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Cover Page Footnote

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THE COLOR OF PAIN: RACIAL BIAS IN PAIN AND SUFFERING DAMAGES

Maytal Gilboa[*]

For more than half a century, our legal system has formally eschewed race-based discrimination, and nearly every field of law has evolved to increase protections for minority groups historically burdened by racial prejudice. Yet, even today, juries in tort actions routinely consider a plaintiff's race when calculating compensatory tort damages, and they do so in a manner that systematically results in lower awards to Black plaintiffs than to White. This Article examines this problem, zeroing in on the specific issue of racial bias in calculations of tort damages for pain and suffering.

The severity of a plaintiff's injury is commonly considered the best indicator for measuring her pain and suffering. In this Article, I argue that severity of injury is also the loophole through which racial bias infiltrates the calculation of these damages. Drawing on studies that reveal medical providers' tendency to view Black patients' injuries as less severe than White patients', I explain that Black plaintiffs' damages for pain and suffering are susceptible to racial bias at two levels: first, when health care providers underestimate their injuries, and second, when jurors rely on the opinions of these providers—which may confirm and amplify the jurors' own implicit biases—in deciding damages for pain and suffering.

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[*] Assistant Professor, Bar-Ilan University Law School; Ph.D., Tel Aviv University Faculty of Law. I wish to thank Ronen Avraham, Ygal Blum, Natalie Davidson, Doron Dorfman, Ehud Guttel, Yotam Kaplan, Omer Pelled, Ariel Porat, Dan Priel, Emily Schaffer, Ernest Weinrib, and Keren Yalin-Mor for helpful comments and discussions and Or Elmalich for excellent research assistance.

This Article argues that tort law currently has no reliable mechanism for detecting and correcting implicit biases that may inform jurors' assessments of Black plaintiffs' pain and suffering. Failure to correct these biases allows juries to undervalue Black plaintiffs' pain and suffering losses, leading to damages awards that are inconsistent with the goals of tort law. In particular, I explain that the systematic underestimation of Black plaintiffs' pain and suffering losses effectively lowers both the cost of defendants' tortious conduct toward Black victims and the standard of care vis-à-vis those victims, creating a severe problem of underdeterrence. Because potential tortfeasors know that, on average, tortious conduct towards White victims costs more than tortious conduct towards Black victims, they will generally act more cautiously around White people.

After exposing the problem of racial bias in pain and suffering damages and exploring its serious implications, this Article introduces a simple and easy-to-apply mechanism for neutralizing the effect of implicit racial bias in the calculation of pain and suffering damages: Equalizing Ratio Tables (ERTs). ERTs quantify race-based discrepancies in the average damages awarded for pain and suffering and can be used in several ways to narrow, or even eliminate, these discrepancies and their detrimental implications on Black plaintiffs.

Although this Article focuses on racial bias in pain and suffering damages against Black plaintiffs, its discussion may be relevant to understanding the implications of other types of biases as well.

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I. INTRODUCTION

The issue of racial discrepancies in damages awarded for loss of life and limb is familiar. These damages compensate tort victims for future economic loss, and they commonly[1] reflect the use of race-based tables[2] to predict a plaintiff's future earning potential.[3] Although both courts and scholars have sharply criticized race-based tables,[4] they are frequently used to calculate the loss of future income for plaintiffs with no established earnings record—in which

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[1] *See, e.g.*, Kimberly A. Yuracko & Ronen Avraham, *Valuing Black Lives: A Constitutional Challenge to the Use of Race-Based Tables in Calculating Tort Damages*, 106 CALIF. L. REV. 325, 326 (2018) (referring to the use of race-based data as a "standard practice").

[2] *See, e.g.*, United States v. Bedonie, 317 F. Supp. 2d 1285, 1316 (D. Utah 2004), *rev'd sub nom. on other grounds* United States v. Serawop, 410 F.3d 656 (10th Cir. 2005) (mentioning the view that "including race and sex adjustments appears consistent with the approach encouraged by some treatises, which suggest use of race and sex based statistics for calculating lost income when a claimant has no established earnings record"); Powell v. Parker, 303 S.E.2d 225, 228 (N.C. Ct. App. 1983) (affirming race-based statistics for calculating loss of income); Johnson v. Misericordia Cmty. Hosp., 294 N.W.2d 501, 527–28 (Wis. Ct. App. 1980) (same).

[3] *See*, *e.g.*, *Bedonie*, 317 F. Supp. 2d at 1315 ("Using race and sex adjustments to calculate lost income significantly reduces the awards that the victims would otherwise receive.").

[4] *See, e.g.*, G.M.M. *ex rel.* Hernandez-Adams v. Kimpson, 116 F. Supp. 3d 126, 152 (E.D.N.Y. 2015) ("The use of race-based statistics to obtain a reduced damage award—which is now extended to the use of ethnicity-based statistics, to calculate future economic loss—is unconstitutional."); McMillan v. City of New York, 253 F.R.D. 247, 255 (E.D.N.Y. 2008) ("Equal protection . . . demands that the claimant not be subjected to a disadvantageous life expectancy estimate solely on the basis of a 'racial' classification."); Yuracko & Avraham, *supra* note 1, at 371–72 (arguing that reliance on race-based data to calculate tort damages violates the Equal Protection Clause of the Fourteenth Amendment); Ronen Avraham & Kimberly Yuracko, *Torts and Discrimination*, 78 OHIO ST. L.J. 661, 666–67 (2017) (suggesting that courts should stop using tables that factor race and gender into damages calculations and should instead use "blended" tables—meaning tables "that do not delineate on racial or gender lines"); Martha Chamallas, *Questioning the Use of Race-Specific and Gender-Specific Economic Data in Tort Litigation: A Constitutional Argument*, 63 FORDHAM L. REV. 73, 75 (1994) ("[T]he use of explicit race-based and gender-based economic data is unconstitutional."); MARTHA CHAMALLAS & JENNIFER B. WRIGGINS, THE MEASURE OF INJURY: RACE, GENDER, AND TORT LAW 168 (2010) ("When courts award damages for loss of earning capacity in tort litigation, they do more than passively pass on the market price of plaintiff's labor; they express a view about the future and should not be oblivious to their own role in constructing that future.").

cases, the tables systematically produce lower awards for Black plaintiffs than for White plaintiffs with the same injury.[5]

The focus of this Article, however, is on a different type of damages, namely, damages for pain and suffering. Unlike economic losses that result from physical injuries, pain and suffering cannot be measured by reference to objective factors such as loss of income.[6] Therefore, race-based tables or similar statistical data cannot similarly explain evidence of racial discrepancies in pain and suffering damages.[7] I suggest that these discrepancies are the result of implicit racial bias hiding in the shadows of the ambiguous assessment of pain and suffering losses.

For decades, scholars have acknowledged that racial bias affects the estimation of pain and suffering damages.[8] But they have typically considered this problem in the context of the

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[5] *See* Avraham & Yuracko, *supra* note 4, at 669–77 (explaining how race- and gender-based tables "infuse[] race and gender bias into damage calculations," resulting in lower awards); CHAMALLAS & WRIGGINS, *supra* note 4, at 168–70 (criticizing courts' usage of race and gender to predict an individual's future earning capacity); Chamallas, *supra* note 4, at 87 (surveying studies on racially disparate impacts in damages awards).

[6] *See* Neil K. Komesar, *Injuries and Institutions: Tort Reform, Tort Theory, and Beyond*, 65 N.Y.U. L. REV. 23, 58 (1990) (illustrating the significance of pain and suffering loss by asking "whether you would be indifferent or even nearly indifferent between an uninjured state and a severely injured state, such as paraplegia, blindness, or severe brain damage, so long as your income and wealth remained constant").

[7] *See* Erik Girvan & Heather J. Marek, *Psychological and Structural Bias in Civil Jury Awards*, 8 J. AGGRESSION, CONFLICT & PEACE RSCH. 247, 253 (2016) (finding, based on an exploratory case analysis, that Black plaintiffs were awarded "41 percent of the amount of pain and suffering damages as white plaintiffs"); Jonathan Cardi, Valerie P. Hans & Gregory Parks, *Do Black Injuries Matter?: Implicit Bias And Jury Decision Making in Tort Cases*, 93 S. CAL. L. REV. 507, 550 (2020) (generally finding that "in [tort] suits against individual defendants, black plaintiffs were awarded lower dollar damage awards than white plaintiffs" in the authors' study). For an argument that pain and suffering damages can also be influenced by race-based tables to some extent, see Avraham & Yuracko, *supra* note 4, at 725.

[8] *See, e.g.*, Mark Geistfeld, *Placing a Price on Pain and Suffering: A Method for Helping Juries Determine Tort Damages for Nonmonetary Injuries*, 83 CALIF. L. REV. 773, 785 (1995) ("The possibility that jurors rely on extralegal factors such as gender, race, socioeconomic status, or physical appearance is a significant concern . . . ."); Oscar G. Chase, *Helping Jurors Determine Pain and Suffering Awards*, 23 HOFSTRA L. REV. 763, 770 (1995) (noting that there is "disturbing evidence that some jurors have been affected by the race of the litigants" and calling for further investigation of the impact of race and gender in pain and suffering awards).

inconsistency,[9] and thus unpredictability,[10] of these damages. Seeking a solution to these broader questions, many scholars have developed thoughtful approaches to "measure the immeasurable" and put a price on pain and suffering.[11] This Article reviews the prominent proposals for measuring pain and suffering damages,[12] drawing attention to a common theme: the severity of the plaintiff's injury as a significant predictor of the amount of pain and suffering damages.[13] Indeed, the severity-of-injury inquiry has dominated judicial determinations of pain and suffering damages as well.[14]

In this Article, I argue that the severity-of-injury inquiry is also the loophole through which racial bias infiltrates the assessment of

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[9] *See, e.g.*, Geistfeld, *supra* note 8, at 785 ("Even if jurors are not influenced by extralegal factors, the lack of a well-defined method for calculating the award subjects it to the appearance of unfairness."); David W. Leebron, *Final Moments: Damages for Pain and Suffering Prior to Death*, 64 N.Y.U. L. REV. 256, 310 (1989) (noting that similarly situated plaintiffs "are often awarded vastly differing amounts of [pain and suffering] damages" that cannot be explained by the underlying facts in each case).

[10] *Cf.* Ronen Avraham, *Putting a Price on Pain-and-Suffering Damages: A Critique of the Current Approaches and a Preliminary Proposal for Change*, 100 NW. U. L. REV. 87, 91 (2006) (noting that many people perceive jury awards as "a lottery in which the outcome cannot be predicted based on relevant case factors" and that some people attributed insurance and products liability crises to jury awards of pain and suffering damages); Alan Schwartz, *Proposals for Products Liability Reform: A Theoretical Synthesis*, 97 YALE L.J. 353, 411 (1988) (arguing that "[c]ourts . . . should deny strict liability for nonpecuniary harm" in part because "the risk of nonpecuniary harm is difficult . . . to predict and insure against").

[11] *See* Avraham, *supra* note 10, at 87 (describing finding a way to calculate pain and damages as "a daunting task" of "put[ting] a price on the unpriceable"); Chase, *supra* note 8, at 765 ("An inescapable reality of the pain and suffering conundrum is that tort law requires the monetization of a 'product' for which there is no market and therefore no market price.").

[12] I review prominent proposals for estimating pain and suffering damages in Section III.A., *infra*.

[13] *See infra* notes 103–104 and accompanying text.

[14] *See, e.g.*, Binette v. Sec'y of Health & Hum. Servs., No. 16-0731V, 2019 WL 1552620, at *10 (Fed. Cl. Off. of the Special Masters Mar. 20, 2019) ("In determining an award for pain and suffering and emotional distress, it is appropriate to consider the severity of injury and awareness and duration of suffering."); Easton v. Chevron Indus., Inc., 602 So. 2d 1032, 1038 (La. Ct. App. 1992) ("In assessing quantum for a decedent's pre-death pain and suffering, the Court must consider both the severity and duration of the injury preceding death." (citing Bickham v. Airlie Corp., 468 So. 2d 658, 661 (La. Ct. App. 1985))); Graves v. Sec'y of the Dep't of Health & Hum. Servs., 109 Fed. Cl. 579, 589 (2013) (stating that "severity of injury, awareness, and duration of the suffering" are the factors for assessing compensation in pain and suffering cases); Mousa v. Islamic Republic of Iran, 238 F. Supp. 2d 1, 12 (D.D.C. 2001) (enumerating various aspects of the plaintiff's pain and suffering loss to determine its level of severity).

pain and suffering damages. The severity-of-injury inquiry is extremely susceptible to racial bias, especially when applied to the pain and suffering of Black victims. Research indicates that many White laypeople, and even trained healthcare providers, underestimate the severity of Black people's injuries.[15] The roots of this bias derive from myths that accord Black people higher resistance to pain and physically stronger bodies than White people.[16] Although these stereotypes might seem benevolent, they dehumanize Black people[17] and have numerous detrimental implications. The implication that concerns this Article is that Black plaintiffs are, on average, under-compensated for their pain and suffering losses. The Article identifies the twofold bias that explains this result. The first comes from biased judgments of healthcare providers who, research shows, often underestimate the severity of Black patients' medical conditions.[18] The second comes from biased jurors who may also view Black plaintiffs' injuries as less severe than White plaintiffs' and whose biases are confirmed and amplified (unbeknownst to them) by medical evidence that purports to be objective but is tainted with bias.[19] Importantly, as this Article explains, biased judgements usually result from *implicit* bias,[20] meaning that the healthcare professionals and jurors are

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[15] *See infra* notes 124–127, 145–153 and accompanying text.

[16] *See infra* notes 117–118 and accompanying text.

[17] Adam Waytz, Kelly Marie Hoffman & Sophie Trawalter, *A Superhumanization Bias in Whites' Perceptions of Blacks*, 6 SOC. PSYCH. & PERSONALITY SCI. 352, 352–53 (2015) ("Work on moral typecasting shows that perceiving humans and nonhuman entities to have advanced capacities for agency reduces perceptions of these figures (compared to entities perceived to lack agency) as capable of experiencing pain.") (citations omitted)); *id.* at 353 ("[I]f people see Blacks as superhuman, they may . . . perceive Blacks as less capable than Whites of feeling pain.").

[18] *See infra* Section III.B.*2*.

[19] *See infra* Section III.B.*1*.

[20] Social scientists define implicit bias as a cognitive state in which people express stereotypes without conscious awareness. *See, e.g.*, Anona Su, *A Proposal to Properly Address Implicit Bias in the Jury*, 31 HASTINGS WOMEN'S L.J. 79, 81 (2020) ("Implicit bias is a phenomenon coined . . . to describe the stereotypes our brains have built to help us navigate the world. These implicit biases are something that humans generally do not realize exist and [are] outside of their control."); Jerry Kang et al., *Implicit Bias in the Courtroom*, 59 UCLA L. REV. 1124, 1132 (2012) (defining implicit biases as "attitudes and stereotypes that are not consciously accessible through introspection")*; see also* CHAMALLAS & WRIGGINS, *supra* note 4, at 8 ("As [legal actors] operate in institutional contexts, common forms of cognitive bias—particularly habits of thought that make it harder to imagine different

unaware of the influence of bias on their estimation of a Black person's injury.

