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Black Physicians' Experiences with Anti-Black Racism in Healthcare Systems Explored Through An Attraction-Selection-Attrition Lens

Myia S. Williams^{1,2,3,5} · Alyson K. Myers^{1,2,3,4} · Kayla D. Finuf^{1,2} · Vidhi H. Patel^{1,2} · Lyndonna M. Marrast^{1,2,3} · Renee Pekmezaris^{1,2,3} · Johanna Martinez^{1,2}

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Abstract

Anti-Black racism is a specific form of racism directed at Black people. In healthcare, there are poignant examples of anti-Black racism in the recruitment, selection, and retention stages of the job cycle. Research shows that anti-Black racism is associated with inequitable work outcomes and the under-representation of Black physicians. However, empirical findings are scattered with no organizing framework to consolidate these findings. To add to the literature, in this paper we present the attraction-selection-attrition (ASA) model (Schneider, 1987) as an organizing framework to discuss Black physicians' experiences with anti-Black racism and discrimination throughout their careers. We draw from previous literature to highlight specific experiences of Black physicians at each stage of the job cycle (i.e., attraction, selection, retention), and we offer considerations on how practitioners can mitigate anti-Black racism throughout the job cycle. In the wake of COVID-19 and highly publicized social justice movements, healthcare systems are seeking ways to increase the recruitment, selection, and retention of Black physicians to ensure health equity. We believe this guide will be valuable to practitioners, leaders, researchers, and program directions seeking to advance diversity, equity, and inclusion of Black physicians in their healthcare systems. We conclude by providing practical implications and directions for future research.

Keywords Anti-Black racism · Anti-racism · Healthcare organizations · Organizational psychology

Throughout the literature, researchers have highlighted poignant examples of how the policies, procedures, and practices in healthcare systems collectively work to perpetuate various forms of inequitable workplace and health outcomes for Black physicians and patients, respectively (Nunez-Smith et al., 2009; Hoffman et al., 2016). This inequity comes from anti-Black racism, defined as "racism

Myia S. Williams mwilliam26@northwell.edu

- ¹ Department of Medicine, Northwell Health, Manhasset, NY, USA
- ² Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, Hempstead, NY, USA
- ³ Institute of Health Innovations and Outcomes Research, Feinstein Institutes for Medical Research, Manhasset, NY, USA
- ⁴ Department of Medicine, Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY, USA
- ⁵ Department of Medicine, Northwell Health, 600 Community Drive 4th Floor, Manhasset, NY 11030, USA

which is rooted in the history and experience of enslavement, that is targeted against Black people, and people of African descent" (Dryden & Nnorom, 2021, p. 55). Anti-Black racism is a specific form of racism thought to have originated from a hierarchical system implemented during chattel slavery that considered White individuals at the "top" and Black individuals at the "bottom" of the social hierarchy. This move served to marginalize Black individuals to this day (Dryden & Nnorom, 2021; King et al., 2022). To date, because of anti-Black racism-related policies, actions, and organizational hierarchies, Black physicians remain significantly underrepresented in leadership and other positions of power and influence in healthcare systems (Montgomery Rice, 2021; Serafini et al., 2020). Thus, structural and organizational hierarchies are avenues through which anti-Black racism can be perpetuated by healthcare systems (Avakame et al., 2021).

Another way in which anti-Black racism is demonstrated is when healthcare systems enact the myth that Black individuals are "racially or biologically different" to rationalize mistreatment, reproduce inequities and adopt racialized identities as "White spaces" (Bonilla-Silva, 2020; Dryden & Nnorom, 2021; Wingfield & Alston, 2014). Several studies have linked the prevalence of stereotypes, discrimination, and non-Black physicians' implicit White preference with clinical and workplace decisions that are detrimental to Black individuals (Capers et al., 2017; Hoffman et al., 2016). Hoffman et al. (2016) found that in general hospital settings, White laypersons and physicians who perceived Black individuals to be biologically different (e.g., Black skin was thicker than White skin) were more likely to rate the pain of Black patients lower than White patients and provide inaccurate treatment options for Black patients. In a related vein, research on patient-physician concordance found that Black patients reported better health outcomes, satisfaction, communication, and medication adherence, and agreed to more aggressive medical treatments when treated by Black physicians. This supports the case for increasing the number of Black physicians in healthcare (Alsan et al., 2018; Marrast et al., 2014; Williams et al., 2020). Similarly, in the Centers of Disease Control and Prevention (CDC) effort to improve equity in health communications, they have recommended avoiding pictorial displays of a White doctor (s) and a non-White patient (s) (https://www.cdc.gov/healthcommunica tion/Comm Dev.html.). At the organizational level, Capers et al. (2017), Gardner (2018), and Deville et al., (2020) found that implicit White preference was associated with discrimination towards Black physicians during recruitment, selection, and promotion decisions, respectively.

