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TOWARD A STRUCTURAL THEORY OF IMPLICIT RACIAL AND ETHNIC BIAS IN HEALTH CARE

Dayna Bowen Matthew†

INTRODUCTION

Recently, a group of researchers reported that physician implicit race and ethnicity biases do not affect their hypertension treatment for minority patients nor do such biases impact health outcomes for these patients. These findings are counterintuitive. Moreover, they are contrary to the weight of the emerging empirical record that has suggested that physician implicit bias is inversely related to the quality of doctors’ treatment decisions, communication with, and perceptions of their minority patients. Examples include findings that

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1. Irene V. Blair et al., An Investigation of Associations Between Clinicians’ Ethnic or Racial Bias and Hypertension Treatment Medication Adherence and Blood Pressure Control, 29(7) J. GEN. INTERNAL MED. 987, 988 (2014).
implicit bias affects treatment decisions for heart disease, pediatric urinary tract infections, and diseases stereotypically associated with minority patient groups. The profound concern that this recent study raises has less to do with the danger that some may erroneously and prematurely celebrate the fact that physician bias is unrelated to the estimated 83,000 deaths of minority patients annually due to discriminatory health care. Rather, the real concern is that this study will join the copious body of social science literature on implicit bias in health care, which completely overlooks the fundamental structural nature of unconscious racism and its contribution to racial and ethnic inequality in the U.S. health care system. In other words, finding that a group of physicians’ implicit biases are or are not associated with inferior treatment decisions for individual patients with a single disease is not the point if eliminating racial and ethnic health inequality is the goal. The persistent health disparities phenomenon is a structural problem, and therefore implicit biases that contribute to disparities must be structurally dismantled. Moreover, the racial discrimination that causes disparities is so fundamentally associated with poor health outcomes that finding an attenuated association between bias and hypertension treatment does not alter the structurally causal relationship between bias and health disparities overall.

In this article, I sketch out the broad contours of a new theoretical approach to the problem of health disparities. I assert that unconscious racism in medicine is an avoidable and reparable injustice that requires incentive and norm-changing solutions in order to radically disrupt the context in which medicine is currently practiced and under which minority patients currently suffer. Reforming the anti-discrimination legal regime is the solution explored here, but

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there are other structural solutions to consider that are also important to achieving health equality. For example, fixing systemic educational inequality, housing segregation, and the lack of universal health care coverage would go much farther toward equalizing health outcomes than changing discrimination laws. However, I believe that legal reform is also essential to bringing about health equality. Law has the effect of expressing and influencing shifts in social norms, which can permeate systems to affect structural change. Therefore, this discussion centers on reversing the trend toward acceptance of implicit bias as an inevitable, harmless fact of life. Put bluntly, I assert that unconscious racism produces invidious discrimination and an odious inequality that should be prohibited and punished by law. However, as long as the discussion of unconscious bias in health care continues to be framed in terms that examine only individual, cognitive contributions to the problem, the systemic solutions to the health disparities will fail to emerge. Researchers will continue to chase increasingly narrow observations about the hidden attitudes that pass stealthily between and among individual actors in the health care system, instead of pursuing the systemic resolutions for the fact that racial and ethnic discrimination at every level of health care delivery, financing, and organization, is a fundamental cause of poor health outcomes.

I submit that as a fundamental and theoretical matter, the question of whether physician bias is related to medical decision-making for individual diseases is far too small an inquiry. The implicit bias work by social psychologists to date has been defined and limited by a symbolic interactionism framework. This framework has permitted only de-contextualized, ahistorical, and individualized consideration of the broadly systemic and institutional problems that produce health care disparities and health inequality. In place of the individualized inquiries that have dominated the implicit bias discourse, I bring a critical theory perspective to bear on the problem of health disparities in general, and more specifically, on the question of whether individual and institutional providers’ implicit biases contribute to these disparities. From this perspective, I analyze the political economy in which health care disparities occur. I apply constructs from structural violence theory to better understand the context in which physician bias operates, the structural inequality and racism that has produced this bias, and the inadequacy of cognitive and behavioral solutions alone to address it. I conclude by proposing a new theoretical construct that I call “structurally derived discrimination.” I offer this construct to add a broader theoretical perspective to the implicit bias discourse. I contend that without this
perspective, the U.S. health care system will never eradicate, or even meaningfully reduce, health disparities caused by unconscious racism.7

I. BACKGROUND

Racial and ethnic health disparities—the clinically unsupportable differences between health care and health outcomes experienced by minority as compared to white patients—are both deadly and financially costly. In 2005, Dr. David Satcher estimated that 83,570 deaths occur each year as a result of racial and ethnic health disparities.8 In addition, researchers have estimated that over 30 percent of the direct medical costs that African Americans, Latinos, and Asian Americans incur are excess costs due to health inequities—amounting to over $230 billion during a three-year period.9 Moreover, the most recent evidence suggests that most disparities are becoming worse or remain unchanged.10

In 2011, the U.S. Department of Health & Human Services’ Agency for Healthcare Research and Quality (AHRQ) released its ninth annual report on National Healthcare Quality and Disparities.11 A key function of the report is to describe the progress that has been made in reducing disparities in the U.S. health care system.12 The 2011 report recorded few positive changes in disparities over the five-year period from 2002 to 2008 by racial and ethnic groups based on measures of quality, such as the number of deaths due to cancer, heart attacks, and the incidence of end stage renal disease due to diabetes.13 By most measures, disparities in access to health care remained unchanged among African Americans, Native Americans, Latinos, and white Americans.14 Well over 90 percent of the measures that describe disparities in the quality of health care that African

8. Satcher, supra note 5.
11. Id.
12. Id.
13. Id.
14. Id.
Americans, Latinos, Asian Americans, and Native Americans receive as compared to whites have remained unchanged. Thus, notwithstanding isolated metrics that show a narrowing health disparities gap such as overall life expectancy, for most outcome and quality measures, the efforts by health care providers, scientists, and policymakers to “eradicate disparities” has failed. The evidence continues to confirm that minorities spend more money to get inferior care, suffer poorer health outcomes, and die earlier than whites in the United States.

