Stereotype Threat: Racial Microaggression Undermines Performance of Black Health Professionals

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A CLASSIC STUDY: *Black and white college students take a difficult test. Half are informed that the test measures intelligence; the other half are told that the test is not related to intellectual ability.*

RESULT: *Blacks scored worse than whites if the task was described as an intelligence test, but performed as well as whites when told the test is not a measure of intelligence.*[1,2]

What's happening here?

In their landmark 1995 study, Steele and Aronson explored underperformance on a test or problem-solving exercise manipulated by stereotyped racial distinctions. Less obvious than the widespread, overt prejudice in American society are subtle, often unconscious acts or microaggressions directed against a stigmatized, marginalized group that can facilitate impaired self-reflection and behavior. This damaging state occurs when actual or perceived cues in specific situations facilitate negative self-stereotypes connected to an individual's group (such as women, elderly, disabled or Black medical students). These threats can trigger impaired cognitive, physiologic, psychologic and emotional responses, which may interfere with academic or other task performance, diminished self-worth and a sense of belonging.[3,4] Stereotype threats are perceived whether or not others actually hold biased racial, gender- or age-based stereotypes. Rather, a threat is activated by the target's belief in a specific pejorative stereotype attached to their group. A perpetrator may be unaware of such microaggressions.

Our focus in this reflection will be an underrepresented minority group in medical school – Black students for whom the risk and reality of this phenomenon is particularly high.[5] Black medical students experience racism and discrimination which increase stress and challenge opportunities and aspirations associated with learning and socialization in what they frequently perceive to be a prejudiced and hostile environment.

Stereotypes are oversimplified beliefs which may mischaracterize and homogenize all persons in a group, typically an underrepresented, stigmatized minority. These rigid beliefs minimize or ignore the reality of a world of diverse, unique individuals. A common result is a biased, frequently negative perception of an individual or group. There is a pervasive under-appreciation of the consequences of these biases, termed stereotype threats or social identity threats.

This threat is commonly, but not always, associated with systemic racism and negative perception (believed or actual) held by a dominant group (e.g., whites, men), toward the targets – Blacks or women, for example. When minority students perceive a stereotype threat and then act in patterns in accord with the stereotypes, they tend to reinforce and enhance the threat's impact.

Am I treated as an individual or as a one-size-fits-all member of a group?

Racism facilitates practices which negatively influence beliefs and values (**Table 1**) for common detrimental contexts or cues that minority medical students confront that trigger threats.

The consequences of this damaging reality are diverse. (**Table 2**)

Racial distancing

Data indicates that racial distancing and intergroup avoidance are common and can be unrelated to explicit interracial bias.[6] Racial prejudice and racial distancing are not the same. Less frequent and open interactions with members of dominant groups harm everyone. Frantz and co-workers reported that stereotype threat impaired whites in settings where whites could assess their behavior as inadvertently supporting the stereotype that whites are racist.[7] Thus, the threat of being outed as racist may induce some whites to distance themselves socially from Blacks. Social distancing can blunt the contributions of minorities including survival skills honed in difficult neighborhoods, a tight, supportive intergenerational ethos and commitment to family and community.

What do Black med students say?

In focus groups, Black medical students decry what they perceive as too frequent misinformation and limited understanding by whites of affirmative action, medical school admission guidelines, scholarships and financial aid.[5,8] Students also targeted administrators who frequently did not seem to understand the importance of embracing diversity or advancing a culture of inclusion. Group participants also stated that their ethnic majority classmates

Table 1. Common contexts facilitating stereotype threats in Black medical students

Mistaken for housekeepers, orderlies, other med students
Social/numerical isolation, loneliness, low social status
Inadequate same race, gender, ethnic role models
Financial limitations impairing socialization
Institutional discrimination, racism, perceived slights
Tokenism exacerbating self-doubt
Mass media portrayal in subordinate or unflattering roles
Self-pressure to represent their race rather than be an individual
Effects most likely in tasks pushing upper limits of ability
Absence of a shared identity with mainstream groups

Table 2. Stereotype threats, consequences

Impaired self-esteem, self-identity, sense of belonging
Decreased performance/aspirations/expectations
Reduced sense of personal accomplishment/competency
Disengagement: avoidance of settings perceived as threatening
Deidentification: withdrawal, loss of interest in settings triggering stereotypes
Code switching: alteration of speech, clothing, behavior, mannerisms when with non-minority groups to appear "less" Black
Racial distancing; miscommunication with mainstream groups
Discounted/devalued contributions
Increased risk of burnout, depression, suicidality, impostor syndrome
Conforming bias: more likely to stifle creativity, go along with the crowd, leads to loss to group problem-solving by self-censoring to confer inclusion, acceptance
Decreased interest for leadership positions
Fear of confirming stereotypes resulting in underperformance

lacked confidence in Blacks' skills. Participants also noted a "minority tax" related to a disproportionate burden placed on underrepresented students and faculty to participate in recruitment of candidates and diversity-associated service and committee assignments. Fear of tokenism exists.

