American plaintiffs recovered less in damages than Caucasian

6. MARTHA CHAMALLAS & JENNIFER B. WRIGGINS, THE MEASURE OF INJURY: RACE, GENDER, AND TORT LAW 21 (2010).

7. *Id.* at 1.

8. JUSTICE CHARLES Z. SMITH ET AL., WASH. STATE MINORITY & JUSTICE TASK FORCE, FINAL REPORT 43–45 (1990); *Report of the New York State Judicial Commission on Minorities*, 19 FORDHAM URB. L.J. 181, 219, 227 (1992); The Or. Supreme Court Task Force on Racial/Ethnic Issues in the Judicial Sys., Or. Judicial Dep't, *Report of the Oregon Supreme Court Task Force on Racial/Ethnic Issues in the Judicial System*, 73 OR. L. REV. 823, 853 (1994); *see also* EQUAL. IN THE COURTS TASK FORCE, STATE OF IOWA, FINAL REPORT 163–64 (1993); TASK FORCE ON MINORITY FAIRNESS, STATE OF CONN. JUDICIAL BRANCH, FULL REPORT 34 (1996). Similar studies were conducted by the Florida Supreme Court in 1990 and 1991, the Massachusetts Supreme Court in 1994, the Michigan Supreme Court in 1989, the Minnesota Supreme Court in 1993, and the New Jersey Supreme Court in 1992. Frank M. McClellan, *Confronting Racial, Ethnic, or Gender Bias in Product Liability Cases*, SB16 ALI-ABA 145, 149 n.3 (1996).

plaintiffs under similar factual circumstances.[9] Several state task force studies have reported the perception that minorities' claims are also settled for less than those of similarly situated nonminorities.[10] Frank McClellan has also suggested that racial bias affects settlement discussions, describing as an example a case in which bias likely affected an attorney's interpretation of the legitimacy of the opposing party's claims and the perceived likelihood of success before a jury.[11]

Some early research provided mixed evidence about whether black plaintiffs are less successful and tend to receive smaller tort awards. One study of asbestos cases in the 1980s found substantial disparities between the settlements reached by minority and nonminority plaintiffs.[12] The Civil Litigation Research Project ("CLRP"), published in 1980–1981, examined the full dispute resolution process from the identification of grievances to their resolution. They discovered several differences along racial lines. Blacks were more likely than whites to translate their grievances into claims in discrimination cases but were less likely than whites to do so in tort cases.[13] Achieving success in discrimination grievances was more elusive for black than white claimants, but in the tort disputes examined in the CLRP, the claimant's race was not a significant predictor of success.[14]

Chin and Peterson's *Deep Pockets, Empty Pockets* analyzed jury verdict data in Cook County, Illinois, over the years 1959–1979.[15] The project found

9. Interestingly, in a similar study in the District of Columbia—where the jury pool is primarily African American—minority attorneys thought minority litigants were at a disadvantage in bench trials, a hurdle neutralized by the presence of a jury. *See* Special Comm. on Race & Ethnicity, *Report on Race and Ethnicity*, 64 GEO. WASH. L. REV. 189, 283–84 (1996). Caucasian attorneys, however, concluded the opposite—that minority parties suffered from no disadvantage before a judge, and in fact enjoyed an advantage in front of the largely African-American juries of the district. *Id*.

10. *See, e.g.*, The Or. Supreme Court Task Force on Racial/Ethnic Issues in the Judicial Sys., *supra* note 8.

11. *See* Frank M. McClellan, *The Dark Side of Tort Reform: Searching for Racial Justice*, 48 RUTGERS L. REV. 761, 781–82 (1996) (discussing a defendant's decision to settle with white plaintiffs but not a black plaintiff). McClellan also cites the Connecticut Task Force for the proposition that "[t]he Task Force survey revealed a perception on the part of minority attorneys that juries make lower awards to minority plaintiffs than to non-minority plaintiffs for similar cases; and that attorneys recommend smaller settlement amounts in personal injury cases." *Id.* at 776 n.27 (citing TASK FORCE ON MINORITY FAIRNESS, *supra* note 8, at 40).

12. *See* SMITH ET AL., *supra* note 8, at 123–25.

13. *See* Richard E. Miller & Austin Sarat, *Grievances, Claims, and Disputes: Assessing the Adversary Culture*, 15 LAW & SOC'Y REV. 525, 552–54 (1980–1981).

14. *Id.* at 559 tbl.9.

15. AUDREY CHIN & MARK A. PETERSON, DEEP POCKETS, EMPTY POCKETS app. a at 63 (1985). Chin and Peterson explained that the jury verdict reporters they used as the source of information about jury trials in Cook County identified black litigants but did not provide information about the race of other litigants. *Id*. at viii n.1. Therefore, the researchers were only able to compare black and nonblack

that black plaintiffs won less at trial, and when they did win, they received smaller awards than plaintiffs who were not black.[16] Black plaintiffs received approximately 74 percent of the awards given to white plaintiffs with the same injuries.[17] Black defendants who lost their cases paid about 10 percent less in damages than "white defendants in similar trials."[18] Black plaintiffs tend to sue black defendants, hence Chin and Peterson speculated that the black defendants' "empty pockets" was one factor that drove the award levels for black plaintiffs downward.[19]

In a more recent field study, Erik Girvan and Heather Marek examined the impact of a plaintiff's race on tort awards in three states.[20] Using Lexis Advance information describing legal cases in three states from 2000 to 2010, the researchers created a dataset of jury verdicts in tort cases in which the plaintiff had received pain and suffering damages.[21] The race and ethnicity of the plaintiffs were imputed by analyzing party surnames in reference to U.S. Census Bureau information regarding race and ethnicity.[22] The researchers employed statistical tests to measure the relationships between the plaintiffs' race, ethnicity, gender, and the awards the plaintiffs received for economic damages and non-economic damages.[23] Using the imputed race of the parties, Girvan and Marek discovered that black plaintiffs were awarded significantly less than white plaintiffs for non-economic damages (pain and suffering), even after controlling for economic damages in the case.[24] The researchers did not find significant differences for black plaintiffs in awards for lost income or medical expenses.[25] These field studies support the perceptions of differential outcomes for minority plaintiffs that several task forces have reported.[26] Of course, in these field studies, differential outcomes could be produced by the litigants' races or might be due to many other differences in the tort cases brought or defended by litigants of different races.

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litigants. *Id*.

16. *Id*. at viii.
17. *Id*.
18. *Id.* at ix.
19. *See id.*
20. Erik Girvan & Heather J. Marek, *Psychological and Structural Bias in Civil Jury Awards*, 8 J. AGGRESSION, CONFLICT & PEACE RES. 247, 252–53 (2016).
21. *Id*. at 250. The states included were New York, Florida, and Illinois. *Id*.
22. *Id*. at 248.
23. *Id*. at 250–51.
24. *Id*. at 252–53.
25. *Id*. at 253.
26. *See supra* text accompanying notes 8–9.

B. PREVIOUS RESEARCH ON THE RACE OF THE FACT FINDERS IN TORT CASES

The previous section suggests that under some circumstances, parties of different races might receive different outcomes in tort cases. What about the race of the fact finders in tort cases? Popular folklore has it that in communities with high proportions of minority residents, it will be easier to win tort cases and damage awards will be higher.[27] There is a limited amount of empirical research on the issue.

Studying actual cases, Eric Helland and Alexander Tabarrok investigated the correlation between the race and income of jury pools and the size of trial awards in tort cases. Helland and Tabarrok examined thousands of cases decided from 1988 to 1997 and found that "[t]he average tort award increases as black and Hispanic county population rates increase and especially as black and Hispanic county poverty rates increase."[28]

In contrast to these results finding a link between the racial composition of a county's population and tort awards, Issa Kohler-Hausmann's study did not confirm such a pattern. She examined county demographic characteristics and civil tort case outcomes.[29] She analyzed how plaintiff win rates and expected damages related to demographic and income data in a sample of counties.[30] Neither black nor Hispanic population rates were statistically significant predictors of the plaintiff win rate.[31] In predicting the level of expected damages (contingent on the jury having found the defendant liable for the plaintiff's loss), one model found a link between the Hispanic population rate and logged damages.[32] However, the link disappeared when Kohler-Hausmann controlled for the county's poverty rate and an income inequality measure.[33] Both of these economic measures were statistically significant predictors of expected damages.[34]

Whether or not the foregoing studies found evidence of differential

27. Theodore Eisenberg & Martin T. Wells, *Trial Outcomes and Demographics: Is There a Bronx Effect?*, 80 TEX. L. REV. 1839, 1840–43 (2002); Mary R. Rose & Neil Vidmar, Commentary, *The Bronx "Bronx Jury": A Profile of Civil Jury Awards in New York Counties*, 80 TEX. L. REV. 1889, 1896 (2002).

28. Eric Helland & Alexander Tabarrok, *Race, Poverty, and American Tort Awards: Evidence from Three Data Sets*, 32 J. LEGAL STUD. 27, 27 (2003).

29. Issa Kohler-Hausmann, *Community Characteristics and Tort Law: The Importance of County Demographic Composition and Inequality to Tort Trial Outcomes*, 8 J. EMPIRICAL LEGAL STUD. 413, 415 (2011).

30. *Id.* at 415, 422–23, 426–30.

31. *Id.* at 430–32.

32. *Id.* at 433.

33. *Id.*

34. *Id.* at 433, 435.

effects based on the jurors' races, racial composition differences do not necessarily imply racial bias in jurors. Rather, at most, they might reveal a difference in perspective, along racial lines, regarding jurors' normative judgments about culpability and the corresponding duty to compensate. The studies do not explain *why* a jury's racial composition might lead to a particular verdict. Several behavioral law and economics scholars, led by Kip Viscusi, have begun such an investigation into the influence of juror demographics on assessments of punitive damages.[35] In one study, Viscusi and Richard Zeckhauser tested the accuracy of jurors' understandings of risk.[36] Race of the juror served as one of the variables.[37] Starting from the premise that risk is comprised of frequency of harm as a fraction of exposure to potentially harmful conditions, Viscusi and Zeckhauser found that although participants readily took note of the frequency numerator, they paid less attention to the exposure denominator.[38] That is not surprising; denominator neglect is a well-documented cognitive bias.[39] In light of this finding, the researchers concluded that participants overestimated the risk created by a defendant's conduct.[40] Because the significance of risk is the basis of a jury's assessment of recklessness and because recklessness is often a prerequisite for punitive damages, Viscusi and Zeckhauser inferred that, using their metric, juries are likely overzealous in assigning punitive damages.[41] Relevant to the current study, the researchers found that Hispanic participants were more likely than whites to overestimate risk, and more likely to award punitive damages.[42]

In related research, Viscusi found that Hispanic participants were less likely than Caucasian participants to adhere to specific numerical instructions in assessing punitive damages.[43] When other factors such as education were included in a regression analysis, however, participant race and ethnicity were not statistically significant determinants of damage awards.[44]

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35. *See, e.g.*, Eisenberg & Wells, *supra* note 27, at 1851–54, 1865–70; Jennifer K. Robbennolt, *Determining Punitive Damages: Empirical Insights and Implications for Reform*, 50 BUFF. L. REV. 103, 125–34 (2002); W. Kip Viscusi, *The Challenge of Punitive Damages Mathematics*, 30 J. LEGAL STUD. 313, 337–42 (2001).

36. W. Kip Viscusi & Richard J. Zeckhauser, *The Denominator Blindness Effect: Accident Frequencies and the Misjudgment of Recklessness*, 6 AM. L. & ECON. REV. 72, 76 (2004).

37. *Id.* at 80 tbl.1.

38. *Id.* at 91–92.

39. DANIEL KAHNEMAN, THINKING, FAST AND SLOW 329 (2011).

40. *Cf.* Viscusi & Zeckhauser, *supra* note 36, at 88 (stating that study participants judged risk based on the absolute number of accidents rather than the level of activity that generates accidents).

41. *Id.* at 72-74.

42. *Id.* at 86.

43. *See* Viscusi, *supra* note 35, at 337–40.

44. *See id*. at 341 tbl.12 (showing that race and ethnicity are not statistically significant predictors

The work by Viscusi and his colleagues represents a useful first step in explaining one mechanism by which participant race might affect the assignment of tort damages. Still, these studies do not explain the ultimate source of racial distinctions in risk assessment or the application of damages formulas.

A handful of experimental studies have also explored whether and how the race of a fact finder affects tort case decisions. For example, Justin Levinson and Kaiping Peng examined mock jurors' assessments of factual causation and foreseeability in common-law negligence cases.[45] Levinson and Peng found cultural differences (between people of European and Asian descent) in three common psychological phenomena—the fundamental attribution error, the principle of culpable causation, and the illusion of control[46]—and proposed that these cognitive differences translate into culturally divergent analyses of causation and foreseeability, which in turn might help to explain different approaches to tort judgments.[47]

Brian Bornstein and Michelle Rajki presented study participants with one of three versions of a product liability case in which the plaintiff suffered from cancer allegedly caused by birth control pills, by calligraphy ink, or by a chemical toxin in the water supply.[48] Bornstein and Rajki found that minority participants were more likely than white participants to hold the defendant liable, but participants of different races assessed damages similarly.[49]

In a comparable study, using five fact patterns representing different types of tortious conduct, Chris Denove and Edward Imwinkelried found that the participant's race was "the single most important factor in predicting juror orientation."[50] Not only were African-American participants 50 percent

of damage awards).

45. *See* Justin D. Levinson & Kaiping Peng, *Different Torts for Different Cohorts: A Cultural Psychological Critique of Tort Law's Actual Cause and Foreseeability Inquiries*, 13 S. CAL. INTERDISC. L.J. 195, 198 (2004).

46. The fundamental attribution error is "the tendency of observers to overestimate how much a person's behavior is determined by his or her internal stable dispositions." *Id*. at 206. Culpable causation refers to the effect by which people's perceptions regarding an actor's moral culpability influence their assessment of whether the actor caused the plaintiff's injury. *Id.* at 213. The illusion of control is the tendency to expect success that is "inappropriately higher than objective probability would warrant." *Id*. at 220.

47. *Id.* at 207–11, 216–18, 222–23.

48. *See* Brian H. Bornstein & Michelle Rajki, *Extra-Legal Factors and Product Liability: The Influence of Mock Jurors' Demographic Characteristics and Intuitions About the Cause of an Injury*, 12 BEHAV. SCI. & L. 127, 132 (1994).

49. *Id.* at 134.

50. Chris F. Denove & Edward J. Imwinkelried, *Jury Selection: An Empirical Investigation of*

more likely than nonminority participants to find for the plaintiff, but they also awarded over five times the amount of emotional damages and twice the compensation for physical disability.[51] Although Hispanic participants were no more likely than whites to hold the defendant liable, Hispanics awarded higher compensatory damages than did white participants.[52] Moreover, controlling for factors often associated with race, such as income and education, Denove and Imwinkelried concluded that African-American juror orientation varied according to cultural rather than socioeconomic differences.[53] These experimental studies suggest several ways in which the race or ethnicity of the fact finder could matter.

Taken together, these studies raise the possibility that racial differences could be influencing tort case outcomes. However, because the cases of black and white litigants can differ on a host of factors, we cannot rule out the possibility that in the field studies in particular these factors, rather than race, explain the apparent differential treatment.[54] The experiment we report here allows us to hold all else constant and vary only the race of the litigants. Furthermore, few previous studies have examined the role of racial attitudes, and in particular, implicit racial bias, on tort outcomes.

II. RESEARCH BACKGROUND: RACIAL BIAS AND IMPLICIT RACIAL BIAS

Over the last two decades, there has been something of a shift from examining the impact of conscious and explicit racism to the exploration of unconscious and implicit bias.[55] Research on unconscious bias suggests that race influences cognitive judgment and decision making, automatically and outside of rational awareness.[56] Cognitive and social psychologists call these unconscious, automatic influences "implicit biases"—attitudes, beliefs, or

Demographic Bias, 19 AM. J. TRIAL ADVOC. 285, 293 (1995).

51. *Id.* at 294–95.

52. *Id.* at 295.

53. *Id.* at 306.

54. For example, a fascinating historical empirical study recently concluded that "a clear positive relationship exists between the percentage of African-Americans in a state's largest cities and its continuing acceptance of [tort] doctrines that impede the plaintiff's access to the jury" and that "a state's geographic location within the South yields the most powerful effect on the extent to which the state denies jury access to tort plaintiffs." *See* Donald G. Gifford & Brian Jones, *Keeping Cases from Black Juries: An Empirical Analysis of How Race, Income Inequality, and Regional History Affect Tort Law*, 73 WASH. & LEE L. REV. 557, 565 (2016).