Perhaps the least understood aspect of racial and ethnic disparities is the role that unconscious racial attitudes (i.e. implicit biases) play in contributing to inequity in health and health care. As in much of the discourse about disparities, the current literature merely focuses on implicit bias in the individual clinical encounter. As such, social science researchers have assumed a theoretical paradigm similar to theorists who posit that health disparities are due to behavior, lifestyle, and genetic differences between races. Indeed, some scholars have gone so far as to suggest that racial bias is patently irrelevant to racial and ethnic disparities in health and health care. Unfortunately, behavioral and biomedical theories divert attention from the systemic injustice of discrimination in health care. Even the nascent social science literature that confirms the association between physicians’ unconscious racism and health inequalities also overlooks the structural context from which unconscious racism emanates. While the researchers behind this implicit bias literature are to be commended for their work, much more is needed in order to understand and effectively combat the systemic influences of bias on health inequality. Therefore, it is important to consider the limitations of the existing social science literature on physician implicit bias in order to shed light on the true nature of the problem, and only then develop broader interventions to address it.

15. Id.


II. THE SOCIAL SCIENCE RECORD ON IMPPLICIT BIAS IN HEALTH CARE

Twenty-five years of social science research confirms that implicit, anti-minority biases are pervasive among Americans generally, and among physicians in this country specifically.  

Using implicit association test (IAT) data collected from hundreds of thousands of voluntary visitors to Harvard University’s Project Implicit website, researchers concluded after analyzing data from over 2,500 test takers who self-identified as “MDs” that the tested physicians exhibited the same preferences for whites over blacks as those found among the general population.  

This study made two additional, noteworthy findings: First, the study found that implicit preferences vary by race and gender. White male physicians displayed the strongest pro-white preferences. Black physicians, on average, did not show implicit preference for either white or black Americans, but the broad standard deviation reported for black physicians indicates that some black doctors had strong implicit preferences for whites and that others had strong implicit preferences for blacks.

The second important consensus reached by implicit bias researchers relates to the weak correlation between individuals’ explicitly reported racial preferences and their measured implicit biases. Explicit, or self-reported, racial preferences are attitudes that a person is aware of and able to describe. Although implicit and explicit measures among tested subjects are most often statistically significant overall, the two measures are only modestly related. This disassociation is consistently replicated over several studies and supports the view that a person may hold egalitarian beliefs explicitly while simultaneously holding biased racial views implicitly because the cognitive processes that govern explicit and implicit attitudes are separate and independent from one another. These results become particularly important when viewed in the context of medical decision-making and health care delivery.

20. Id. at 906.
21. Id. at 902.
22. Id.
Recently, Dr. Irene Blair expanded on this research in two important ways. First, Dr. Blair’s study confirmed that physician implicit biases operate against Latinos as well as African Americans, adding to the literature that had previously only focused on interactions among black and white physicians and patients. More importantly, from a theoretical standpoint, Dr. Blair’s study concluded that evidence indicating that physicians and community members shared substantially similar racial and ethnic biases “suggested a wider societal problem.” Although this conclusion is a significant understatement, Blair and her colleagues are unique among social scientists in this field for their willingness to acknowledge the relevance of broader racial bias beyond the clinical encounter. Since the 2003 IOM report, seven scientific studies have tested the association between physicians’ implicit biases and their medical decisions. Six of those studies found a positive correlation, and five of the studies found the correlation specifically between implicit anti-black biases and medical decisions. A review of those studies uncovers several shortcomings or “gaps” in both the approach of this literature and the underlying assumptions that characterize it.

Dr. Alexander Green was first to empirically demonstrate an association between physicians’ implicit biases and racially disparate treatment decisions. Dr. Green’s research team tested physicians’ levels of implicit racial bias by asking them to complete one questionnaire and two implicit association tests. The physicians’ explicit racial preferences were assessed using the questionnaire. Next, the physicians were asked to watch a recorded clinical vignette of a patient who described having chest pain and then described her medical history. In each recording, the vignette was read by either a black or white actor from a script that described a patient with

23. Irene V. Blair et al., Assessment of Biases Against Latinos and African Americans Among Primary Care Providers and Community Members, 103 AM. J. PUB. HEALTH 92, 93 (2013).

