

Racialized Perceptions of Motherhood: The Pervasiveness of Implicit Biases in Race-Conscious Biomedical Research

Elizabeth Ni ¹, Tiffany Tieu ³, Kate Wisniewski ³, Deiriai Myers ³, Dr. Wanjikũ Njoroge ^{2, 3}
(1) College of Arts & Sciences C/O 2026, (2) Perelman School of Medicine, (3) Children's Hospital of Philadelphia





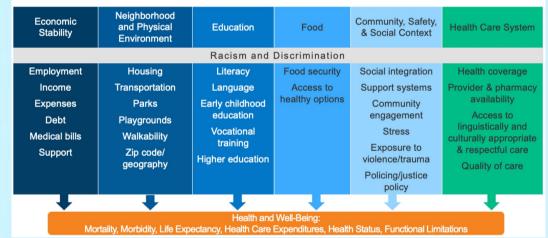
Introduction

I joined a research team looking at the effects of the pandemic on parents and their children, with a focus on the effects on Black families. This poster looks at the presence of implicit biases within the scope of this research team's work.

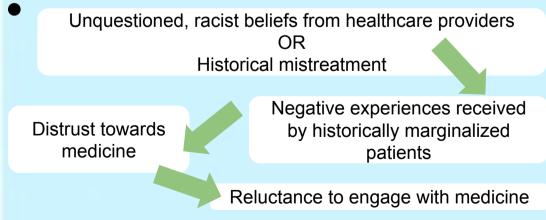
Background

- Racial disparities are well documented in medicine
- The COVID-19 pandemic has illuminated this reality
- Racial disparities are caused by a wide-array of cultural factors, known as the <u>social determinants of health</u>

Health Disparities are Driven by Social and Economic Inequities



- Barriers to accessing healthcare contributes to such disparities
- Racism from healthcare providers is a barrier to healthcare



Research Question

 Even in clinical research with diverse communities that aim to understand racial disparities, do implicit racial biases and stereotypes impact researchers and clinicians perceptions, despite meaningful intentions?

Research Approach

Methods

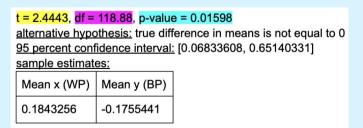
This poster qualitatively looks at lab interactions and quantitatively analyzes the study data.

STUDY METHODS:

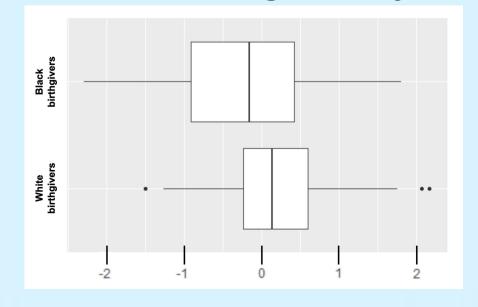
- 201 non-Hispanic white and Black people who gave birth during the early months of the pandemic were interviewed/given tasks to complete with children
- 193 (98 Black parents, 95 non-Hispanic white parents) ultimately assessed on standardized scale of 0 to 3 for positive parenting factor
- Defined in protocol manual as "parent's expression of love, respect, and/or admiration for the child"

Analyzing Study Data (Quantitative Approach)

- Conducted t-test, p-value = .05
- Hypothesis: There is a true difference of means in the mean standardized score of positive parenting between Black & non-Hispanic white mothers



Standardized Positive Parenting Factor for Birthgivers by Race



Inspecting Lab Interactions (Qualitative Approach)

How do implicit biases influence researchers' approaches?

 A concern of abuse towards Black mother was raised to physician staff (mandated reporters of abuse)
 Email Conversation of Report

CODER: I would just feel a lot better if someone could review the video and follow up because the way she raised her hand in the moment just didn't sit right with me.

RESEARCH COORDINATOR: I have watched a recording and I also noticed that during the Puzzle Box task, the mother raised her hand towards the child but then stopped when she looked at the camera.

Coder is a non-Hispanic white woman, Research coordinator is a non-Black, hispanic woman.

- Notably, the mother's face was not in frame during the task. The research coordinator's statement cannot be true.
- Ultimately, lead physicians (BW & WW) found no reportable actions from the Black mother towards her Black child after team-wide discussion

Results

Quantitative

- Average positive parenting factor of Black mothers was -0.17 vs. +0.18 for non-Hispanic white mothers, a ~0.36 difference on a 6 pt. scale
- T-test concludes that the chances of this difference in means happening by chance is 1.5%, less than p-value of 5%

Qualitative

 Two non-Black research staff members erroneously reported a Black mother having intent and awareness of abuse

Conclusions

- (Racially homogenous) coders systematically found Black parents to be less expressive of love & respect to child
- Data suggest implicit racial biases (negative stereotypes towards Black women). Study later sought more diversity in staff.
- If the matter of the qualitative study escalated, consequences would include Child Protective Services called on family, legal intervention
- Harkens to institutional over-policing of Black people, especially Black mothers

Limitations

- This poster looks at one particular research study conducted in Philadelphia
- It is beyond the scope of this poster to systematically understand implicit bias' impacts on biomedical research

Supplemental Materials & References





Acknowledgements

A special thank you to Dr. Njoroge, my fellow undergrad summer interns, Megan Himes & IGNITE, PolicyLab, LiBi, and CURF and the PURM program for making this poster possible.

Questions? Email me!

elizani@sas.upenn.edu