Racial discrepancies in pain and suffering damages affront both the fundamental principles of our justice system and the concrete goals of tort law. This Article focuses on the latter, revealing a uniquely confounding problem of underdeterrence resulting from the combination of elusive and unintentional bias with the inherently indeterminate nature of pain and suffering. Unaware of their bias, jurors not only may mistakenly underestimate a Black plaintiff's pain and suffering but also may unintentionally set a lower standard of care for potential tortfeasors in their interactions with Black victims as compared to White victims.[21] In light of the immeasurable nature of pain and suffering, detecting judicial errors in awarding damages or setting the standard of care properly is almost impossible in this type of loss. Potential tortfeasors who know, even subconsciously, that on average their negligent conduct towards White victims costs them more than the same conduct towards Black victims will rationally tend to act more carefully when they are around White people. In addition to this problem, racial discrepancies in pain and suffering damages are at odds with both the concept of global fairness, which demands similar compensation for similarly severe injuries,[22] and the core principle of corrective justice, which requires a defendant's liability to be correlated to the foreseeable risk inflicted on the plaintiff.[23]

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outcomes—can affect expectations about what is normal and reasonable and therefore ultimately impact legal liability."). The evidence on implicit bias has been contested. *See, e.g.*, Frederick L. Oswald, Hart Blanton, Gregory Mitchell, James Jaccard & Philip E. Tetlock, *Predicting Ethnic and Racial Discrimination: A Meta-Analysis of IAT Criterion Studies*, 105 J. PERSONALITY & SOC. PSYCH. 171, 173 (2013) (expressing skepticism on introductory findings of Implicit Association Tests (IAT) calling for a new meta-analysis of the IAT criterion to better understand the relation between implicit and explicit biases and discriminatory behavior).

[21] *See infra* notes 58–59 and accompanying text.

[22] *See, e.g.*, Avraham, *supra* note 10, at 88 n.3 (defining global fairness as the idea that "like cases should be treated alike"); CHAMALLAS & WRIGGINS, *supra* note 4, at 163 (describing the concept of universal justice manifested in compensatory damages in different legal systems).

[23] Under this correlativity requirement, liability should be imposed when the risk that defined the injurer's conduct as negligent materializes as harm for the victim. *See, e.g.*, ERNEST J. WEINRIB, THE IDEA OF PRIVATE LAW 159 (1995) ("The consequences for which the defendant is liable are restricted to those within the risks that render the act wrongful in the first place.").

After examining the contours of this problem, this Article introduces a possible solution—namely, the use of a tool that I term Equalizing Ratio Tables (ERTs)—which provides a vehicle for educating jurors and judges about racial bias in pain and suffering damages as well as an effective remedial method for eliminating race-based inequities.[24]

This Article makes four important contributions. First, it responds to recent calls to investigate implicit racial bias in tort litigation, a realm in which the research about unconscious prejudice is still in its early stages as compared to other areas like criminal law and employment law.[25] Second, the Article reveals a severe problem of underdeterrence resulting from the unique combination of unconscious bias and the open-ended nature of pain and suffering loss. Third, the Article explains why the current proposals for measuring pain and suffering losses fail to eliminate racial bias and how they instead provide a safe place for racial bias to hide. Last, the Article provides effective and easy-to-apply methods to contend with the problem of racial bias in pain and suffering damages and explains how they comply with the goals of tort law.

The Article proceeds as follows: Part II delineates the problem of racial bias in pain and suffering damages in light of tort law's goals. Part III explains why the current proposals for calculating pain and suffering damages cannot properly address this problem. Part IV introduces my proposed solution. The conclusion then summarizes the discussion.

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[24] *See infra* note 185 and accompanying text.

[25] *See* Cardi et al., *supra* note 7, at 509 ("[T]he 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. . . . By comparison, tort law has received much less attention."); Yuracko & Avraham, *supra* note 1, at 329 n.15 (noting that only a small number of torts and remedies casebooks mention the role of race and gender in damage calculations); CHAMALLAS & WRIGGINS, *supra* note 4, at 1 ("Despite its social importance, the topic of the significance of race and gender in the law of torts has not received sustained attention largely because, on its surface, the world of torts appears divided between those who suffer injury and those who inflict injury, categories that are race and gender neutral."); *see also* Mikah K. Thompson, *Bias on Trial: Toward an Open Discussion of Racial Stereotypes in the Courtroom*, 2018 MICH. ST. L. REV. 1243, 1307 (calling for more solutions to solve the problem of racial bias in the justice system and noting that "each scholar, researcher, jurist, and attorney must stand on the shoulders of the ones who came before them, hoping that they are able to place a brick in the wall of justice").

II. DELINEATING THE PROBLEM

A. IMPLICIT BIAS HIDDEN IN THE FOLDS OF AMBIGUOUS LOSS ESTIMATION

Pain and suffering damages are possibly the purest indicator of the influence of racial bias in tort law. Whereas loss of life and limb can be converted relatively easily into monetary terms by estimating loss of income, emotional losses require measurement of the immeasurable by "putting a price" on a person's pain.[26] Indeed, pain presents a different kind of loss. On the one hand, it is amorphous in nature and thus difficult to demonstrate or to prove.[27] On the other hand, it has very real implications on the sufferer's life,[28] no less than loss of income.[29] The ambiguous nature of pain and suffering losses renders their estimation obscure as well.[30] This, in turn, has led to criticism that damages intended to compensate for pain and suffering losses are unpredictable[31] and potentially

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[26] *See supra* note 11.

[27] *See, e.g.*, I.D. v. Sec'y of Health & Hum. Servs., No. 04-1593V, 2013 WL 2448125, at *9 (Fed. Cl. Off. of the Special Masters May 14, 2013) ("Awards for emotional distress are inherently subjective and cannot be determined by using a mathematical formula."); Muenstermann *ex rel.* Muenstermann v. United States, 787 F. Supp. 499, 527 (D. Md. 1992) ("The full extent of nonpecuniary damages is difficult to measure. The amorphous nature of the subject and the infinite variables that come into play make it impossible for courts to fashion any precise rule.").

[28] *See* Avraham, *supra* note 10, at 88 (describing the view that "pain-and-suffering damages actually compensate for a concrete loss: disfigurement, emotional trauma, extended physical discomfort, and loss of normal life-enhancing capacities").

[29] *Id.* Moreover, "emotional costs" may also result in physical symptoms. *See, e.g.*, W. PAGE KEETON, DAN B. DOBBS, ROBERT E. KEETON & DAVID G. OWEN, PROSSER AND KEETON ON THE LAW OF TORTS 56 (W. Page Keeton ed., 5th ed. 1984) ("[M]edical science has recognized long since that not only fright and shock, but also grief, anxiety, rage and shame, are in themselves 'physical' injuries, in the sense that they produce well marked changes in the body, and symptoms that are readily visible to the professional eye.").

[30] *Cf.* Edward J. McCaffery, Daniel J. Kahneman & Matthew L. Spitzer, *Framing the Jury: Cognitive Perspectives on Pain and Suffering Awards*, 81 VA. L. REV. 1341, 1345–46 (1995) (contending that due to the open-ended nature of pain and suffering evaluations, "legal scholars and others should pay more attention to cognitive effects on pain and suffering damages, so that society can respond more actively to choices made under the influence of cognitive tendencies").

[31] *See supra* note 10.

excessive.[32] Some commentators have even called for abolishing these damages.[33] Over the years, this criticism has yielded state tort law reforms, typically in the form of some cap on noneconomic damages.[34] Nevertheless, pain and suffering damages continue to make up a significant part of total compensatory awards,[35] and scholars have called for the repeal of reforms limiting them.[36] Accordingly, the investigation of racial disparities in these damages remains relevant and essential.

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[32] *See, e.g.*, CHAMALLAS & WRIGGINS, *supra* note 4, at 178 ("The main thrust of the tort reformers' general critique of noneconomic damages is that noneconomic damages are excessive and unpredictable."); John E. Calfee & Paul H. Rubin, *Some Implications of Damage Payments for Nonpecuniary Losses*, 21 J. LEGAL STUD. 371, 385 (1992) (maintaining that courts tend to overestimate the risk for pain and suffering loss because "judicial focus on the occurrence of an untoward event can obscure the smallness of the ex ante probability that the event would occur"). *But see* Neil Vidmar, *Empirical Evidence on the Deep Pockets Hypothesis: Jury Awards for Pain and Suffering in Medical Malpractice Cases*, 43 DUKE L.J. 217, 255, 262–64 (1993) (discussing empirical results that contest the hypothesis that jurors award excessive amounts for pain and suffering when the defendants have "deep pockets").

[33] *See*, *e.g.*, Joseph H. King, Jr., *Pain and Suffering, Noneconomic Damages, and the Goals of Tort Law*, 57 SMU L. REV. 163, 201 (2004) (suggesting that noneconomic damages for pain and suffering should no longer be recoverable in any personal injury torts claims and that prevailing plaintiffs in such claims should be awarded enhanced economic damages and reasonable attorney's fees instead); JEFFREY O'CONNELL, ENDING INSULT TO INJURY: NO-FAULT INSURANCE FOR PRODUCTS AND SERVICES 10, 97 (1975) (calling for the establishment of elective no-fault liability and explaining that under a no-fault liability scheme, insurance companies would only pay for an insured's out-of-pocket costs, rather than for pain and suffering damages).

[34] *See*, *e.g.*, CAL. CIV. CODE § 3333.2(b) (West 2022) ("In no action shall the amount of damages for noneconomic losses exceed two hundred fifty thousand dollars ($250,000)."); FLA. STAT. ANN. § 766.118(2) (West 2022) (limiting noneconomic loss resulting from medical malpractice to $1 million, excluding cases of permanent vegetative state or death). For updated data on states' tort law reforms, see RONEN AVRAHAM, DATABASE OF STATE TORT LAW REFORMS (7th ed. 2021) (tracking prevalent tort reforms in the United States from 1980 to 2020 and recording data on all tort law reforms in every state).

[35] Avraham, *supra* note 10, at 87 ("Pain-and-suffering awards seem to continue to make up approximately fifty percent of total awards, at least in some areas of personal injury cases."); Geistfeld, *supra* note 8, at 777 ("At present, pain-and-suffering damages account for about half of the total tort damages paid in products liability and medical malpractice cases."); *see also* John Campbell, Bernard Chao & Christopher Robertson, *Time Is Money: An Empirical Assessment of Non-Economic Damages Arguments*, 95 WASH. U. L. REV. 1, 3–5 (2017) (emphasizing the importance of non-economic damages).

[36] For a profound review of the arguments against the reforms limiting pain and suffering damages, see CHAMALLAS & WRIGGINS, *supra* note 4, at 170–82.

The ambiguous nature of pain and suffering losses makes them not only difficult to measure but also an ideal place for racial bias to linger undetected. Indeed, the effects of any bias are much more difficult to observe in open-ended assessments.[37] This is especially true when it comes to *implicit* bias. While the legal system has made notable progress in eliminating explicit or conscious bias,[38] only limited steps have been taken to confront the more difficult challenge of eliminating the effects of implicit bias.[39]

Social scientists define implicit bias as a cognitive phenomenon in which people consciously reject certain stereotypes or preferences but express them without conscious intent.[40] Thus, one may deny, even to oneself, that she holds prejudiced beliefs, while at the same time she is influenced by such beliefs when wearing a juror's hat.[41]

Unawareness and denial make the elimination of implicit bias in the courtroom a difficult task, even with respect to tangible damages.[42] The task becomes almost impossible when it comes to pain and suffering damages, which compensate for losses that are themselves intangible and difficult to define.

B. THE GOALS OF TORT LAW

Undercompensating minorities for their pain and suffering undermines three dominant goals of tort law: global fairness, deterrence, and corrective justice. In this section, I address each of

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[37] *See, e.g.*, Girvan & Marek, *supra* note 7, at 248–49 (connecting the racial discrepancies in pain and suffering damages to the psychological intuition that "ambiguity and discretion facilitate discrimination"); Geistfeld, *supra* note 8, at 785 (referring to studies showing that "extralegal factors such as" race and gender are "more influential in jury decision-making when the legal standards are the most" obscure).

[38] *See* Su, *supra* note 20, at 79–80 ("[A]lthough not all explicit biases have been eliminated in the courts, they are now no longer at the forefront of issues that courts address since many mechanisms have been put in place to prevent such issues." (footnote omitted)).

[39] *See id.* at 80 (describing steps taken by courts to address implicit bias as "limited" and "rang[ing] across the board").

[40] *See supra* note 20.

[41] *See id.* at 90 (theorizing that a potential jury instruction on implicit bias would not yield its intended result because it would not have a "great effect on how jurors may take their implicit biases into consideration when reanalyzing the evidence").

[42] *Cf. id.* at 89–91 (explaining that the influence of implicit bias remains even when detailed implicit-bias jury instructions are used due to jurors' lack of prior knowledge and the difficultly of applying knowledge of implicit bias to their own decision-making).

these aspects, starting with considerations of global fairness,[43] and in particular, the idea that similarly situated plaintiffs ought to be treated alike.[44] This concept is also referred to as "horizontal equity,"[45] or the idea of fairness-as-equality.[46]

As explained above, because pain and suffering are amorphous and harder to estimate with objective measures such as loss of income,[47] racial discrepancies in these damages are more difficult to detect and redress. Yet, a reality in which two plaintiffs with identical injuries are compensated differently for their pain and suffering based on arbitrary considerations such as race or gender cannot be squared with the concept of fairness as equality, which requires that like cases be treated alike.[48]

Implicit bias in pain and suffering damages also compromises a second critical goal of tort law: deterrence. To appreciate the uniquely severe problem of underdeterrence that results from undetected racial bias in pain and suffering damages,[49] consider the following hypothetical involving medical malpractice. Assume that a physician creates a foreseeable harm of severe trauma and anxiety to a plaintiff by mistakenly diagnosing her with terminal cancer while she is in fact healthy.[50] For simplicity, assume that the patient

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[43] *See supra* note 22.

[44] *See supra* note 22 and accompanying text; Randall R. Bovbjerg, Frank A. Sloan & James F. Blumstein, *Valuing Life and Limb in Tort: Scheduling "Pain and Suffering"*, 83 NW. U. L. REV. 908, 924 (1989) (explaining that "*fundamental fairness* requires similarly situated parties to be treated in a similar fashion by the legal system"); CHAMALLAS & WRIGGINS, *supra* note 4, at 163 (summarizing how some courts have opted to ensure equality among similarly situated plaintiffs regardless of their race and gender).

[45] Geistfeld, *supra* note 8, at 784. I will later explain that the definition of horizontal equity does not necessarily reflect the most prominent problem resulting from implicit bias. *See infra* Section III.B.

[46] Avraham, *supra* note 10, at 101.

[47] *See supra* notes 30–36 and accompanying text.

[48] *Cf.* CHAMALLAS & WRIGGINS, *supra* note 4, at 162 ("[T]he contemporary reliance on gender- and race-based tables amounts to an updated version of the old discriminatory practice.").

