

## AI and Me

*How did AI do with “Theory vs. Evidence: Unconscious Bias in Medical Decisions”?*

In an article published in the open-access *Journal of Controversial Ideas* earlier this year, I called attention to evidentiary defects of the anti-racist medical literature, beginning with its charter, the Institute of Medicine’s 2003 report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. In order to show that the racial bias of doctors is ultimately responsible for observed disparities of care, one would first have to rule out other credible explanations. A consistent pattern of findings from clinical vignettes or similar trials of doctors themselves would constitute direct, as opposed to inferential, evidence of racial bias in treatment decisions. On the principle that strong claims call for strong evidence, robust findings across the board would be needed to establish the existence of an unconscious racial bias operating automatically and universally in white doctors. None of these conditions was satisfied when the authors of *Unequal Treatment* suggested or intimated that the unconscious bias of white doctors warps medical care in the United States; and it is on this dubious foundation that the anti-racist medical literature rests.

As I wrote in the article’s Abstract:

Racial disparities of medical care have been well documented for decades. That much is clear. Less clear are the cause or causes. By the time of the historic 2003

report by the Institute of Medicine (IOM), investigators had uncovered a pervasive pattern of disparities—often, however, without access to clinical or socioeconomic data which might help explain them. It was in these circumstances that the authors of the IOM report adopted the theory of unconscious bias as the ultimate explanation of observed disparities of care. The theory of a profound bias working outside the holder’s awareness and control seemed to many to account for patterns of disparate treatment as nothing else could. However, to this day there exists little good evidence that such bias warps clinical decisions—certainly not enough to bear out the sweeping theory of a psychological mechanism that operates automatically. Impressive in principle but doubtful in practice, the theory of unconscious bias does not account for the evidence but covers its absence, just as it did when it was enshrined in the IOM report in 2003.

The article as a whole, titled “Theory vs. Evidence: Unconscious Bias in Medical Decisions,” is readily available. See doi: [10.63466/jci05010003](https://doi.org/10.63466/jci05010003).

A couple of months after the article appeared, Academia.edu notified me that “an AI” had written a review of it, leading me to wonder if the AI in question sought anonymity for itself (as, indeed, contributors to the *Journal of Controversial Ideas* are given the option of anonymity). The review concludes as follows:

By questioning the sufficiency of unconscious bias theories, the article advances a critical conversation about the intersection of theory, evidence, and ethical practice in medicine, making it a valuable contribution to both current and future scholarship.

In sum, while the paper provides a compelling counterpoint to dominant perspectives, integrating contemporary research and interdisciplinary insights might enhance its impact. The conversations ignited by Justman's critique could stimulate new pathways for innovative research and meaningful policy change in healthcare.

While it’s gratifying to have work judged compelling, the entire passage—the entire review—is blather. Think only of the high importance awarded to “conversations,” which is to say, blather itself.

Generic from beginning to end, the review says nothing in particular, gives this nothing an academic aura (“intersection”; “interdisciplinary”), and resembles, all in all, a nominally competent college essay lacking the least spark of insight, originality, or even thought. The product of artificial intelligence, it is nevertheless mindless—so much so that at one point it suggests how to improve my chances of getting the article published, whereas it found the article in the first place only because it *was* published.

Including a clear literature review helps reviewers quickly see what's new and why it matters, which can speed up the review and improve acceptance chances. The following references were selected because they relate closely to the topics and ideas in your submission. [A list follows.]

Among the sources I am advised to include in a literature review in the interest of impressing the referees is “What If Perceived Discrimination Isn’t the Same as Real Discrimination?”—a paper of my own which appeared in the same journal as the present one, that is, the *Journal of Controversial Ideas*.

Struck by the incompetence of this unsolicited report, I decided to ask several other AI engines to review the same article. Responses are appended in full below.

Even worse than the anonymous review is the one produced by the Microsoft AI assistant, Copilot, which entirely misses the point of “Theory vs. Evidence,” namely, that the evidence fails to support the allegation that a deeply held racial animus distorts the practice of medicine in the United States. According to Copilot,

Your article, “Theory vs. Evidence: Unconscious Bias in Medical Decisions,” addresses a vital and timely subject within the medical community. The exploration of how unconscious bias can influence clinical judgment is both significant and

necessary for promoting equitable healthcare outcomes. The structure of your piece—comparing theoretical frameworks with empirical evidence—provides your readers with a balanced and nuanced perspective.