24. Id.

25. Id. at 92.


27. Id.

28. Id.

29. Green, supra note 2, at 1231.

30. Id.

31. Id.

32. Id. at 1233.
coronary artery disease (CAD).\textsuperscript{33} Whether a doctor viewed a black, white, male, or female actor was determined randomly.\textsuperscript{34} The physicians were then asked to rate the likelihood that the patient’s chest pain was due to CAD and to state whether they would prescribe thrombolysis.\textsuperscript{35}

The Green study’s findings were remarkable. The study showed a statistical correlation between physicians’ willingness to prescribe thrombolysis and their implicit biases against blacks generally and against black patients specifically.\textsuperscript{36} As physicians’ levels of anti-black implicit bias increased, the likelihood that those physicians would prescribe thrombolysis to black patients decreased.\textsuperscript{37} Also, the likelihood that these physicians prescribed white patients with thrombolysis increased as a physician’s anti-black bias increased.\textsuperscript{38} Said another way, more unconscious bias meant less desirable treatment for black patients and more desirable treatment for white patients. Importantly, the physicians in this study expressed no racial bias on questionnaires asking them to indicate explicit preferences between black and white patients.\textsuperscript{39} In fact, for all 287 physicians, this study showed no explicit preference for white patients whatsoever.\textsuperscript{40}

Yet, the Green study supports the conclusion that physicians’ unconscious beliefs are a more important determinant of the quality of care that they give than are their affirmative bias self-assessments.

A pair of studies focusing on pediatricians conducted by Dr. Janice Sabin refined what we know about the association between implicit bias and physicians’ treatment decisions.\textsuperscript{41} In the first study, Sabin’s group recruited pediatric faculty, fellows, and residents from an urban research university.\textsuperscript{42} The pediatricians were also asked to

\textsuperscript{33} Id.
\textsuperscript{34} Id.
\textsuperscript{35} Id. Thrombolysis is the preferred way to treat CAD and involves introducing clot-dissolving medication through a catheter. The treatment is designed to prevent blood clots from lodging in the brain and causing strokes, or near the heart and causing heart attacks.
\textsuperscript{36} Id. at 1237.
\textsuperscript{37} Id. at 1235.
\textsuperscript{38} Id. at 1231.
\textsuperscript{39} Id.
\textsuperscript{40} Id. at 1233.
\textsuperscript{41} Janice A. Sabin et al., Physician Implicit Attitudes and Stereotypes About Race and Quality of Medical Care, 46 MED. CARE 678, 678 (2008) (concluding that “[p]ediatricians held less implicit race bias compared with other MDs and others in society.”).
\textsuperscript{42} Id. at 679.
self-report their explicit biases by ranking how they would respond to statements about their feelings towards both black and white patients. The ranking incorporated the doctors’ perceptions of whether white or black patients are compliant and their impressions of which patient group received access to better care. Then, using case vignettes written for the study, researchers asked the pediatricians to make treatment recommendations for four commonly occurring pediatric conditions: urinary tract infections (UTI), attention deficit hyperactivity disorder (ADHD), asthma, and postsurgical pain. Dr. Sabin found that although the doctors generally showed pro-white implicit preferences, these pediatricians showed lower implicit preferences for whites over blacks than most IAT test-takers, including most other physicians. Moreover, these lower implicit bias measures were not associated with any statistically significant differences among the doctors’ treatment recommendations for black and white patients with UTI, ADHD, or asthma. However, the story was different where pain management was concerned. Dr. Sabin’s group was the first to demonstrate that “physicians with more pro-white implicit bias more readily prescribed pain medication to white patients than to African American patients.” Ironically, the study also showed that physicians were more likely to recommend the preferred treatment for UTI (i.e., outpatient management) for black patients than for whites.

In a second study, Drs. Sabin and Greenwald used a survey of eighty-six academic pediatricians to determine the correlation between pediatricians’ implicit racial biases and their diagnostic decisions for the same four pediatric conditions. In this 2012 study, Sabin and Greenwald did find an association between the pediatricians’ implicit attitudes about race and their treatment recommendations for black and white patients, particularly for pain treatment. In both studies, the researchers confirmed that pediatricians have significantly lower implicit biases than other physicians, and that these biases have different effects on medical decisions depending on the condition being treated.

43. Id.
44. Id. at 680.
45. Id. at 681.
46. Id.
47. Sabin, supra note 3, at 992.
49. Sabin, supra note 3, at 988.
50. Id. at 992.
51. Id.; Sabin, supra note 42, at 678.
A group led by Dr. Gordon Moskowitz published a study in 2012 that explored the connection between physicians’ implicit attitudes and their diagnostic decisions by testing physicians’ ability to quickly identify medical terms from a group of randomly generated words appearing on a computer screen. However, immediately before the selected words appeared, the participating physicians were subliminally “primed” with a photograph of either a black or a white face. The photograph flashed quickly in the physician’s peripheral field of vision so that it would not be consciously perceived. Dr. Moskowitz found that physicians were fastest at identifying medical words for diseases stereotypically associated with African Americans after subliminally seeing a black face, but slower at identifying the same medical words after being primed with a white face. Moreover, physicians responded fastest to terms for conditions that were perceived as arising from behavioral choices such as HIV, drug abuse, and obesity after being primed with a black face. In contrast, physicians were slower to identify terms for medical conditions that were less frequently associated with lifestyle choices such as hypertension, stroke, sickle cell anemia, and coronary artery disease even though the study showed that these diseases are also stereotypically identified with blacks. Thus, physicians in Moskowitz’s study implicitly associated certain diseases with African Americans, without being aware that they were doing so. They were also quick to implicitly associate diseases arising from anti-social behavior with African Americans.