[49] *See* Geistfeld, *supra* note 8, at 786 ("[T]he element of arbitrariness and resultant unpredictability of pain-and-suffering awards undermine the deterrence function of the tort system . . . .").

[50] For examples of such diagnostic errors, see *In re* Flood v. Pendleton Mem'l Methodist Hosp., 989 So. 2d 809, 811–12, 816 (La. Ct. App. 2008) (affirming pain and suffering damages awarded by the trial court to the plaintiff who was misdiagnosed with Stage IV terminal bone cancer and later discovered that his diagnosis was based on a different patient's bone scan);

does not endure any physical harm as a result.[51] Assume further that if the patient is White, her expected harm is estimated at 10, whereas if the patient is Black, the same harm is estimated at 6. Finally, assume that the physician can reduce the risk of harm to 0 by taking precautions that would cost her 7.

To address the implications of the hypothetical, two basic rules should be taken into account: first, the rule of negligence, according to which the physician's behavior would amount to negligence if the costs of precautions are lower than the expected harm;[52] and second, the prevailing law, under which a physician's conduct is governed by the same standard of care regardless of whether she treats a White patient or a Black patient.[53]

Given these two basic rules, the hypothetical above demonstrates a legal phenomenon termed "misalignment," in which the expected harm that sets the standard of care is different from the expected harm for which liability is imposed and damages are awarded.[54] In

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Monroe v. State, No. 2012 CA 1683, 2013 WL 1791022, at *2 (La. Ct. App. Apr. 26, 2013) (affirming the trial court's decision to award damages to a plaintiff who was erroneously diagnosed with breast cancer and had her left breast removed needlessly, while also addressing the plaintiff's pain and suffering resulting from the diagnostic error).

[51] For example, assume the patient did not get a treatment for the cancer, which might have caused harmful physical consequences.

[52] The standard of care is generally determined by the formula first articulated by Judge Learned Hand in *United States v. Carroll Towing Co.*, 159 F.2d 169, 173–74 (2d Cir. 1947). According to this formula, liability in negligence should be determined based on the relation between investment in precaution (B) and the product of the probability (P) and magnitude (L) of harm resulting from the accident. *Id.* If PL exceeds B, then the defendant should be liable in negligence. *Id.* Conversely, if B equals or exceeds PL, then the defendant should not be held liable. *Id.* The formula was later endorsed by courts and the RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL & EMOTIONAL HARM § 3 cmt. e (AM. L. INST. 2010) (suggesting a risk–benefit balancing test to assess negligence, substantially similar to the Learned Hand formula, whereby the benefit is the advantage that the defendant gains if he or she refrains from taking precautions, and when the costs of precautions exceed this benefit, the defendant should be held liable in negligence).

[53] *See supra* note 4; *cf.* Ariel Porat, *Misalignments in Tort Law*, 121 YALE L.J. 82, 85–86 (2011) ("I could not find a single court decision suggesting that . . . a doctor would be required under negligence law to take better care of a high-income patient than a low-income patient . . . .").

[54] *See* Porat, *supra* note 53, at 84–85 ("In cases of misalignment, the risks that are accounted for in setting the standard of care are different from the risks for which liability is imposed and damages are awarded.").

the hypothetical, the standard of care should be set at 10[55] regardless of whether it applies to a Black or a White patient. Even assuming, however, that the jury applies the same standard of care for Black and White patients, and that the physician knows she will be held liable for negligence that causes her patients harm,[56] she will have no incentive to take precautions that cost her 7 when liability will cost her only 6, as in the Black patient's case. By contrast, she will be induced to take precautions costing her 7 to prevent liability that would cost her 10 in the White patient's case.[57]

The outcome for the Black patient in our hypothetical is even worse if we assume that jurors may be implicitly biased and thus unaware that they are underestimating the Black patient's harm. Because the standard of care is generally set according to the expected harm,[58] the standard of care is set higher for injuries that are evaluated as more costly than for injuries evaluated as less costly.[59] Therefore, when jurors unconsciously assess a Black plaintiff's injury at 6—and a White plaintiff's injury resulting from the same conduct at 10—they may also implicitly lower the standard of care in the Black plaintiff's case, setting it at 6.[60] Recall

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[55] The standard of care is set according to the expected harm. *See*, *e.g.*, STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW 182–89 (2004) (explaining that the duty of care reflects the expected losses resulting from the accident); Richard A. Posner, *A Theory of Negligence*, 1 J. LEGAL STUD. 29, 32–33 (1972) (explaining the connection between the expected harm and the precautions that would avert it).

[56] Because 10 is greater than 7, the Hand Formula, *supra* note 52, would not impose liability on the doctor.

[57] *See* Porat, *supra* note 53, at 107 ("[W]hile the standard of care is the same for all victims, the higher compensation awarded to high-income victims leads injurers to be more cautious toward this group after all."). A similar concern of misalignment is mentioned in the literature about the practice of using race-based tables to calculate tort damages for loss of life and limb when the plaintiff's injury is assessed in terms of loss of earnings and loss of earning capacity. *See, e.g.*, Yuracko & Avraham, *supra* note 1, at 327 ("The use of race-based tables creates an incentive for companies to disproportionately allocate risks to minority communities in order to minimize potential tort damages in the future.").

[58] *See supra* note 55.

[59] *See* Porat, *supra* note 53, at 86–87 (discussing accidents involving loss of income and noting that in light of courts' longstanding practice regarding the standard of care, "it seems that potential injurers should take greater care toward the rich than the poor, just as they should be more careful in their interactions with high-value property").

[60] This is especially true in cases of pure nonmonetary losses when the plaintiff does not suffer from any physical harm. But even when physical harm accompanies pain and suffering loss, it would be very difficult (if at all possible) to find out whether the jurors mistakenly

that the cost of precautions in our hypothetical is 7. As this simple numerical illustration shows, implicitly biased jurors applying disparate standards of care would therefore find that the physician met her duty of care to the Black plaintiff and would not hold her liable for negligence,[61] while they would find that she violated her duty of care with respect to the White plaintiff and would hold her liable for negligence.

Thus, although the law ostensibly requires the same levels of care toward White and Black patients, the physician in our hypothetical knows—despite the purest of intentions—that she is less likely to incur liability for negligence toward Black patients than toward White patients. As a result, the gap between the expected cost of harm to Black and to White patients is even greater. Under these conditions, the physician is incentivized (likely unconsciously) to act more cautiously toward White patients than toward Black patients.[62] In this scenario, Black patients are potentially disadvantaged at three junctures: first, when the physician exercises less caution in her medical treatment; second, when the jury applies a lower standard of care to the physician's conduct (making it less likely that the physician will be held liable for negligence); and third, when the jury applies the appropriate standard of care and holds the physician liable but awards damages in an amount that underestimates the plaintiff's loss.

It should be noted that the pattern of comparatively lower damage awards for Black plaintiffs places the Black patient in our hypothetical at a further disadvantage even before her case is filed. Minority plaintiffs who are, on average, more likely to struggle to pay hourly fees and therefore more often utilize contingency-fee

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applied different standards of care on the two types of harm even though they derive from the same negligence.

[61] This outcome would follow if in the Black patient-plaintiff's case, the jurors mistakenly interpreted the standard of care as requiring the physician to take precautions at a cost lower than 6.

[62] *Cf.* Porat, *supra* note 53, at 98 (explaining that because courts will award, on average, a greater amount in damages to victims from rich neighborhoods than to victims from poor neighborhoods, drivers are incentivized to be more careful when driving in a rich neighborhood); Kathryn A. Sabbeth, *(Under)Enforcement of Poor Tenants' Rights*, 27 GEO. J. ON POVERTY L. & POL'Y 97, 137 (2019) ("[T]he inability of poor tenants to access the legal system means that landlords have the fewest incentives to maintain safe conditions in poor people's homes.").

payments, might find an attorney who agrees to take their case.[63] Attorneys who work on contingency bases, however, select cases according to their expected damages and chances of winning.[64] Damages for loss of life and limb usually constitute a substantial part of plaintiffs' compensation.[65] These damages are computed based on loss of income,[66] and minorities whose earning capacity is, on average, lower than that of Whites', are expected to have a lower damages amount,[67] which then translates to expected lower contingency fees for their lawyers.[68] The Black patient in our hypothetical might therefore struggle more to find a lawyer who agrees to take her case than a White patient in similar circumstances.[69]

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[63] *See, e.g.,* Jennifer B. Wriggins, *Torts, Race, and the Value of Injury, 1900–1949*, 49 HOW. L.J. 99, 107 (2005) ("Many black clients, such as in the cases discussed in this Article, could not have paid a lawyer's hourly fee or advanced litigation expenses, but were able to bring tort suits. The fact that these suits were brought at all is in part a story of the success of contingency fee agreements.").

[64] *See, e.g.*, *id.* ("Lawyers who work on a contingency basis have incentives to select and aggressively pursue cases for which their clients are likely to win on liability and recover significant damages, whatever the race of the injured person."); Sabbeth, *supra* note 62, at 121 ("Contingency arrangements supply lawyers in cases that have a reasonable probability of success and damages high enough to make the pursuit worthwhile when factoring in the time and expenses of the litigation.").

[65] *See, e.g.*, Chamallas, *supra* note 4, at 75 (1994) (noting that that loss of future earning capacity is "frequently a sizable component of a damage award"). This is especially true due to the caps typically applied on noneconomic damages. *See infra notes* 83–84 and accompanying text.

[66] *See* Chamallas, *supra* note 4, at 79 ("[L]oss of future earning capacity compensates for the loss of ability to earn money, for the fact that the accident impaired plaintiff's (or decedent's) earning power.").

[67] *See id.* at 75 ("The use of [race- and gender-based tables for calculating damages] allows discrimination in one area—the setting of pay rates—to influence valuations in another area—the calculation of personal injury awards."); *see also supra* notes 4–6 and accompanying text.

[68] *See, e.g.*, David Sherwyn, Samuel Estreicher & Michael Heise, *Assessing the Case for Employment Arbitration: A New Path for Empirical Research*, 57 STAN. L. REV. 1557, 1574 (2005) ("Litigation in federal and state courts requires time, and time costs attorneys money. Consequently, plaintiffs' lawyers have less economic incentive to take employment claims from low-wage employees.").

[69] *Cf.* CHAMALLAS & WRIGGINS, *supra* note 4, at 178 (raising a similar argument when discussing the influence of caps on pain and suffering damages, Chamallas and Wriggins note that "in the same way that caps make it harder for elderly victims in nursing homes to find lawyers to take their cases, the racial impact of caps likely surfaces even before cases are

Importantly, the analysis here does not deny the possibilities that two individuals might experience different levels of pain or that similar circumstances might produce different emotional reactions in different people. It is possible that the individual Black patient in our hypothetical would experience either a lower or a higher level of trauma and anxiety than the individual White patient. The problem here, however, is that people *other* than the patient herself may assign to her a lower level of pain and suffering based on racial stereotypes, rather than on her individual characteristics. When this error occurs systematically toward a particular minority group,[70] and in particular toward one that people most often identify by appearance,[71] a severe problem of underdeterrence may arise.[72]

Last, the hypothetical above also demonstrates how undercompensating minority plaintiffs for their pain and suffering[73] undermines corrective justice. The theory of corrective justice views damages as a form of restoration needed to undo the injustice that the defendant's wrongful behavior inflicted on the plaintiff.[74] Put

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filed, settled, or tried"); Avraham & Yuracko, *supra* note 4, at 690 ("The caps on noneconomic damages greatly limit the overall recoveries of women and minorities, thus making it less likely for them to find a lawyer who will take on their case at all, as lawyers in that field work on a contingency fee basis.").

[70] *See, e.g.*, James L. Hilton & William von Hippel, *Stereotypes*, 47 ANN. REV. PSYCH. 237, 256 (1996) (describing prejudice as "negative evaluations of group members").

[71] *See, e.g.*, Cynthia Feliciano, *Shades of Race: How Phenotype and Observer Characteristics Shape Racial Classification*, 60 AM. BEHAV. SCIENTIST 390, 394, 401 (2016) (observing that "phenotypic differences are often employed in most definitions of race," and "of all the phenotypic characteristics, skin color is the most robustly significant and of the largest magnitude in predicting who is classified as White, Black, or Latino").

[72] *Cf.* Porat, *supra* note 53, at 104 (explaining that a problem of underdeterrence is especially problematic "when the typical potential victim can be clearly identified in advance by the injurer, and adapting the level of care toward him by the injurer is practical"). The physicians' error of judgment concerning the estimation of the severeness of their Black patients' injuries is particularly troublesome because this type of error is associated with the patients' appearance. It is their identification as "Black" that enables physicians who hold bias (even if unconsciously) to make this error of underestimating their pain.

[73] *See* Girvan & Marek, *supra* note 7, at 253 ("[H]olding the other variables constant, jurors tend to award black plaintiffs approximately 41 percent of the amount of pain and suffering damages as white plaintiffs, controlling for the other predictors."); Cardi et al., *supra* note 7, at 550 ("[I]n suits against individual defendants, black plaintiffs were awarded lower dollar damage awards than white plaintiffs [in the authors' experiment].").

[74] ERNEST J. WEINRIB, CORRECTIVE JUSTICE 84 (2012) ("Corrective justice integrates the injustice and its rectification by construing the latter as undoing the former.").

differently, damages are required to make the plaintiff whole again.[75] To realize this restorative function of tort law, compensatory damages cover a wide variety of injuries, including pain and suffering losses.[76] Assuming in the hypothetical above that a Black patient and a White patient suffer the same level of trauma and anxiety as a result of the physician's diagnostic error, the injury is the same, and both should be entitled to the same amount of damages.

Recall that although racial bias in any type of damages is a problem that must be addressed, it is especially insidious in the nebulous paradigm of pain and suffering damages where errors in assessing damages and setting the standard of care are much harder to uncover and correct. This makes pain and suffering damages a place where racial bias can flourish undetected.

The potential adverse effects of hidden racial bias (as well as other biases) on pain and suffering damages have not gone unnoticed.[77] In the next Part, I address some of the prominent solutions suggested in the literature to contend with this issue and then explain why they fall short.

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[75] CHARLES T. MCCORMICK, HANDBOOK ON THE LAW OF DAMAGES § 137 (1935) ("[D]amages for a tort should place the injured person as nearly as possible in the condition he would have occupied if the wrong had not occurred . . . ."); *see*, *e.g.*, WEINRIB, *supra* note 74, at 118 ("Because corrective justice views damages as undoing an injustice, it is particularly sensitive to the connection between the remedy that the plaintiff can claim and the injustice that is imputed to the defendant."); JULES COLEMAN, RISKS AND WRONGS 371–73 (1992) ("If it is to implement corrective justice, tort law must impose liability on that individual who has the duty in corrective justice to make good the victim's loss."). Naturally, damages can only make the plaintiff whole again in the normative sense because a monetary award cannot literally restore the plaintiff to his or her pre-accident state.