Note again the wooden phrasing. The second sentence might conceivably apply to the *Unequal Treatment*, but certainly not to my article, which openly challenges the argumentation of *Unequal Treatment*. As I state, “Ever since *Unequal Treatment* proposed its theory of unconscious bias before, not after, rival explanations of disparate care had been sifted and eliminated, critics have been quick to accuse American medicine of a systematic bias against patients of color.” How could Copilot fail to register that the article containing this statement disputes the doctrine that racism drives the practice of American medicine? Copilot doesn’t so much review the article as neutralize it—denature its content until nothing of the original remains.

Copilot seems to believe I’m struggling (with mixed success) to show that American doctors suffer from unconscious bias, and concludes from this that my article “implicitly motivates healthcare professionals to reflect on their own biases and to seek out interventions to mitigate their effects.” Like “implicit bias” itself, this statement abuses the notion of the implicit. In actuality, the article seeks to dig up the doctrine of unconscious or implicit bias by the roots.

Copilot suggests “enriching [my] argument with concrete examples.” The article abounds with specific examples of the dissonance between the theory of and the evidence for unconscious bias in medicine, discussing, for example, several studies that set out to demonstrate the influence of that bias over clinical decisions and then failed to do so. As Gemini, the Google AI assistant, noted when I asked it to review “Theory vs. Evidence,”

“Your detailed critique of the Harris et al. study, the Schulman et al. trial, and the Green and Sabin/Greenwald studies is particularly strong. You precisely pinpoint the methodological limitations, confounding factors, and interpretational issues in these foundational papers.”

Unfortunately, this sampling of the studies discussed in my paper is somewhat misleading. The Green study, an outlier in the literature, reports a positive correlation between a test for unconscious bias and differential recommendations of a medical treatment (in clinical vignettes). I do not critique it except to note that it has not been replicated. As for the Harris et al. study, far from critiquing it, I hold it up as an example of good practice and rest much of my argument on its ground rule—at once methodological and ethical—that a verdict of bias can be given only after ruling out other explanations of observed disparities of care. (Elsewhere, the Gemini review itself recognizes the importance of this study.) Here, then, is the principle violated by the authors of *Unequal Treatment* when they insinuate that medical decisions are driven by unconscious bias even while other explanations of the disparities in question remain open (as in the case of most studies of cardiovascular care listed in the online bibliography) and even though direct evidence of biased decision-making is virtually nil. In lieu of strong evidence of an unconscious or automatic bias, the authors of *Unequal Treatment* employ a peculiar rhetoric of suggested conclusions which has no place in a purportedly objective document.

Gemini has a good rough grasp of my argument. “You maintain a consistent and clear argument throughout the article: the theory of unconscious bias has been adopted as

an explanation for racial disparities in medical care without sufficient empirical evidence to support its direct influence on clinical decisions.” Moreover, Gemini judges this argument well supported:

Overall, your article is exceptionally well-written, thoroughly researched, and makes a compelling case. The detailed examination of the studies and the consistent emphasis on the lack of strong empirical support are its greatest strengths. It effectively challenges a widely accepted theory by meticulously dissecting the evidence (or lack thereof).

If indeed the article makes a strong case, then the literature that presumes the hegemony of unconscious bias over American medicine rests on a flawed foundation, namely, *Unequal Treatment* itself. Ultimately, the argumentation of *Unequal Treatment* turns upon anticipated findings and insinuated conclusions. Simply put, this work that set the course and the terms of an immense literature issued a verdict of bias before the evidence of bias was in. What, then, does Gemini think of *Unequal Treatment*?