Two studies have examined the role and evolution of implicit biases in doctors during their medical school training. In 2011, a group led by Dr. Adil Haider published a study involving first-year medical students at Johns Hopkins Medical School. Haider found that the majority of doctors-in-training held similar implicit preferences for whites as compared to blacks, and for wealthy individuals as compared to poor individuals. These preferences are consistent with those found among more senior physicians and among

52. Moskowitz, supra note 4, at 998.
53. Id.
54. Id.
55. Id. at 999.
56. Id. at 1000.
57. Id. at 999.
59. Id. at 947.
Americans overall. However, Haider also found no association between the medical students’ IAT scores and their clinical assessments based on patient vignettes. Thus, Haider’s study raises important questions about whether physicians’ implicit biases begin to influence their medical decision-making during the course of their medical training, or whether their implicit biases arise as a consequence of how they are trained.

The second study raises a similar concern. Dr. Shelley White-Means studied implicit and explicit race and skin tone bias among medical, nursing, and pharmacy students at a southern U.S. university. This longitudinal study followed students over three years. Researchers administered two IATs: the race-attitude IAT, and an IAT measuring skin tone preferences annually during the study. Four findings from this study are noteworthy. First, the students in this study exhibited significantly higher levels of pro-white bias than test takers in the nation as a whole. Remarkably, of those tested, 96 percent of Hispanic students, 76 percent of Asian students, and 64 percent of black students showed statistically significant unconscious preferences for whites over blacks. Second, the students’ implicit bias scores were negatively correlated with their self-reported levels of cultural competency. Thus, the students believed themselves to be effective communicators in cross-cultural situations, despite their high IAT scores. Third, and perhaps most significant, the White-Means study revealed that medical students’ implicit bias scores grew worse as their training progressed, while pharmacy and nursing students’ scores improved. Finally, the study showed a correlation between students’ socioeconomic status and their implicit bias scores. The participants’ IAT scores were significantly lower

60. Id. at 949-50.
61. Id. at 947.
63. Id.
64. Id. at 436.
65. Id. at 452.
66. Id. at 447.
67. Id. at 450.
68. Id. at 453.
69. Id.
when their reported backgrounds included personal experience with economic deprivation.\textsuperscript{70} 

The most recently published study of physician implicit bias and its impact on patient treatment and outcomes also stands out. Dr. Irene Blair studied 138 primary care physicians and 4,794 hypertension patients to determine whether the clinicians’ implicit racial or ethnic biases were associated with treatment decisions or patient health outcomes.\textsuperscript{71} In this study, black and Latino patients received equal treatment intensification but lower hypertension control. Black patients showed less medication adherence than whites.\textsuperscript{72} But differences in treatment were unrelated to clinician implicit biases for black and Latino patients, and only moderately related to patient health outcomes.\textsuperscript{73} 

The finding that bias did not impact physician decision-making in this study adds importantly to the literature but should not be misunderstood. Dr. Blair studied experienced, primary care physicians and a single, well-understood illness. Moreover it is unlikely that this study accounted for patients who may have opted out of treatment due to discrimination that they may have perceived from high-bias physicians. While the Blair study contributes to our understanding of primary care physicians’ treatment of hypertension, the results do not contradict the volume of evidence that provider discrimination is associated with poor minority health outcomes.

A final study of note examined the relationship between physicians’ implicit and explicit racial biases, and their black patients’ responses to these physicians. In 2010, a group of social psychologists led by Dr. Louis Penner coined the term “aversive racism” to describe how unconscious racism infiltrates the complex and subtle communication-exchange between physicians and minority patients.\textsuperscript{74} An aversive racist is an individual whose implicit and explicit bias measures are contradictory.\textsuperscript{75} Aversive racists, according to Penner, have very low explicit bias scores, together with very high implicit

\textsuperscript{70} Id.

\textsuperscript{71} Irene V. Blair et al., \textit{An Investigation of Associations Between Clinicians’ Ethnic or Racial Bias and Hypertension Treatment, Medication Adherence and Blood Pressure Control}, 29 J. GEN. INTERNAL MED. 987, 987 (2014).

\textsuperscript{72} Id.

\textsuperscript{73} Id.

\textsuperscript{74} See generally Louis A. Penner et al., \textit{Aversive Racism and Medical Interactions with Black Patients: A Field Study}, 46 J. EXPERIMENTAL SOC. PSYCHOL. 436, 436 (2010).

\textsuperscript{75} Id. at 437.
bias scores. Not only does the aversive racist deny expressly racist views, but this person also explicitly, perhaps even emphatically, disapproves of racism in others. At the same time, however, this person harbors unconscious racial prejudice.

Dr. Penner’s group examined the effects of implicit and explicit bias on physician-patient relationships in a study of fifteen primary care physicians and 150 of their African American patients at an inner-city clinic. The study evaluated the level of teamwork and cooperation that black patients felt with doctors who demonstrated high anti-black implicit bias on their IATs. The physicians Penner studied were almost all non-black, foreign-trained doctors, a typical demographic profile for inner city providers who serve poor communities of color. The lack of diversity among physicians was a limitation of the study. Nevertheless, Penner’s findings are troubling. African American patients reacted most negatively toward physicians who met the criteria for an aversive racist. According to Dr. Penner, African Americans trust these physicians least and perceive a lack of trust, friendliness, and teamwork in their relationships. Penner concluded that black patients are unlikely to accept medical advice, adhere to treatment regimes, or schedule and attend follow-up visits with these physicians.