55. JENNIFER L. EBERHARDT, BIASED 7 (Penguin Books 2020) (2019); CLAUDE M. STEELE, WHISTLING VIVALDI 204 (2010); Cardi, *supra* note 1, at 121–23; *see also infra* Part III.

56. *See* Anthony G. Greenwald & Linda Hamilton Krieger, *Implicit Bias: Scientific Foundations*, 94 CALIF. L. REV 945, 951 (2006) (explaining that "[*i*]*mplicit biases* are discriminatory biases based on implicit attitudes or implicit stereotypes").

thoughts that people hold but may explicitly reject.[57]

Research on implicit bias, and the concept itself, have been the subject of debate both within and outside of the academy.[58] There is understandable resistance to the idea that we are governed by hidden thoughts that operate below our conscious awareness. The measurement, reliability, and validity of implicit bias have also been debated. In particular, people have questioned the extent to which implicit bias influences real world behavior. That said, researchers have built a substantial body of scholarly work on measuring implicit bias and its impact.[59] And many commentators have found implicit bias to be a useful concept in helping to explain continuing evidence of discrimination along racial lines.[60] Therefore, it is worthwhile to provide some background on the development of the concept of implicit bias and research findings.

A. IMPLICIT SOCIAL COGNITION AND IMPLICIT RACIAL BIAS

There are now more than two decades of empirical psychological (biological, cognitive, and social) research on implicit social cognition, including implicit bias. Conventional wisdom and folk conceptions of human thought and social behavior place great weight on accessible thoughts and conscious intentions as informing expressly held beliefs and volitional behavior.[61] An express belief is one that is consciously endorsed, and a conscious intention to act is one where the actor purposefully engages in behavior for some specific reason. The challenge to such an assessment is

57. *See* Anthony G. Greenwald & Mahzarin R. Banaji, *Implicit Social Cognition: Attitudes, Self-Esteem, and Stereotypes*, 102 PSYCHOL. REV. 4, 13 (1995); *see also* Brian A. Nosek et al*., The Implicit Association Test at Age 7: A Methodological and Conceptual Review*, *in* SOCIAL PSYCHOLOGY AND THE UNCONSCIOUS 265, 266 (John A. Bargh ed., 2007).

58. *See*, *e.g.*, Olivia Goldhill, *The World Is Relying on a Flawed Psychological Test to Fight Racism*, QUARTZ (Dec. 3, 2017), https://qz.com/1144504/the-world-is-relying-on-a-flawed-psychological-test-to-fight-racism [https://perma.cc/VK7W-75CC]; Jesse Singal, *The Creators of the Implicit Association Test Should Get Their Story Straight*, N.Y. MAG.: INTELLIGENCER (Dec. 5, 2017), https://nymag.com/daily/intelligencer/2017/12/iat-behavior-problem.html [https://perma.cc/2MWE-WA83].

59. For a popular summary of the phenomenon of implicit bias and supportive evidence, see generally MAHZARIN R. BANAJI & ANTHONY G. GREENWALD, BLINDSPOT (Bantam Books trade paperback ed., Bantam Books 2016) (2013) (exploring hidden biases). Many research publications examining the measurement and effects of implicit bias are available at the Project Implicit website: https://www.projectimplicit.net/index.html.

60. Keith Payne et al., *How to Think About "Implicit Bias*,*"* SCI. AM. (Mar. 27, 2018), https://www.scientificamerican.com/article/how-to-think-about-implicit-bias [https://perma.cc/2HX7-6A6M].

61. Terence Horgan & James Woodward, *Folk Psychology Is Here to Stay*, *in* MIND AND COGNITION 419, 425–26 (William G. Lycan & Jesse J. Prinz eds., 3d ed. 2008); Anna Wierzbicka, *On Folk Conceptions of Mind, Agency and Morality*, 6 J. COGNITION & CULTURE 165, 169–72 (2006).

that it has long been known that social influences operating within interview and research settings can lead individuals to inaccurately describe their explicit beliefs.[62]

In contrast to the notion that human thoughts are completely accessible and behaviors are purely volitional is the vast and growing body of research on implicit social cognition. This research suggests that individuals lack absolute awareness of their own thoughts and the ability to control behaviors that flow from such thoughts. Such mental processes include implicit memory,[63] implicit perception,[64] implicit attitudes,[65] implicit stereotypes,[66] implicit self-esteem,[67] and implicit self-concept.[68] The term "implicit" means a lack of explicit or express access to memory, perception, attitudes, and the like.

In the 1980s, implicit memory research led to the development of measures for other implicit mental phenomena. Among these were measures for implicit attitudes and implicit stereotypes. An attitude is a hypothetical construct that represents the degree to which an individual likes or dislikes, or acts favorably or unfavorably toward, someone or something.[69] People can also be ambivalent about a person, a group of people, or an object,

62. *See* Martin T. Orne, *On the Social Psychology of the Psychological Experiment: With Particular Reference to Demand Characteristics and Their Implications*, 17 AM. PSYCHOLOGIST 776, 781 (1962); Stephen J. Weber & Thomas D. Cook, *Subject Effects in Laboratory Research: An Examination of Subject Roles, Demand Characteristics, and Valid Inference*, 77 PSYCHOL. BULL. 273, 289–91 (1972).

63. *See generally* Daniel L. Schacter, Critical Review, *Implicit Memory: History and Current Status*, 13 J. EXPERIMENTAL PSYCHOL. 501 (1987) (arguing that there is evidence of separate implicit and explicit memory, this separation presents a challenge for researchers, and the dissociation between implicit and explicit knowledge provides relevant context).

64. *See generally* John F. Kihlstrom et al., *Implicit Perception* (arguing for implicit perception and against subliminal perception), *in* PERCEPTION WITHOUT AWARENESS 17 (Robert F. Bornstein & Thane S. Pittman eds., 1992).

65. *See generally* Anthony G. Greenwald et al., *Measuring Individual Differences in Implicit Cognition: The Implicit Association Test*, 74 J. PERSONALITY & SOC. PSYCHOL. 1464 (1998) (evaluating the IAT's effectiveness at gauging evaluative associations that give rise to implicit attitudes).

66. *See generally* Laurie A. Rudman et al., *Implicit Self-Concept and Evaluative Implicit Gender Stereotypes: Self and Ingroup Share Desirable Traits*, 27 PERSONALITY & SOC. PSYCHOL. BULL. 1164 (2001) (suggesting that implicit gender stereotypes are self-favoring because people associate themselves with positive traits).

67. *See generally* Anthony G. Greenwald & Shelly D. Farnham, *Using the Implicit Association Test to Measure Self-Esteem and Self-Concept*, 79 J. PERSONALITY & SOC. PSYCHOL. 1022 (2000) (indicating that IAT measures of implicit self-esteem and self-concept exhibit stability and validity appropriate for use in studies and define constructs that are different from constructs measured by self-report).

68. Rudman et al., *supra* note 66, at 1176.

69. *See* Alice H. Eagly & Shelly Chaiken, *Attitude Structure and Function*, *in* 1 THE HANDBOOK OF SOCIAL PSYCHOLOGY 269, 269 (Daniel T. Gilbert et al. eds., 4th ed. 1998).

holding both positive and negative attitudes toward the attitude object.[70] Attitudes are implicit when they lie outside of conscious awareness. Greenwald and Banaji defined implicit attitudes as "introspectively unidentified (or inaccurately identified) traces of past experience that mediate favorable or unfavorable feeling, thought, or action toward social objects."[71] Implicit attitudes are of greatest interest when they are different from explicit attitudes about the same category of individuals or things. Such discrepancies, referred to as dissociations,[72] are often observed in attitudes toward stigmatized groups, such as groups defined by age, disability, ethnicity, gender, religion, sexual orientation, and race.[73]

On the other hand, a social stereotype is a mental association made between, for example, a social group and a trait.[74] Such an association may or may not be grounded in a statistical reality.[75] If the association is statistically real, group members who are the subject of the mental association will be more likely to display the associated trait than will members of other groups. Implicitly, such "*stereotypes* are the introspectively unidentified (or inaccurately identified) traces of past experience that mediate attributions of qualities to members of a social category."[76]

Biases reflect a preference for a particular group or category of individuals, for example, over another group or category. Accordingly, within biases, there are opposite sides to the same coin—favorable and unfavorable categorizations of comparative groups. For example, in-group bias designates favoritism toward one's own group or groups.[77] Not surprisingly, implicit attitudes and stereotypes may result in discriminatory biases. These biases are called implicit biases, which may diverge from an individual's express beliefs and result in behavior inconsistent with an

70. Franziska Lautenbach & Franziska Antoniewicz, *Ambivalent Implicit Attitudes Towards Inclusion in Preservice PE Teachers: The Need for Assessing Both Implicit and Explicit Attitudes Towards Inclusion*, 72 TEACHING & TCHR. EDU. 24, 25–26 (2018).

71. Greenwald & Banaji, *supra* note 57, at 8.

72. Michael A. Olson & Russell H. Fazio, *Implicit and Explicit Measures of Attitudes: The Perspective of the MODE Model*, *in* ATTITUDES: INSIGHTS FROM THE NEW IMPLICIT MEASURES 19, 48 (Richard E. Petty et al. eds., 2009).

73. BANAJI & GREENWALD, *supra* note 59, at 57–58.

74. *Id.* at 73–75; Charles M. Judd & Bernadette Park, *Definition and Assessment of Accuracy in Social Stereotypes*, 100 PYSCHOL. REV. 109, 110 (1993).

75. Judd & Park, *supra* note 74, at 110–12.

76. Greenwald & Banaji, *supra* note 57, at 15.

77. Luigi Castelli et al., *Implicit Ingroup Metafavoritism: Subtle Preference for Ingroup Members Displaying Ingroup Bias*, 34 PERSONALITY & SOC. PSYCHOL. BULL. 807, 816 (2008).

individual's intentions.[78]

Within the social and behavioral sciences, the typical method of attitude measurement has been the collection of self-reports that reflect individuals' explicit attitudes. For example, when researchers want to ascertain subjects' attitudes toward someone (or a group) or something, they usually ask participants to select one of several responses or to mark a rating scale.[79] The drawback in using these methods is that sometimes respondents may be unwilling or unable to report their attitudes in an unbiased or accurate manner. Moreover, research respondents' answers are dependent on the context—for example, who asks and how they ask.[80]

These concerns gave rise to measures that would indirectly gauge attitude. Indirect measures seem to minimize respondents' strategic responding incentives and attitudes.[81] These measures have evolved from projective tests[82] to a wide variety of contemporary techniques, which fall into three general categories: (1) reaction time measures;[83] (2) language measures;[84] and (3) psychophysiological measures.[85] This Article does not offer an exhaustive review of the variety of implicit measures.[86] However, it is worth discussing in detail two that are frequently used: subliminal priming, a precursor to the Implicit Association Test ("IAT"), and the IAT itself, which we employ in this experimental study.

One popular implicit measure is affective, or subliminal, priming. Cognitive psychology research indicates that exposure to a concept facilitates the later recognition of related concepts.[87] As explained by

78. *See* Greenwald & Krieger, *supra* note 56, at 946, 957 tbl.1.

79. Bernd Wittenbrink & Norbert Schwarz, *Introduction* to IMPLICIT MEASURES OF ATTITUDES 1, 2 (Bernd Wittenbrink & Norbert Schwarz eds., 2007).

80. SEYMOUR SUDMAN ET AL., THINKING ABOUT ANSWERS 81–86 (1996); ROGER TOURANGEAU ET AL., THE PSYCHOLOGY OF SURVEY RESPONSE 198–200 (2000).

81. Wittenbrink & Schwarz, *supra* note 79, at 3.

82. *See generally* Harold M. Proshansky, *A Projective Method for the Study of Attitudes*, 38 J. ABNORMAL & SOC. PSYCHOL. 393, 393 (1943).

83. Brad Verhulst & Milton Lodge, *Reaction Time Measures in Implicit Attitudes Research*, *in* POLITICAL SCIENCE RESEARCH METHODS IN ACTION 64-92 (Michael Bruter & Milton Dodge eds., 2013).

84. *See generally* Anne Maas et al., *Linguistic Intergroup Bias: Evidence for In-Group-Protective Motivation*, 71 J. PERSONALITY & SOC. PSYCHOL. 512 (1996) (suggesting that linguistic intergroup bias relies on in-group-protective motivation and that language that favors an in-group is connected to self-esteem maintenance).

85. *See generally* Tiffany A. Ito & John T. Cacioppo, *Attitudes as Mental and Neural States of Readiness: Using Physiological Measures to Study Implicit Attitudes* (reviewing physiological measures used to evaluate implicit attitudes), *in* IMPLICIT MEASURES OF ATTITUDES, *supra* note 79, at 125.

86. For a more in-depth review of the implicit measurement literature, see generally IMPLICIT MEASURES OF ATTITUDES, *supra* note 79 (reviewing implicit measures).

87. James H. Neely, *Semantic Priming Effects in Visual Word Recognition: A Selective Review of Current Findings and Theories*, *in* BASIC PROCESSES IN READING: VISUAL WORD RECOGNITION 264,

Wittenbrink and Schwarz, "[a] common explanation for this phenomenon holds that exposure to the initial concept (the prime) activates semantically related concepts in memory, thus reducing the time needed for their identification."[88] A variety of priming procedures have been developed to measure attitudes, all derived from the seminal work of Meyer and Schvaneveldt. In two different experiments, subjects were simultaneously presented with two strings of letters, with one string displayed visually above the other.[89] Meyer and Schvaneveldt described the experiments as follows:

> In [the first experiment, participants] responded "yes" if both strings were words, otherwise [they] respond[ed] "no." [In the second experiment, participants] responded "same" if the two strings were both words or . . . nonwords, otherwise [they] respond[ed] "different." "Yes" responses and "same" responses were faster for pairs of commonly associated words than for pairs of unassociated words. "Same" responses were slowest for [nonword] pairs . . . . "No" responses were faster when the top string in the display was a nonword, whereas "different" responses were faster when the top string was a word.[90]

In fact, participants more quickly make such decisions when the prime and target string share some semantic relationship.[91] The prime activates semantically related concepts in long-term memory, resulting in faster recognition and response to related targets.[92]

Fazio and colleagues believed that such a priming technique could be extended to attitudes. They "used a priming procedure to [determine] the [degree] to which the . . . presentation of an attitude object would facilitate the [speed] with which [study participants] could indicate whether a subsequently presented target adjective had a positive or a negative connotation."[93] Fazio and colleagues found greater facilitation "when positively valued primes were followed by positive targets and when negatively valued primes were followed by negative targets than when the

264–66 (Derek Besner & Glyn W. Humphreys eds., 1991).

88. Wittenbrink & Schwarz, *supra* note 79, at 5.

89. David E. Meyer & Roger W. Schvaneveldt, *Facilitation in Recognizing Pairs of Words: Evidence of a Dependence Between Retrieval Operations*, 90 J. EXPERIMENTAL PSYCHOL. 227, 227 (1971).

90. *Id.* at 227.

91. *See id.* at 232.

92. James H. Neely, *Semantic Priming and Retrieval from Lexical Memory: Roles of Inhibitionless Spreading Activation and Limited-Capacity Attention*, 106 J. EXPERIMENTAL PSYCHOL. 226, 226–27 (1977).

93. Russell H. Fazio et al., *On the Automatic Activation of Attitudes*, 50 J. PERSONALITY & SOC. PSYCHOL. 229, 229 (1986).

prime-target pairs were incongruent in valence."[94] Almost a decade later, Fazio and colleagues extended this technique to racial attitudes. Specifically, they used African-American and white faces as primes; they used adjectives with positive or negative connotations.[95] Participants had to push keys labeled either "good" or "bad" as quickly as possible.[96] White study participants' reaction times to the good words were faster following presentation of white faces.[97] Their reaction times to the bad words were quicker when those words followed the presentation of African-American faces.[98]

Building upon Fazio's work, the IAT has become an important attitude measure of implicit bias.[99] The IAT assesses the ease, reported in reaction times, with which individuals associate various categories.[100] Accordingly, IAT permits an inference about attitudes, because it is generally easier to respond quickly to items from two categories that are cognitively associated with each other. The most widely used IAT assesses implicit attitudes toward blacks vis-á-vis whites. In the Race IAT, which we used in the current study, study participants first practice distinguishing black and white faces by responding to images of faces by pressing a computer key on the left side of the keyboard for one racial category and on the right side of the keyboard for the other racial category.[101] Participants next practice distinguishing pleasant-meaning words vis-á-vis unpleasant-meaning words in a manner like that used for distinguishing black and white faces.[102] The next two tasks, given in a randomly determined order, use all four categories (black faces, white faces, pleasant-meaning words, and unpleasant-meaning words).[103] One task requires one response (for example, pressing a left-side key) when the respondent sees black faces or pleasant words, whereas white faces and unpleasant words call for the other response (right-side key).[104] In the remaining task, white faces share a response with pleasant words and black faces with unpleasant words.[105] For respondents who take the Race IAT, response speeds are often faster when whites, vis-à-vis blacks, are paired

94. *Id.* at 235.