When I asked Gemini to review *Unequal Treatment*, it instantly produced a write-up that takes that volume at face value, uncritically repeating its claim that unconscious bias on the part of doctors is the final explanation of disparities of care and fudging the evidence more or less as *Unequal Treatment* itself does. As *Unequal Treatment* suggests and insinuates that doctors act like bigots even though the authors lack the evidence, for the time being, to make this incendiary claim good, so Gemini states that “unconscious bias, stereotyping, and prejudice among healthcare providers can lead to differences in

diagnosis, treatment, and referrals,” with a certain tactical ambiguity attending the word “can.” (Note that Gemini uses “bias” and “prejudice” redundantly just as *UT* itself does.) I fail to see how an article can provide a “compelling” critique of *Unequal Treatment* (and the literature predicated on it) if the argumentation of *Unequal Treatment* is quite sound to begin with.

Gemini parrots the conclusion of *Unequal Treatment* that racial disparities of care and outcome “exist even after accounting for socioeconomic factors and access to care,” a claim I contest explicitly. In all, *Unequal Treatment* “provided a crucial framework for understanding and addressing the complex issue of racial and ethnic disparities in healthcare.” Does Gemini mean that *Unequal Treatment* is so foundational, so indispensable, that any critique of it, no matter how cogent or “meticulous,” is beside the point? Nevertheless, if AI really is a form of intelligence, it ought to recognize that a single argument can’t be at once valid (as Gemini deems *Unequal Treatment*) and profoundly flawed.

In response to “Theory vs. Evidence,” the ChatGPT review asks, “Does absence of evidence equal absence of effect?” and goes on to observe rather coyly that “Critics could argue that early-stage hypotheses often lack full data but should still be pursued, not dismissed.” The theory of unconscious bias was indeed in its early stages when *Unequal Treatment* appeared, but 22 years have elapsed since then, over which span almost nothing has been added to the meager evidence available to the authors of *UT* when they issued their anticipatory finding that a medical profession driven by unconscious bigotry

bears ultimate responsibility for racial disparities of care in the United States. Some of the long-awaited evidence seemed to arrive in 2020 when a paper in the *Proceedings of the National Academy of Sciences* reported that black newborns attended by white doctors die disproportionately (a result suggestive of racial bias, most likely an unconscious one); but it later emerged that the disparity approached zero when very low birth weight was taken into account. The 2020 paper is in the tradition of *Unequal Treatment*, which it cites, and unwittingly continues its practice of offering an inflammatory conclusion in advance of the evidence. The rebuttal appeared in the same journal as the original, both are cited in my article, and neither is mentioned in any of the AI reviews.

The point isn't just that 22 years constitutes a fair trial, but that there is something irregular about the argumentation of *UT*, which says, in effect: "We do not quite have the evidence to establish that white American doctors are racists deep down and practice medicine accordingly, but for the time being we suspect, presume, conclude and suggest that they are and do." As *Unequal Treatment* puts it more circumspectly, "Indirect evidence indicates that bias, stereotyping, prejudice, and clinical uncertainty on the part of healthcare providers may be contributory factors to racial and ethnic disparities in healthcare" (p. 178). What is this but argument by innuendo? AI that mirrors the judgments of *Unequal Treatment*, if only because the document has been cited thousands of times and enjoys something of the status of a constitution, endorses this unworthy practice.



Some of the defects of the reviews of “Theory vs. Evidence” may be due to the growing pains of a young technology. As AI acquires experience, maybe it will manage not to fall into errors like misidentifying a published paper as an unpublished manuscript or citing a mysteriously nonexistent “request for concrete numbers” (as Gemini does). Maybe its outputs will be less like high-powered book reports. Maybe it will even appreciate the explosiveness of the allegation that white doctors cause the death of black infants; the horror of the thought of doctors practicing medicine as if in their sleep, under the governance of their unconscious mind; and the impropriety of arguing by innuendo.

But some of the errors in the AI reviews may not be products of inexperience. As if it were simply unable to process a reasoned critique of the construct of unconscious bias, Copilot ignores my article in toto, instead commenting on some notional paper with the usual strengths and weaknesses. Incapable as it is of comprehending a rebuttal of the doctrine of unconscious bias, it recommends that I “offer practical steps for both individual practitioners and health systems to address unconscious bias.” In short, in the face of my argument Copilot behaves like someone unprepared to see what he is looking right at. Gemini, for its part, commends my analysis of the tradition of preconceived conclusions and failed studies that arose from *Unequal Treatment*, but seems reluctant to fault *Unequal Treatment* itself, suggests that I acknowledge its “laudable intent,” and elsewhere characterizes it as a “crucial framework” for understanding racial disparities in treatments and outcomes, as if criticism did not apply to it.