III. The Shortcomings of the Symbolic Interactionism Perspective

All the studies reviewed above contribute importantly to our understanding of how physicians discriminate against minority patients. However, when viewed through a critical theory lens, these studies demonstrate five theoretical shortcomings. First, the implicit bias literature is decontextualized. Researchers have failed to appreciate the systemic, racially biased context that has fomented the implicit biases that they study. Although implicit bias is recognized as a product of social knowledge, social science scholars have missed the

76. Id. at 438.
77. See id. at 437.
78. See id. at 438.
79. Id. at 437.
80. Id.
81. Id.
82. Id. at 438.
83. See id. at 436.
84. Id.
The structure of racial discrimination has historically characterized the most powerful tool of the American state—the law—so that racism incongruously poisoned the fundamental aspirations of equality and freedom that gave birth to the American political economy. Beginning with the “Founding Fathers” conceptualization of members of minority racial groups at the inception of this nation, structural inequality threatened the American ideal. Indeed, Article 1, section 2, paragraph 3 of the U.S. Constitution identified those “persons” to be counted among the citizens of this country as whites, “civilized” Native Americans who paid taxes, and blacks who were to be counted as merely three-fifths of a person. As a young nation, this structural defect grew, and law was twisted and used as a tool to ensure that systemic racism was enshrined in a way that discriminated against minorities and adversely impacted their health. For example, laws such as Black Code edicts required the return of runaway slaves as property and penalized laborers for working outside of the plantation economy. Public health statutes herded Chinese immigrant workers into unsanitary and unhealthy ghettos; vagrancy ordinances such as the “Greaser Act” enforced residential segregation by forbidding interaction between whites and Mexican laborers; Jim Crow laws ensured separate and unequal access to public facilities including hospitals for blacks. To be sure, the living and breathing nature of our laws have given way to correction and progress, but still

86. W.E.B. Du Bois, Black Reconstruction: An Essay Toward a History of the Part Which Black Folk Played in the Attempt to Reconstruct Democracy in America 1860-1880 at 167 (Russell & Russell ed., 1962) (1935) (“Negroes were liable to a slave trade under the guides of vagrancy and apprenticeship laws; to make the best labor contracts, Negroes must leave the old plantations and seek better terms; but if caught wandering in search of work, and thus unemployed and without a home, this was vagrancy, and the victim could be whipped and sold into slavery.”).
88. See Greaser Law of 1855, Cal. Sat. 175.
89. C. Vann Woodward, The Strange Career of Jim Crow 99 (1955) (including examples of laws such as Alabama ordinance providing that “No person or corporation shall require any white female nurse to nurse in wards or rooms in hospitals, either public or private, in which negro men are placed.” Ala. Acts 727 (1915)).
structural problems persist such as modern anti-immigration statutes that deny undocumented immigrants access to publicly funded, preventative health care. All of these laws are examples of a legal regime that has adversely affected minority populations’ health and health access, and each contributed to a social environment that excluded and discriminated against minorities. By imagining that these systemic factors influenced only explicit bias, and by taking comfort from the decline of such overt measures, social scientists have imagined wrongly that the source of implicit bias is different and less virulent than the source of explicit bias. In truth, the sources—historic racism, classism, power, and domination—are the same for both implicit and explicit physician biases.

The second conceptual oversight in implicit bias literature follows directly from the first. By ignoring the continuing influence of our historic consciousness of discrimination against minorities, the individualized solutions of social cognitive theorists exaggerate the power of agency over structure to address health inequities related to unconscious racism. Social scientists studying implicit bias have failed to appreciate the extent to which the racial discrimination and inequalities endemic to the institutions that deliver, finance, and administer health care are the source of the physician and individual provider implicit biases that they study. As a result, they imagine that addressing physician and even patient attitudes and prejudices can change disparate health outcomes without changing the institutional contexts in which these disparities occur. Researchers who importantly demonstrate that implicit biases are malleable, and therefore are subject to interventions that can control or reduce discrimination, offer only individualized cognitive solutions such as stereotype negation, reimagining, or providing counter-stereotypes. These psychological remedies, though seldom directed toward discriminatory physicians as discussed below, are necessary but insufficient to address the race-, class-, and power-based structural divisions that pervade the U.S. health care system. Even the reciprocal determinism of social cognitive theory is unable to confront the structural racism that fuels physicians’ implicit bias.

It is not only interpersonal interaction and environmental factors such as disparate physician diagnosis, treatment, or communication that determine group behavior; group behavior is also determined by systemic-level interactions among institutions of power (such as the

90. See, e.g., COLO. REV. STAT. ANN. §24-76.5-103 (2006) (restricting public benefits unless verification of lawful presence in United States).

industrial medical complex), the state, and groups of underclass patients as populations, not merely as individuals. Thus, only changes to the overarching environment and social system itself will interrupt the flow of messages that inform the stereotypes, class stratification, and unequal power distribution that distort the interaction between physicians and patients. Social science solutions are incomplete and perhaps even naïve to the extent that they rely solely on individual human agency to address the social systems and environmental changes needed in order to benefit oppressed population groups such as minority patients.92