Although there is well-documented evidence of Black physicians' experiences with bias and discrimination in the workplace (Filut et al., 2020; Nunez-Smith et al., 2007; Serafini et al., 2020), empirical findings are scattered with no organizing framework to consolidate and integrate these findings across the job cycle (Wingfield & Chavez, 2020). To add to the literature, in this paper we present the attraction-selection-attrition (ASA) model (Schneider, 1987) as an organizing framework to discuss Black physicians' experiences with anti-Black racism and discrimination throughout their careers. We draw from previous literature to highlight specific experiences of Black physicians at each stage of the job cycle as set forth by the ASA model (Avery-Desmarais et al., 2021; Schneider, 1987), and we offer considerations on how scholars can address anti-Black racism throughout the job cycle. Our goal for this paper includes raising awareness and providing an organizational-based framework to examine the impact of anti-Black racism on the work experiences of Black physicians.

It should be noted that although we focus on anti-Black racism in healthcare organizations, specifically for Black physicians, anti-Black racism transcends across other healthcare professions such as nursing, pharmacy, mental health professionals, and other areas (Avery-Desmarais et al., 2021). Similarly, while we focus on the experiences of Black physicians for the purposes of this paper, we also want to point out that other racial/ethnic minority groups (e.g., Hispanic/Latino and Native Americans) remain underrepresented in medicine relative to their numbers in the population, and they also face significant barriers and racism. Lastly, while we provide a comprehensive look at the experiences of Black physicians, this is not exhaustive of the experiences that Black physicians face or the experience of every Black physician.

Theoretical Framework: Attraction-Selection-Attrition Model

Developed by Schneider (1987), the attraction-selectionattrition (ASA) model suggests that employees are attracted to organizations that share similar values and beliefs. The ASA model (Schneider, 1987) has three stages, namely: (1) attraction-employees are attracted to organizations where members are similar to them in terms of personality, values, beliefs, identity, interests, and other attributes; (2) selection-organizations recruit and select individuals who are similar in attributes to their existing employees; and (3) attrition-as time progresses, employees who are dissimilar to existing employees and do not fit well within the working environment will eventually leave (Schneider, 1987). Altogether, the ASA model posits that through the processes of attraction, selection, and attrition, organizations are made up of people with distinct personalities, values, beliefs, a common mission, and other attributes that determine the unique culture of the organization. It is important to note that the ASA model does not predict the behaviors of employees, but rather it predicts the behaviors of the organization, considering that it is defined by its people (Avery-Desmarais et al., 2021). In other words, since the individuals in the organizations are similar, the organization itself becomes homogenous, resulting in the individuals who experience fit and congruence having better employee outcomes. However, those individuals who fit poorly with the organization have the worst employee outcomes such as lower job satisfaction and affective commitment and higher attrition and turnover rates (Avery-Desmarais et al., 2021; Schneider, 1987). Below, we elaborate on the Black physicians' experiences with anti-Black racism at each stage of the ASA model (see Table 1 for a summary).