On the basis of its erratic handling of my article, I wonder if AI is prepared to evaluate reasoned criticisms of academic orthodoxies. If AI “thinks” by scanning the

literature, what happens when the literature is as repetitive, uncritical, and ideologically saturated as the literature on unconscious bias in medicine? AI that floats the notion that 22 years isn't enough time for an automatic psychological mechanism to show itself has absorbed the strange anticipatory attitude toward evidence itself written into *Unequal Treatment*.

Over time, as AI engines like Gemini and Copilot grow more and more familiar, will they become research assistants on which investigators rely to review and assess the underlying literature? Even if AI were able to appraise articles like mine without making basic errors or generic judgments, it would behoove all concerned to evaluate sources for themselves. In that spirit I invite readers to [view](#) "Theory vs. Evidence" and form their own conclusions.

Stewart Justman  
2025

## Appendices

### 1. Anonymous AI Review of "Theory vs. Evidence: Unconscious Bias in Medical Decisions"

#### Overview

Stewart Justman's "Theory vs. Evidence: Unconscious Bias in Medical Decisions" critically examines the reliance on the theory of unconscious bias as a primary explanation for racial disparities in healthcare. The article revisits the assumptions and evidentiary gaps present in the influential 2003 Institute of Medicine (IOM) report, "Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare." Justman argues that the compelling nature of the unconscious bias theory has overshadowed the need for robust evidence supporting its impact on clinical decisions. Through a detailed analysis of historic studies and the scholarly discourse surrounding unconscious bias, the work emphasizes the need for stronger empirical support before such a theory can be foundational in addressing healthcare disparities.

#### Relevant References

Including a clear literature review helps reviewers quickly see what's new and why it matters, which can speed up the review and improve acceptance chances. The following references were selected because they relate closely to the topics and ideas in your submission. They may provide helpful context, illustrate similar methods, or point to recent developments that can strengthen how your work is positioned within the existing literature.

1. Benton, Roxanna. "Unconscious Bias and How Clinicians Can Address Racial Inequities in Medicine." JAAPA, Lippincott Williams & Wilkins, 2021, doi:10.1097/01.jaa.0000751000.53855.71.
2. Dovidio, John F., and Susan T. Fiske. "Under the Radar: How Unexamined Biases in Decision-Making Processes in Clinical Interactions Can Contribute to Health Care Disparities." American Journal of Public Health, American Public Health Association, 2012, doi:10.2105/ajph.2011.300601.
3. White, Augustus A., and David Chanoff. "Seeing Patients: Unconscious Bias in Health Care (2011)." Harvard University Press EBooks, Harvard University Press, 2020, doi:10.4159/9780674251656-010.
4. Satel, Sally L., and Jonathan Klick. "Are Doctors Biased." Policy Review, Hoover Institution, 2006, <https://www.questia.com/library/journal/1G1-145781324/are-doctors-biased>.

5. Egan, Kayla. "The Roots and Clinical Effects of Racial Bias in Medicine." University of Michigan Undergraduate Research Journal, 2024, <https://doi.org/10.3998/umurj.5504>.
6. Chisolm-Straker, Makini, and Howard Straker. "Implicit Bias in US Medicine: Complex Findings and Incomplete Conclusions." International Journal of Human Rights in Healthcare, Emerald Publishing Limited, 2017, doi:10.1108/ijhrh-11-2015-0038.
7. Chapman, Elizabeth, et al. "Physicians and Implicit Bias: How Doctors May Unwittingly Perpetuate Health Care Disparities." Journal of General Internal Medicine, Springer Science+Business Media, 2013, doi:10.1007/s11606-013-2441-1.
8. Oxtoby, Kathy. "How Unconscious Bias Can Discriminate against Patients and Affect Their Care." The BMJ, BMJ, 2020, doi:10.1136/bmj.m4152.
9. van Ryn, Michelle, and Somnath Saha. "Exploring Unconscious Bias in Disparities Research and Medical Education." JAMA, American Medical Association, 2011, doi:10.1001/jama.2011.1275.
10. Justman, Stewart. "What If Perceived Discrimination in Medicine Isn't the Same as Real Discrimination?" Journal of Controversial Ideas, 2024, <https://doi.org/10.35995/jci04010004>.