[76] *See* CHAMALLAS & WRIGGINS, *supra* note 4, at 157 (noting the inclusion of noneconomic damages as a form of compensable loss). For a view of corrective justice that is suspicious of the idea of damages for non-pecuniary losses, see, for example, Bruce Chapman, *Wrongdoing, Welfare, and Damages: Recovery for Non-Pecuniary Loss in Corrective Justice*, *in* PHILOSOPHICAL FOUNDATIONS OF TORT LAW 409 (David G. Owen ed., 1995). Chapman concludes that a monetary remedy for non-pecuniary loss increases the plaintiff's welfare in a way that is "irrelevant to the defendant's wrongdoing" and that in such cases only nominal damages should be available to the plaintiff. *Id.* at 425.

[77] *See supra* note 8.

III. SEVERITY OF INJURY: THE LOOPHOLE FOR RACIAL BIAS

A. CALCULATING PAIN

Scholars typically identify the potential effects of racial bias on pain and suffering damages as part of the greater issue of lack of consistency in these damages,[78] which, in turn, imperils not only their predictability,[79] but also the goal of "horizontal equity."[80] In response, many scholars have proposed approaches to calculating pain and suffering damages in ways that would improve consistency. In this section, I briefly present some of these proposals. Importantly, my purpose here is not to offer a complete survey of the different approaches to calculating pain and suffering damages,[81] but rather to draw attention to the common idea underlying these proposals, namely the view that the *severity of injury* is the best proxy for valuing a plaintiff's pain and suffering.[82]

The first approach I address, which has been adopted by many states,[83] sets a cap on the amount of damages available for pain and suffering. Caps purport to limit damages in order to improve their predictability and prevent the possibility of excessively high awards.[84] Scholars have criticized the cap policy because, *inter alia*, it leaves people with extremely severe injuries undercompensated[85] and creates obstacles for those low-income people who can only pay lawyers by contingency fees[86] to find a lawyer who agrees to take

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[78] *See supra* note 9.

[79] *See supra* note 10.

[80] *See supra* notes 44–46 and accompanying text.

[81] For a profound survey of the prominent approaches to computing pain and suffering damages, see, for example, Avraham, *supra* note 10, at 90–97.

[82] *See infra* note 103.

[83] *See supra* note 34.

[84] *See* Avraham, *supra* note 10, at 97 ("Under . . . a [capping] legal regime, lawyers and insurers would have better knowledge of the range of possible awards and the extent of unpredictability would be reduced.").

[85] This lack of adequate compensation, in turn, leads to a severe problem of underdeterrence whereby potential tortfeasors have "no incentive to invest more in avoiding more severe injuries because" they know that their liability for such injuries will be limited. *Id.* at 98–99.

[86] *See supra* notes 63–68 and accompanying text.

their case.[87] For present purposes, however, it is particularly important to address the cap policy's absence of any organizing idea to confront the potential inconsistency of pain and suffering damages within the range that falls below the cap.[88] Under the cap policy, jurors are left with the daunting task of evaluating the plaintiff's pain and suffering damages, subject only to an upper limit.[89] In this task, the severity of the plaintiff's injury is generally the guidepost offered for jurors.[90]

A different approach to contending with the difficult task of assessing pain and suffering damages proposes to supplement the tort system with structured methods of calculation, such as schedules and matrices.[91] Schedules (binding or non-binding) provide jurors with evidence of prior pain and suffering awards in similar cases.[92] The jurors thus can choose the right estimation of

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[87] *See* CHAMALLAS & WRIGGINS, *supra* note 4, at 177–78 ("Because caps on noneconomic damages reduce plaintiffs' recoveries, lawyers are less likely to represent . . . low-income plaintiffs when a contingency fee is the only avenue for attorney compensation."); *see also* Avraham, *supra* note 10, at 99 (observing that "low-income people, especially the unemployed . . . whose loss-of-income component in the total damage awards is null, might be left severely injured without adequate means of survivorship").

[88] Bovbjerg et al., *supra* note 44, at 957–58 (noting that the "arbitrary limits" on jury caps "fail to address any undervaluation or overvaluation below the ceiling").

[89] Geistfeld, *supra* note 8, at 790 (observing that capping damages does not resolve the core problem of helping juries determine the appropriate award).

[90] *Id.* at 839 (observing that "injury severity" constitutes "the sole piece of evidence that juries are told to consider").

[91] For a profound review of this approach, see, for example, Avraham, *supra* note 10, at 101–06.

[92] *See, e.g.*, Frederick S. Levin, *Pain and Suffering Guidelines: A Cure for Damages Measurement "Anomie,"* 22 U. MICH. J.L. REFORM 303, 310 (1989) (proposing "guidelines [that] would inform juries of the value for pain and suffering assigned by a large number of juries to injuries similar to those before the factfinder"). An estimation method similar to schedules is "comparability analysis," which is based on the idea of using information about prior similar cases as a guidance rule. *See, e.g.*, Hillel J. Bavli, *The Logic of Comparable-Case Guidance in the Determination of Awards for Pain and Suffering and Punitive Damages*, 85 U. CIN. L. REV. 1, 3–5 (2017) (defining comparable-case guidance and concluding that it reduces unpredictability and "improves[s] the accuracy of awards for pain and suffering and punitive damages generally by allowing for the sharing of relevant information across cases"); *cf.* Hillel J. Bavli & Reagan Mozer, *The Effects of Comparable-Case Guidance on Awards for Pain and Suffering and Punitive Damages: Evidence from a Randomized Controlled Trial*, 37 YALE L. & POL'Y REV. 405, 408 (2019) ("[T]here is strong evidence that prior-award information reduces the unpredictability of damage awards while also introducing the possibility of biasing the awards.").

damages based on defined categories that describe different levels of injury severity and prior awards for the injuries within each category.[93] The schedules approach has been criticized for the complexity that it brings into the already challenging process of evaluating pain and suffering damages, which are typically idiosyncratic and hard to compare.[94] Systems based on matrices classify injuries mostly according to their severity level as a key to valuing pain and suffering losses.[95] Although the matrices approach is less restrictive than the schedules approach, it has also been criticized for its complexity and administrative costs[96]—as well as for its failure to address the basic inquiry for which it was formed, i.e., "how one should initially assess the value of pain-and-suffering damages."[97] Indeed, it is not clear how the categories that best express the right amount of damages for pain and suffering loss can be determined without first answering this threshold question.[98]

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[93] *See* Geistfeld, *supra* note 8, at 791 ("The jury or reviewing court determines where the plaintiff's injury falls on the schedule, and the schedule provides a range or specified amount that can be binding or nonbinding on juries or courts.").

[94] Bovbjerg et al., *supra* note 44, at 920 ("The best available single predictor of award amount is the severity of injury . . . ."). Another problem of schedules is their dependence on past awards, which may lead to replicating previous assessment errors. *See* Geistfeld, *supra* note 8, at 791–92 (noting that "prior awards for injuries within each category [of the schedule] provide a range of damages amounts" and "[t]his reliance upon past awards . . . represents the most problematic aspect of . . . reform proposals" because it can ensure that juries repeat past mistakes).

[95] Bovbjerg et al., *supra* note 44, at 939–53 (proposing a matrix that defines the severity of injury by determining whether it is permanent or temporary and major or minor). Another key factor suggested for evaluating pain and suffering damages is the plaintiff's age. *See id.* at 941 (explaining that although young people are expected to recover faster from temporary pain and suffering injuries, they suffer more from permanent injuries because their life spans are longer). Alternatively, a more open-ended matrix would present few standardized injury scenarios for the jurors to choose from, each describing a different physical injury and severity level with corresponding monetary awards. *Id.* at 953–56 (observing that the monetary values attached to the scenarios in a proposed matrix would be "advisory rather than mandatory," allowing jurors flexibility to select "intermediate amounts between the scenario levels").

[96] *See* Avraham, *supra* note 10, at 103 (noting that even a "simple" matrix creates high levels of variance among injury-severity types and thus comparable problems of cost and administration).

[97] *Id.* at 104.

[98] *Cf.* Chase, *supra* note 8, at 765 (explaining that jurors must monetize pain and suffering based on their own subjective standards given a lack of any "'absolute' standard" by which to calculate pain and suffering damages).

A different approach intended to address this question asks the jury to consider the amount that a reasonable person would have paid *ex ante* to eliminate the risk that caused the plaintiff's pain and suffering.[99] This framework, commonly referred to as the "willingness to pay"[100] approach, similarly seeks to facilitate the determination of "the appropriate relationship between the severity of the plaintiff's injury and the amount of . . . compensation for that injury."[101] Like the previously described approaches, the willingness to pay approach asks jurors to estimate the severity of the plaintiff's injury, only this time from the perspective of a reasonable person: they must estimate how the plaintiff would have assessed the severity of her injury *ex ante*, and accordingly, how much she would have been willing to pay to eliminate the risk of its occurrence.[102]

As this brief review shows, severity of injury is generally used to evaluate pain and suffering damages[103] and is, in essence, "the item for which pain-and-suffering damages compensate."[104] Despite its centrality, severity of injury is highly obscure and difficult to evaluate objectively.[105] I return to this point later when I explain

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[99] *See* Geistfeld, *supra* note 8, at 804–10 (proposing an "ex ante full-compensation award" that includes the amount the consumer would be willing to pay to eliminate the risk of incurring the injury). This idea has also been criticized for its administrative complexity and costs and potential to distort deterrence by overcompensating victims. *See, e.g.*, Avraham, *supra* note 10, at 106–08 (describing various potential disadvantages of Geistfeld's *ex ante* approach).

[100] Avraham, *supra* note 10, at 106.

[101] Geistfeld, *supra* note 8, at 814.

[102] *See* Avraham, *supra* note 10, at 106–08, 110 ("Another approach . . . is to ask the jury to assess how much a rational individual would have paid ex ante to eliminate the risk that caused the pain-and-suffering loss.").

[103] *See, e.g.*, Yun-chien Chang, Theodore Eisenberg, Tsung Hsien Li & Martin T. Wells, *Pain and Suffering Damages in Personal Injury Cases: An Empirical Study*, 14 J. EMPIRICAL LEGAL STUD. 199, 205 (2017) ("Our first conjecture, based on discussions with dozens of judges in all three levels of courts in Taiwan, is that judges consciously base the amount of pain and suffering damages on the severity of injury."); Roselle L. Wissler, Allen J. Hart & Michael J. Saks, *Decisionmaking About General Damages: A Comparison of Jurors, Judges, and Lawyers*, 98 MICH. L. REV. 751, 760–61 (1999) (showing that subjective assessments of severity of injury account for 61% the variance in damages awards); Bovbjerg et al., *supra* note 44, at 920, 941 (identifying the severity of injury as "[t]he best available single predictor" for pain and suffering damages).

[104] Avraham, *supra* note 10, at 114.

[105] *See* Geistfeld, *supra* note 8, at 781 ("[T]here is no objective test that measures the severity of the victim's pain-and-suffering injury."); *see also* Bovbjerg et al., *supra* note 44, at

that the concept of severity creates a loophole through which extralegal factors such as race and gender considerations can infiltrate the evaluation of pain and suffering damages.[106]

At this juncture, I want to draw attention to two so-called "equity scales" pertaining to pain and suffering damages and the severity-of-injury inquiry[107]: "vertical equity," which expresses the idea that plaintiffs who suffer more severe injuries should receive higher damage awards,[108] and "horizontal equity," according to which injuries with similar levels of severity should be compensated alike.[109] While the state of vertical equity is generally perceived as "rather good,"[110] meaning that "more severe injuries tend to receive higher awards,"[111] horizontal equity is perceived as deficient because similarly severe injuries are still often awarded disproportionately.[112] Accordingly, scholars have shifted their attention to the challenges of estimating the severity-of-injury factor primarily through the lens of horizontal equity.[113]

I suggest that the scholarship's focus on resolving horizontal equity is at least partly responsible for allowing implicit racial bias to infiltrate the estimation of pain and suffering damages. The problem with implicit racial bias is that it may disrupt the evaluation of severity of injury *in one's mind*, thus making a juror genuinely believe that a Black victim's injury is less severe than it actually is. When people evaluate *equally* severe injuries *differently,* they compromise both vertical and horizontal equity. Racially

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920–21 (noting that the affiliation of the suffering to physical injury, the injury's permanence, and whether the injury is minor or major as some factors that scholars have suggested to evaluate the severity of pain and suffering); Avraham, *supra* note 10, at 112 (stating that the medical costs associated with the required treatment for the injury may also correlate to pain and suffering damages).

[106] *See infra* notes 123–129, 157–164 and accompanying text.

[107] *See* CHAMALLAS & WRIGGINS, *supra* note 4, at 179–80 (pointing out the centrality of severity of injury in both vertical and horizontal equality).

[108] *See*, *e.g.*, Bovbjerg et al., *supra* note 44, at 924 (defining vertical equity as "the fairness between separate categories of injury"); Geistfeld, *supra* note 8, at 784 ("[P]laintiffs who suffer more severe injuries tend to receive higher awards (indicating some degree of 'vertical equity') . . . .").

[109] *See supra* notes 44–46 and accompanying text.

[110] Bovbjerg et al., *supra* note 44, at 924.

[111] Geistfeld, *supra* note 8, at 784.

[112] *Id.* at 784–85.

[113] *See supra* notes 44–46.

disparate perceptions of severity of injury allow injuries with different levels of severity to receive similar awards,[114] thus disrupting vertical equity, and allow similarly severe injuries to receive different awards, thus disrupting horizontal equity.[115]

Implicit bias influences both scales of equity because it concerns the qualitative process of thinking about the severity of injury, rather than the quantitative description of the harmful effects of that injury.[116] The approaches to measuring pain and suffering damages described above concentrate only on the latter issue, trying to estimate the effects of the injury on the plaintiff. These approaches thus leave aside the problems associated with jurors' (as well as healthcare providers') subjective views of the injury's harmful effects on the plaintiff. Yet, this is exactly where implicit bias lies.

B. THE COLOR OF PAIN

This section explains how racial bias infiltrates pain and suffering damages from two different, yet connected, sources: jurors' and healthcare providers' evaluations of the severity of the plaintiff's injury.

1. Racial Bias in Jurors' Assessments. For centuries, racist beliefs have attributed fundamental biological differences to Black and White people.[117] Indeed, myths such as "Black skin is thicker than White skin,"[118] which imagines that Black people have greater

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[114] For example, in the hypothetical above, as a result of racial bias, the Black plaintiff's award (if she gets one) would be 6, whereas a White plaintiff would receive 6 for a less-severe injury.

[115] For example, as the hypothetical above demonstrates, two plaintiffs with identical injuries can get different damage awards ($6 \neq 10$) because of racial bias.

[116] *Cf.* Geistfeld, *supra* note 8, at 785 ("The possibility that jurors rely on extralegal factors such as gender, race, socioeconomic status, or physical appearance is a significant concern, particularly since studies have shown that such factors become more influential in jury decision-making when the legal standards are the most ambiguous.").

[117] *See* Kelly M. Hoffman, Sophie Trawalter, Jordan R. Axt & M. Norman Oliver, *Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites*, 113 PROCS. NAT'L ACAD. SCIS. 4296, 4297 (2016) ("Beliefs that blacks and whites are fundamentally and biologically different have been prevalent in various forms for centuries.").