95. Russell H. Fazio et al., *Variability in Automatic Activation as an Unobtrusive Measure of Racial Attitudes: A Bona Fide Pipeline?*, 69 J. PERSONALITY & SOC. PSYCHOL. 1013, 1015 (1995).

96. *Id.*

97. *See id.* at 1017.

98. *See id.*

99. *See* Greenwald et al., *supra* note 65, at 1464.

100. *Id.*

101. Wittenbrink & Schwarz, *supra* note 79, at 6.

102. *Id.*

103. *Id.*

104. *Id.*

105. *Id.*

with pleasant words.[106] This finding supports the interpretation that white-pleasant is a stronger association than black-pleasant (and conversely, white-negative is weaker than black-negative). These results suggest an implicit attitudinal preference for whites vis-à-vis blacks. The IAT's general method can be and has been adapted to measure a wide variety of group-valence and group-trait associations underlying attitudes and stereotypes.[107]

Implicit attitudes are unremarkable in the sense that people harbor them with respect to a broad range of things. One study, for example, found that people hold implicit attitudes about objects as simple as yogurt brands, fast food restaurants, and soft drinks.[108] Certainly, in such a context, these implicit attitudes may predict behavior that may largely be deemed as inconsequential, at least with respect to any macro-level considerations.[109] Group identities, however, may provide for a heightened level of concern. For example, Americans tend to implicitly favor American places over foreign places, for example the United States over Japan or Canada. [110] They also favor thin people over obese people and young people over old people.[111] Heterosexuals are favored over gay people, the rich over the poor, and Jews over Muslims—all implicitly.[112]

Research on implicit racial attitudes and bias—particularly research focused on blacks—is the most robust area of implicit attitudes and bias

106. Brian A. Nosek et al., *Harvesting Implicit Group Attitudes and Beliefs from a Demonstration Web Site*, 6 GROUP DYNAMICS 101, 105 (2002) (reporting findings from a dataset with N = 192,364).

107. Some researchers have examined whether the IAT performance can be consciously modified. *See*, *e.g.*, Klaus Fiedler & Matthias Bluemke, *Faking the IAT: Aided and Unaided Response Control on the Implicit Association Tests*, 27 BASIC & APPLIED SOC. PSYCHOL. 307, 308 (2005); Do-Yeong Kim, *Voluntary Controllability of the Implicit Association Test (IAT)*, 66 SOC. PSYCHOL. Q. 83, 84 (2003); Konrad Schnabel et al., *Employing Automatic Approach and Avoidance Tendencies for the Assessment of Implicit Personality Self-Concept*, 53 EXPERIMENTAL PSYCHOL. 69, 70 (2006); Melanie C. Steffens, *Is the Implicit Association Test Immune to Faking?*, 51 EXPERIMENTAL PSYCHOL. 165, 166–67 (2004). Efforts to fake the IAT are generally unsuccessful and readily detectable. *See* Dario Cvencek et al., *Faking of the Implicit Association Test Is Statistically Detectable and Partly Correctable*, 32 BASIC & APPLIED SOC. PSYCHOL. 302, 302 (2010) (researchers instructed study participants to fake an IAT test by intentionally slowing their responses, but researchers were able to accurately distinguish between the faked and the accurate tests).

108. Dominika Maison et al., *Predictive Validity of the Implicit Association Test in Studies of Brands, Consumer Attitudes, and Behavior*, 14 J. CONSUMER PSYCHOL. 405, 412–14 (2004).

109. *Cf.* Malte Friese et al., *Implicit Consumer Preferences and Their Influence on Product Choice*, 23 PSYCHOL. & MARKETING 727, 727 (2006) (finding that participants who possessed incongruent "explicit and implicit preferences regarding generic food products and well-known food brands . . . were more likely to choose the implicitly preferred brand . . . when choices were made under time pressure").

110. *See* Brian A. Nosek, *Moderators of the Relationship Between Implicit and Explicit Evaluation*, 134 J. EXPERIMENTAL PSYCHOL. 565, 572 tbl.1 (2005).

111. *See id.*

112. *See id.*

research. As previously indicated, often people's explicit and implicit attitudes are not completely concordant. This may be no more evident than when it comes to the hotbed issue of race. Latinos demonstrate a limited explicit preference for whites (25.3 percent favor) over blacks (15.0 percent favor), with most showing no preference (59.7 percent).[113] At the implicit level, however, Latinos show a substantial preference for whites (60.5 percent favor) over blacks (10.2 percent favor), with far fewer showing preferential neutrality (29.2 percent) when compared to their explicit preferences.[114] For Asians and Pacific Islanders, when compared to Latinos, they show more of an explicit preference for whites (32.9 percent favor) over blacks (9.6 percent favor), with only slightly fewer showing preferential neutrality (57.5 percent).[115] At the implicit level, however, Asians and Pacific Islanders demonstrate a substantial preference for whites (67.5 percent favor) over blacks (7.7 percent favor), with far fewer showing preferential neutrality (24.8 percent) when compared to their explicit preferences.[116] Whites show much more of an explicit preference for whites (40.7 percent favor) than blacks (3.4 percent favor), especially when compared to other racial groups, but still more than half (56.0 percent) show no preference.[117] At the implicit level, however, whites show a robust preference for whites (71.5 percent favor) over blacks (6.8 percent favor), with only 21.7 percent showing no preference.[118] Nosek and colleague conducted an internet-based study that confirmed and extended the findings of strong ingroup favoritism among whites, especially using implicit measures. Just over half (51.1 percent) of whites showed ingroup favoritism on explicit measures, compared to 78.4 percent who revealed ingroup favoritism on implicit measures.[119]

It is no surprise, for example, "[w]hite[s] . . . and Asian . . . Americans associated [w]hite[s] . . . with the concept 'American' to a greater extent than [blacks]."[120] Another study showed that people explicitly associated black American Olympic athletes to be more strongly associated with "American" than white American Olympic athletes, and were more familiar

113. Greenwald & Krieger, *supra* note 56, at 958 tbl.2.

114. *Id.*

115. *Id.*

116. *Id.*

117. *Id.*

118. *Id.*

119. John T. Jost et al., *A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo*, 25 POL. PSYCHOL. 881, 897 (2004) (analyzing implicit and explicit in-group and out-group favoritism among many groups).

120. Thierry Devos & Mahzarin R. Banaji, *American = White?*, 88 J. PERSONALITY & SOC. PSYCHOL. 447, 459 (2005).

with black athletes than with white athletes.[121] However, people implicitly associated white American Olympic athletes more strongly with the category "American" than black American Olympic athletes.[122] Even more, a study conducted in December 2007 showed that people implicitly associated Senator Clinton—and even then British Prime Minister Tony Blair—with the category "American" more so than then-Senator and presidential candidate Barack Obama.[123] In contrast, their explicit associations between Blair, Obama, and the "American" category found that Obama was more associated with "American."[124]

Research on blacks' implicit racial biases is striking for two reasons. Like research on other racial groups, there is a lack of concordance between their explicit and implicit racial attitudes. Whereas they show an explicit preference for blacks (58.9 percent) over whites (4.8 percent), with 36.2 percent showing no preference, the same cannot be said for implicit bias.[125] At the implicit level, some research shows that blacks have no preference at all—34.1 percent favoring blacks, 32.4 percent favoring whites, and 33.6 percent showing no preference.[126] Other research bolsters these findings. For example, among twelve- to fourteen-year-old blacks, Andrew Baron and Mahzarin Banaji found that, "at least by age 13, young [b]lack[s] . . . do not show the in-group preference that has come to be the hallmark of [w]hite[s]."[127] Clarence Spicer found that among black adults there is considerable variability in blacks' implicit racial preferences, though overall, blacks show a significant preference for whites over blacks.[128] In sum, blacks show strong in-group favoritism explicitly but it is reduced or eliminated implicitly.[129] Thus, despite some of the research challenges of studying implicit bias, findings in this research domain tell us something unique, vis-à-vis explicit bias, about how people process race.

121. *Id.* at 454–56.

122. *Id.* at 455 (attempting to eliminate the "White = America" effect by employing the topic of sports, which had a strong black and American association).

123. Thierry Devos & Debbie S. Ma, *How "American" Is Barack Obama? The Role of National Identity in a Historic Bid for the White House*, 43 J. APPLIED SOC. PSYCHOL. 214, 217, 219 (2013).

124. *Id.*

125. Greenwald & Krieger, *supra* note 56, at 958 tbl.2.

126. *Id.*

127. Andrew Scott Baron & Mahzarin R. Banaji, *The Development of Implicit Attitudes: Evidence of Race Evaluations from Ages 6 and 10 and Adulthood*, 17 PSYCHOL. SCI. 53, 57 (2006) (citing A.S. Baron et al., Poster at the 5th Annual Meeting of the Society for Personality and Social Psychology: Implicit Race Attitudes in African-American and Hispanic Children (2004)).

128. Clarence Vincent Spicer, Effects of Self-Stereotyping and Stereotype Threat on Intellectual Performance 57–58 (July 1, 1999) (unpublished Ph.D. dissertation, University of Kentucky) (on file with the William T. Young Library, University of Kentucky).

129. Jost et al., *supra* note 119.

B. IMPLICIT BIAS IN THE COURTROOM

Researchers have explored the ways in which unconscious biases influence judgment and decision making in the courtroom. For example, research has focused on the effect of racial bias in jurors' reception of expert witness testimony,[130] bias in attorneys' jury selection,[131] the presence of and appropriate response to bias in judges,[132] and the effects of bias on inter-attorney communications.[133]

Research on participant bias in tort cases,[134] in particular, is less common. In one of the few relevant experiments, Justin Levinson examined the presence and effect of racial bias in jurors and witnesses in the torts context. Levinson presented study participants with two tort-based hypotheticals, one involving a fistfight and the other wrongful termination.[135] The races of the hypothetical actors were varied randomly to test for differences in the participants' memories of the events.[136] After reading their story, participants completed a distraction task to eliminate immediate memory effects.[137] They were then asked sixteen recall questions about the story they read.[138] Levinson found that participants systematically misremembered and even generated false memories in racially biased ways.[139] For example, participants were significantly more likely to recall aggressive conduct in the fistfight story featuring African Americans (80 percent) than in the same story featuring Caucasians (68 percent).[140] However, there were no significant effects found for the wrongful

130. *See*, *e.g.*, Veronica S. Tetterton & Stanley L. Brodsky, *African Americans on the Witness Stand: Race and Expert Witness Testimony*, *in* CRITICAL RACE REALISM, *supra* note 1, at 94, 94–96.

131. *See, e.g.*, M. Juliet Bonazzoli, Note, *Jury Selection and Bias: Debunking Invidious Stereotypes Through Science*, 18 QUINNIPIAC L. REV. 247, 247–49 (1998).

132. *See, e.g.*, Frank M. McClellan, *Judicial Impartiality & Recusal: Reflections on the Vexing Issue of Racial Bias*, 78 TEMP. L. REV. 351, 350–67 (2005).

133. *See, e.g.*, McClellan, *supra* note 11, at 763–74.

134. *See* John E. Montgomery, *Cognitive Biases and Heuristics in Tort Litigation: A Proposal to Limit Their Effects Without Changing the World*, 85 NEB. L. REV. 15, 40–49 (2006).

135. Justin D. Levinson, *Forgotten Racial Equality: Implicit Bias, Decisionmaking, and Misremembering*, 57 DUKE L.J. 345, 391 (2007).

136. *Id.* at 394–95.

137. *Id.* at 391.

138. *Id.* at 393.

139. *Id.* at 398–401.

140. *Id.* at 399. Other research has found analogous results. 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, 596–97 (1976) (finding that subjects more often attributed a violent disposition to black harm-doers than white harm-doers); H. Andrew Sagar & Janet Ward Schofield, *Racial and Behavioral Cues in Black and White Children's Perceptions of Ambiguously Aggressive Acts*, 39 J. PERSONALITY & SOC. PSYCHOL. 590, 596–97 (1980) (finding that subjects were more likely to consider black males to be threatening than white males based on the same behaviors).

termination story.[141] The results indicate that, at least in some situations, racial biases shape how individuals perceive and recall case facts and scenarios. The significance of Levinson's study is clear—if the implicit racial bias of witnesses and jurors causes them to recall events or testimony in racially biased ways, the jury's determination of tort liability will reflect this bias.

One interesting question in this area is whether judges or juries are more likely to be affected by implicit racial bias. Frank McClellan suggests that having to justify one's position to other jury members might act as a curb on racial bias.[142] Some mock jury research has found evidence for this proposition; in one illustrative experiment, racially-mixed mock juries performed better than all-white juries, engaging in longer deliberations, discussing a broader range of information, and making more accurate comments about a racially-charged case.[143]

Jeffrey Rachlinski and his colleagues administered the black-white IAT and three hypothetical vignettes to 133 judges.[144] On the IAT, white judges exhibited significantly higher implicit racial bias, with 87 percent of white judges and 44 percent of black judges showing white preference.[145] An analysis of the judges' responses to the vignettes showed that, in the explicit race scenarios (for example, a black defendant assaulting a white victim or a white defendant assaulting a black victim), black judges were more likely to convict the defendant when he was white and had harmed a black victim.[146] Comparatively, white judges were equally willing to convict black and white defendants charged with harming opposite-race victims.[147] In interpreting the results, the researchers posited that the white judges were aware of the potential for race bias in the vignette exercises, so they compensated by working to avoid race bias in their decisions, and therefore they did not show any racial preference in those studies.[148] The researchers observed that black judges were also motivated to avoid showing racial bias but might have been especially responsive to the victimization of the black victims harmed by

141. Levinson, supra note 135, at 403.

142. McClellan, *supra* note 11, at 792.

143. Samuel R. Sommers, *On Racial Diversity and Group Decision Making: Identifying Multiple Effects of Racial Composition on Jury Deliberations*, 90 J. PERSONALITY & SOC. PSYCHOL. 597, 604–05 (2006); *see also* NEIL VIDMAR & VALERIE P. HANS, AMERICAN JURIES 74–76 (2007).

144. Jeffrey J. Rachlinski et al., *Does Unconscious Racial Bias Affect Trial Judges?*, 84 NOTRE DAME L. REV. 1195, 1205, 1208 (2009).

145. *Id.* at 1210.

146. *Id.* at 1218.

147. *Id.*

148. *Id.*

white defendants.[149] The outcomes of the IAT and vignette exercises suggest that some judges do, in fact, exhibit implicit race biases in some cases.

C. RACIAL SALIENCE

As we study the role of race and implicit bias in tort cases, one concept to keep in mind is that of racial salience, that is, the degree to which race is a prominent and obvious element in the context of the case. Some experimental mock juror research in the criminal context has found that racial salience can affect case outcomes. For example, in one experiment, white mock jurors' conviction rates for black defendants dropped in a racially-charged trial compared to a trial that did not on its face implicate race.[150] Thus, white mock jurors appear to be more biased by a defendant's race in a trial that is not racially charged.[151]

In contrast, other studies have found that "[w]hites were no more lenient towards [b]lack defendants" regardless of the type of trial.[152] Samuel Sommers and Phoebe Ellsworth critiqued the term of racial salience on the grounds that its ambiguous nature created several misconceptions.[153] The first misconception is that " 'race salience' refers to mock jurors' awareness of the defendant's race."[154] The second misconception is that "white juror bias cannot occur when racial issues are salient at trial."[155] The third misconception is that "salient racial issues at trial always lead to white juror leniency."[156] Sommers and Ellsworth argue that racially-charged trials affect juror bias, and they have found that "[w]hite jurors perceived [b]lack and [w]hite defendants as equally guilty" of criminal conduct in racially-charged incidents.[157]

Although there is much to explore about the impact of race salience, even in the criminal context, it seems likely to interact with other features of

149. *Id*. at 1224–25.

150. Ellen S. Cohn et al., *Reducing White Juror Bias: The Role of Race Salience and Racial Attitudes*, 39 J. APPLIED SOC. PSYCHOL. 1953, 1964–65 (2009).