### Strengths

Justman's article stands out for its rigorous critique of widely accepted theoretical frameworks in the field of healthcare disparities. The strength of the work lies in its meticulous deconstruction of the historical context in which the theory of unconscious bias emerged, particularly its adoption in the IOM's seminal report. The author's detailed analysis of various studies that claim to support the existence and impact of unconscious bias adds depth to the discourse, highlighting discrepancies between theory and empirical evidence. Moreover, Justman's ability to critically evaluate complex psychological concepts and translate them into accessible language for broader audiences is commendable.

### Major Comments

#### Methodological Critique

Justman's primary contribution is his challenge to the methodological underpinnings of studies supporting unconscious bias. However, the review could benefit from a deeper exploration of recent advancements in cognitive psychology and behavioral sciences that may provide stronger methodological frameworks for examining biases in clinical settings. Incorporating a discussion on innovative methodologies can strengthen the work's argument and offer pathways for future research.

### Evidence and Assumptions

While the critique of assumptions inherent in the theory of unconscious bias is thorough, the paper might expand on alternative explanations for healthcare disparities. By acknowledging the multifactorial nature of these disparities, the work can present a more balanced view, potentially incorporating social determinants of health and systemic issues. This broader perspective can enhance the utility of Justman's critique for policy and practice.

### Ethical Framing

The article presents ethical implications surrounding the hasty adoption of the unconscious bias theory but stops short of addressing how these implications could influence medical education and practice reform. A more direct engagement with potential ethical reforms, drawing on existing literature on medical ethics, could provide actionable insights for practitioners and educators.

### Minor Comments

### Terminology Precision

At several points in the text, terms related to cognitive psychology and bias could be defined more clearly. Including a glossary or refining the definitions in-text may enhance reader comprehension, particularly for audiences outside the field of psychology.

### Organization and Flow

While the article is generally well-organized, the extensive use of historical examples sometimes disrupts the narrative flow. A more structured layout that differentiates historical context from critique could improve readability and highlight the work's central arguments effectively.

### Reviewer Commentary

Justman's article raises important questions about the reliance on psychological theories in understanding and addressing healthcare disparities. By situating the theory of unconscious bias within broader historical and methodological debates, he emphasizes the need for critical scrutiny in the adoption of theoretical frameworks in policy-making. Beyond methodology, the work invites interdisciplinary collaboration between fields such as sociology, ethics, and psychology, urging a multifaceted approach to understanding and addressing medical inequalities. The implications of such scrutiny extend beyond individual studies, potentially reshaping the discourse on healthcare equity.

## Summary Assessment

Overall, "Theory vs. Evidence: Unconscious Bias in Medical Decisions" is an intellectually stimulating piece that challenges prevailing narratives in the literature on healthcare disparities. Justman's work contributes to ongoing scholarly debates by advocating for more robust evidence and a nuanced understanding of the factors contributing to medical inequalities. By questioning the sufficiency of unconscious bias theories, the article advances a critical conversation about the intersection of theory, evidence, and ethical practice in medicine, making it a valuable contribution to both current and future scholarship.

In sum, while the paper provides a compelling counterpoint to dominant perspectives, integrating contemporary research and interdisciplinary insights might enhance its impact. The conversations ignited by Justman's critique could stimulate new pathways for innovative research and meaningful policy change in healthcare.

## **2. Copilot Review**

### Overview

Your article, "Theory vs. Evidence: Unconscious Bias in Medical Decisions," addresses a vital and timely subject within the medical community. The exploration of how unconscious bias can influence clinical judgment is both significant and necessary for promoting equitable healthcare outcomes. The structure of your piece—comparing theoretical frameworks with empirical evidence—provides your readers with a balanced and nuanced perspective.