COVID, racial violence and stereotypes

Mass media portrayal of Blacks as violent protesters or in subordinate roles accentuates negative stereotypes. Blacks complain that they are overrepresented as criminals and underrepresented as victims compared to real-world crime statistics. Media accentuation of intergroup differences and boundaries can impair empathy with marginalized groups, such as Black medical students. Misinformation about disproportionately higher COVID-related mortality in Blacks can target minorities as less fit, healthy, health-conscious, inferior or "different."

Social identity threats also attack privileged, mainstream groups. Some data indicates that whites underperform on motor skill tasks if described as testing athletic ability.[9] Another finding is that white men may underachieve on math exams when told that their scores would be compared with those of Asian men.[10] Importantly, whites threatened by the Asian math stereotype underperform only if they were very identified with math as integral to their self-identity. In one study, women under stereotype threat had lower leadership aspirations than women who did not experience that threat.[11]

Do stereotype threats explain real-world performance?

Some scholars debunk the validity of stereotype threat effects, believing that they arise mainly from manipulated experimental study conditions, not actual performance impairment.[2] This view posits that stereotype threat effects do not contribute to actual gaps in performance between Blacks and whites, or women and men. This alternate analysis claims that self-identity threats exist primarily as laboratory phenomena, where investigators artificially manipulate study parameters to ensure stereotypes are especially salient. Adding to this debate is the fragmentation in the literature, which is fraught with major, incompatible differences in study design, populations and environments and an absence of clear, uniform guidelines for investigation. Thus, generalizability may be compromised.

Conclusion

Co-author CH writes:

"As a Black woman and the first in my family to attend medical school, I must express how stereotype threat can negatively impact my medical school experience. Imagine transitioning from a historically Black college to a medical school where I can almost count the number of Blacks on one hand. Being a woman adds to the social identity threats. It is exhausting to see too few people who look like me. I am frustrated, as wonderful non-Blacks who genuinely want to help may not understand my struggles. Imagine not having same race, same gender, same ethnicity mentors in my specialty choice. All medical students confront huge stresses. But, most of my peers do not confront the added burden of decompressing from such heightened micro-aggression and fear of underperforming or being falsely perceived as "dumb." After summoning the mental reserves to avoid drowning in my daily challenges and wondering how I can look better the next day, I refocus to start studying."

The sad reality is that talented, competent Black people may become "deskilled" and underachieve compared to their underlying ability. Social identity threats can interfere with performance, self-identity, motivation and effective engagement in triggering environments.

References

1. Steele CM, Aronson J. Stereotype threat and the intellectual test performance of African Americans. J. Personal. Soc. Psychol. 1995;69(5):797–811.
2. Spencer SJ, Logel C, Davies PG. Stereotype Threat. Annu. Rev. Psychol. 2016;67:415–37.
3. Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. Lancet. 2017;389:1453–63.
4. Spencer SJ, Steele CM, Quinn DM. Stereotype threat and women's math performance. J Exp Soc Psych. 1999;35:4–28.
5. Odom KL, Roberts LM, Johnson RL, et al. Exploring obstacles to and opportunities for professional success among ethnic minority medical students. Acad Med. 2007;82(2):146–153.
6. Goff PA, Steele CM, Davies PG. The space between us: stereotype threat and distance in interracial contexts. J Pers Soc Psychol. 2008;94(1):91–107.
7. Frantz CM, Cuddy AJC, Burnett M, Ray H, Hart A. A threat in the computer: The race implicit association test as a stereotype threat experience. Personality and Social Psychology Bulletin. 2004;30:1611–1624. [PubMed: 15536243]
8. Ackerman-Barger K, Boatright D, Gonzalez-Colaso R, Orozco R, Latimore D. Seeking inclusion excellence: Understanding racial microaggressions as experienced by underrepresented medical and nursing students. Acad Med. 2020;95:758–763.
9. Stone J. Battling doubt by avoiding practice: The effects of stereotype threat on self-handicapping in White athletes. Person Soc Psych Bull. 2002;28:1667–1678.
10. Aronson J, Lustina MJ, Good C, Keough K, Steele CM, Brown J. When White men can't do math: Necessary and sufficient factors in stereotype threat. Journal of Experimental Social Psychology. 1999;35:29–46.
11. Burgess DJ, Joseph A, van Ryn M, Carnes M. Does Stereotype Threat Affect Women in Academic Medicine? Acad Med. 2012; 87:506–512.

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