[118] *See, e.g.*, JOHN BROWN, SLAVE LIFE IN GEORGIA: A NARRATIVE OF THE LIFE, SUFFERINGS, AND ESCAPE OF JOHN BROWN, A FUGITIVE SLAVE, NOW IN ENGLAND 47–48 (L.A. Chamerovzow

resistance to pain than White people, are still common[119]—although they tend to be hidden in what some might view at first glance as "innocuous" or "benevolent" beliefs, such as those attributing superior athletic capabilities and greater strength to Black people.[120] These beliefs express what psychologists define as "infrahumanization," meaning "that people tend to perceive out-group members as less human than in-group members,"[121] even if that means associating them with superhuman capacities.[122]

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ed., 2d ed. 1855) (documenting Dr. Thomas Hamilton's horrific experiments on John Brown, which were motivated by the belief that Black skin was thicker than White skin).

[119] *See, e.g.*, Hoffman et al., *supra* note 117, at 4297–98 (finding that participants in a study who rated "high" in false racial beliefs rated the pain of Black individuals lower and the pain of White individuals higher than participates who rated "low" in false beliefs, indicating that "relative to participants low in false beliefs, [the participants holding such racial beliefs] seemed to assume that the black body is stronger and that the white body is weaker"); Sophie Trawalter, Kelly M. Hoffman & Adan Waytz, *Racial Bias in Perceptions of Others' Pain*, 7 PLOS ONE, Nov. 2012, at 1, 1 (finding that "people assume *a priori* that Blacks feel less pain than do Whites"); René Bowser, *Racial Profiling in Health Care: An Institutional Analysis of Medical Treatment Disparities*, 7 MICH. J. RACE & L. 79, 103 (2001) (observing that "the unquestioned knowledge that Blacks are biologically and culturally different serves as an unseen and unquestioned antecedent" to forming patterns or practices in highly formalized settings, such as the biomedical community); Thompson, *supra* note 25, at 1244 ("Social science research has made clear that a majority of Americans carry some level of subconscious or implicit bias against racial minorities and that this bias manifests itself in the application of racial stereotypes.").

[120] *See, e.g.*, Waytz et al., *supra* note 17, at 352 (finding that "Whites preferentially attribute superhuman capacities to Blacks versus Whites"); D. MARVIN JONES, RACE, SEX, AND SUSPICION: THE MYTH OF THE BLACK MALE 139 (2005) ("Ideas about the 'natural' physical talents of dark-skinned peoples, and the media-generated images that sustain them, probably do more than anything else in our public life to encourage the idea that blacks and whites are biologically different in a meaningful way."); Catherine A. Cottrell & Steven L. Neuberg, *Different Emotional Reactions to Different Groups: A Sociofunctional Threat-Based Approach to "Prejudice"*, 88 J. PERSONALITY & SOC. PSYCH. 770, 770 (2005) (stating that "African Americans are [stereotyped as] noisy, athletic, and 'hav[ing] an attitude'"); Patricia Vertinsky & Gwendolyn Captain, *More Myth than History: American Culture and Representations of the Black Female's Athletic Ability*, 25 J. SPORT HIST. 532, 533–34 (1998) (tracing the construction and perpetuation of the myths about Black women athletes and their abilities in the context of American culture).

[121] Nick Haslam & Steve Loughnan, *Dehumanization and Infrahumanization*, 65 ANN. REV. PSYCH. 399, 402 (2014).

[122] *See* Waytz et al., *supra* note 17, at 352 (finding that "White Americans superhumanize Black people relative to White people"); Hoffman et al., *supra* note 117, at 4297 (explaining that a different prejudiced explanation for attributing Black people superhuman capacities

At the core of the myth that a Black body is stronger than a White one lies the belief that Black people experience less pain than White people.[123] This belief has a variety of possible implications. For example, in examining National Football League injury reports, researchers found that "injured Black players [we]re deemed more likely to play in a subsequent game," relative to injured White players.[124] Other researchers have shown that Black people are sometimes perceived as better able to suppress hunger and thirst,[125] or even to tolerate heat, than White people.[126] Researchers have found discrepancies in evaluating the physical conditions of injured White and Black people among medical students and professionally trained residents,[127] which I address separately below.[128] This raises the concern that judges and jurors are likewise susceptible to false racial beliefs. When these racial beliefs are implicit, a judge or juror might underestimate the severity or the effects of a Black plaintiff's injury, all the while being completely convinced that her view is objective and not biased.[129] In such a case, the amount of damages awarded to a Black plaintiff would be lower than she actually deserves.

The possible effects of implicit bias on jurors' decision-making have been extensively explored in the literature[130] and are reflected

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is that "black people are better athletes—stronger, faster, and more agile—as a result of natural selection and deliberate breeding practices during slavery").

[123] *See* Hoffman et al., *supra* note 117, at 4297–98 (finding that when participants in a study were asked to rate the pain of a gender-matched Black or White target across the same scenarios, participants who rated the Black target reported lower pain estimates than participants who rated the White target and that participants with higher levels of false racial beliefs rated the Black target's pain even lower).

[124] Trawalter et al., *supra* note 119, at 1–2 (examining NFL players' injury reports from two seasons and concluding that Black injured players were rated as more likely to play in the next game than White players, controlling for age, experience in NFL, position, and injury type).

[125] Waytz et al., *supra* note 17, at 5.

[126] Hoffman et al., *supra* note 117, at 4297.

[127] *Id.* at 4298–99.

[128] *See infra* notes 148–153 and accompanying text.

[129] *See* Justin D. Levinson, *Forgotten Racial Equality: Implicit Bias, Decisionmaking, and Misremembering*, 57 DUKE L.J. 345, 386–87 (2007) (suggesting that racial memory encoding may lead to "cognitive errors such as framing effects" and "decision-making problems"); *infra* notes 136–142, and accompanying text.

[130] *See e.g.*, Levinson, *supra* note 129, at 406 ("The results of the empirical study, combined with existing research on implicit social cognition and memory, lead to the conclusion that

in existing procedures and practices intended to confront these unwanted effects before trial (e.g., peremptory challenges),[131] during the trial (e.g., the process of jury deliberation as a group[132] and the use of jury instructions[133]), and in the final decision stage

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implicit [racial] memory biases most likely operate in legal decisionmaking."); Cardi et al., *supra* note 7, at 550 (focusing on the influence of implicit bias on tort litigation and concluding that Black plaintiffs were awarded lower damage awards than White plaintiffs); Thompson, *supra* note 25, at 1297–1300 (suggesting reform in voir dire and jury instructions to contend with implicit racial bias in criminal litigation); McCaffery et al., *supra* note 30, at 1347–87 (investigating implicit bias in the context of pain and suffering losses, particularly concentrating on the connection between the framing of jury instructions and the monetary awards in these cases).

[131] Peremptory challenges enable the parties to eliminate potential jurors from either side of the legal dispute to secure impartiality in a trial. *See, e.g.*, 28 U.S.C. § 1870 ("In civil cases, each party shall be entitled to three peremptory challenges."); FED. R. CIV. P. 47(b) ("The court must allow the number of peremptory challenges provided by 28 U.S.C. § 1870."). But peremptory challenges are often ignored in civil trials. *See, e.g.*, Roger Allan Ford, *Modeling the Effects of Peremptory Challenges on Jury Selection and Jury Verdicts*, 17 GEO. MASON L. REV. 377, 380 n.11 (2010) (analyzing peremptory challenges in criminal cases because "most of the controversy about peremptory challenges concerns their use in criminal cases"). Even scholars and judges have questioned the effectiveness of peremptory challenges. *See, e.g.*, Joshua Revesz, Comment, *Ideological Imbalance and the Peremptory Challenge*, 125 YALE L.J. 2535, 2535 (2016) ("Allowing parties to unilaterally strike prospective jurors without explanation has been attacked as undemocratic, as prone to manipulation, as a potential First Amendment violation, and—most often of all—as racist. Judges and even prosecutors have spoken out against the procedure." (footnotes omitted)); Valerie P. Hans & Alayna Jehle, *Avoid Bald Men and People with Green Socks? Other Ways to Improve the Voir Dire Process in Jury Selection*, 78 CHI.-KENT L. REV. 1179, 1182–97 (2003) ("The research we review below indicates that limited voir dire, as it is practiced in many United States jurisdictions, is not effective in identifying and vetting jurors with relevant experiences and attitudes."); Albert W. Alschuler, *The Supreme Court and the Jury: Voir Dire, Peremptory Challenges, and the Review of Jury Verdicts*, 56 U. CHI. L. REV. 153, 163–70 (1989) ("Peremptory challenges ensure the selection of jurors on the basis of insulting stereotypes without substantially advancing the goal of making juries more impartial.").

[132] Catharine Pierce Wells, *Tort Law as Corrective Justice: A Pragmatic Justification for Jury Adjudication*, 88 MICH. L. REV. 2348, 2406–08 (1990). Wells notes that in order to eliminate individuals' bias among the jury, the jurors sit together throughout the trial "enclosed in a box," "retire to the privacy of a jury room" to deliberate, and are overall physically isolated from the outside world. *Id.* Wells also emphasizes the importance of jurors engaging in mutual discussion amongst themselves, which leads to what she identifies as collective, rather than aggregative, decision-making (i.e., a judgment that transcends individual viewpoint). *Id.*

[133] *See*, *e.g.*, WASH. STATE SUP. CT. COMM. ON JURY INSTRUCTIONS, 6 WASHINGTON PATTERN JURY INSTRUCTIONS—CIVIL WPI 1.01 (7th ed. 2019) ("It is important that you discharge your duties without discrimination, meaning that bias regarding the race, color, religious beliefs,

(e.g., reducing the required number of assenting jurors).[134] These procedures and practices, however, are mostly designed to contend with explicit forms of bias. And indeed, although explicit racial bias has not been eliminated, expressions of prejudice have become considerably less common in the courtroom.[135]

And yet, studies reveal that even when explicit racial bias is appropriately treated, implicit racial bias lingers. For example, participants in a study on implicit bias and memory errors systematically misremembered relevant case facts in a racially biased manner that harmed Black litigants.[136] Interestingly, the participants who showed greater memory bias against Black litigants were *not* found to be more likely to be explicitly biased.[137]

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national origin, sexual orientation, gender, or disability of any party, any witnesses, and the lawyers should play no part in the exercise of your judgment throughout the trial. These are called 'conscious biases'– and, when answering questions, it is important, even if uncomfortable for you, to share these views with the lawyers."). For a discussion about using jury instructions as means for reducing racial bias, see generally, Thompson, *supra* note 25 (suggesting that courts make racial bias "salient at trial" by improving jury instructions so that they address both conscious and unconscious stereotypes); Suzanne Mannes, Elizabeth E. Foster & Shana L. Maier, *Jury Instructions: How Timing, Type and Defendant Race Impact Capital Sentencing Decisions*, 14 APPLIED PSYCH. CRIM. JUST. 154, 157–68 (2018) (discussing different methods for conveying the instructions to the jury to reduce potential bias, and finding that the timing of providing the instructions significantly impacts juror bias); Chase, *supra* note 8, at 766–68 (discussing jury instructions such as those directing the jurors to use their "collective enlightened conscience[s]" or to determine the sum of recovery "justly and fairly," arguing that this type of terminology is too vague and thus only introduces more confusion to the jury's open-ended task of evaluating the plaintiff's pain and suffering).

[134] *See*, *e.g.*, HAROLD J. ROTHWAX, GUILTY: THE COLLAPSE OF CRIMINAL JUSTICE 213 (1996) (noting that most states "permit nonunanimous verdicts in civil cases"); Wells, *supra* note 132, at 2407 (explaining that jury decisions may eliminate or at least limit the impact of individual opinion). It should be noted, however, that eliminating the impact of the minority may actually fail to achieve this goal when the minority balances against a biased decision. *See, e.g.*, Michael H. Glasser, *Letting the Supermajority Rule: Nonunanimous Jury Verdicts in Criminal Trials*, 24 FLA. ST. U. L. REV. 659, 676–77 (1997) (suggesting a plan that would help ensure that the jurors in the majority will not ignore the arguments of jurors in the minority once the majority attains the requisite number of assenting jurors).

[135] *See* Su, *supra* note 20, at 79–80 (explaining that "although not all explicit biases have been eliminated in all the courts, they are now no longer at the forefront of issues that courts address since many mechanisms have been put in place to prevent such issues" (footnote omitted)).

[136] *See* Levinson, *supra* note 129, at 398–406.

[137] *Id.* at 404 ("[P]articipants who manifested more memory bias were not more likely to be explicitly biased.").

Moreover, the study results revealed an alarming fact: some of the participants who showed lower levels of explicit bias were actually found to be more racially biased than participants who showed higher levels of explicit bias.[138] These results are consistent with evidence that people, including judges,[139] have discovered after taking an Implicit Association Test[140]: although they were certain of their neutral and unbiased opinions, they were in fact unconsciously biased against Black people.[141] This evidence is especially disturbing considering that research has shown that implicit bias is not only much harder to detect than explicit bias, but also much harder to control.[142]

Naturally, most of the existing research on implicit racial bias among jurors focuses on its detrimental implications in the context of criminal litigation, where juror prejudice may result in the deprivation of an innocent defendant's freedom.[143] The focus on the criminal arena has left the field of tort law neglected and more exposed to the negative influences of implicit racial bias. This is especially troubling in light of recent research on implicit racial bias in tort litigation, which revealed that people tend to award Black plaintiffs lower damage awards than White plaintiffs, both in general and with respect to pain and suffering damages

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[138] *Id.* (noting instances where people with scores indicating less explicit racism were more likely to demonstrate racial bias than those with higher scores).

[139] Recently retired Judge Mark W. Bennet of the United States District Court in the Northern District of Iowa shared his experience of taking the Implicit Association Test and learning that he had "very high implicit bias against African Americans." *See* ABA Criminal Justice Section, *Highlights: Judges Explore Implicit Bias*, YOUTUBE, at 4:47–4:51 (May 29, 2015) [hereinafter Judge Mark W. Bennett Video], https://www.youtube.com/watch?v=12TY110t8PY.

[140] The Implicit Association Test (IAT) is part of Project Implicit based at Harvard University that aims to "measure[] attitudes and beliefs that people may be unwilling or unable to report." PROJECT IMPLICIT, https://implicit.harvard.edu/implicit/education.html (last visited Feb. 10, 2022).

[141] *See* Judge Mark W. Bennett Video, *supra* note 139, at 4:05–5:15 (describing his discovery of his implicit bias against African Americans in his Implicit Association Test results, even though he was previously convinced that he was unbiased).

[142] Levinson, *supra* note 129, at 406 (noting that "social scientists have demonstrated that implicit biases are 'widespread' and frequently resistant to intervention").