151. Samuel R. Sommers & Phoebe C. Ellsworth, "*Race Salience" in Juror Decision-Making: Misconceptions, Clarifications, and Unanswered Questions*, 27 BEHAV. SCI & L. 599, 605–06 (2009).

152. *Id.* at 605. *But see* Samuel R. Sommers & Phoebe C. Ellsworth, *Race in the Courtroom: Perceptions of Guilt and Dispositional Attributions*, 26 PERSONALITY & SOC. PSYCHOL. BULL. 1367, 1373-74 (2000) (finding white mock jurors did not differentiate between white and black defendants when race was salient, although they did show bias when race was not salient).

153. Sommers & Ellsworth, *supra* note 151, at 600.

154. *Id.* at 603–05. Please note that the capital letters in this quote were reduced to lowercase letters to improve readability.

155. *Id.* at 605. Please note that the capital letters in this quote were reduced to lowercase letters to improve readability.

156. *Id.* 605–06. Please note that the capital letters in this quote were reduced to lowercase letters to improve readability.

157. *Id.* at 605.

cases. The operation of race salience on trials and jury decision making has yet to be fully determined.[158] But it is worth emphasizing that previous research has examined criminal case decision making. An unresolved question is to what extent, if any, racial salience affects jury decision making in the civil context.

III. RESEARCH HYPOTHESES

Field studies have documented some differences along racial lines in tort case outcomes.[159] However, as we noted above, black and white litigants in real world contexts are likely to differ along a host of dimensions, including income, education, resources, and more.[160] Their tort cases may differ as well. By using an experimental approach, we are able to disentangle effects that are linked to the litigant's race itself from other potential sources of differential treatment.

Building on previous research, the current study's objective is to examine the role of race and implicit racial bias in reactions to tort cases. Our major hypotheses, derived from the literature, are as follows:

Prior field research suggests that black plaintiffs will lose more of their cases compared to similarly situated whites.[161] Therefore, we predict that, in our hypothetical tort scenarios, the win rate for black plaintiffs will be lower than that for similarly situated white plaintiffs.

Prior theory and field research suggests that black plaintiffs are apt to seem less deserving and receive lower awards than white plaintiffs.[162] We therefore predict that the race of the plaintiff will influence award amounts, with black plaintiffs receiving lower awards than identically situated white plaintiffs.

Prior field research also suggests that black defendants may generate concerns about the defendant's "empty pockets."[163] Therefore, we predict that plaintiffs who sue black as opposed to otherwise identically situated

158. *Id.* at 608.

159. *See infra* Section I.A.

160. *See infra* notes 32–33 and accompanying text. Kohler-Hausmann found that controlling for income inequality and poverty measures reduced or eliminated the significant effects of county race and ethnicity variables on tort case outcomes. Kohler-Hausmann, *supra* note 29, at 435. She suggested a number of ways in which a community's demographic composition may affect the caseload. *Id.* at 435–38.

161. *See infra* Section I.A.

162. *See* CHAMALLAS & WRIGGINS, *supra* note 6, at 1–6; CHIN & PETERSON, *supra* note 15, at viii–ix.

163. CHIN & PETERSON, *supra* note 15, at ix.

white defendants will receive lower awards.

We predict that a research participant's implicit bias will interact with plaintiff race and defendant race. The stronger a potential juror's implicit preference for whites versus African Americans, the more likely it is that the juror will find for white parties (whether plaintiff or defendant) in tort cases.

We also predict an interaction between a research participant's implicit attitudes for whites versus African Americans and the race of the parties in damage awards. The higher a potential juror's implicit preferences for whites versus African Americans, the more generous the damage awards will be for white plaintiffs over similarly situated black plaintiffs.

Prior research showing variation in race and implicit race bias effects leads us to expect some differences across the scenarios.[164] We used a broad range of tort scenarios that differed in, among other things, the salience of race. As noted above, race salience has been found to affect judgments in other contexts.[165] As outlined earlier, cases in which race is a salient factor can sometimes depress differential treatment of blacks and whites, compared to instances in which race is subtle or not mentioned.[166] However, the current study did not systematically vary race salience while holding all other dimensions of the scenarios constant. The scenarios differed in multiple ways, such as the gender of the litigants, the type of tort, the nature and severity of the injury, and the type of wrongdoing. The multiple dimensions along which the scenarios varied allow us to examine the robustness of race effects in tort cases more generally but do not offer a tightly controlled test of the impact of individual dimensions, including racial salience. Nonetheless, in this initial exploration of the role of race and implicit racial bias in tort cases, it will be interesting to observe whether and how responses to the scenarios differ, and whether the participant's implicit racial bias plays any role.

IV. RESEARCH METHODOLOGY

A. RECRUITMENT OF STUDY PARTICIPANTS

Participants were recruited by the online research firm Toluna to take part in an online experiment.[167] The study was estimated to take thirty

164. *Id.*

165. *See infra* Sections II.A, II.B.

166. *See infra* Sections II.C.

167. The recruitment invitation was as follows:

> You are invited to participate in a research study. We are investigating how people's judgments influence decision making about lawsuits. We have hired Toluna—an online research firm—to recruit subjects with characteristics matching those of adults most likely to serve as jurors and to direct them to a data collection website. There are two parts to the study. In Part 1, you'll

minutes to complete. Toluna awarded those who completed the study four dollars' worth of points, which could be redeemed for cash, gifts, and entry into sweepstakes.

B. EXPERIMENTAL DESIGN

To provide an overview, in the first phase of the research project, the individuals who consented to participate read and evaluated twelve randomly assigned scenarios, answering questions about the defendant's legal responsibility and the plaintiff's deserved damages. The races of the tort scenario litigants were varied by employing stereotypically white and stereotypically black first names. In the second phase of the research project, participants proceeded to the Project Implicit website where they read standard instructions and took the black-white IAT.

In the first tort scenarios phase, participants read twelve randomly assigned and randomly ordered tort scenarios and responded to three questions about each one. For each scenario, after reading the facts, they first rated the defendant's legal responsibility for the plaintiff's injury as follows: "If you were a juror hearing this lawsuit, would you find [the defendant] legally responsible for [the plaintiff's] injury?" They responded on a five-point scale ranging from "definitely yes" to "definitely no." For clarity, the questions repeated the defendant's and the plaintiff's names. Participants reading one scenario, for example, were asked, "If you were a juror hearing this lawsuit, would you find Maurice legally responsible for Joseph's injury?" Second, they were asked, "Assuming that the jury, of which you are a member, has found [the defendant] legally responsible for [the plaintiff's] injury, how much would you award [the plaintiff] in money damages?" and responded on a five-point scale from "very low money damages" to "very high money damages." Again, the questions repeated the defendant's and the plaintiff's names. Finally, they were asked, "Approximately how much, in dollars, would you award?" and were instructed to fill in a dollar amount. Using a scale as well as requesting a specific dollar amount gave us two different ways to assess the valuation of a plaintiff's injury. People vary considerably in what they consider to be low and high money damages, and dollar amounts are often strongly skewed, posing analysis problems.

make judgments about injuries and lawsuits, like the judgments that juries would make. We will describe the facts in 12 civil lawsuits, tell you the legal rule, ask you to decide about who should win each lawsuit, and ask you to assign money damages, if appropriate. The lawsuit descriptions include the kinds of facts like those found in real civil cases. After you have made these judgments about the lawsuits, in Part 2, you will be asked to complete a computerized task that seeks to determine what types of associations you have between categories of individuals and categories of things. You will also be asked to provide some basic demographic information.

Nonetheless, we expect that these measures will be significantly correlated. For example, we anticipate that a person who chooses a scale response favoring high money damages will give a substantial money damage award amount.

Following the completion of the tort scenario part of the experiment, participants were directed to the Harvard IAT website and completed the implicit racial attitudes test.

Finally, participants answered demographic questions, including information about their gender, race, Hispanic/Latino ethnicity, age category, educational attainment, whether they had any formal training in law, employment status, occupational category, and combined household income category for the previous year. They were also asked whether they considered themselves politically liberal, moderate, or conservative, and whether they had served on a jury in either a criminal or a civil case.

Upon completion of the two phases of the experiment, participants were debriefed about the purpose of the study and receive their compensation in points from Toluna.

C. MATERIALS: TORT SCENARIOS

We developed a total of sixteen different scenarios, eight of which varied the plaintiff's black or white race only (plaintiff race scenarios), and eight of which varied both the defendant's black or white race and the plaintiff's black or white race (plaintiff race-defendant race scenarios). All the scenarios are included in Appendix A. The scenarios were relatively brief, about a paragraph in length, and described the facts leading to an injury and the legal rule to be applied. Many of the scenarios were abridged summaries of classic tort cases, the outcomes of which are known to be hotly debated by those who read them. The scenarios include a diversity of tort cases that vary along several metrics: the degree of racial salience, the type of tort, the basis on which the defendant owed a duty of care, the identity of the plaintiff, the type of defendant (individual or entity), whether the plaintiff was arguably also at fault, the type of harm done to the plaintiff (personal, property, or economic), and the degree of that harm. Appendix B provides a table with the coding of each vignette along these metrics.

Each participant evaluated four randomly chosen plaintiff race scenarios and all eight of the plaintiff race-defendant race scenarios. The race of the litigants was varied by using stereotypically black and stereotypically white first names.

Stereotypical names were selected from two sources. Names were drawn from a classic experiment that varied names of potential job applicants

and compared responses to applicants with stereotypically black and stereotypically white names.[168] Additional names were drawn from the 2010 New York City listing of births by sex and ethnicity. We used the relative proportion of the first names of white and black boys and girls to identify predominantly black and predominantly white names.

1. Plaintiff Race Scenarios

The plaintiff race scenarios varied only the black versus white name of the plaintiff, who sued a business or a government entity. These cases reflect a common litigant pairing in contemporary tort cases, whereby an individual plaintiff sues a business, corporate, or governmental entity.[169] The following is an example of the Baby Food Slip scenario, which varied whether the name of the injured plaintiff who sued the grocery store was stereotypically white (Allison) or black (Aisha).

> While shopping at a grocery store, Allison/Aisha slipped on some baby food and fell, causing her to hit her head on the floor. The fall left Allison/Aisha with a concussion. There were several broken jars of baby food on the floor where Allison/Aisha had slipped. The baby food was dirty and messy. A witness stated that he did not hear any jars falling from the shelves or otherwise breaking for 15 to 20 minutes before the accident occurred. The aisle where the accident occurred had not been cleaned or inspected for at least 50 minutes prior to the accident and possibly as long as two hours. Allison/Aisha sued the grocery store for negligently failing to clean the dangerous condition of the aisle. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

The seven other plaintiff race scenarios described a wide variety of injuries, including a beauty salon fire, death in a police station drunk tank, wrongful termination from a job in a nursing home, poisoned farmworkers, discrimination in a property rental, an electric burn from an exposed trolley

168. Marianne Bertrand & Sendhil Mullainathan, *Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination*, 94 AM. ECON. REV. 991, 994–97 (2004).

169. *See* Gillian K. Hadfield, *Exploring Economic and Democratic Theories of Civil Litigation: Differences Between Individual and Organizational Litigants in the Disposition of Federal Civil Cases*, 57 STAN. L. REV. 1275, 1298 tbl.2, 1302 fig.2 (2005) (showing that individual plaintiffs sued organizations in 60.5 percent of federal civil cases in 2000, and that plaintiffs sued organizations in a substantial majority of federal tort cases in 2000); *cf.* VALERIE P. HANS, BUSINESS ON TRIAL 232 n.53 (2000) (stating that during the 1992 fiscal year a little over half of defendants in civil jury trials were businesses). *But see* THOMAS H. COHEN, U.S. DEP'T OF JUSTICE, NCJ 228129, TORT BENCH AND JURY TRIALS IN STATE COURTS 2005 (2009) (showing that individuals suing businesses or hospitals constituted more than a third of all torts lawsuits in state courts while individuals suing individuals constituted the majority of lawsuits in state courts).

wire, and a vandalized bus. Defendants in these scenarios included a grocery store, police department, beauty salon, nursing home,[170] manufacturer, real estate agency, trolley company, and a school district.

2. Plaintiff Race and Defendant Race Scenarios

The plaintiff and defendant race scenarios used 2 x 2 designs, with four different versions of each of the scenarios: black defendant and black plaintiff, black defendant and white plaintiff, white defendant and black plaintiff, and white defendant and white plaintiff. Two unique black names and two unique white names were used for each scenario, with one of the black names and one of the white names common to three of the four conditions.

The following is an example of the Gun Shooting scenario, one of the 2 x 2 plaintiff race-defendant race scenarios. In this scenario, there is a white defendant Zachary or black defendant Maurice, and a white plaintiff Joseph or a black plaintiff Jamel.

> Zachary's/Maurice's 15-year-old son accidentally shot Joseph/Jamel, a stranger who happened to be walking on the sidewalk by the house, using Zachary's/Maurice's handgun. Zachary/Maurice kept the unloaded gun, along with its ammunition, in a locked gun cabinet. The key to the cabinet stayed with Zachary/Maurice at all times, and Zachary/Maurice told his son not to use the gun without supervision. The son used a screwdriver to open Zachary's/Maurice's locked gun cabinet and gain access to the gun and ammunition. Joseph/Jamel, who was in the hospital for two weeks with a punctured lung, has sued Zachary/Maurice for negligently allowing his son to access the gun. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

In addition to the Gun Shooting scenario above, the other plaintiff race-defendant race scenarios depicted a racially-tinged fight between basketball teammates,[171] failure to get help for an injured friend, an eye injury caused by someone trying to break up a dog fight, a car accident by an epileptic driver, a diving injury, and a car accident caused by a trampoline blown by the wind. An eighth 2 x 2 scenario, depicting a person who was injured by tripping over a repairman, was originally included in the study. However,

170. The nursing home scenario involved a charge of race discrimination in firing. It varied both the plaintiff's race, as in other scenarios, but also varied the typical race of the nursing home residents. The race of the plaintiff and the predominant race of the nursing home residents always differed. A black plaintiff was fired from a nursing home with predominantly white residents; a white plaintiff was fired from a nursing home with predominantly black residents.

171. The Basketball Team scenario also varied whether the high school was predominantly white or black.

data from that scenario were unusable because of a random assignment error by the individual administering the tort vignette experiment online. All responses to that scenario were removed from the dataset and are not considered further.

D. CHARACTERISTICS OF THE NATIONAL SAMPLE

We cleaned the dataset received from the Project Implicit administrator, dropping participants who did not complete both the tort scenarios phase and the IAT phase of the research study. We also removed those who failed to complete at least eight of the twelve demographic questions and two individuals who gave the same responses to all questions. The remaining sample of 1,107 participants included a cross-section of US residents, although proportionately more women, more whites, and more educated individuals participated in the study compared to their numbers in the national population.[172] Forty-two percent of the respondents were male. Asked about their race, most respondents said they were white (85 percent), with 7 percent black/African American, 5 percent Asian, and 2 percent another race. Six percent responded that they were of Hispanic, Latino, or Spanish origin.

There was a mix of ages, incomes, education levels, and occupations. Participants indicated their age categories, with 13 percent indicating they were between the ages of eighteen and thirty, 21 percent between the ages of thirty and thirty-nine, 17 percent between the ages of forty and forty-nine, 20 percent between the ages of fifty and fifty-nine, and 30 percent reporting

172. U.S. Census data offer some relevant comparisons. In the 2010 Census, U.S. residents were 49 percent male and 51 percent female. *See* LINDSAY M. HOWDEN & JULIE A. MEYER, U.S. DEP'T OF COMMERCE, C2010BR-03, AGE AND SEX COMPOSITION: 2010 (2011), https://www.census.gov/prod/cen2010/briefs/c2010br-03.pdf [https://perma.cc/E36X-87H3]. As of 2019, for the population that is twenty-five years of age and older, 28 percent had graduated from high school, 23 percent had four years of college, and 36 percent had a bachelor's degree or higher. *See U.S. Census Bureau Releases New Educational Attainment Data*, U.S. CENSUS BUREAU (Mar. 30, 2020), https://www.census.gov/newsroom/press-releases/2020/educational-attainment.html [https://perma.cc/Y5KL-TGG4]. For data files of the population's educational attainment, see *Educational Attainment in the United States: 2019*, U.S. CENSUS BUREAU (Mar. 30, 2020), https://www.census.gov/content/census/en/data/tables/2019/demo/educational-attainment/cps-detailed-tables.html [https://perma.cc/EBS3-9LWT]. As for race, U.S. Census data indicate that 13 percent of those fifteen years of age and older identified themselves as black, either alone or in combination with other races. *The Black Alone or in Combination Population in the United States: 2014*, U.S. CENSUS BUREAU, https://www.census.gov/data/tables/2014/demo/race/ppl-bc14.html [https://perma.cc/8JTM-29UZ] (follow "Table 15. Population by Sex and Age, for Black Alone or in Combination and White Alone, Not Hispanic: 2014" hyperlink). For ethnicity, U.S. Census data indicate that in 2014, 16 percent of those fifteen years of age and older claimed Hispanic ancestry. *The Hispanic Population in the United States: 2014*, U.S. CENSUS BUREAU, https://www.census.gov/data/tables/2014/demo/hispanic-origin/2014-cps.html [https://perma.cc/FVA5-KR7U] (follow "Table 1. Population by Sex, Age, Hispanic Origin, and Race: 2014" hyperlink).

they were sixty or older. Asked for their highest degree or level of educational attainment, just 2 percent said they had less than a high school degree, 20 percent said they had a high school degree or its equivalent, 26 percent said they had some college but no degree, 11 percent reported having an associate degree, 29 percent said they had a bachelor's degree, and 14 percent reported they had a graduate degree. One percent of the sample said they had a J.D.; another 3 percent said they had some formal training in law, but no law degree.