The third theoretical gap in the implicit bias literature lies in the fact that its scholars have missed the breadth and complexity of discrimination arising from implicit racial and ethnic biases beyond health care. A broader view of racial biases that impact health outcomes must include discrimination in all social determinants of health including residential segregation, employment inequality, inequitable educational funding, and enormous income disparities that reinforce the implicit biases that physicians have been shown to hold against their minority patients. By viewing the psychological determinants of implicit bias and the discriminatory behavior it produces in isolation, social cognitive theory falls short of addressing the multi-dimensional, multigenerational discrimination that both affects minority patient populations and underlies the social knowledge that produces physician bias. The current social science literature focuses narrowly on the clinical environment as though changes in that arena alone can combat unconscious bias and the harm it causes minority patients. Scholars fail to consider that physicians’ implicit biases grow out of inequities in power and wealth that separate physicians from their patients in virtually every aspect of their lives, including housing, education, employment, the food that they eat, and the recreational options available to them. Moreover, implicit bias scholarship fails to acknowledge that even these divisions reflect massive unconscious racism. Indeed, as Williams and Rucker noted, “[e]ffectively addressing health care disparities will require comprehensive efforts by multiple sectors of society in order to address larger inequities in major societal institutions. There is clearly a need for concerted society-wide efforts to confront and eliminate discrimination in education, employment, housing, criminal justice, and other areas of society which will improve the socioeconomic status (SES) of disadvantaged minority populations and indirectly

provide them with greater access to medical care.”93 However, even this prescription must be expanded. Implicit bias harms not only “disadvantaged minority populations,” but it also harms all minority populations regardless of their income, education, or profession. Merely improving access to health care will not eradicate the destructive environmental effects of unconscious racism that surrounds the health care delivery system in the United States.

The fourth conceptual gap in the implicit bias literature arises from the fallacious notion that implicit biases are ubiquitous and therefore inevitable. There are three flaws in this view. First, it suggests that physician implicit bias is largely unchangeable. This behaviorist reductionism suggests that even the recommended individual-level changes are practically futile because they depend on changing the way that physicians think about their patients and the ways that patients react to their physicians. Unconscious racism literature that describes these attitudes as automatic94 and unintentional has even prompted some theorists to suggest that discriminatory biases can only be made worse by attempting to suppress them.95 For these theorists, the upshot of this perspective is a virtual justification of implicit bias and the absence of any real intervention to address or reverse its devastating effects. For example, based on this behaviorist view, some legal scholars have asserted that discrimination resulting from implicit bias is not blameworthy, and any attempt to regulate or penalize this form of discrimination amounts to “mind-reading,” or holding honorable actors liable for thoughts and conduct that they do not intend and outcomes for which they are not responsible.96

The second shortcoming of the belief that implicit biases are ubiquitous and thus inevitable is that it absolves physicians, providers, and indeed society overall from accountability for the harms that unconscious racism visits upon members of racial and ethnic minority populations. The fact that these conclusions are directly contradicted by over a quarter-century of research that shows implicit biases are malleable—that is, within the control of a

sufficiently motivated actor—is ignored completely by policy-makers and barely mentioned by social scientists when discussing health disparities. This omission is evidence of the structural violence that unconscious race and ethnicity bias has had on the discourse itself.

Lastly, social psychologists dramatically underestimate the orderliness of the structural constraints on individual change and the concomitant need for macro-level interventions to address health disparities. Because the literature’s dominant social cognitive theory explains these individual attitudes as inadvertent, inevitable, and ubiquitous, the literature makes unconscious racism seem irrational and exceptional. Social scientists have missed the very rational, structured functionalism that characterizes racial and ethnic discrimination in the United States and in U.S. health care. Sadly, discrimination has historically tainted our society and legal structures. There have been extended periods in our nation’s history during which race- and ethnicity-based differentiation has been orderly, deliberate, and even mechanical. These divisions by race and ethnicity in health care preserve power and protect the institutional health care delivery system from economic and social destabilization.

The woefully inadequate incrementalist approach that social cognitivists have taken to address the problem of unconscious racism in the U.S. health care system represents a fifth conceptual gap in the psychological approach to implicit bias. I assert that a significant contributor to the failure of the health care industry to reduce health disparities is the delicate and timid approach to analyzing unconscious racism that characterizes the social science literature. Social psychologists describe experiments that show that race and gender determine who gets to live and who gets to die, and then they end their studies with stunningly tepid conclusions such as, “[o]ur data indicate that participants do differ in the strength of negative versus positive associations with African Americans relative to White Americans” or “[m]ore work bridging the psychological literature and medical practice may offer new theoretical insights and practical ways to combat bias in health care.” Some social scientists have gone so far as to acknowledge that “[t]hese findings have implications for cultural competency training programs . . . . This has been a concern


of the legal community, police academies, and medical and nursing schools.”  Nevertheless, the destructive impact of unconscious bias on the real lives and real deaths of minorities in the United States seems to have escaped the social science gaze.

Dr. Alexander Green’s study, though undeniably groundbreaking, highlighted one procedure, for one disease, using video-vignettes and ended with a whimper from a practical policy perspective:

In conclusion, our findings suggest that physicians, like others, may harbor unconscious preferences and stereotypes that influence clinical decisions. Further study is needed to confirm our findings and to determine the extent to which unconscious racial biases contribute to health care disparities. Given the potential existence of these biases, new approaches to addressing disparities might include confidential feedback mechanisms to make physicians aware of disparities in their own cohort of patients, securely and privately administered IATs to increase physicians’ awareness of unconscious bias, and targeted education to mitigate its effects on clinical decision-making.101

Dr. Green’s prescription of the “potential existence” of racial bias that “may” influence clinical decisions is “further study.” Similarly, Dr. Janice Sabin’s remarkable research concludes quite unremarkably:

Early research suggests that implicit attitudes and stereotypes may be amenable to change. Strategies aimed at changing implicit attitudes and stereotypes about race and ethnicity include stimulating social desirability, suppression of known prejudices, and the promotion of counter-stereotypes . . . . This approach reduced implicit racial bias by 50% and the reduced bias effect remained when measured 24 hours later . . . . Identifying implicit associations among health care providers, such as an ‘implicit perceived compliance and race’ stereotype and incorporating methods to change implicit bias into clinical training may be one approach to improving quality of care delivered to minority populations. Future research is needed to gain a better understanding of the complex psychological interactions that exist between physician implicit and