### Strengths

- **Topical Relevance:** The topic is highly pertinent, especially as awareness grows regarding health disparities and the roots of inequitable care.
- **Balanced Approach:** By juxtaposing theoretical discussions with real-world evidence, your article encourages critical thinking and avoids oversimplification.
- **Clear Explanations:** Complex concepts surrounding unconscious bias are articulated in accessible language, making the content approachable for a broad audience.
- **Calls to Action:** The piece implicitly motivates healthcare professionals to reflect on their own biases and to seek out interventions that mitigate their effects.

### Suggestions for Improvement

- Clarify the Main Thesis: The core argument could be stated more explicitly in the introduction, helping readers grasp your stance from the outset.
- Expand Empirical Examples: While you reference several studies, including more detailed case studies or recent research—especially involving diverse patient populations—would strengthen your argument.
- Address Counterarguments: A section acknowledging limitations of current bias research (e.g., challenges in measurement or conflicting findings) would enrich your analysis and demonstrate critical engagement with the literature.
- Enhance the Conclusion: Summarize key takeaways more sharply and offer practical steps for both individual practitioners and health systems to address unconscious bias.
- Review for Consistency: Check for consistent use of key terminology (e.g., “implicit bias” vs. “unconscious bias”) to ensure clarity and avoid confusion.

### Final Thoughts

Your article provides a thoughtful examination of an urgent issue in healthcare. By sharpening your thesis, enriching your discussion with concrete examples, and acknowledging the complexities and limitations in the field, you can further elevate the impact of your work. This is a strong foundation for sparking dialogue and fostering awareness about unconscious bias in medical decision-making.

## **3. Gemini Review**

Your article, "Theory vs. Evidence: Unconscious Bias in Medical Decisions," presents a strong and well-argued critique of the role of unconscious bias theory in explaining racial disparities in medical care. You effectively highlight the historical context, the limitations of early studies, and the theoretical rather than empirical foundation upon which the concept of unconscious bias was adopted as a primary explanation.

Here's a breakdown of the strengths and some areas for potential refinement, keeping in mind your request for concrete numbers and avoiding a preachy tone:

### Strengths of Your Article

#### Clear and Focused Argument

You maintain a consistent and clear argument throughout the article: the theory of unconscious bias has been adopted as an explanation for racial disparities in medical care without sufficient empirical evidence to support its direct influence on clinical decisions.

#### Historical Context and Evolution of the Debate

You do an excellent job tracing the evolution of the discussion, starting with the Harris et al. study, moving through the Institute of Medicine's (IOM) 2003 report "Unequal Treatment," and then analyzing subsequent research, including work by Greenwald, Banaji, van Ryn, and Schulman et al. This historical perspective helps the reader understand how the theory gained prominence.

#### Meticulous Analysis of Key Studies

Your detailed critique of the Harris et al. study, the Schulman et al. trial, and the Green and Sabin/Greenwald studies is particularly strong. You precisely pinpoint the methodological limitations, confounding factors, and interpretational issues in these foundational papers.

Harris et al. (1991): You clearly show how this study, despite finding disparities (e.g., "blacks were less likely than whites to receive major therapeutic procedures in 37 of 77 (48%) conditions"), explicitly refrained from alleging racial bias due to lack of clinical and economic data. This is a crucial point in your argument.

Schulman et al. (1999): Your dissection of this study, highlighting the misrepresentation of statistics (e.g., initial claims of 40% less likely for blacks and women, later clarified to be mainly black women at 12% lower referral rates, and the role of the actresses' performances), is very effective. You demonstrate how the theory was applied despite questionable evidence.

Green et al. (2007) and Sabin & Greenwald (2008/later analysis): You effectively show the "one hit wonder" nature of the Green study and the subsequent inconsistent and often null findings of Greenwald's own research. The "no significant relationship" in the 2008 study and the "no significant associations" in three out of four conditions in the later Sabin and Greenwald analysis provide concrete evidence against the theory's predictive power.