Half of the sample was employed, working either full-time, forty or more hours a week (24 percent), or working less than forty hours (26 percent). Ten percent were unemployed and looking for work; another 10 percent were unemployed but not looking for work. Seven percent indicated they were disabled and unable to work. Retirees constituted 24 percent of the sample. Those who were presently employed reported a broad range of occupational categories, including managerial specialties (12 percent), professional jobs (18 percent), technical and sales work (20 percent), service occupations (9 percent), work as an operator, laborer, or in transportation (7 percent), mechanic or craftsperson (2 percent), or another occupation (32 percent). As for household income, 20 percent reported household income of less than $20,000, 19 percent said their household income was between $20,000–$34,999, 15 percent between $35,000–$49,000, 21 percent between $50,000–$74,999, 11 percent between $75,000–$99,999, 9 percent between $100,000–$149,000, and 5 percent reported their household income as $150,000 or more.

Their political views, tapped on a seven-point scale from very liberal to very conservative, were nearly evenly balanced across liberal (32 percent), moderate (32 percent), and conservative (36 percent) views. Fifteen percent had served on a civil jury, and 17 percent had served on a criminal jury.

As for the sample's IAT scores, the mean IAT score, calculated by Project Implicit following their standard protocol, was 0.61.[173] The lower the

173. For detailed information about Project Implicit's standard protocol for calculating IAT scores, see Anthony G. Greenwald et al., *Understanding and Using the Implicit Association Test: I. An Improved Scoring Algorithm*, 85 J. PERSONALITY & SOC. PSYCHOL. 197, 201 (2003); Kristin A. Lane et al., *Understanding and Using the Implicit Association Test: IV – What We Know (So Far) About the Method*, *in* IMPLICIT MEASURES OF ATTITUDES, *supra* note 79, at 59. For more information, see SUMMARY OF IMPROVED SCORING ALGORITHM, https://faculty.washington.edu/agg/IATmaterials/Summary%20of%20Improved%20Scoring%20Algorithm.pdf [https://perma.cc/FH3A-Y58Q]; *Implicit Association Test Materials*, ANTHONY G. GREENWALD, PHD, http://faculty.washington.edu/agg/iat_materials.htm [https://perma.cc/L3T3-LG8G]. Detailed data for our sample are as follows: The overall response latency was 983.79, with a minimum of 301.62 and a maximum of 2,906.59. The latency for white positive was 855.88; the latency for black positive was 1,111.77. The error rate for white positive was 5.15; for black positive, it was 10.27. The percentage of trials that were very slow (three thousand milliseconds or more)

score, the weaker the negative association with African-American faces and positive association with Caucasian faces; the higher the score, the stronger the negative association with African-American faces and positive association with Caucasian faces. A score of 0.61 is high in comparison to internet samples in other studies, which tend to be in the 0.35 range, but more in line with Rachlinski and colleagues' study with judges.[174] The mean latency of responses was 983.79 milliseconds. The error rate was acceptable at 7.71 percent.

Not surprisingly, specific demographic variables were related to the IAT score. We compared IAT scores for demographic groups, including the variables of age, education, employment, gender, income, politics, and race. Several demographic factors emerged as significant factors. Race produced the greatest average differences ($F(2, 1101) = 58.85$, $p < .001$), whereby African-American participants had significantly lower IAT scores ($M = .11$) than either Caucasian/white participants ($M = .66$) or participants who identified themselves as belonging to other racial groups ($M = .58$, both p-values $< .001$).

Age was associated with IAT scores ($F(5, 1094) = 5.02$, $p < .001$). Those in the 21–29-year age range had significantly lower IAT scores ($M = .47$) than older age participants. Notably, the latencies of responses for both white and black targets increased as a function of age. That is consistent with other research showing age differences in response latency.[175]

The participants' current employment statuses also were associated with IAT scores ($F(8,720) = 2.00$, $p < .04$). Those who were not employed and not looking for work had significantly higher IAT scores ($M = .71$) than those who were employed, not employed but looking for work, and the disabled.

Finally, political liberalism/conservatism was also associated with IAT scores ($F(6, 1080) = 2.35$, $p = .03$). Participants who described themselves

was 1.98 percent; the percentage of trials that were very fast (under three hundred milliseconds) was 1.64 percent. The percentage of trials in which there was an error (that is, the participant hit the wrong key first) was 7.71 percent.

174. Rachlinski et al., *supra* note 144, at 1210–11, 1246 (describing how judges in their study had higher IAT scores than internet samples, and ascribing at least some of the scoring difference to generally slower responses).

175. Karen Gonsalkorale et al., *Aging and Prejudice: Diminished Regulation of Automatic Race Bias Among Older Adults,* 45 J. EXPERIMENTAL SOC. PSYCHOL. 410, 412 (2009) (finding increased implicit racial preferences favoring whites among older participants); Greenwald, et al., *supra* note 173, at 198; Rachlinski et al., *supra* note 144, at 1246 ("[O]ur judges have higher IAT scores than other populations simply because they were somewhat slower.").

as very liberal had significantly lower IAT scores ($M = .50$) than those who said they were moderate ($M = .60$) or very conservative ($M = .68$) (all p-values $< .05$). The IAT scores did not differ significantly for those with or without Latino ancestry, for men versus women, by educational attainment, by income, and for those of different occupational categories.

V. RESULTS

The two different sets of tort scenarios were analyzed separately.

A. PLAINTIFF RACE SCENARIOS

1. Legal Responsibility Question

We analyzed responses to the legal responsibility question, considering the Scenario, Plaintiff Race, and the IAT score of the participant. Table 1 shows participants' judgments about the defendant's legal responsibility for each tort scenario.

TABLE 1. Plaintiff Race Scenarios: Responses to Legal Responsibility Question

	Scenario (Defendant)	*Definitely No*	*Probably No*	*Unsure*	*Probably Yes*	*Definitely Yes*	*Total Responses (N's)*
1.	Baby Food Slip (Grocery Store)	2.0%	5.2%	11.5%	38.2%	43.1%	557
2.	Hair Fire (Beauty Salon)	26.2%	22.4%	18.2%	21.5%	11.7%	545
3.	Drunk Tank (Police Department)	3.6%	9.8%	13.6%	35.3%	37.7%	552
4.	Nursing Home (Nursing Home)	10.6%	16.6%	31.6%	28.3%	13.0%	548
5.	Poisoned Farmworkers (Manufacturer)	18.6%	23.6%	15.3%	25.0%	17.5%	555
6.	Property Rental (Real Estate Agency)	11.9%	13.2%	16.6%	32.1%	26.2%	561
7.	Trolley Wire (Trolley Company)	30.5%	30.1%	13.9%	19.1%	6.5%	555
8.	Vandalized Bus (School District)	45.6%	24.4%	12.5%	11.2%	6.3%	553

Note: Participants were asked: "If you were a juror hearing this lawsuit, would you find [the defendant] legally responsible for [the plaintiff's] injury?"

One can observe that in some scenarios, including the Baby Food Slip, Drunk Tank, and Property Rental, most of the participants concluded that the defendant was legally responsible for the plaintiff's injury. In others, the Hair Fire, Nursing Home, Trolley Wire, and Vandalized Bus scenarios, only a minority agreed that the defendant was legally responsible. In the Poisoned Farmworkers scenario, respondents were nearly evenly split on the question.

The statistical analysis, displayed in Table 2, confirms that judgments of legal responsibility varied significantly by the scenario.[176] That was expected, as evidence of defendant fault differed across scenarios. However, in contrast to our predictions and some prior field work that has identified

176. All statistical analyses controlled for the fact that individuals rated multiple scenarios.

plaintiff race as a factor in judgments of legal responsibility, we observed no significant main or interaction effects with the plaintiff's race. Indeed, there were no significant interactions among the variables.

TABLE 2. Final Model: Plaintiff Race Scenarios, Legal Responsibility Question

Tests of Fixed Effects				
Source	*Numerator df*	*Denominator df*	*F*	*Sig.*
Intercept	1	1,104.942	7,447.317	.000
Scenario	7	3,922.931	201.236	.000
Plaintiff Race	1	3,313.781	1.550	.213
IAT Score	1	1,105.580	2.147	.143

Notes: Dependent variable: "If you were a juror hearing this lawsuit, would you find [the defendant] legally responsible for [the plaintiff's] injury?" Nonsignificant interactions removed.

2. Award Questions

We asked about award preferences two different ways. We requested both a scale judgment (how much would you award, from low money damages to high money damages) and an actual dollar amount. Table 3 presents the statistical analysis for the scaled award judgments.

TABLE 3. Final Model: Plaintiff Race Scenarios, Scaled Award Question

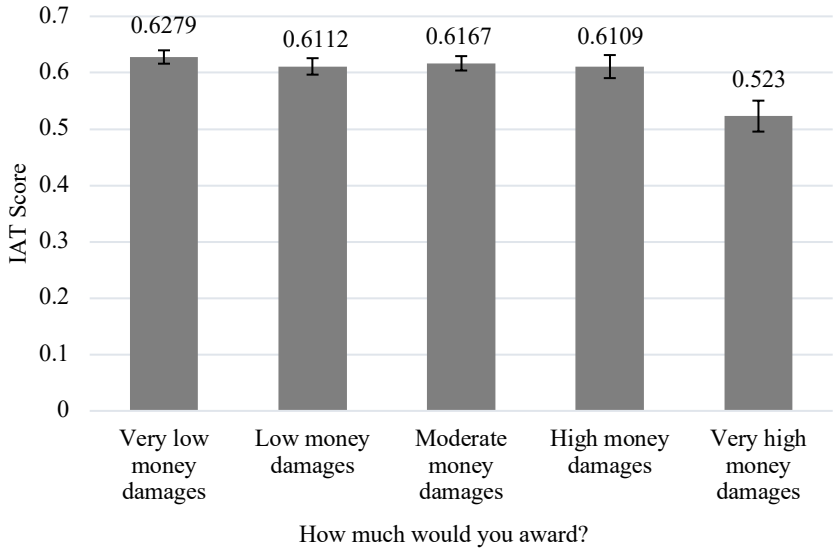
Tests of Fixed Effects

Source	*Numerator df*	*Denominator df*	*F*	*Sig.*
Intercept	1	1,105.884	4,929.225	.000
Scenario	7	3,834.247	154.631	.000
Plaintiff Race	1	3,308.085	2.422	.120
IAT Score	1	1,106.195	6.845	.009
Scenario x Plaintiff Race	7	4,279.752	2.497	.015

Notes: Dependent variable: "Assuming that the jury, of which you are a member, has found [the defendant] legally responsible for [the plaintiff's] injury, how much would you award [the plaintiff] in money damages?" Nonsignificant interactions removed.

Several results are worth noting. First and most importantly, a participant's IAT score was a significant predictor of the scaled award. Those who scored high on the IAT, showing stronger implicit preferences for whites over blacks, were less generous overall to both black and white plaintiffs suing the business or government defendants. One can observe from Figure 1, which plots the average IAT scores for each of the scaled award categories, that the IAT differences emerge only at the highest level of scaled damages. Participants with comparatively low IAT scores appear more willing to give very high money damages.

FIGURE 1. Scaled Award Judgment by IAT Score



Notes: Figure 1 depicts mean values of IAT scores for each scaled award category. Error bars represent +/- one standard error.

Scaled awards varied significantly across scenarios, as expected, as the injuries differed dramatically. Notably, there was also a significant interaction between the plaintiff's race and the scenario. Overall, the mean scaled award for black plaintiffs (M = 2.38)[177] was slightly but nonsignificantly lower than the mean scaled award (M = 2.41) for white plaintiffs. However, in the Baby Food Slip scenario, participants said they would award the black plaintiff significantly more (M = 2.95) than the white plaintiff (M = 2.68).

As for the dollar awards, they were highly variable and strongly skewed (skewness of 66.53, SE = .04), with a small number of extreme outlier awards, which violated traditional assumptions of statistical analysis. Therefore, we performed a natural log transformation on the dollar awards, removed the five most extreme values, and employed these natural log values in the statistical analyses.[178] Table 4 presents the results of the analysis.

177. We report here and elsewhere estimated marginal means, or *EMM*, which take into account the effects of other variables in the data analysis.

178. We first explored how different transformations affected the residuals before settling on a natural log transformation, which produced the most normal distribution of the residuals.

TABLE 4. Final Model, Plaintiff Race Scenarios, Dollar Award Question

Tests of Fixed Effects

Source	*Numerator df*	*Denominator df*	*F*	*Sig.*
Intercept	1	1,104.652	4,162.187	.000
Scenario	7	3,650.172	140.707	.000
Plaintiff Race	1	3,312.235	.910	.340
IAT Score	1	1,105.011	.704	.402

Notes: Dependent variable: logged dollars. Nonsignificant interactions removed.

As with the analyses of legal liability and how much to award, the logged dollar amounts award varied significantly across the scenarios. However, plaintiff race and the participant's IAT score did not emerge as significant predictors.

In sum, the specific scenario evaluated by the participant affected judgments of legal responsibility, scaled awards, and dollar awards. The participants' IAT scores affected scaled awards, but did not interact with the plaintiff's race, as we had predicted. Instead, the participants who scored high on the IAT recommended lower money damages against plaintiffs of both races.

B. PLAINTIFF RACE-DEFENDANT RACE SCENARIOS

In contrast to the first set of scenarios, in which plaintiff race was varied and a business or a government entity was the defendant, the second set of scenarios varied the race of both the defendant and the plaintiff. Overall, these analyses showed wider effects of litigant race and participants' racial attitudes.

1. Legal Responsibility Question

We analyzed responses to the legal responsibility question, considering the scenario, plaintiff race, defendant race, and the IAT score of the participant. Table 5 shows the ratings of the defendant's legal responsibility for the different tort scenarios, and Table 6 provides the statistical analysis. Overall, plaintiff race did not influence judgments of legal responsibility.

TABLE 5. Plaintiff Race and Defendant Race Scenarios, Responses to Legal Responsibility Question

	Scenario	*Definitely No*	*Probably No*	*Unsure*	*Probably Yes*	*Definitely Yes*	*Total Responses (N's)*
1.	Gun Shooting	21.6%	18.4%	13.0%	22.9%	24.1%	1107
2.	Basketball Team	5.0%	8.8%	19.4%	35.7%	31.1%	1106
3.	Beer and a Beating	7.6%	10.8%	16.6%	37.3%	27.8%	1106
4.	Dogfight	17.9%	24.3%	15.6%	25.0%	17.1%	1106
5.	Epileptic Driver	26.1%	24.8%	16.1%	20.8%	12.2%	1107
6.	Diving Injury	26.4%	27.6%	18.5%	17.9%	9.7%	1107
7.	Away Without Leave ("AWOL") Trampoline	6.2%	11.5%	13.1%	35.7%	33.5%	1107

Notes: Participants were asked: "If you were a juror hearing this lawsuit, would you find [the defendant] legally responsible for [the plaintiff's] injury?" Scenario 8 (Tripped on Repairman) data were excluded from analyses because of an error in random assignment during administration.

Table 5 shows how the ratings of the defendant's legal responsibility varied across tort scenarios. In some scenarios, including the Basketball Team, Beer and a Beating, and the AWOL Trampoline scenarios, most of the participants concluded that the defendant was legally responsible for the plaintiff's injury. In the others, the Epileptic Driver and Shallow Diver scenarios, only a minority agreed that the defendant was legally responsible. Respondents were closely split with regard to the Dogfight and Gun Shooting scenarios.