100. Moskowitz, supra note 4, at 1000.

explicit attitudes and stereotypes about race, physician perceptions of patient characteristics, physician characteristics, organizational characteristics, and quality of medical care.¹⁰²

The remedies proposed by these social scientists are confined to the psychological realm. As such, these remedies fail to recognize the way that the history and culture of racism in the United States makes proposals for “stimulating social desirability” and “suppressing known prejudices” to accomplish change that, at best, offers the hope to remain measureable “24 hours later,” an inconsequential remedy doomed to fail without much more systemic change. Moreover, these limited findings promote a narrow discourse among social scientists so that the literature builds a narrative that focuses attention on the health behavior and decisions of thousands of individual doctors and patients as isolated actors, apart from the organizations, health delivery systems, and social and political institutions within which they operate. In the end, even the social scientists’ proposed frail steps toward change must await “future research to gain a better understanding” while tens of thousands of minority patients suffer and die disproportionately to their white counterparts.

According to these studies, change must be preceded by more study of narrower questions. This is a disproportional response to the problem of unconscious racism and its association to health disparities. True and lasting change will depend upon sustained interactions that finally alter the social constructs that have led to physicians’ discriminatory attitudes that have been reinforced by the organizational structures that surround them. In contrast, social cognitive theorists propose that changing physician attitudes depends upon an incrementalist approach that involves waiting until conditioning and socialization change the symbols attached to race and ethnicity in the United States. These changes seem unlikely in an environment that continues to deliver racial and ethnic stereotypes that are incessantly reinforced through the media, educational systems, political discourse, and housing and employment patterns. As African Americans, Latinos, Asian Americans, and Native Americans disproportionately suffer massive and severe incidences of disease and death associated with health disparities in this nation’s health care system, the incrementalist approaches to unconscious racism in health care endorsed by some social scientists may be viewed as intellectual myopia.

I do not believe that the reason for this shortsightedness is malevolence. Indeed, little progress toward equality in the

¹⁰². Sabin, supra note 42, at 684.
contemporary U.S. health care system will be made apart from the work of social science researchers uncovering the effects of implicit racial bias. Nevertheless, the narrowness of their framework is due to the proclivity in the social science disciplines to strain toward a biomedical model of scientific inquiry that is ostensibly value-neutral, descriptive, objective, and non-experiential. “Pure” science, they imagine, shuns advocacy or normative proscriptions in favor of “letting the ‘facts’ speak for themselves.” Social scientists seem loath to taint their work with advocacy or policy, preferring instead to inform others who would then in turn deal with the injustices that the social scientists elucidate. Moreover, little recognition appears in the implicit bias literature with which I am familiar that acknowledges the likelihood that the environment in which social science proceeds is itself influenced by unconscious racial and ethnic bias. Finally, the level of structural change needed to accomplish true reform in health care is not susceptible to scientific proof or testing, and thus may appear out of reach and even impossible to achieve.

For these reasons, I believe social science is a necessary but insufficient component of true social change. Although I have placed a critical lens on the social science of physician implicit bias, I do highly value the social science tools and analysis that have shed considerable light on the problem of implicit bias in health care. In the final section of this essay, I hope to bring a cross-disciplinary approach to the problem of implicit bias in health care in order to fill the theoretical gaps in the implicit bias literature that I have identified. In the final section of this paper I will discuss how the theories I have used to deconstruct the current literature on physician bias may also be used to fashion a more comprehensive theoretical construct for understanding and addressing unconscious racism in health care.

IV. Toward a New Paradigm

Thus far, a primary objective of my critique on health disparities research is to address the theoretical gaps in the social science literature on physicians’ unconscious racism. While the current literature has contributed to our understanding of how racial and ethnic discrimination operates on an individual, cognitive level, the structural violence done by this form of racism is arguably more insidious and damaging than social scientists have revealed. Therefore, I now turn to proposing a new construct—one that I call “structurally derived discrimination”—to both unify the discussion concerning the sources of the harm done to health justice and equality by both explicit and implicit forms of racial and ethnic bias and to enlarge the current understanding of the scope of their influence. My objective is to help place the implicit bias literature into a broader context by locating the formation of these unconscious prejudices within the larger societal and historical context in which they occur,
while also shedding light on the level of harm that they cause. This construct is schematically modeled in Figure 1 below.

**Figure 1.** Structurally derived discrimination: A contextualized theory of health inequality.

On the left side of the model, I lay out theoretical insights provided by critical theory, political economy, and structural violence. These theoretical perspectives suggest that the sources of both implicit and explicit bias arise from a systemic ecology of racial and ethnic discrimination, class stratification and inequality, and power differentials that permeate the health care system and the nation. These three structural sources manifest at every institutional level and are communicated through media, education, and government; they feed all biases, regardless of whether those biases are implicit or explicit. The overlap between explicit and implicit bias is also greater, I believe, than the social science literature has revealed. While explicit and implicit biases operate independently to influence individual conduct and judgments, the two overlap to create institutional environments that tolerate and even condone broad inequities that subordinate historically disadvantaged populations in accord with well-established social expectations. Hence, in the structurally derived discrimination model, I link explicit and implicit biases in the middle circles. On the right side of the model, I directly connect both explicit and implicit race and ethnicity biases to the disparate health
outcomes that African Americans, Latinos, Asian Americans, and Native Americans suffer in the United States.