Musey and Kline (2014): You highlight the paradoxical finding where, despite an assumption of unconscious bias driving disparities, the study found "no



significant difference in either treatment or outcome between black and white patients."

#### Emphasis on Lack of Evidence

You consistently return to the theme that there is "little good evidence that such bias warps clinical decisions," citing systematic reviews from 2017 and 2018 that conclude a "lack of good evidence for a direct negative influence of biases" and "limited research examining the impact of implicit bias on patient care and outcomes," with most studies showing "mixed results" or "no association" (four positive, eight negative in the 2018 review). This use of specific numbers strengthens your case.

#### Challenge to the "Automatic, Ubiquitous" Nature of Unconscious Bias

You effectively question the foundational assumption of unconscious bias as an "automatic" and "ubiquitous" mechanism, contrasting it with the "puzzling irregularity" of observed disparities. Your point about Asian patients often faring "the same or better compared to White people" further challenges the universality of the theory.

#### Thought-Provoking Conclusion

Your concluding remarks, particularly the idea that the theory "thrives even without confirming evidence, like a sort of anaerobic cultural organism," are impactful and summarize your central thesis powerfully.

#### Areas for Potential Refinement and Further Considerations

##### Strengthen the Introduction with a Preview of Your Argument's Structure

While your abstract is clear, you could consider briefly outlining the sections of your article in the introduction to guide the reader through your logical progression. For instance, mentioning that you will first discuss the IOM report, then analyze key studies, and finally address the resilience of the theory despite evidence.

##### More Explicitly Define "Unconscious Bias" Early On

While you cite Greenwald and Banaji's formulation ("automatic, unconscious, ubiquitous"), a brief, concise definition of what "unconscious bias" is *purported* to be by its proponents early in the introduction or "Automatic, Unconscious, Ubiquitous" section would be helpful for readers less familiar with the concept. This would set up your critique more effectively.

### Consider a Brief Acknowledgement of the *Intent* Behind the IOM Report

While your focus is on the evidence, a very brief sentence acknowledging the laudable intent of the IOM report to address disparities (before critiquing its methodology for attributing cause) could preempt any misinterpretation of your stance as minimizing the existence of disparities themselves. You do this implicitly by stating "Racial disparities of medical care have been well documented for decades. That much is clear," but a slightly more explicit nod to the underlying concern could be beneficial.

### Nuance the "No Evidence" Claim Slightly (While Maintaining Your Core Argument)

You effectively demonstrate the *lack of robust, consistent evidence* for unconscious bias *warping clinical decisions*. While your current phrasing is strong, you could subtly reinforce that your argument is not that bias *never* exists, but that its *automatic and ubiquitous influence on clinical outcomes* is not well-supported by evidence. You already do this somewhat by citing the "mixed results" in reviews, but being extremely precise about the scope of your "no evidence" claim can further solidify your position against potential counter-arguments. For example, instead of "there exists little good evidence that such bias warps clinical decisions," you might say, "despite widespread adoption of the theory, there remains little robust evidence demonstrating that unconscious bias *systematically* warps clinical decisions in the manner proposed." This is a minor point, as your article already does a good job of this.

### Concluding Thought or Call to Action (Optional)

While your conclusion is strong as is, consider if there's a final provocative question or a very brief suggestion about where the focus should be if not on unconscious bias (e.g., addressing socioeconomic factors, explicit bias where it exists, or structural issues). This is entirely optional and depends on the desired tone for the "Journal of Controversial Ideas."

Overall, your article is exceptionally well-written, thoroughly researched, and makes a compelling case. The detailed examination of the studies and the consistent emphasis on the lack of strong empirical support are its greatest strengths. It effectively challenges a widely accepted theory by meticulously dissecting the evidence (or lack thereof).

## **4. Gemini Review of *Unequal Treatment***

"Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare," published by the National Academies Press in 2003, is a landmark report that examines the persistent and systemic disparities in healthcare experienced by racial and ethnic minorities in the United States. The report concluded that these disparities exist even after accounting for socioeconomic factors and access to care, highlighting the role of unconscious bias, [stereotyping](#), and prejudice among healthcare providers. It emphasized the need for interventions to address these disparities and promote equitable healthcare access and quality for all.