Table 6 shows the final statistical model for the judgments of legal responsibility.[179]

179. In the statistical analyses that follow, we adopted the following procedure. First, full models with all main effects and interaction effects were included in the analysis. Then, nonsignificant interaction effects were removed one at a time to produce a final model of effects. All main effects, whether statistically significant or not, were retained in the final model.

TABLE 6. Final Model: Plaintiff Race and Defendant Race Scenarios, Legal Responsibility Question

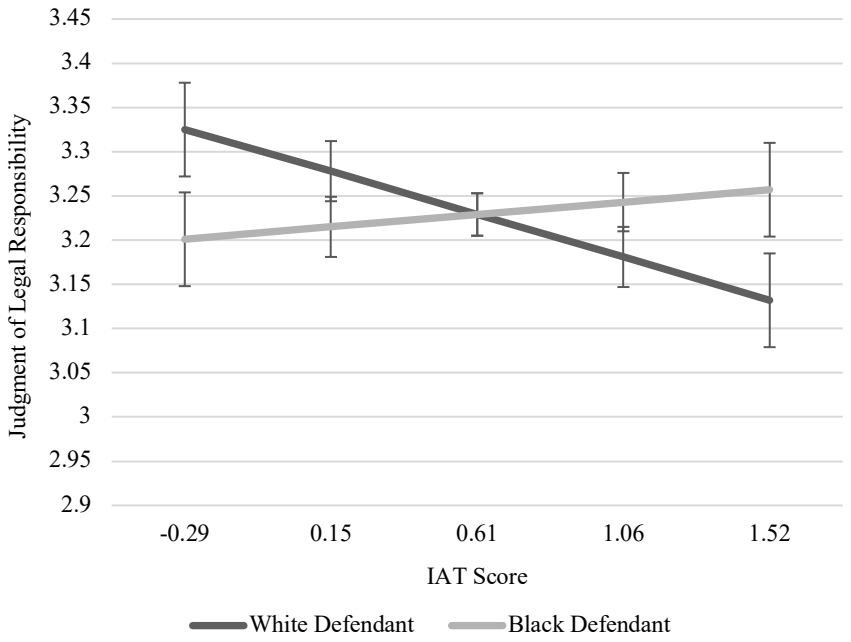
Tests of Fixed Effects				
Source	*Numerator df*	*Denominator df*	*F*	*Sig.*
Intercept	1	1,109.311	10,221.535	.000
Scenario	6	6,633.732	196.423	.000
Plaintiff Race	1	6,772.191	.463	.496
Defendant Race	1	6;772.011	3.131	.077
IAT Score	1	1,106.123	.815	.367
Defendant Race x IAT Score	1	6,771.712	4.942	.026
Scenario x Defendant Race	6	7,579.639	4.287	.000

Notes: Dependent variable: "If you were a juror hearing this lawsuit, would you find [the defendant] legally responsible for [the plaintiff's] injury?" Nonsignificant interactions removed.

Confirming the obvious differences in Table 5, judgments of legal responsibility varied by the scenario. In addition, there were two statistically significant interaction effects: between the scenario and the defendant's race, and between the defendant's race and the participant's IAT score. We will take up each of these interaction effects in turn.

First, the impact of the defendant's race depended on the participant's IAT score. Figure 2 shows the nature of the statistically significant interaction by plotting judgments of legal responsibility for white and black defendants at five levels of the IAT score: two standard deviations below the mean (-0.29), one standard deviation below the mean (0.15), the mean (0.61), one standard deviation above the mean (1.06), and two standard deviations above the mean (1.52).

FIGURE 2. Relationship Between Participants' IAT Scores and Judgments of Legal Responsibility



Notes: Values represent estimated marginal means at five IAT values. Error bars represent +/- one standard error.

Those with extremely low IAT scores attributed significantly more legal responsibility to white defendants compared to black defendants. In a mirror image, those with extremely high IAT scores attributed significantly more legal responsibility to black defendants compared to white defendants. Means for white versus black defendants differed significantly at the lowest (-.29, p = .048) and highest (1.52, p = .046) values of the IAT. Figure 2 reveals a striking decline in attribution of legal responsibility to white defendants as IAT scores increase. Interestingly, as one can see by the flatter line for black defendants compared to white defendants, judgments of black defendants were not affected by the participants' IAT scores. Statistical analysis confirmed that it was the white defendants' legal responsibility, not black defendants' legal responsibility, that varied along with the IAT score.

In these tort cases, the defendant's race interacted significantly with the specific tort scenario. Two scenarios in particular produced differences for white and black defendants, but in opposite directions. Pairwise comparisons revealed that in the Basketball Team scenario, the black defendant (M = 3.90)

was attributed more responsibility than the white defendant ($M = 3.67$, $p = .003$). In contrast, in the Gun Shooting scenario, the white defendant ($M = 3.23$) was given more legal responsibility than the black defendant ($M = 2.98$, $p = .001$). No other scenario comparisons reached statistical significance. In short, the defendant's race mattered, but how it mattered depended on the context.

2. Award Questions

The scaled award judgments showed a very similar pattern of results to the legal responsibility question. Table 7 presents the final model for scaled award judgments, showing a significant effect for the defendant's race, a marginal effect for the IAT score, and a significant interaction between the two.

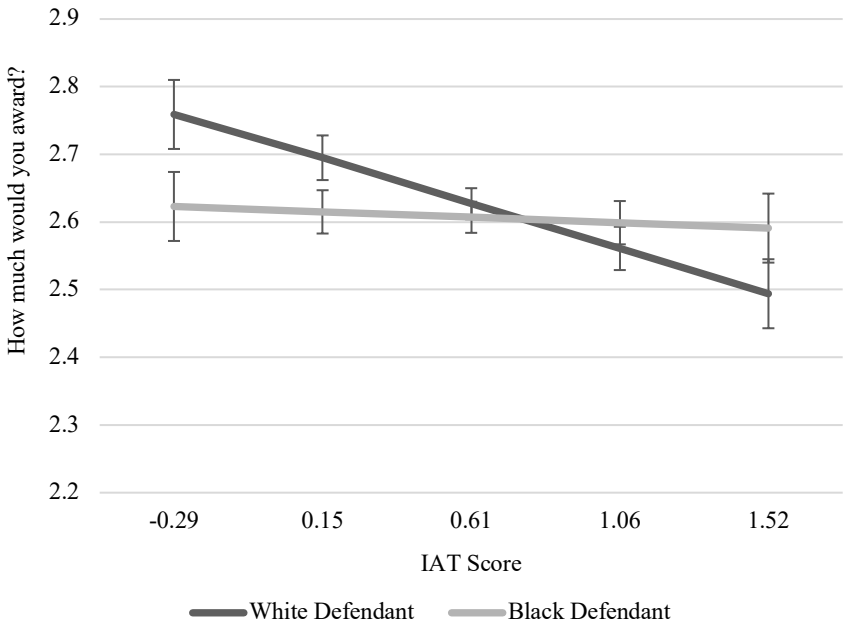
TABLE 7. Final Model: Plaintiff and Defendant Race Scenarios, Scaled Award Question

Type III Tests of Fixed Effects				
Source	*Numerator df*	*Denominator df*	*F*	*Sig.*
Intercept	1	1,108.722	6,847.421	.000
Scenario	6	6,631.939	60.437	.000
Plaintiff Race	1	6,736.322	1.802	.179
Defendant Race	1	6,736.115	5.848	.016
IAT Score	1	1,106.210	3.785	.052
Defendant Race x IAT Score	1	6,735.903	5.753	.016
Scenario x Defendant Race	6	7,423.914	4.141	.000

Notes: Dependent variable: "Assuming that the jury, of which you are a member, has found [the defendant] legally responsible for [the plaintiff's] injury, how much would you award [the plaintiff] in money damages?" Nonsignificant interactions removed.

The interaction between the IAT score and the defendant's race is displayed in Figure 3.

FIGURE 3. Relationship Between Participant's IAT Scores and Scaled Awards



Notes: Values represent estimated marginal means at five IAT values. Error bars represent +/- one standard error.

As one can observe in Figure 3, low IAT scorers were willing to award more to plaintiffs who sued white defendants as opposed to black defendants. At the highest IAT scores, the means were reversed, with these participants recommending higher awards for plaintiffs who sued black defendants. Pairwise comparisons showed that the scaled awards for the white defendant were significantly higher at the lowest two values of the IAT (at -0.29, $p = .01$; at 0.15, $p = .02$). The difference at the highest value was marginally significant (1.52, $p = .08$).[180] Analysis confirmed that participants' IAT scores were associated only with scaled award differences for the white

180. Because white and black participants have distinctive IAT scores, we explored the possibility that the preference for black defendants over white defendants shown by low IAT scorers and the preference for white defendants over black defendants by high IAT scorers reflected own-race bias. However, when we analyzed just white participants' responses, we found similar interaction patterns, although the significance levels differed somewhat. The interaction between IAT scores and defendant race for the legal responsibility judgment became marginal ($p = .10$), but the interaction remained statistically significant for the scaled award ($p = .04$). Therefore, the pattern we discovered does not exclusively reflect own-race bias.

defendants; awards for black defendants did not vary as a function of IAT scores.

The defendant's race also interacted significantly with the scenario. As in the legal responsibility judgments, the defendant's race mattered in some scenarios but not others. In the Beer and a Beating and Gun Shooting scenarios, participants awarded significantly higher scaled damages to the plaintiffs who sued white defendants compared to those who sued black defendants (p = .03 and p = .001, respectively). However, in the Shallow Diver scenario, participants awarded higher scaled damages to the plaintiff who sued the black defendant (p. = .007).

Table 8 shows the final model for the logged dollar awards.

TABLE 8. Final Model: Plaintiff and Defendant Race Scenarios, Logged Dollar Award

Tests of Fixed Effects

Source	*Numerator df*	*Denominator df*	*F*	*Sig.*
Intercept	1	1,107.407	5,661.834	.000
Scenario	6	6,629.870	45.308	.000
Plaintiff Race	1	6,688.319	4.877	.027
Defendant Race	1	6,686.914	.002	.964
IAT Score	1	1,105.892	.930	.335
Scenario x Defendant Race	6	7,128.799	2.123	.048

Notes: Dependent variable: logged dollars. Nonsignificant interactions removed.

As shown in Table 8, there was a statistically significant effect for the plaintiff's race. White plaintiffs (M = 8.85) in the tort scenarios were awarded more in logged dollars than black plaintiffs (M = 8.71, p = .03). The injuries of white plaintiffs were valued more highly than the injuries of black plaintiffs, in line with our predictions.

There is also a statistically significant interaction between the scenario and the defendant's race, yet the effect goes in opposite directions depending on the scenario. Replicating two of the patterns for scaled awards, in the Gun Shooting scenario, the white defendant had to pay significantly more (p =

.02); in the Shallow Diver scenario, it is the black defendant who must pay significantly more ($p = .02$).

C. SUMMARY OF FINDINGS TIED TO STUDY HYPOTHESES

Before briefly exploring the implications of these diverse and complex findings, it is helpful to summarize them in terms of our original hypotheses. We predicted the following:

(1) Black plaintiffs would win less frequently than their white counterparts.

Contrary to our hypothesis, plaintiff race was not a factor in liability determinations.

As for the defendants, an interesting result emerged on liability judgments. Two scenarios produced differences for white and black defendants, in opposite directions. In the Basketball Team scenario, the black defendant was attributed more responsibility than the white defendant. By contrast, in the Gun Shooting scenario, the white defendant was given more legal responsibility than the black defendant.

(2) Black plaintiffs would receive lower damage awards than white plaintiffs.

Contrary to our hypothesis, plaintiff race was not a factor in either scaled or dollar awards in suits against institutional defendants, with one exception: in the Baby Food Slip scenario, the black plaintiff was awarded higher damages than the white plaintiff, which also cuts against our hypothesis.

Consistent with our hypothesis, however, in suits against individual defendants, black plaintiffs were awarded lower dollar damage awards than white plaintiffs. The scaled award question did not show statistically significant differences in awards to black and white plaintiffs ($p = .179$, ns). It is interesting to speculate why. Overall, scaled responses and the logged value of dollar damage awards were reasonably well correlated ($r = .66$, $p = .0001$). However, people's attitudes and the meaning they place on amounts of money might well affect the specific dollars they consider to be "low" and "high." As participants consider what constitutes a "high" amount of money for an individual plaintiff, the plaintiff's racial identity appears to come into play.

(3) Black defendants would be assigned lower damage awards than white defendants.

Contrary to our hypothesis, we found no consistent trend in damage awards against black and white defendants. Rather, the defendant's race mattered in some scenarios but not in others. In the Beer and a Beating and Gun Shooting scenarios, participants ordered significantly higher damages against white defendants than black defendants. However, in the Shallow Diver scenario, participants awarded higher damages against the black defendant. In addition, as we observe below, defendant race interacted with the participants' IAT scores.

(4) The higher the IAT score (more pro-white/anti-black bias), the more often the white party (whether plaintiff or defendant) would win.

This hypothesis was partially confirmed. The higher the participant IAT score, the less likely a white defendant was held liable; the lower the IAT score, the more likely a white defendant was liable. IAT scores did not, however, affect the liability of black defendants or the win-rate of black or white plaintiffs.

(5) The higher the IAT score, the higher damage awards would be for white plaintiffs versus black plaintiffs.

Our study found no evidence that IAT scores predicted differences in damage awards depending on the race of the plaintiff. The higher the IAT score, however, the less generous a juror's awards against institutional defendants, regardless of the race of the plaintiff.

As we noted above, low IAT scorers ordered white defendants to pay more damages than black defendants; high IAT scorers ordered black defendants to pay more than white defendants—this was true regardless of the race of the plaintiff.

(6) Results would differ across scenarios, and vignettes with high racial salience might produce outlier results of some kind.

Our results confirmed the prediction that results would vary across vignettes. For example, participants ordered white defendants to pay higher damages in the Beer and a Beating scenario but ordered black defendants to pay more in the Shallow Diving scenario. Some possible explanations for these differences are discussed below.

With regard to certain scenario-specific results, racial salience did seem to matter—particularly with regard to the basketball vignette, in which the black defendant was more often liable than the white defendant. Race might

have been salient also in the Gun Shooting scenario, although resulting in greater liability for the white defendant.

VI. DISCUSSION

The results of this study complicate the narrative that race and unconscious bias predictably and uniformly harm African-American litigants. Although this proved accurate in some dimensions of the study, other results suggest that racial bias either plays no role in tort outcomes or that its role is highly dependent on the facts of the particular case. We address the implications of these results below, then discuss how courts might account for them.

A. INTERPRETATIONS, IMPLICATIONS, AND OPPORTUNITIES FOR FUTURE STUDY

1. Race of the Parties

According to our results, the race of the plaintiff does not affect liability determinations. One might take this as good news—perhaps wronged black plaintiffs are no longer disregarded by juries as they once were. On the other hand, it would be difficult to explain why this effect would be true with regard to plaintiff race, but not defendant race, with regard to which this study did find race effects.

The damages picture for black plaintiffs is more complicated. Although there were no race-based differences in damage awards against institutional defendants, black plaintiffs were awarded lesser damages than white plaintiffs in suits between individuals. This troubles the notion, proposed by Martha Chamallas, that differences in damage awards may be traced to jurors' expectations about the economic status of black plaintiffs.[181] If that were accurate, one would expect similar award differences in suits against individual and institutional defendants. Furthermore, although it is possible that award differences might be traced to animus against black defendants, this seems unlikely in light of the fact that there were no parallel differences in liability determinations. In short, teasing out the causal factors underlying these findings would require further study.

It is also worth briefly speculating about why logged dollars showed a race effect while scaled awards did not. One possibility is that plaintiff race enters into the transformation of the gist of the award into verbatim

181. *See* Martha Chamallas, *The Architecture of Bias: Deep Structures in Tort Law*, 146 U. PA. L. REV. 463, 481–83 (1998) (identifying different expectations for women and minority men versus white men).

dollars.[182] An injury might be seen as deserving "high money damages," for example, but as the person thinks about what is an appropriate amount for a high money damage award for a white versus a black plaintiff, the plaintiff's race subtly shifts the dollar amounts.