The disconnect in the social science literature between these health disparities and the study of individual implicit bias is perhaps the most revealing sign of the myopic and decontextualized approach that psychological theories of implicit bias have taken. This model conceptualizes implicit biases as a direct cause of the population-wide, well-documented inequity of health outcomes that epidemiologists and clinicians call “health disparities.” In my model, I would discard the value-neutral term, “health disparities,” in favor of a more accurate description of the inequality and injustice that disparate health outcomes represent. The understanding expressed in the current literature is that the sources and harms of implicit bias are small, and therefore the interventions and remedies that social scientists have proposed are also small. The structurally derived discrimination model intends to challenge this perspective by contributing a larger view.

I propose a model that explores structural inequality within the broader theoretical frameworks provided by critical theorists because of their perspective and understanding of structural elements. Political economy theory informs this model acknowledging the important role of the state and its vast influence in creating the behavior that produces health inequality. Structural violence theory introduces a necessary understanding of the injurious nature and effect of racial and ethnic discrimination that I believe reflects the reality of those who experience ethnicity- and race-related health injustice. Notwithstanding the strengths of these theoretical paradigms, they have some important weaknesses. They can be used to deconstruct without reconstructing and can describe large and intractable problems for which there are no workable solutions. But I believe the structurally derived discrimination model can begin a discourse that will account for these weaknesses.

First, I propose using this model to help address the relationship between physician bias and discrimination in larger societal contexts: housing discrimination physically separates the powerful providers from vulnerable patient groups; educational discrimination ensures that asymmetric understandings and perceptions will prevail during the clinical encounter; and employment discrimination builds financial divisions between patients and physicians. In short, I invite a discourse that recognizes the interplay between “health, wealth, and power” as the non-negotiable starting point to understanding and addressing effectively the health disparities caused by physician and institutional implicit bias.\textsuperscript{103} “Until now, most behaviorally based

\textsuperscript{103} Paul Farmer et al., \textit{Rereading Social Science, in Women, Poverty, & AIDS: Sex, Drugs, & STRUCTURAL VIOLENCE} 147, 150 (Paul Farmer et al., eds. 1996).
disparities prevention research has focused on the individual . . . it must also be recognized that all individual behavior is embedded in and influenced by its social and physical environment . . . . But broader social forces such as economics, politics, and international affairs also shape individual decisions.” 104 The first step must be to press beyond the narrow search to connect individual doctors’ implicit biases and individual patients’ disparate health outcomes empirically. The broader view will enlarge our understanding of the population-based harms caused by implicit bias as it goes unchecked throughout health care institutions and networks. Regrettably, the current literature lacks interviews, focus groups, and ethnographic research that would give a voice to minority patients and likely change the direction of current research by contextualizing the experiences of minority patients beyond the clinical encounter. The important process of incorporating social context into implicit bias research will challenge current individualism and promote change at multiple levels of authority, influence, and power.105

CONCLUSION

Critical analysis of the social science literature that addresses physician implicit bias suggests that cognitive theories may have thus far overlooked the fact that social injustice, perpetuated by the state and all the institutions it touches, leads directly to the health and health care inequities that minority patients suffer. Indeed, state-perpetuated social injustice may lead to many related inequities as well, such as unequal housing, inferior education, and lack of safe environments, healthy food, and fair employment. All of these inequalities are structural, not individual, and fixing them will likely require structural changes to the larger context in which health care delivery occurs. Moreover, these inequalities are replicated in the provider, insurance, and educational institutions that surround health care delivery in this country. Cognitive theory solutions to the problem of implicit bias on an individual level cannot accomplish the reformative task alone. Proposed solutions that focus on educating providers or altering cognitive processes must occur within a framework that recognizes a need for accompanying external changes that reinforce socially acceptable and morally desirable behaviors.

The physician decision maker is currently constrained by cultural, political, and economic factors that, if uninterrupted, will perpetuate

104. Id. at 173.
current biases and stereotypes. Left unaddressed, these biases and stereotypes may be indistinguishable in impact from the bigotry and racism of our nation’s past. Individual-level cognitive solutions are likely too narrow in scope to effectively address such broad-sweeping constraints. Thus, true and lasting change should be made with reference to the context in which physicians’ attitudes develop and behaviors occur.

Because discriminatory conduct is socially determined, I propose that we look to legal interventions that are both grounded in social science evidence and strive toward changing the social and political context in which health care is delivered, as well as the environments in which patients live, work, and play. Further research is needed to flesh out the full range of options that are likely to be necessary to achieve the type of structural change that will in turn compel agency-level changes as well. Of course, there will be limitations to legal solutions as well. The law, to be sure, is a “blunt instrument” and therefore encounters considerable resistance when wielded. Moreover, there are limits on the law’s ability to change values and attitudes. Nevertheless, we have seen law used to institutionalize racist values that produce health disparities, and likewise, we have witnessed law used to dismantle segregation in health care during the Civil Rights Era. Law is one of the strongest of American social tools to both reflect and influence changing social norms. As we work towards addressing the health inequities arising from implicit bias, we should remain cognizant of that tool’s utility. Indeed, I believe it is now reasonable to employ legal avenues to implement structural change in socially determined discrimination. I propose a future approach that focuses on using legal remedies, informed by current social science and (of course) further research, to produce structural change and effectuate real health improvement for minority patient populations.