#### Key Findings and Conclusions:

Disparities are widespread and persistent:

The report found that racial and ethnic disparities in healthcare are remarkably consistent across various conditions and settings, even when controlling for factors like insurance status and income.

Bias and stereotyping play a significant role:

Unconscious bias, stereotyping, and prejudice among healthcare providers can lead to differences in diagnosis, treatment, and referrals, negatively impacting minority patients.

Access-related factors are not the sole explanation:

While access to care is a crucial factor, the report emphasized that disparities persist even when access is not a significant barrier, indicating other systemic issues at play.

Recommendations for change:

The report offered a range of recommendations, including increased awareness of disparities, cultural competency training for providers, and policy changes to promote equitable access and quality of care.

#### Impact and Legacy:

Shifting the narrative:

"Unequal Treatment" brought the issue of racial and ethnic disparities in healthcare to the forefront, prompting increased attention and research in this area.

Informing policy and practice:

The report's findings have influenced healthcare policy, clinical practice guidelines, and educational initiatives aimed at addressing disparities.

#### Ongoing challenges:

Despite the report's impact, significant disparities persist, highlighting the need for continued efforts to achieve health equity.

In essence, "Unequal Treatment" provided a crucial framework for understanding and addressing the complex issue of racial and ethnic disparities in healthcare, emphasizing the need for a multifaceted approach that includes addressing provider bias, promoting cultural competency, and ensuring equitable access to care for all.

## **5. ChatGPT Review**

### Central Argument

Justman challenges the commonly accepted explanation that unconscious bias—that is, automatic, hidden prejudice—is the primary driver behind racial disparities in healthcare. He highlights that, while disparities are well-documented, the leap from observing unequal treatment to attributing it to unconscious bias lacks sufficient empirical grounding.

### Key Points

#### 1. Evidence Gap

- Justman notes that many foundational reports, including the 2003 IOM study, lacked comprehensive clinical or socioeconomic data.
- With the data missing, the unconscious-bias explanation may reflect more a theoretical comfort zone than a factually-grounded conclusion.

#### 2. Theory as a Placeholder

- He contends the unconscious-bias narrative became an appealing explanation partly because nothing else seemed to fit.
- However, he emphasizes that this explanation “covers its absence” of robust evidence—that is, it fills an evidentiary void .

#### 3. Demand for Rigor

- Justman doesn't deny disparities are real, but he urges a more methodologically sound approach.
- He calls for more investigations into institutional, socioeconomic, and systemic causes rather than settling too quickly on psychological mechanisms.

### Strengths

- Evidence-first mindset: Justman's skepticism underscores the scientific principle that hypotheses require robust empirical validation.
- Intellectual honesty: He warns against letting appealing theories substitute for hard data.
- Implications for policy: Under-addressed causes may continue to permit inequities if unconscious bias becomes the default explanation.

### Weaknesses & Counterpoints

- Does absence of evidence equal absence of effect? Critics could argue that early-stage hypotheses often lack full data but should still be pursued, not dismissed.
- Research is underway: Since the IOM report, many studies using methods like Implicit Association Tests (IATs), standardized patients, and vignette trials have produced mixed but sometimes supportive results. Justman might underplay this evolving empirical landscape.
- Unconscious bias is not unitary: There may be distinct forms of bias—implicit, explicit, contextual—that require separate investigation. Justman largely treats it as a monolithic concept.

### In Context

Justman's essay follows a broader tradition (e.g., his 2024 critique "What If Perceived Discrimination Isn't the Same as Real Discrimination?") in which he emphasizes methodological rigor and warns of theoretical overreach.

### Final Thoughts

Justman offers a vital corrective: don't let elegant theories replace missing data. His critique should inspire deeper, more nuanced research into the roots of healthcare disparities—probing structural, institutional, and socioeconomic forces as much as cognitive ones.

If you're exploring this topic further, I'd recommend looking into empirical work on implicit bias interventions, systemic racism in clinical protocols, and controlled

studies using "standardized patient" methods. That kind of work complements Justman's caution with concrete pathways forward.