Our findings regarding defendant's race are even more intriguing, for defendant race seems to matter—with respect both to liability and damages—depending on the specific facts of the case. That the black defendant was attributed more responsibility than the white defendant in the Basketball Team scenario seems consistent with a frequent narrative with respect to race: a negative backlash to perceived anti-white racism.[183] Recall that the Basketball Team scenario involved a battery resulting from an alleged racial epithet. By contrast, the white defendant was assigned more responsibility than the black defendant in the Gun Shooting vignette, perhaps revealing that respondents have higher expectations of white parents than black parents with regard to the handling of guns in the home. A similar stereotype might explain the results of the Beer and a Beating vignette, in which a white driver was ordered to pay more in damages than a black driver. This result might reflect stereotypes about the behavior expected of white versus black teens carousing late at night. Rather than falling in line with simple anti-white or anti-black sentiments, these various findings suggest that tort cases trigger specific stereotypes, creating biased results only in particular cases.

As a final point, it is worth mentioning the Shallow Diver vignette, in which respondents assigned higher damages to a black defendant, regardless of the race of the plaintiff. It is difficult to explain this result in terms of simple anti-black bias or by reference to any obvious racial stereotype. The lesson from this is not, however, that racial bias cannot explain the respondents' decision making in that case. Rather, the race of the defendant might well make a difference in the outcome of a tort suit, and the explanation underlying the difference might remain opaque. This is certainly true in other contexts—for example, standardized testing. Frequently, a question on a standardized test produces results that are strongly skewed on metrics of race or gender, without any obvious cause.[184] In such cases, testing

182. For a discussion of the transformation of the gist of an injury and a deserved award into verbatim dollar awards, see Valerie P. Hans et al., *From Meaning to Money: Translating Injury into Dollars*, 42 LAW & HUM. BEHAV. 95, 96–97 (2018).

183. *See* Angela Onwuachi-Willig, *Reconceptualizing the Harms of Discrimination: How* Brown v. Board of Education *Helped To Further White Supremacy*, 105 VA. L. REV. 343, 361–62 (2019) (citing scholarship detailing society's stronger reaction to anti-white racism than anti-black racism).

184. *See* Roy O. Freedle, *Correcting the SAT's Ethnic and Social-Class Bias: A Method for Reestimating SAT Scores*, 73 HARV. EDUC. REV. 1, 3–4 (2003); William C. Kidder & Jay Rosner, *How*

authorities might throw out the question without ever understanding the underlying reasons. Unfortunately, courts do not have this option.

In short, the discovery of varying patterns across tort scenarios indicates that context is critically important to understanding race effects. In this initial experiment, we employed a broad range of tort scenarios but did not systematically vary the components of these scenarios. For example, our tort scenarios varied in the salience of race and the nature of the injury, but these features were not experimentally manipulated independently. Future research could do just that.

2. Unconscious Bias

The effect of unconscious bias on study participants was similarly complicated, although consistent with some existing literature. That IAT score was associated with differences in the liability of white defendants, for example, is consistent with our hypotheses and with prior studies outside the torts context—but why not black defendants? One would expect parallel results. The results regarding IAT scores, defendant race, and damage awards, showing that unconscious racial bias was tied to damages awarded against white defendants, were even more consistent with existing studies documenting race of defendant differences in damages.[185] Yet, again there was no tie between participants' IAT scores and the amount of damages ordered against black defendants. One possibility is that participants were more on guard when asked to evaluate liability and damages against black defendants but were less guarded in cases with white defendants, which allowed their implicit associations to influence their judgments.

That unconscious bias does not play a strong role in plaintiff verdict outcomes is surprising. IAT scores reflect positive/negative associations with race—the study catches unconscious judgments about each person the study participant evaluates. Because tort judgments focus primarily on the behavior of the defendant, it makes sense that race-based judgments of the defendant would affect tort liability. However, even if jurors are not asked to judge the behavior of the plaintiff, as they might be required to do in cases of contributory and comparative fault, they often focus on what the plaintiff

the SAT Creates "Built-In Headwinds": An Educational and Legal Analysis of Disparate Impact, 43 SANTA CLARA L. REV. 131, 141–55 (2002); Jay Rosner, *Why the New SAT Isn't as Transparent as the College Board Wants You to Believe*, L.A. TIMES (Apr. 29, 2016, 11:29 AM), https://www.latimes.com/opinion/op-ed/la-oe-0501-rosner-sat-transparency-20160501-story.html [https://perma.cc/H5AX-URLV].

185. *See* Girvan & Marek, *supra* note 20, at 252–53. *But see* CHIN & PETERSON, *supra* note 15, at 38–40.

might have done to avoid an injury or to minimize its consequences.[186] Nonetheless, in our study, the tie between unconscious bias and plaintiff verdict outcomes is more tenuous.

One of the most interesting outcomes of the study is that the higher the IAT score, the less generous a juror's awards against institutional defendants, regardless of the race of the plaintiff. This suggests that IAT scores are a useful proxy either for generosity or for pro-plaintiff/anti-institutional biases. So far as we can find, this is an entirely new finding. It is, however, not altogether surprising. We found, as others have,[187] that participants with high IAT scores were also more likely to describe themselves as more politically conservative. In line with their politically conservative views, participants with high implicit bias scores might hold more pro-business attitudes, and concomitantly more negative views about plaintiffs who sue businesses.

B. WHAT CAN BE DONE?

Notwithstanding the complexities of this study's findings, they reinforce the general proposition that race and unconscious bias do play a role in tort outcomes. Our experiment confirms that the impact of litigant race and participants' implicit attitudes is likely to be case-specific. It is natural, then, to wonder what might be done about this fact. Researchers in the field have put a considerable amount of thought into this challenge. Recommendations coalesce around three general ideas: screen out biased jurors, reduce bias in jurors, and reduce the effects of bias in tort decision making. We discuss each of these suggestions in light of this study's findings.

1. Screen out Biased Jurors

If we know that some jurors are biased and that bias can play a role in tort outcomes, then perhaps courts should screen biased jurors from jury service. Judge Mark Bennett has written a provocative article suggesting changes to the jury selection process that would facilitate this goal, including testing potential jurors for bias.[188] There are two significant shortcomings to

186. *See* JENNIFER K. ROBBENNOLT & VALERIE P. HANS, THE PSYCHOLOGY OF TORT LAW 149 (2016) ("Plaintiff-blaming sentiments abound in jury pools.").

187. *See, e.g.,* Anthony G. Greenwald et al., *Implicit Race Attitudes Predicted Vote in the 2008 U.S. Presidential Election*, 9 ANALYSES OF SOC. ISSUES & PUB. POL'Y 241, 246–47 (2009) (finding that the IAT positively correlated with political conservatism).

188. Mark W. Bennett, *Unraveling the Gordian Knot of Implicit Bias in Jury Selection: The Problems of Judge-Dominated Voir Dire, the Failed Promise of* Batson*, and Proposed Solutions*, 4 HARV. L. & POL'Y REV. 149, 170 (2010) (suggesting that judges should give "computer or hand-written

this approach, however. First, as others have noted, using the IAT score for this purpose is problematic because although the test is very reliable in predicting group response bias, it is not sufficiently reliable as a tool to predict bias or biased behavior of an individual.[189] This shortcoming might be mitigated by the use of questions employed during voir dire that have been pre-tested to approximate IAT results. Even if this were possible, however, how much bias should be deemed disqualifying? The population responding to the IAT with absolute neutrality—zero anti-white and anti-black bias—is exceedingly small. Put differently, bias-screening might well deplete jury pools beyond functionable levels.

Second, even if one were to succeed somehow in screening out race-biased jurors in tort cases, the results of this study suggest that such a mechanism would be significantly over-inclusive. According to our results, bias does not interfere with a variety of aspects of tort decision making and, in some cases, only with respect to certain fact patterns. Particularly in light of the fact that in most jurisdictions the available jury pool is already a small subset of the population,[190] an over-inclusive screening mechanism might result in more harm than good.

2. Reduce Bias in Jurors

An alternative to screening biased jurors might rest in reducing jurors' biases, at least for the duration of trial. Although implicit racial bias has proven highly intransigent in most studies,[191] certain methods have proven to reduce bias for short periods of time. Justin Levinson has offered a summary of some of the relevant findings.[192] First, exposing subjects to images of positive role models of another race, sometimes in combination with particularly reviled members of the subject's race, has been shown to

bias sensitivity tests to potential jurors and share the results with the lawyers before voir dire").

189. Jerry Kang et al., *Implicit Bias in the Courtroom*, 59 UCLA L. REV. 1124, 1179–80 (2012) (critiquing test-retest reliability of IAT as applied to individuals); Anna Roberts, *(Re)forming the Jury: Detection and Disinfection of Implicit Juror Bias*, 44 CONN. L. REV. 827, 854–57 (2012) (critiquing general use of the IAT as a screen for jurors).

190. *See* JOE S. CECIL ET AL., JURY SERVICE IN LENGTHY CIVIL TRIALS 19 (1987) ("The comparisons confirm that jurors [who serve] in long trials are more likely to be unemployed or retired, more likely to be unmarried, and less likely to have a college education.").

191. *See* Jerry Kang & Mahzarin R. Banaji, *Fair Measures: A Behavioral Realist Revision of "Affirmative Action,"* 94 CALIF. L. REV. 1063, 1073–75 (2006) (detailing studies that demonstrate the intransigency of implicit racial bias); Kang, *supra* note 3, at 1528–35 (describing studies illustrating that conscious self-correction for implicit bias ranges from difficult to unlikely); Levinson, *supra* note 135, at 370–71 ("[S]ocial cognition research has not yet provided a universal bias reduction solution. In fact, overcoming implicit biases such as those demonstrated by the IAT appears to be quite difficult, given that implicit biases are particularly resistant to conscious efforts.").

192. *See* Levinson, *supra* note 135, at 415.

reduce IAT scores for up to twenty-four hours.[193] Some studies have also shown that making subjects aware of their implicit bias decreases bias for some period of time thereafter.[194] Others have suggested that making jurors aware of their likely biases using pretrial jury questionnaires, voir dire, and jury instructions might mirror this effect.[195]

An interesting study by Jennifer Richeson and Richard Nussbaum found that simply exposing mock jurors to descriptions of a multicultural ideology, versus a viewpoint of "color-blindness," results in lower measures of implicit racial bias.[196] Similar effects have been produced by diversity education programs.[197]

Finally, the very fact of a diverse jury might well result in a reduction in the implicit bias of its members. This possibility is suggested by a host of studies showing that intergroup understanding reduces prejudice.[198] This is particularly true when that understanding is developed under conditions like equal status, common goals, cooperation, and the express imprimatur of an authority—all of which are present in the experience of a jury.[199]

Although implementing some of these methods in the jury context might take creativity and nuance—for efforts that smack of an attempt to force preference for an out-group race can result in backlash[200]—they are not outside the realm of possibility. Furthermore, because many of these methods produce only a short-term reduction in bias, the results of our study might help courts better tailor interventions to the relevant point in a trial. For example, if the facts of a particular case indicate that implicit racial bias might affect the jury's consideration of damages, but not liability, then a court might bifurcate those phases of trial, implementing debiasing techniques only at the damages stage.

193. 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, 802–05 (2001).

194. Alexander M. Czopp et al., *Standing Up for a Change: Reducing Bias Through Interpersonal Confrontation*, 90 J. PERSONALITY & SOC. PSYCHOL. 784, 799 (2006).

195. Levinson, *supra* note 135, at 415.

196. Jennifer A. Richeson & Richard J. Nussbaum, *The Impact of Multiculturalism Versus Color-Blindness on Racial Bias*, 40 J. EXPERIMENTAL SOC. PSYCHOL. 417, 420–22 (2004).

197. Laurie A. Rudman et al., *"Unlearning" Automatic Biases: The Malleability of Implicit Prejudice and Stereotypes*, 81 J. PERSONALITY & SOC. PSYCHOL. 856, 865 (2001).

198. Thomas F. Pettigrew & Linda R. Tropp, *A Meta-Analytic Test of Intergroup Contact Theory*, 90 J. PERSONALITY & SOC. PSYCHOL. 751, 766 (2006); *see also* Sommers, *supra* note 143, at 606–09 (documenting benefits of a racially diverse jury).

199. Levinson, *supra* note 135, at 417; Pettigrew & Tropp, *supra* note 198, at 752 (citing GORDON W. ALLPORT, THE NATURE OF PREJUDICE 281 (25th anniversary ed. 1979)).

200. Rudman et al., *supra* note 197, at 857.

3. Reduce the Effects of Bias in Tort Decision Making

If reducing bias proves less than effective, a court might take steps to reduce the effects of bias in a tort case. For instance, a handful of judges instruct juries on unconscious racial bias during voir dire or just before their deliberations, in some cases asking jurors to make a pledge to do their best to ensure that implicit bias does not affect their evaluation of the evidence.[201] Such efforts aim not only to educate jurors as to the effect that bias might have, but also to bring that effect to the surface, to make it an expressly salient factor in the case. A number of studies have shown that the more salient race is in the facts of a case, the less likely implicit bias will influence the outcome.[202]

In addition, a number of the bias-reducing strategies discussed above have been shown not only to reduce bias but also to interfere with the translation of bias into behavior.[203]

As other studies have shown, bias enters into jury decision making via a plethora of portals. For example, as Justin Levinson has demonstrated, jurors' impressions and memories of the evidence at trial are affected in biased ways.[204] Professor Levinson thus suggests a variety of solutions, including allowing juries to take notes and ask questions of the court, and perhaps even of witnesses, during trial.[205] Because the outcomes of tort cases are even more sensitive than other cases to small factual distinctions, the danger Levinson illuminates is particularly important.

CONCLUSION

In this experimental study, we set out to test whether race and implicit racial bias affect decisions regarding liability and the assignment of damages in tort cases. We studied responses to hypothetical cases, not real-world verdicts and awards, and this represents an obvious limitation. In addition, our results might not be representative of actual jury verdicts because study participants did not benefit from the time and discussion that are characteristic of real trials and jury deliberations. Nonetheless, the study offers evidence of the potential behavioral impact of race and implicit

201. Jerry Kang & Kristin Lane, *Seeing Through Colorblindness: Implicit Bias and the Law*, 58 UCLA L. REV. 465, 500–01 (2010).

202. Samuel R. Sommers & Phoebe C. Ellsworth, *White Juror Bias: An Investigation of Prejudice Against Black Defendants in the American Courtroom*, 7 PSYCHOL. PUB. POL'Y & L. 201, 210 (2001).

203. Kang & Banaji, *supra* note 191, at 1092–94 (detailing the positive effect of "cloaking" racial identity as a means of decreasing the effects of implicit bias); Sommers, *supra* note 143, at 602–03, 606 (showing increase in heterogeneous juries' performances).

204. *See generally* Levinson, *supra* note 135; *supra* text accompanying notes 135–140.

205. *Id*. at 410–11.

attitudes in civil litigation under certain circumstances. It suggests that the picture is much more complex and nuanced than prior studies have suggested. And it indicates the importance of further investigation of these issues. Such further investigation might focus on differences between plaintiff and defendant in the effects of race and unconscious bias, the types of fact patterns that trigger such effects, and the causal link between IAT scores and damage awards regardless of defendant or plaintiff race.

APPENDIX A. TORT SCENARIOS

A. PLAINTIFF RACE SCENARIOS

The following are reproductions of all plaintiff race scenarios presented to participants. All scenarios contain two versions: a white ("W") and black ("B") version.

1. Baby Food Slip

While shopping at a grocery store, Allison/Aisha slipped on some baby food and fell, causing her to hit her head on the floor. The fall left Allison/Aisha with a concussion. There were several broken jars of baby food on the floor where Allison/Aisha had slipped. The baby food was dirty and messy. A witness stated that he did not hear any jars falling from the shelves or otherwise breaking for 15 to 20 minutes before the accident occurred. The aisle where the accident occurred had not been cleaned or inspected for at least 50 minutes prior to the accident and possibly as long as two hours. Allison/Aisha sued the grocery store for negligently failing to clean the dangerous condition of the aisle. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

2. Drunk Tank

Neil/Jamal, 45 years old, was arrested for public intoxication and pan handling. At 11:30 pm, the police put Neil/Jamal into the city jail's "drunk tank" to hold him until he sobered up. At midnight, Neil/Jamal started yelling and holding his arms around his stomach, and vomited into the trashcan in the cell. The guard on duty couldn't understand what Neil/Jamal was saying and assumed that he was merely drunk. The next morning, when guards arrived to remove him from the drunk tank, they found that Neil/Jamal was not breathing. They called emergency assistance, but paramedics were unable to wake him. Doctors learned that Neil's/Jamal's appendix had ruptured and that he had died from lack of medical attention. Neil's/Jamal's family sued the police department for negligently failing to aid him. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

3. Hair Fire

Anne/Tamika had her hair straightened at Beauty Salon. As part of the chemical straightening process, Beauty's employee wrapped absorbent cotton around portions of Anne's/Tamika's hair. Anne/Tamika took a cigarette break while waiting for the chemicals to set. While lighting the cigarette, Anne/Tamika set fire to the absorbent cotton in her hair, resulting in serious burns to her scalp. Anne/Tamika sued Beauty Salon for negligently

failing to warn her of the danger. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

4. Nursing Home

Hilltop Assisted Living Community is a nursing home with predominately black/white residents. Carrie/Lakisha, a white/black woman, worked as a nurse at Hilltop until she was fired—according to her supervisors because she was too often late for work. Carrie/Lakisha admits that she was "a couple minutes late for work" a few times over the course of the past year, but she urges that this was not the reason for her termination. Carrie/Lakisha contends that she was fired because of her race. She notes that other employees had also been late for work without losing their job. She also argues that her patients were often not responsive to her authority and that they had occasionally used racial slurs in her presence. Carrie/Lakisha has sued the nursing home for wrongful termination of employment due to her race.