[143] *See infra* notes 171–172 and accompanying text (noting that juror bias can have detrimental effects on a defendant's freedom).

specifically.[144] Recently, researchers at the University of Oregon conducted an exploratory analysis on a broad sample of cases and confirmed these patterns.[145] They found that jurors had a tendency to award Black plaintiffs less in pain and suffering damages than White plaintiffs.[146] Interestingly, they did not find a similar disparity concerning other minorities.[147]

2. Racial Bias in Medical Providers' Assessments. Even in the optimistic case in which jurors' implicit racial bias can be identified and properly contained, it is important to acknowledge the possibility that healthcare providers' judgments and testimonies, on which jurors base their decisions, might also be influenced by such bias. Indeed, studies suggest that false beliefs attributing biological differences to Black and White bodies, or attributing higher resistance to pain to Black people, are still present in modern day medical education and practice.[148] These studies suggest that Black people's injuries and the effects of those injuries might be underestimated as compared to the same injuries in White people, even through the eyes of well-trained healthcare providers.

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[144] *See supra* note 7 (describing how evidence of racial discrepancies in damages cannot be explained fully by the use of race-based tables or similar statistical data).

[145] Girvan & Marek, *supra* note 7, at 252–53.

[146] *See id.* at 253 ("[H]olding the other variables constant, jurors tend to award black plaintiffs approximately 41 percent of the amount of pain and suffering damages as white plaintiffs, controlling for the other predictors.").

[147] *Id.*

[148] *See*, *e.g.*, Hoffman et al., *supra* note 117, at 4296 ("[A] substantial number of white laypeople and medical students and residents hold false beliefs about biological differences between blacks and whites[.] . . . [T]hese beliefs predict racial bias in pain perception and treatment recommendation accuracy."); Sophie Trawalter & Kelly M. Hoffman, *Got Pain? Racial Bias in Perceptions of Pain*, 9 SOC. & PERSONALITY PSYCH. COMPASS 146, 152 (2015) ("Our findings suggest that one reason black patients may receive less pain medication is that medical professionals assume black patients feel less pain than do white patients."); Linda Villarosa, *Myths About Physical Racial Differences Were Used to Justify Slavery – and Are Still Believed by Doctors Today*, N.Y. TIMES (Aug. 14, 2019), https://www.nytimes.com/interactive/2019/08/14/magazine/racial-differences-doctors.html ("Over the centuries, the two most persistent physiological myths—that black people were impervious to pain and had weak lungs that could be strengthened through hard work—wormed their way into scientific consensus, and they remain rooted in modern-day medical education and practice."); *see also* LUNDY BRAUN, BREATHING RACE INTO THE MACHINE: THE SURPRISING CAREER OF THE SPIROMETER FROM PLANTATION TO GENETICS 198 (2014) ("As historians have demonstrated repeatedly, social conditions influence scientists and how they interpret their findings.").

For example, one study found that Black and Hispanic patients were less likely than White patients to receive pain-reducing treatment in ambulance response settings (whereas neither sex nor age was found to be a significant predictor).[149] Racial discrepancies in pain assessment were even found in children through a study of nearly one million children diagnosed with appendicitis that showed that Black children were less likely to receive any pain medication.[150] Racial disparities in healthcare providers' estimation of patients' severity of injury were also found in responses to Black and White patients in hospital emergency departments,[151] as well as in responses to Black and White patients' complaints describing identical symptoms of chest pain[152] and knee problems.[153]

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[149] *See* Megann F. Young, H. Gene Hern, Harrison J. Alter, Joseph Barger & Farnaz Vahidnia, *Racial Differences in Receiving Morphine Among Prehospital Patients with Blunt Trauma*, 45 J. EMERGENCY MED. 46, 51 (2013) ("This study suggests that Caucasians . . . are more likely to receive analgesia for blunt trauma injuries in the prehospital setting. When adjusted for pain severity and other characteristics, sex and age were not significant factors in this analysis.").

[150] *See* Monika K. Goyal, Nathan Kuppermann, Sean D. Cleary, Stephen J. Teach & James M. Chamberlain, *Racial Disparities in Pain Management of Children with Appendicitis in Emergency Departments*, 169 JAMA PEDIATRICS 996, 998 (2015) ("When stratified by pain score and adjusted for ethnicity . . . black patients with moderate pain were less likely to receive any analgesia than white patients.").

[151] *See* Mark J. Pletcher, Stefan G. Kertesz, Michael A. Kohn & Ralph Gonzales, *Trends in Opioid Prescribing by Race/Ethnicity for Patients Seeking Care in US Emergency Departments*, 299 JAMA 70, 72 (2008) (finding differences in opioid prescriptions for pain between ethnic minority patients and White patients in hospital emergency departments).

[152] Kevin A. Schulman et al., *The Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization,* 340 NEW ENG. J. MED. 618, 623 (1999) (finding that patients' race and sex affected physicians' decisions about whether to refer the patient for cardiac catheterization, especially with respect to Black female patients). The researchers used Black and White actors who described similar symptoms of chest pain. *Id.* at 619. A videotape of the patients was then shown to 720 physicians, who were told that they were participating in a study of clinical decision making. *Id.* at 619, 621. The researchers did not tell the physicians that the purpose of the study was to determine the effects of patients' race (and sex) on clinical decision making. *Id.* at 619. For a thorough review of this study, see Bowser, *supra* note 119, at 85 n.28 (pointing out that "[b]y using actors and actual physicians in a controlled environment, the study avoid[ed] some of the methodological issues involved in adjusting for confounding variables," such as patients' income and socioeconomic status, and observing that, due to racial bias, "equality of health care coverage does not guarantee equality of medical treatment").

[153] Emma Pierson, David M. Cutler, Jure Leskovec, Sendhil Mullainathan & Ziad Obermeyer, *An Algorithmic Approach to Reducing Unexplained Pain Disparities in*

Importantly, none of these studies suggests that the healthcare providers disregarded what they considered severe injuries.[154] Instead, the studies imply that the providers, likely unconsciously, interpreted the Black patients' injuries to be less severe.[155] They thus demonstrate what Oliver Wendell Holmes observed more than a century ago: There is a "closer relation between the Medical Sciences and the conditions of Society and the general thought of the time, than would at first be suspected."[156] Evidently, implicit racial bias may distort even well-trained healthcare providers' assessments of injury severity.

These types of disruptions in assessing Black patients' severity of injury cannot be offset by using proxies, such as a minor–major severity scale[157] or a medical costs indicator.[158] When a physician unconsciously underestimates the severity or effects of her Black patients' injuries as compared to her White patients', she may consequently classify her Black patients' injuries as more minor on a minor–major scale. Similarly, the disruptions in assessing Black patients' severity of injury may also influence the physician's judgment regarding the needed course of treatment, which in turn translates to lower medical costs. Research supports this conclusion. Racial discrepancies in treatment have been observed not only in responses to severe pain of Black versus White patients,[159] but also in Black versus White patients' admission to

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Underserved Populations, 27 NATURE MED. 136, 138–39 (2021) (suggesting the use of algorithmic predictions to redress racial disparities in treatments for knee problems due to mistaken measures of severity graded by radiologists).

[154] *See supra* notes 151–153.

[155] *See, e.g.*, *supra* note 62 and accompanying text.

[156] OLIVER WENDELL HOLMES, MEDICAL ESSAYS: 1842–1882, at 177 (1911).

[157] *See* Bovbjerg et al., *supra* note 44, at 939–41. Bovbjerg, Sloan, and Blumstein also offer to define the level of severity of injury with reference to a permanent–temporary scale. *See id.* Even this scale has some gray areas in which there is room for interpretation, though. As explained above, gray areas are where racial bias can linger. *See supra* note 37 and accompanying text.

[158] Avraham, *supra* note 10, at 110–12 (proposing the use of medical costs of present and future treatments that the plaintiff's injury necessitates as a proxy for severity of injury to determine the appropriate sum for pain and suffering damages and explaining that "larger economic losses are correlated with higher severity of injury, which in turn is what pain and suffering is all about").

[159] *See supra* notes 149–150.

cardiac care units,[160] receipt of heart bypass surgery or coronary angioplasty,[161] dialysis treatments,[162] and various other treatments and hospital services.[163] Because implicit racial bias may result in inferior treatment for Black patients,[164] it is reasonable to assume that the medical costs that this treatment entails—on its face, an objective indicator for estimating the plaintiff's pain and suffering and severity of injury—are also affected by racial bias.

Thus, the approaches to calculating pain and suffering damages depend, at least to some extent, on jurors' and healthcare providers' interpretations of the evidence pertaining to the severity of a plaintiff's injury.[165] Studies indicate that this interpretation is

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[160] Tetyana P. Shippee, Kenneth F. Ferraro & Roland J. Thorpe, *Racial Disparity in Access to Cardiac Intensive Care Over 20 Years*, 16 ETHNICITY & HEALTH 145, 162 (2011) ("The racial disparity in access to CCUs [cardiac care units] is clear . . . . We conclude that the chain of risks leading to CCU admission is distinct for Black and White adults. . . . Black individuals experience a chain of cultural and economic risks that influence their health care access.").

[161] David M. Carlisle, Barbara D. Leake & Martin F. Shapiro, *Racial and Ethnic Disparities in the Use of Cardiovascular Procedures: Associations with Type of Health Insurance*, 87 AM. J. PUB. HEALTH 263, 265 (1997) ("The study population underwent . . . 10 604 [sic] coronary artery bypass graft surgeries, and 9190 [sic] coronary artery angioplasties . . . . Slightly more than two thirds of the study population consisted of White patients.").

[162] C.M. Kjellstrand & George M. Logan, *Racial, Sexual and Age Inequalities in Chronic Dialysis*, 45 NEPHRON 257, 257 (1987) ("[T]here are three times as many blacks on dialysis per million population as whites in the United States.").

[163] For a survey of some of these discrepancies, see, for example, Graciela J. Soto, Greg S. Martin & Michelle Ng Gong, *Healthcare Disparities in Critical Illness*, 41 CRITICAL CARE MED. 2784, 2787 (2013) (listing racial disparities in clinical management such as care delivered "before, during, and after [an] ICU stay"; admission "to an ICU from the emergency department"; receipt of "interventions such as dialysis, tracheostomy, central venous access, and pulmonary artery catheterization"; and post-ICU discharges of "[n]onwhites with sepsis and mechanically ventilated African-American patients" to another medical facility or to long-term acute care hospitals); and John F. Williams, Jack E. Zimmerman, Douglas P. Wagner, Millard Hawkins & Williams A. Knaus, *African-American and White Patients Admitted to the Intensive Care Unit: Is There a Difference in Therapy and Outcome?*, 23 CRITICAL CARE MED. 626, 626–636 (1995) (explaining the significant racial differences in the frequency of organ transplantation and coronary arteriography surgery).

[164] *See supra* note 150 and accompanying text; *see also* Bowser, *supra* note 119, at 120 (arguing that racial profiling in medicine, which is common, often "leads to errors in diagnosis, distorted judgments about the appropriate course of treatment, and, ultimately, to different and inferior medical treatment"); Villarosa, *supra* note 148 ("The poor health outcomes of black people, the targets of discrimination over hundreds of years and numerous generations, may be a harbinger for the future health of an increasingly diverse and unequal America.").

[165] See *supra* notes 103–104 and accompanying text.

systematically disrupted by racial bias, especially toward Black plaintiffs.[166] The latter conclusion is particularly alarming when considering the ambiguous nature of pain and suffering damages, which can easily conceal the effects of implicit racial bias.[167] Implicit racial bias disrupts the evaluation of the injury's severity in people's minds, making people believe a Black person's injury is less severe than it actually is.[168] The approaches to calculating pain and suffering damages proposed to date focus on severity of injury without addressing this problem.[169] Therefore, they cannot provide a sufficient antidote to racial bias in this central paradigm of tort law. In the fourth and final Part of this Article, I introduce a proposal that can.

IV. EQUALIZING RATIO TABLES

As explained above, the legal system's current procedures and practices for contending with juror bias are generally ineffective when it comes to implicit racial bias.[170] For purposes of this last Part, I wish to draw attention to a different issue, namely that the current procedures and practices, some of which are particularly designed to protect defendants' rights in criminal litigation,[171] do not necessarily meet the needs of minority plaintiffs in tort litigation.[172] In particular, they fail to redress the problem of racial

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[166] *See supra* notes 123–129 and accompanying text.

[167] *See supra* note 37 and accompanying text.

[168] *See, e.g.*, *supra* notes 148–153.

[169] *See supra* Section III.A.

[170] *See supra* notes 136–142 and accompanying text.

[171] *Cf.* Thompson, *supra* note 25, at 1300 (stating that both voir dire questioning and "jury instructions on racial bias and stereotypes should be available whenever requested by minority defendants in criminal cases"); Ford, *supra* note 131, at 380 n.11 (noting that peremptory challenges are controversial in criminal cases but usually unused in civil trials); Su, *supra* note 20, at 81 (suggesting that "implicit bias education of jurors is critical in order for a fairer court system—particularly for the criminal justice system"); Rachel E. Barkow, *Recharging the Jury: The Criminal Jury's Constitutional Role in an Era of Mandatory Sentencing*, 152 U. PA. L. REV. 33, 34 (2003) ("[T]he criminal jury was designed to be part of our elaborate system of checks and balances, placing a check on the legislature and executive to ensure that no one received criminal punishment unless a group of ordinary citizens agreed.").

[172] In fact, the focus on combating implicit bias to protect defendants' rights in criminal trials has put also aside the issue of *victims* of color in criminal trials, who are particularly

bias in pain and suffering damages for two main reasons. First, even assuming that the procedures and practices can eliminate jurors' own biased judgments about the severity and effects of a plaintiff's injury, they cannot reach the "deeper level" of racial bias embedded in the medical providers' underlying judgments that influence the jurors' assessment. Second, the existing procedures and practices that aim to contend with juror bias do not directly address a central element of tort law: the plaintiff's remedy.

In the next sections, I introduce a solution to racial bias in pain and suffering damages that is attentive to these essential requirements.

A. EQUALIZING RATIO TABLES AND EQUALIZING DAMAGES

In this section, I sketch my proposed solution to the problem of racial bias in pain and suffering damages, which I term Equalizing Ratio Tables (ERTs). This solution consists of three techniques specifically designed to eliminate the effects of racial bias in pain and suffering damages, regardless of the chosen computational approach.[173]

For any type of injury, ERTs consist of grids that display the following[174]: the average pain and suffering award to White plaintiffs, (Av(L)); the average pain and suffering award to a plaintiff belonging to a minority group (Av(Lm)) that, statistics show, suffers from systematic bias[175] affecting the evaluation of pain

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susceptible to prejudice in self-defense cases. *See* Thompson, *supra* note 25, at 1305–06 (suggesting that the jury instructions concerning stereotypes should be given in cases with Black victims where the defendant argues self-defense).

[173] In this Article, I neither address the desirability of the different approaches to computing pain and suffering damages nor attempt to prioritize them according to different scales. Instead, I focus on the problem of implicit racial bias that these approaches are not equipped to resolve.

[174] The discussion in this Article focuses on negligence cases; however, ERTs can include data on equalizing ratios for intentional torts as well.