5. Poisoned Farmworkers

Two South Carolina farm workers, Jack and Benjamin/Khalil and Kamari, were killed by contact with a poisonous insecticide manufactured and distributed by the same company. The manufacturer agreed that the insecticide was dangerous, but argues that it had placed the following warning labels on sacks containing the insecticide:

"WARNING: May Be Fatal If Swallowed, Inhaled or Absorbed Through Skin. Rapidly Absorbed Through Skin. Do not get in eyes or on skin. Wear natural rubber gloves, protective clothing and goggles. In case of contact, wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for parathion protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be re-entered until drifting insecticide and volatile residues have dissipated. Do not contaminate feed and foodstuffs. Wash hands, arms and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before re-use."

The labels conformed with federal regulations. The labels did not have any symbols to indicate that the insecticide was dangerous, such as a skull and bones. Jack and Benjamin/Khalil and Kamari could not read. Their estates have sued the manufacturer for wrongful death.

6. Property Rental

James/Amari, a white/black male, visited a real estate office to inquire about a property he was interested in renting. The real estate agent told him the property was taken. James/Amari went to his car and called his sister to double check the property's availability. She assured him the property was not taken. After asking her to check a second time, she affirmed that no one had claimed the property. Assuming there had been a mistake, James/Amari immediately re-entered the real estate office and was told again from the agent that the property was unavailable. Having previously shown his exemplary rental record to the agent, James/Amari thought he had been discriminated against based on race and filed suit. The rental company alleges that the previous renters had been partiers and had damaged the apartment, necessitating costly repairs. The agent explained that he has to use his judgment all the time in renting the apartment and that James's/Amari's mannerisms and style of dress caused him to suspect that James/Amari was "young, irresponsible, and the partying type."

7. Trolley Wire

Defendant owns a trolley line that runs through a city. The trolley uses an overhead wire system. At one point, the trolley goes under a railroad bridge. An eighteen-inch high ledge juts out along the edges of the bridge, shielding the trolley wires, which run four feet below. Brad/Darnell, a 12-year-old boy, crossed the railroad bridge one day with some friends, swinging an 8-foot long wire. The wire hit the trolley's wire system below the bridge, and an electrical jolt ran through the wires. Brad's/Darnell's hand was badly burned from the electricity. Brad's/Darnell's mother has sued the trolley company for negligently locating the trolley wires and for failing to warn of the danger. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

8. Vandalized Bus

On the last day of the school year, a group of junior high school students began to vandalize the school bus on which they were riding. The bus driver locked the door and proceeded to take them directly to a police station. Greg/Hakim, a student on the bus, attempted to jump out of a window and sustained two broken legs and a broken arm when a rear wheel of the bus rolled over him. Greg's/Hakim's father sued the school district and the bus driver on behalf of his son for false imprisonment (defined as the intentional confinement of another) and negligently supervising the children. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

B. PLAINTIFF RACE-DEFENDANT RACE SCENARIOS

The following are reproductions of all plaintiff race-defendant race scenarios presented to participants. All scenarios contain four versions: W W, B B, W B, and B W.

1. Basketball Team

Adam/Omari was the starting point guard on the basketball team at a predominantly black/white high school. The team had been struggling, and the coach decided to bench Adam/Omari in favor of a younger, less experienced player named Matthew/Leroy. Before the first game after the lineup change, Adam/Omari was passing Matthew/Leroy in the locker room when he suddenly stopped and began yelling at him. Two witnesses explain that the frustrated Adam/Omari told Matthew/Leroy, "You aren't half the player I am. You must be kissing Coach's ass pretty hard." According to these same witnesses, when two other players grabbed Adam/Omari and tried to restrain him, Adam/Omari threw them off, pushed Matthew/Leroy into a row of lockers, and ran out of the room. As a result of this fall, two of Matthew's/Leroy's teeth were chipped and he was knocked unconscious. Adam/Omari claims that Matthew/Leroy provoked his anger by muttering a racial slur as they passed in the locker room. He also claims that he was merely acting in self-defense and that Matthew's/Leroy's injuries were accidental. According to an assistant coach, Adam/Omari did not get along with many people on the team and had been the subject of obscene remarks and unfair criticism from many of his teammates throughout the season. Adam/Omari claims that he was afraid for his own safety during the altercation in the locker room and "definitely felt ganged up on." Adam/Omari admits he "might have been aggressive towards Matthew/Leroy and started the whole thing," but says that when several other players grabbed him from behind for no reason, he tried to break free and must have accidentally knocked into Matthew/Leroy in the attempt to get out of the locker room. Matthew/Leroy has sued Adam/Omari for battery (defined as the intentional offensive touching of another).

2. Beer and a Beating

Geoffrey/Jermaine and Brett/Kareem were drinking some beer together in a vacant lot. Two girls walked by the lot, and Geoffrey/Jermaine and Brett/Kareem attempted to engage them in conversation. Geoffrey/Jermaine and Brett/Kareem followed the girls to a nearby restaurant, where the girls complained to some friends. In response, six males chased Geoffrey/Jermaine and Brett/Kareem back to the vacant lot. Brett/Kareem escaped unharmed, but Geoffrey/Jermaine was severely beaten.

Brett/Kareem returned to the scene a short time later and found Geoffrey/Jermaine moaning in pain. He applied ice to Geoffrey's/Jermaine's head, and drove Geoffrey/Jermaine around in Geoffrey's/Jermaine's car for about two hours, during which time Geoffrey/Jermaine fell asleep in the back seat of the car. Around midnight, Brett/Kareem drove to the home of Geoffrey's/Jermaine's grandparents and parked in the driveway. After unsuccessfully attempting to wake Geoffrey/Jermaine, Brett/Kareem left. The next morning, Geoffrey/Jermaine's grandparents discovered Geoffrey/Jermaine in the car and took him to the hospital. Geoffrey/Jermaine died 3 days later. Had Geoffrey/Jermaine been taken to a doctor before or within half an hour after he lost consciousness, there was an 85–88 % chance of survival. Although the males who beat Geoffrey/Jermaine could not be located, Geoffrey's/Jermaine's father sued Brett/Kareem for negligently contributing to Geoffrey/Jermaine's death. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

3. Dogfight

Brendan's/Tyrone's dog and Art's/Malik's dog were fighting in a park. Art/Malik attempted to break up the fight by hitting the dogs with a four-foot long stick, while Brendan/Tyrone watched from a distance of about 16 feet. As the fighting dogs moved closer towards Brendan/Tyrone, Art/Malik continued to hit the dogs, with his back towards Brendan/Tyrone. Unaware of how close he was to Brendan/Tyrone, Art/Malik raised the stick to hit the dogs again. In doing so, Art/Malik unintentionally struck Brendan/Tyrone in the eye, causing permanent blindness in that eye. Brendan/Tyrone has sued Art/Malik for negligence in swinging the stick. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

4. Epileptic Driver

Jill/Latoya had epilepsy, although she had not had a seizure for twelve years thanks to a regular dose of medication. One day, despite having taken her medication as prescribed, Jill/Latoya had a seizure while she was driving her vehicle. During the seizure, Jill/Latoya crashed into a store owned by Meredith/Tanisha, giving Meredith/Tanisha a concussion and three broken ribs. Prior to the accident, Jill/Latoya had no symptoms or other warning that she was about to have a seizure. Meredith/Tanisha sued Jill/Latoya for negligence (defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances).

5. Gun Shooting

Zachary's/Maurice's 15-year-old son accidentally shot Joseph/Jamel, a stranger who happened to be walking on the sidewalk by the house, using Zachary's/Maurice's handgun. Zachary/Maurice kept the unloaded gun, along with its ammunition, in a locked gun cabinet. The key to the cabinet stayed with Zachary/Maurice at all times, and Zachary/Maurice told his son not to use the gun without supervision. The son used a screwdriver to open Zachary's/Maurice's locked gun cabinet and gain access to the gun and ammunition. Joseph/Jamel, who was in the hospital for two weeks with a punctured lung, has sued Zachary/Maurice for negligently allowing his son to access the gun. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

6. Shallow Diver

Albert/Da-Shaun was a friend of an invited guest on Jay's/Rasheed's 26-foot boat at Lake Minnetonka. Albert/Da-Shaun was twenty years old and knew how to swim. Jay/Rasheed was 64 years old and very familiar with boating on Lake Minnetonka. Prior to the outing, Albert/Da-Shaun and Jay/Rasheed did not know each other. While boating on the lake, Jay/Rasheed suggested that they go swimming at Big Island. Jay/Rasheed had been to Big Island several times and knew that the water surrounding the shore of the island remained shallow for some distance. Upon arriving, Jay/Rasheed anchored the boat 100 to 200 yards from the island. While Jay/Rasheed was lowering the ladder at the back of the boat, Albert/Da-Shaun asked Jay/Rasheed if he was "going in." When Jay/Rasheed responded yes, Albert/Da-Shaun stepped onto the side of the boat and dove into the water, which was only two to three feet deep. Albert/Da-Shaun struck the bottom of the lake, injuring his spinal cord and leaving him a quadriplegic. Albert/Da-Shaun sued Jay/Rasheed for negligently mooring in shallow water and failing to warn him of the danger. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

7. AWOL Trampoline

The Ginther/Washington family owned an outdoor trampoline. One Saturday, their son suffered a minor cut on his leg when he came into contact with one of the trampoline's springs, which was exposed due to holes that had developed in the padding. After the injury, the Ginthers/Washingtons disassembled the trampoline and left it in pieces on the front lawn. They planned to load it into their truck and take it to town for repairs. The following week, the winds from a summer storm picked up the fabric of the

trampoline and blew it from the lawn into the street in front of the Ginthers'/Washingtons' house just as Charles/Darius drove by. The trampoline covered the windshield of Charles/Darius and caused him to crash his car. Charles/Darius suffered a broken jaw and collarbone and has sued the Ginthers/Washingtons for negligently leaving the trampoline in their lawn. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

8. Tripped over Repairman[206]

Emily/Keisha entered a convenience store to purchase a soft drink. On the way to the checkout counter, she noticed a repairman, Todd/Tremayne, kneeling at the end of the counter, about six feet away from her, working with some wiring. While Emily/Keisha was making her purchase, Todd/Tremayne moved to work on an area of the floor behind her. When she turned to leave, Emily/Keisha tripped over Todd's/Tremayne's foot, fell, and broke her wrist. She has sued Todd/Tremayne for negligently kneeling behind her without warning her of his presence. (Negligence is defined as having failed to act as the ordinarily reasonable person should have acted under the circumstances.)

206. Data were dropped from all analyses because of a random assignment error during administration.

APPENDIX B. CHARACTERISTICS OF SCENARIOS

APPENDIX TABLE A. Characteristics of Scenarios

Plaintiff Race Scenarios				
Scenario	*Racial Implication*	*Tort Type*	*Duty Exists Because…*	*Type of Plaintiff*
Baby Food Slip	Low	Negligence	Landowner affirmative duty	Private individual (shopper)
Drunk Tank	Medium (criminal aspect might trigger stereotype)	Negligence	Special relationship (custodian)	Private individual (arrestee)
Hair Fire	Low	Negligence	Defendant created the risk	Private individual (client)
Nursing Home	High	Wrongful termination of employment	Statutory duty	Private individual (employee)
Poisoned Farm Workers	Low	Strict liability (inadequate warning label, wrongful death) & negligence	Manufacturer strictly liable for defective products/ defendant created a risk	Private individuals (illiterate employees)
Property Rental	High	Intentional, discrimination	Statutory (Federal Housing Act)	Private individual (lessee)
Trolley Wire	Low	Negligence	Defendant created the risk	Private individual (mother on behalf of young boy)
Vandalized Bus	Medium (criminal aspect of vandalism)	False imprisonment, negligence	Special relationship (custodian)	Student

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APPENDIX TABLE A. Characteristics of Scenarios

Plaintiff Race Scenarios				
Scenario	*Type of Defendant*	*Plaintiff at Fault?*	*Type of Damage*	*Extent of Damage*
Baby Food Slip	Private business owner (grocery store)	Possibly – although plaintiff did not cause the slippery condition, she might have avoided the hazard	Body	Medium (plaintiff had concussion)
Drunk Tank	Municipality (police department)	Yes. Defendant was voluntarily inebriated, which resulted in his being arrested and possibly prevented him from voicing his problem	Body	High (death)
Hair Fire	Private business owner (styling salon)	Yes. Plaintiff lit the cigarette that caused the fire	Body	Medium (serious burns to scalp)
Nursing Home	Business (nursing home, employer)	Slightly. Plaintiff admitted she was "a couple minutes late for work" a few times	Economic	Medium (loss of employment/ inchoate race offense)
Poisoned Farm Workers	Private manufacturer/ distributor (of poisonous insecticides)	No, although a jury might argue that the reasonable person can read and should have understood the warning	Body	High (plaintiffs died from exposure to insecticides)
Property Rental	Private real estate agency (lessor)	No	Economic	Low (lost housing opportunity/ inchoate race offense)
Trolley Wire	Business owner	Yes, swinging long wire near trolley line	Body	Medium (badly burned hand)
Vandalized Bus	Bus driver	Yes	Body	Medium (two broken legs, broken arm)

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APPENDIX TABLE A. Characteristics of Scenarios

Plaintiff Race and Defendant Race Scenarios				
Scenario	*Racial Implication*	*Tort Type*	*Duty Exists Because…*	*Type of Plaintiff*
Basketball Team	High	Intentional battery	Not applicable	Student
Beer and a Beating	Medium (as both plaintiff and defendant were harassing women, perhaps stereotype triggered)	Negligence (wrongful death)	Voluntary rescue/special relationship	Private individual (father on behalf of dead son)
Dogfight	Medium (any violence might trigger stereotype)	Negligence	Defendant created the risk	Private individual (dog owner)
Epileptic Driver	None	Negligence	Defendant created the risk	Private individual
Gun Shooting	Medium (violence, guns, and stereotypes)	Negligence	Defendant created the risk	Private individual
Shallow Diver	None	Negligence	Defendant created the risk or special relationship (also, possibly no duty)	Private individual (young man)
AWOL Trampoline	None	Negligence	Defendant created the risk	Private individual (motorist)
Tripped over Repairman (Excluded from Data Analysis)	Low	Negligence	Defendant created the risk	Private individual (shopper)

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APPENDIX TABLE A. Characteristics of Scenarios

Plaintiff Race and Defendant Race Scenarios				
Scenario	*Type of Defendant*	*Plaintiff at Fault?*	*Type of Damage*	*Extent of Damage*
Basketball Team	Student	Possibly, if defendant provoked plaintiff	Body	Medium (two chipped teeth, knocked unconscious)
Beer and a Beating	Private individual (friend of dead son)	Yes. Defendant's son had followed the women which led to the beating—the overall reason why he needed hospitalization	Body	High (death)
Dogfight	Private individual (dog owner)	Possibly, he did not move clear of the stick	Body	Medium-High (blind in one eye)
Epileptic Driver	Private Business Owner	No	Body, property	Medium (Concussion and three broken ribs, damage to store)
Gun Shooting	Private individual	No	Body	Medium-High (punctured lung, two weeks hospitalization)
Shallow Diver	Private individual (older man, boat owner)	Yes. Plaintiff dove into unfamiliar water	Body	High (plaintiff rendered a quadriplegic)
AWOL Trampoline	Private individual (resident)	No	Body, property	Medium (broken jaw & collarbone, damaged vehicle)
Tripped over Repairman (Excluded from Data Analysis)	Private individual (repairman)	Possibly	Body	Medium-Low (broken wrist)