[175] Social psychologists define systematic bias as systematic or orderly deviations from a normative standard of judgment. Norbert L. Kerr, Robert J. MacCoun & Geoffrey P. Kramer, *Bias in Judgment: Comparing Individuals and Groups*, 103 PSYCH. REV. 687, 688 (1996); *see also* Linda Hamilton Krieger, *The Content of Our Categories: A Cognitive Bias Approach to Discrimination and Equal Employment Opportunity*, 47 STAN. L. REV. 1161, 1190 (1995) (stating that inherent bias concerns categorization and related cognitive biases that result in perpetuating stereotypes).

and suffering damages;[176] and the ratio between these averages, termed here *equalizing ratio*.[177]

The tables may be sorted by additional criteria relevant for providing accurate data on the effects of racial bias in pain and suffering damages, such as the plaintiff's age or the laws of the jurisdiction governing her claim.[178] My intention here is not to present a definitive list of the categories that ERTs should comprise, but rather to sketch generally the principle that underlies these tables. I suggest, however, that the level of detail in ERTs should be high enough to allow for a sufficiently accurate comparison between the pain and suffering damages awarded to a minority plaintiff and a White plaintiff in materially similar cases. And yet, the granularity of the tables should consider administrative complexity and cost.[179] If the tables are too detailed, jurors—and even judges—might find them too difficult to use.[180] Last, to represent as

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[176] The tables may thus include a distinct gender category as well.

[177] That is $\frac{Av(L)}{Av(Lm)}$.

[178] Most approaches to computing pain and suffering emphasize the importance of age because, on average, a young person faces more years of suffering ahead than an elderly person. *See*, *e.g.*, Avraham, *supra* note 10, at 111 (arguing that age calculations should be considered in pain and suffering multipliers). Recall that ERTs do not provide a tool for computing pain and suffering damages, but rather a tool for enabling adjustments of the computed damages to neutralize the influence of implicit bias. *See supra* notes 175–177 and accompanying text. Thus, including age ranges in ERTs only makes sense if age is proven relevant with respect to racial bias—unless ERTs are used as part of a schedule method for determining damages, a possibility I address separately below. *See infra* notes 188–190 and accompanying text.

[179] Some level of administrative complexity and cost is inevitable and is justified to promote equality and shield the state and its citizens from racism. *See* Yuracko & Avraham, *supra* note 1, at 369 ("While their use might be more administratively complex and costly than the use of race-based tables, which are more readily accessible, such increased burden does not shield the state from the obligation to use non-race-based means, when possible.").

[180] *See, e.g.*, Larry Heuer & Steven Penrod, *Trial Complexity: A Field Investigation of Its Meaning and Its Effect*, 18 L. & HUM. BEHAV. 29, 30 (1994) (noting that some scholars suggested that "jurors' problems with complex litigation are not inherent, but rather result from a failure to present the trial material in an understandable fashion"). For a discussion of cognitive overload in the context of increasing jurors' responsibilities, see J.J. Prescott & Sonja Starr, *Improving Criminal Jury Decision Making After the* Blakely *Revolution*, 2006 U. ILL. L. REV. 301, 335–36. For an article exploring the psychological phenomenon that people generally become more passive and more susceptible to making wrong decisions when they face more alternatives to choose from, see Alina Tugend, *Too Many Choices: A Problem That Can Paralyze*, N.Y. TIMES (Feb. 26, 2010), https://www.nytimes.com/2010/02/27/your-

accurately as possible the state of racial discrepancies in pain and suffering damages, the ERTs must be updated on a regular basis.[181]

ERTs offer three alternative methods for contending with the effects of racial bias in pain and suffering damages. Under the first method, once a jury decides a damage award (the "originally decided damages"), the judge can complement this award by multiplying it by the relevant *equalizing ratio*.[182] The supplementary damages, i.e., the sum above the originally decided damages, manifests what I term here as *equalizing damages*.[183]

Importantly, to reveal the accurate extent of racial discrepancies in jurors' assessments of pain and suffering damages, the ERTs must reflect the average amounts awarded to Black plaintiffs *before* any equalizing corrections are made. Additionally, the ERTs must be updated on an ongoing basis so that the averages that they present reflect data from recently decided cases. To ensure that these technical, yet essential, requirements are met, courts must include both the originally decided damages (i.e., without the equalizing factor) and the total damages award that includes the equalizing damages in their published decisions.

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money/27shortcuts.html. For a discussion how multiple treatment alternatives impact patients' decision-making, see Maytal Gilboa & Omer Y. Pelled, *The Costs of Having (Too) Many Choices: Reshaping the Doctrine of Informed Consent*, 84 BROOK. L. REV. 367, 371 (2019) (studying the influence of multiple treatment alternatives on patients' wellbeing in the context of informed consent, noting that "[t]he more complex a decision, the more resources a patient must invest in making it," and arguing that "[a]t a certain point, the patient might reach the limits of these resources, which may lead her to choose mistakenly the wrong alternative for her").

[181] For a discussion of the tables' updating mechanism, see *infra* p. 691.

[182] Currently, courts are used to lowering the decided amounts of damages by using either a remittitur process or an adjustment to statutory caps. Avraham, *supra* note 10, at 91. The proposals in this Article suggest adding procedures that allow for increasing rather than decreasing pain and suffering damages awards, based on the equalizing ratio. *Infra* pp. 692–93.

[183] It should be noted that when damages are capped, the proposed multiplier method can only apply within the range below the cap. Where equalizing damages exceed the cap, they may be nullified. Such cases will further highlight the detrimental impact of damage caps on minority groups. *Cf.* Avraham, *supra* note 1, at 99 (noting that caps present problems for "[l]ow-income people, especially the unemployed . . . whose loss-of-income component in the total damage awards is null"). For a brief review of the difficulties that the cap policy entails, see *supra* notes 85–90 and accompanying text.

The use of ERTs in a multiplier method is especially relevant to discretionary legal systems.[184] Used in this way, ERTs offer a mechanism for eliminating the expected influence of racial bias on pain and suffering damages while maintaining the jurors' freedom to employ their discretion regarding the desired damages in light of the evidence.[185] The discretionary approach makes sense considering that two plaintiffs are never exactly the same (regardless of the influence of racial bias).[186]

To illustrate the ERTs' multiplier method, assume that based on the evidence, a jury decides to award a Black plaintiff who lost her leg in a car accident $60k for her pain and suffering. Assume further that according to the information displayed in the ERTs, in materially similar injury cases, Av(L) = $100k, Av(Lm) = $80k and thus the equalizing ratio is 1.25.[187] Under these circumstances, if the court decides to use the multiplier, the total damages for pain and suffering would stand at $75K, and therefore the e*qualizing damages* would be $15K.

An alternate use of ERTs would be to incorporate the tables' data as part of a system of (binding or non-binding) schedules. In this remedial option, the pain and suffering damages award for the minority plaintiff is determined according to evidence on prior awards to White plaintiffs for similarly severe injuries.[188] In a method that uses ERTs in a schedule system, the Black plaintiff in the illustration above should be awarded $100k in damages—that is, the average amount of pain and suffering damages awarded to

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[184] *See* Chase, *supra* note 8, at 786–87 (distinguishing between discretionary and binding schedule systems of computing damages by noting that "more inclusive categories can be tolerated" in the former).

[185] *See, e.g.*, Avraham, *supra* note 10, at 118 n.138 (explaining that non-binding multipliers "enable the jurors to respond to idiosyncratic cases and preserve their authority to exceed even the amount governed by multipliers"); *see also* People v. Arnold, 753 N.E.2d 846, 850 (N.Y. 2001) (noting that jurors' life experience "is precisely [the] experience that enables a jury to evaluate the credibility of witnesses and the strength of arguments").

[186] *See, e.g.*, McCaffery et al., *supra* note 30, at 1405 ("There is no reason to expect the same answer in all cases—indeed, one of the great contributions of cognitive decision theory is to put us on guard against this fallacy—and general tort and moral theory might in fact suggest grounds for different answers.").

[187] If $Av(L) = 100K$ and $Av(Lm) = 80K$, then $\frac{Av(L)}{Av(Lm)} = \frac{100K}{80K} = 1.25$.

[188] For a brief review of additional aspects of the schedules approach, see *supra* notes 91–94 and accompanying text.

White plaintiffs for the same type of injury—regardless of the particular circumstances of the case. Thus, in contrast to the multiplier method, incorporating ERTs in a schedule system would leave considerably less room for jurors to exercise discretion in response to the idiosyncratic facts of the case.[189] This, in turn, may affect the accuracy of the damage award as well.[190] For these reasons, I find the schedules approach inferior to the multiplier method suggested above. Still, the schedule approach remains superior to the current situation, which enables racial discrepancies in pain and suffering damages to persist.

The third use of ERTs is as a valuable informative or educational tool. In this use of ERTs, the tables should be handed to jurors at the close of the evidence, along with jury instructions warning them about the possibility that their decision might be affected by racial prejudice.[191] Jury instructions have been particularly recognized for their potential use as an educational tool,[192] conveying to the jurors that their decision might be biased, even if they are unaware of their biases.[193]

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[189] *See supra* note 184.

[190] For a general criticism of the schedules approach, see *supra* notes 91–94 and accompanying text; Avraham, *supra* note 10, at 101–06 (discussing criticisms of schedules from various scholars and issues with their proposals for reform, arguing that "the problem with [schedules] lies more on administrative and deterrence grounds"); and Bovbjerg et al., *supra* note 44, at 964–65 (detailing the strengths and weaknesses of different forms of scheduling).

[191] It was recently suggested that jury instructions should mention well-known stereotypes to more effectively warn the jurors of biases that may affect their core functions, such as determining damage awards. *See* Thompson, *supra* note 25, at 1245 ("[T]he first step in ridding the jury system of racial bias is to tell the truth about the prevalence and effect of bias. This includes naming the stereotypes that are at play whenever a person of color enters a courtroom."). In tort cases involving pain and suffering loss, jury instructions may accordingly mention false beliefs pertinent to the particular claim, such as attributing greater resistance to pain to Black people.

[192] *See id.* at 1300–06 (suggesting ways to improve the instructions' effectiveness by providing more information on common stereotypes and generally addressing the issue of implicit bias more directly and openly).

[193] *See supra* note 130. For an example of jury instructions that address implicit bias, see, for example, JUD. COUNCIL OF CAL., JUDICIAL COUNCIL OF CALIFORNIA CIVIL JURY INSTRUCTIONS CACI no. 113 (2020):

> Each one of us has biases about or certain perceptions or stereotypes of other people. We may be aware of some of our biases, though we may not

By exposing data on discrepancies in pain and suffering damages, the tables provide jurors with concrete evidence of the consequences of racial bias, thus reinforcing the generic reminder in the jury instructions about the possible influence of racial bias.[194] ERTs may thus contribute to educating jurors about the detrimental effects of racial bias on Black plaintiffs (as well as other minority groups subject to systematic discrimination) in pain and suffering damages.[195]

In addition, following their exposure to the tables, the jurors may decide to adjust their evaluation of damages to account, at least to some extent, for racial discrepancies in pain and suffering damages.[196] The problem with this use of the ERTs is that "freestyle" adjustments would make it difficult to update the ERTs properly. For the tables to reflect the actual state of racial discrepancies in pain and suffering damages, they must take into account the damages awarded by the jury *before* any addition of equalizing damages. Otherwise, when updated, the tables might give the false impression that the racial discrepancies significantly narrowed, when in fact they did not. Unlike the multiplier

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> share them with others. We may not be fully aware of some of our other biases.
>
> Our biases often affect how we act, favorably or unfavorably, toward someone. Bias can affect our thoughts, how we remember, what we see and hear, whom we believe or disbelieve, and how we make important decisions.

[194] *See* Su, *supra* note 20, at 99 (noting the importance of a final reminder to the jurors "on paper," cautioning them to leave out biased beliefs).

[195] Research indicates that educational tools might reduce the effects of racial bias among white jurors, at least to some extent. *See, e.g.*, Ellen S. Cohn, Donald Bucolo, Misha Pride & Samuel R. Sommers, *Reducing White Juror Bias: The Role of Race Salience and Racial Attitudes*, 39 J. APPLIED SOC. PSYCH. 1953, 1957 (2009) (finding that the effects of racial prejudice among White jurors can be reduced by reminding them that their actions could be interpreted as racist); Samuel R. Sommers, *On Racial Diversity and Group Decision Making: Identifying Multiple Effects of Racial Composition on Jury Deliberations*, 90 J. PERSONALITY & SOC. PSYCH. 597, 601 (2006) (finding that emphasis on racial issues at trial can reduce the influence of racial bias on White jurors' judgments); Samuel R. Sommers & Phoebe C. Ellsworth, *White Jurors' Bias: An Investigation of Prejudice Against Black Defendants in the American Courtroom*, 7 PSYCH. PUB. POL'Y & L. 201, 203 (2001) ("Run-of-the-mill trials of Black defendants in which racial issues are not obvious are more likely to elicit prejudicial responses from Whites.").

[196] In this case, the amount added to the originally decided damages also expresses a form of equalizing damages upon which the jurors agreed without limiting themselves to the equalizing ratio or any other guidance.

approach, which facilitates observation of the measure of racial bias at work in each case because it precisely shows the ratio necessary to correct the jury's original award and achieve parity with awards in similar cases brought by White plaintiffs,[197] "freestyle" use of ERTs does not reveal that measure. It is doubtful that this problem can be resolved. First, it is unlikely that jurors could distinguish, even in their own minds, the damages prior to the adjustment for racial discrepancies from the damages after the adjustment. That means that, in time, the tables will not accurately represent the actual racial discrepancies in pain and suffering damages. Second, even if this difficulty could be resolved, jurors who know that two damages awards will be published, one before and one after the equalizing adjustment, may be reluctant to make any adjustments at all out of fear of admitting, even to themselves, that they hold racially biased views. These are serious technical flaws that may disqualify the third proposed use of the tables, which is therefore inferior to the multiplier and schedule uses suggested above.

Finally, but importantly, I am aware that ERTs, even in their optimal, remedial multiplier usage, entail some problems beyond the above-mentioned difficulties.[198] In particular, there are four types of problematic reactions that the tables, and what they represent, may invoke in both jurors and judges. First, and particularly relevant to the multiplier usage of ERTs, is that some jurors who know that the court multiplies their decided damages by the equalizing ratio might seek to correct for the anticipated enhancement by awarding lower damages.[199] As a result, the racial gap, as manifested by the equalizing ratio, will persist in the updated versions of the ERTs.[200] A second possible reaction, relevant to all three uses of ERTs,[201] is that jurors and judges may reject the idea of awarding equalizing damages on the belief that

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[197] *See supra* notes 183–186 and accompanying text.

[198] *See supra* notes 179–181 and accompanying text.

[199] For a discussion regarding how knowledge that damages are subject to limits or alteration can affect juries, see Michael S. Kang, *Don't Tell Juries About Statutory Damage Caps: The Merits of Nondisclosure*, 66 U. CHI. L. REV. 469, 486 (1999) ("When a jury 'guesses' that the statutory cap will apply to its damage award and speculates that the cap is set at a certain figure, jury speculation already biases deliberation significantly . . . .").

[200] That is, the equalizing ratio will never converge to one.

[201] This reaction is relevant to the uses of ERTs unless the multiplier or schedule usages are embraced in binding forms.

they are completely unnecessary under *their* watch.[202] In that case, they might be reluctant to use ERTs in any remedial form. A third problematic reaction is what psychologists define as a "backlash" toward minorities.[203] Following the introduction of these tables, some jurors and judges might experience anger or resentment because they may think that Black plaintiffs are actually seeking to win higher damages that they do not deserve by "playing the 'race card.'"[204] In these trying times of "fake news" and conspiracy theories, some jurors might even think that ERTs are completely made up and do not provide true data.[205] The fourth worry is that ERTs may actually "plant[] the seeds of prejudice where they do not already exist."[206] People who do not harbor racial bias might paradoxically begin to feel race-based resentment after their

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[202] *See* Su, *supra* note 20, at 99 ("People may feel that they do not have explicit biases and by telling them they have implicit biases, when they might not really understand the nature of the topic, would make them defensive.").

[203] *See, e.g.*, Benjamin G. Bishin, Thomas J. Hayes, Matthew B. Incantalupo & Charles Anthony Smith, *Opinion Backlash and Public Attitudes: Are Political Advances in Gay Rights Counterproductive?*, 60 AM. J. POL. SCI. 625, 626 (2016) ("Backlash has traditionally been described as a reaction by members of dominant groups to any challenge to their sense of importance, influence, values, or status in which they seek to reverse or stop change through political means."); Laurie A. Rudman, Richard D. Ashmore & Melvin L. Gary, *"Unlearning" Automatic Biases: The Malleability of Implicit Prejudice and Stereotypes*, 81 J. PERSONALITY & SOC. PSYCH. 856, 857 (2001) (reviewing findings of backlash reactions to pro-Black standards).

[204] *See, e.g.*, Katherine M. Bell, *"This Is Not Who We Are": Progressive Media and Post-Race in the New Era of Overt Racism*, 12 COMMC'N CULTURE & CRITIQUE 1, 3 (2019) ("Within the ideology of post-race, also coined as color-blind racism, discussion of racial bias has been proscribed as playing the 'race card.'"); Doron Dorfman, *Fear of the Disability Con: Perceptions of Fraud and Special Rights Discourse*, 53 L. & SOC'Y REV. 1051, 1060–61 (2019) (describing the view that the demands of minority groups, couched as efforts to achieve equal rights and an even playing field, are actually attempts to obtain extra benefits); Rudman, *supra* note 203, at 857 ("[P]eople may perceive a threat to their freedom of expression or be offended by the implication that they are prejudiced.").

[205] *See, e.g.*, Bell, *supra* note 204, at 4 ("[P]ost-truth includes the president's label of 'fake news' to discredit professional news media."); Robin DiAngelo, *White Fragility*, 3 INT'L J. CRITICAL PEDAGOGY 54, 54 (2011) (defining "White Fragility" as a mental state of White people, due to the insulated social environment surrounding White people in North America, "in which even a minimum amount of racial stress becomes intolerable, triggering a range of defensive moves").

[206] Thompson, *supra* note 25, at 1303 (describing an objection that "[i]t is quite risky to introduce specific racial stereotypes to jurors who would have been unaware of them otherwise" when providing jury instructions on specific racial stereotypes).

exposure to the tables.[207] This potential reaction raises concerns that ERTs not only fail to eliminate racial bias in damage awards but also may have unintended harmful consequences for Black plaintiffs as well.[208]

My first answer to these contentions is that even if some jurors will continue to award lower damages in response to the multiplier use of ERTs because they foresee correction by the court, the use of ERTs ensures that the damages to minority plaintiffs will be cleared from the effects of racial bias.[209] As I explain in the next section, this is particularly important to resolve the severe problem of underdeterrence resulting from racial discrepancies in pain and suffering damages. Second, any use of ERTs can and should be supplemented by conventional methods of educating jurors about the problem of racial bias.[210] Explaining to jurors the harmful effects of racial bias may, in time, reduce the possible resentment toward using ERTs and generally diminish the occurrence of racial bias in pain and suffering damages.[211] Finally, my general response to all of the above contentions is that policy changes frequently meet resistance and backlashes, especially when they disrupt deeply rooted social standards.[212] Yet when core principles of our justice system are systematically violated—and, as discussed above, the goals of tort law routinely frustrated—by racial bias hiding in the shadows of prominent legal determinations such as the

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[207] Because ERTs contain data that highlight discrepancies in recovery between races, exposure to this data could be "risky" in the same way that exposing people to stereotypes "who would have been unaware of them otherwise" would be risky. *Id*.

[208] *See id*. (describing the argument against introducing stereotypes where they were otherwise unrecognized because doing so "would be incredibly harmful to [the] ultimate goal of eliminating racial bias in the justice system").

[209] *See supra* notes 183–186 and accompanying text. For this outcome to be realized, the tables must be updated on an ongoing basis to ensure that the data used to calculate the equalizing ratio is accurate because the ratio is based on average gaps between the amount of pain and suffering damages awarded to White versus Black plaintiffs.

[210] *Supra* notes 130–134 and accompanying text.

[211] For studies indicating that juror education might reduce the effects of racial bias among White jurors to some extent, see *supra* note 195.

[212] *See* Bishin *supra* note 203, at 626 ("The idea [of backlash] is that negative reactions to changes in the status quo are motivated by the attempt to maintain existing power arrangements. It is therefore unsurprising that most references to backlash examine minority groups struggling to gain policy." (citation omitted)).

quantification of pain and suffering, the need for change must prevail.

B. THE GOALS OF TORT LAW

Finally, I explore how the proposed ERTs, especially when used in the multiplier method, advance the goals of tort law discussed in Section II.B. I begin with the pressing problem of underdeterrence of torts committed against Black victims.

Recall that racial bias in pain and suffering damages creates an especially severe problem of underdeterrence for Black plaintiffs (and possibly other minority plaintiffs) for two related reasons. First, the open-ended nature of pain and suffering loss is amorphous enough to hide the racial bias of both the jurors and the healthcare providers on whose opinions and testimony the jurors rely.[213] This "twofold-bias" can, at least potentially, expand the racial discrepancy in pain and suffering damages. Second, when it comes to pain and suffering damages, errors in either awarding damages or setting the standard of care properly are much harder to perceive.[214] For these reasons, the cost of negligently harming Black people is significantly lower than the cost of negligently harming White people, and the problem of underdeterrence is especially severe.[215]

In their remedial form, ERTs not only illustrate to jurors and judges the detrimental effects of implicit racial bias but also provide an effective and easy-to-use tool for eliminating that bias[216] by

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[213] *See supra* note 27 and accompanying text; *see also* Williams J. Hall et. al, *Implicit Racial/Ethnic Bias Among Health Care Professionals and Its Influence on Health Care Outcomes: A Systematic Review*, 105 AM. J. PUB. HEALTH 60, 61, 72–73 (2015) (discussing the many disparities between health care provider treatment and care of minorities and white people).

[214] Paradoxically, they are easier to reveal in loss of life and limb estimated in terms of loss of income, for which the damages are based on actuarial tables that consider the plaintiff's race and gender. *See supra* notes 2–6 and accompanying text.

[215] *See supra* pp. 667–69.

[216] For a discussion of the need for an operative tool to ensure jurors' understanding of the consequences of implicit bias, see Su, *supra* note 20, at 91 ("[E]ven assuming that the jurors can fully understand the perils of implicit bias as imperative considerations for the case, the instructions also does [sic] not provide any information to the jurors as to how to apply their implicit bias training to the case. . . . Implicit bias jury instructions alone are not enough to combat the full effect of these biases.").

adding to the originally decided damages a supplementary amount of equalizing damages. ERTs' remedial use therefore enables courts to raise the cost of negligence toward Black victims to match the cost of negligence toward White victims that yields similar injuries.[217] This, in turn, would neutralize the problem of underdeterrence that results from the fact that it is less costly to harm Black individuals (and, possibly, other minority plaintiffs) than White individuals.

The remedial use of ERTs also comports with the idea of corrective justice, which mandates that a victim is compensated by the tortfeasor for the harm resulting from her negligent behavior.[218] The compensation restores the plaintiff to her pre-accident condition, thus "making the plaintiff whole again."[219] If minority plaintiffs are undercompensated due to arbitrary considerations such as racial bias, the idea of restoring the plaintiff to her pre-accident condition is frustrated. By supplementing the amount needed to fulfill the restorative function of damages, equalizing damages amend this flaw.

Importantly, equalizing damages do *not* serve any punitive function toward the defendant. The supplementary amount added by equalizing damages serves only to complete the amount to which the plaintiff is entitled by virtue of her valid claim against the defendant.[220] In this sense, equalizing damages have a restitutionary function: when a plaintiff's damage award is reduced because of jurors' (and possibly healthcare providers') mistaken judgment as a result of racial bias, the defendant who benefits from the reduced sum of damages is unjustly enriched at the expense of the plaintiff.[221] Equalizing damages thus prevent the defendant's

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[217] That is, the Black and White plaintiffs can receive *exactly* the same amount of damages for similar types of accidents.

[218] *See* COLEMAN, *supra* note 75, at 367, 369 (justifying liability for negligence with corrective justice); *see also* WEINRIB, *supra* note 23, at 145–58 (discussing "the immanence of corrective justice in negligence liability").

[219] *See supra* note 75.

[220] *See, e.g.*, WEINRIB, *supra* note 74, at 90 ("The defendant's breach of duty did not of course bring to an end the duty with respect to the plaintiff's right, for, if it did, the duty—absurdly—would have been discharged by its breach.").

[221] *See* RESTATEMENT (THIRD) OF RESTITUTION AND UNJUST ENRICHMENT § 47 (AM. L. INST. 2011) ("If a third person makes a payment to the defendant in respect of an asset belonging

unjust enrichment at the expense of the plaintiff as a result of third parties' racial bias.[222]

Finally, by eliminating racial bias, equalizing damages effectuate the notion of global fairness, ensuring that people who suffer similarly severe injuries are treated alike, regardless of race.[223] When disrupted by implicit racial bias, jurors and healthcare providers may mistakenly assign two identical injuries different levels of severity without even realizing that they are doing so. *In their minds*, the similar injuries are *actually different*. This cognitive flaw is especially difficult to contend with through conventional means alone.[224] The supplementary remedial tool that ERTs provide is therefore necessary to equate Black plaintiffs' pain and suffering damages with White plaintiffs' damages in similar circumstances and ensure global fairness.

V. CONCLUSION

Pain and suffering damages are probably the remedy most susceptible to (conscious or unconscious) manipulation. This is because these damages manifest the most elusive and difficult-to-define type of loss: one that results from pain. In the folds of such abstract damages, it is particularly difficult, if not impossible, to identify when errors are made by juries and judges, either in the measure of damages or in setting the standard of care.

Against this backdrop, recent findings revealing significant racial discrepancies in pain and suffering damages between Black and White plaintiffs are especially alarming. Interestingly, the scholarship has for decades admitted the possibility that racial bias

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to the claimant, the claimant is entitled to restitution from the defendant as necessary to prevent unjust enrichment.").

[222] *See id.* cmt. a ("Payment may be made to the defendant as the result of a third party's mistake as to identity or ownership . . . . More significant applications of the rule of [§ 47] involve payments to which (as between defendant and third-party payor) the defendant has some sort of entitlement, but to which (as between defendant and claimant) the claimant has the superior claim.").

[223] *See supra* note 22.

[224] *See, e.g.*, Su, *supra* note 20, at 90 ("The fair and just trial instructions are not enough to specifically address implicit biases."); *see also* Thompson, *supra* note 25, at 1244 (noting that safeguards like voir dire and jury instructions addressing racial bias "must be improved if they are to assist trial courts in ferreting out juror bias").

may successfully hide within the obscure estimation of one's pain. Nonetheless, the specific need to eliminate racial bias appears to have been swallowed up by the "greater mission" of finding a way to calculate pain and suffering damages reliably and consistently.

Currently, both the common methods used in courts and the proposals advanced by scholars for calculating pain and suffering damages share the notion that a central factor in estimating these damages is the severity of the plaintiff's injury. This Article does not deny the significance of the severity-of-injury factor as the best indicator for estimating pain and suffering loss. Instead, it exhorts us to pay attention to the fact that this factor is hardly objective. Black people have suffered from underestimation of the severity of their injuries for centuries. Recent studies confirm that even trained healthcare providers, probably without being aware of it, ascribe lower levels of severity to medical conditions in Black patients than to identical medical conditions in White patients. This, in turn, affects the respective treatments offered to Black and White patients.

The Article explained that the severity-of-injury factor is, therefore, a loophole through which racial discrepancies in pain and suffering damages can persist. In particular, the Article identified the source of these discrepancies between Black and White plaintiffs in two potential biases: one coming from jurors who may underestimate Black plaintiffs' injuries, and another coming from healthcare providers' underestimation of Black patients' medical conditions. The latter bias is then cast into the evidence upon which jurors base their decisions, confirming and amplifying the effect of the jurors' pre-existing implicit bias.

The conventional avenues for contending with racial bias in the courtroom are therefore insufficient to address racial discrepancies in pain and suffering losses. Even in the optimistic case in which the legal system successfully eliminates racial bias among jurors, the effects of racial bias on the underlying medical evidence persist. As a result, pain and suffering loss, a central paradigm of tort law that makes up a significant part of the total compensatory award, has become a safe harbor for racial prejudice.

The Article provided a unique analysis that revealed the adverse implications of racial discrepancies in pain and suffering damages in light of the goals of tort law. It highlighted a severe problem of

underdeterrence that results when racial discrepancies render negligence toward Black people less costly than negligence toward White people. Under these circumstances, it explained, potential tortfeasors are generally incentivized to be more cautious around White people than around Black people. In addition, the Article explained that racial discrepancies in pain and suffering damages are inconsistent with corrective justice and the notion of global fairness.

After explaining the unique features of the problem of racial bias in pain and suffering damages, and the severe implications of this problem in light of three dominant goals of tort law, the Article offered a possible solution: ERTs. These tables can serve not only to educate jurors and judges about the effects of racial discrepancies in pain and suffering damages but also to provide three remedial avenues through which decisionmakers can adjust damage awards to neutralize the influence of racial bias: (1) an equalizing ratio multiplier, (2) equalizing ratio-based schedules, and (3) jurors' "freestyle" adjustment of the damages in light of their exposure to the ERTs. I sketched each of these potential solutions and addressed potential difficulties in their implementation. The discussion of the three possible remedial uses of ERTs to eliminate racial bias in pain and suffering damages revealed that the suggested multiplier method is generally superior to the others. The multiplier technique enables jurors to determine an appropriate level of damages in accordance with their view of the evidence, on the one hand, while on the other hand, it allows the court to neutralize the effects of implicit bias by adjusting those damages based on the accurate equalizing ratio.

Importantly, if ERTs are updated frequently enough to represent a relatively accurate account of the state of racial discrepancies in pain and suffering damages, these tables will also show when these discrepancies are narrowing, and hopefully, one day, have disappeared. Until then, ERTs offer a solution that, while admittedly imperfect, promises to do a better job than the current system that fails to address the pressing problem of racial bias in pain and suffering damages and its detrimental implications for Black people.