Anti-Black Racism in Attraction (Recruitment) Processes

According to Schneider (1987), the attraction stage involves the process of recruitment which is the activities and practices that organizations engage in to attract candidates who

Table 1 Recommendations to address Black physician experiences with anti-Blackness in healthcare systems through an ASA model

Black Physician Experience Examples	Category	Recommendations
All pictures/names in the institution are of White men	Attraction	Change the pictures
Recruitment ads include images of White or White – presenting physicians	Attraction	Targeted recruitment
Blanketed diversity and EEO mission statements	Attraction	Develop statements that are inspirational, emphasize autonomy, and highlight multiculturalism
Interviewed by White men	Selection	Diverse selection committee
Professional norms are defined by whiteness (straight hair, suits, little make-up, speaking quietly)	Attrition	Culture change
Success not aligned with values (community, equity work, writ- ten work vs oral)	Attraction	Redefine priorities
Pay differences	Attrition	Change compensation metrics, transparency and accountability of compensation policies
Social support different (nepotism)	Attrition	Black centered programming
Black/minority tax	Attrition	Compensate, acknowledge the work
Reverse discrimination from AAP polices	Attraction	
Power/decision making with white men	Selection	Power redistribution
Bias/stereotypes (myth of meritocracy, laziness, have lower IQs)	Selection	Culture change, unconscious-bias trainings
Implicit White preference	Selection	Unconscious bias trainings
Lack of mentorship opportunities	Attrition	Mentoring programs including Black and non-Black mentors
Effects of colonial constructs	All 3	Culture change, trainings, policy change
Unstructured interviews	Selection	Structured interviews
Organizations prioritize basic science vs community efforts	Selection	Reprioritize
"Ole boys networks" recruiting	Selection	Black medical colleges and medical associations
Black Physician Experience Examples	Category	Recommendations
Micro-aggressions and tokenism	Attrition	Cultural sensitivity and unconscious bias training
Admissions criteria based on standard test scores, best fit vs what one adds	Selection	Holistic review, training on unconscious bias, behavioral inter- viewing
Need to assimilate	Attrition	Culture change, trainings
Racially profiled in practices, clinics (assumed to be everyone but the physician) legitimacy of our presence	Attrition	Training, culture change
URM encouraged to apply in job ads	Attraction	Use multi-cultural language in recruitment ads
Illegal questions/microaggressions in questions	Selection	Standardized questions and structured interview
Video interviews: video cameras programmed to recognize Whiteness and White skin as the default	Selection	Training sessions to conduct video interviews and raise awareness of biases
Lower job satisfaction and affective commitment	Attrition	Cultural change
Digital redlining	Selection	Training and awareness of digital redlining, providing "quiet" places for interviews
Lack of leadership opportunities	Attrition	Transparency and accountability in promotion policies, revamp policies
Toxic working environments and cultures	Attrition	Leadership buy-in, equitable power and influence for Chief Diver- sity Officer
High turnover and burnout	Attrition	Culture change, diversity trainings
Bias practices in publication, grants, awards, compensation	Attrition	Revamp criteria

are similar. As evidenced by the only 4% increase in Black physicians in healthcare professions over a 120-year period (Ly, 2021), anti-Black racism explains why human resource policies, procedures, and practices that set the stage for recruitment have failed to attract Black physicians (Freeman et al., 2016; Williams et al., 2020). Anti-Black racism is evident in the portrayals of and preferential use of White or White-presenting physicians over Black physicians in most recruitment and marketing tools (Bonilla-Silva, 2020; Pippert et al., 2013). For example, Bonilla-Silva (2020) noted that color-blind ideologies explain why healthcare systems are more likely to depict White physicians in recruitment ads and public service announcements as healthcare heroes during the COVID-19 pandemic, even though Black physicians were disproportionally exposed to the virus. Images of Black people, however, were noticeably dominant in recruitment ads for other essential workers such as janitors, nurses, and bus drivers. Several scholars have noted that representation matters because images communicate who (or what) is the gold standard, and by default, they communicate who (or what) is not the gold standard (Hall, 1997; Pippert et al., 2013).

Further, when images of Black physicians are used, on the one hand, anti-Black racism produces colorism among Black physicians. This is evidenced by the significant difference in the use of photographs favoring Black physicians with lighter skin tones compared to Black physicians with darker skin tones (Akhiyat et al., 2020; Pippert et al., 2013). On the other hand, researchers argue that the images and photographs of Black physicians can be used as tokens when healthcare systems want to engage in impression management to give the false "appearance" of diversity and "artificially" increase their diversity recruitment pool (Balzora, 2020; Bell et al., 2020; Pippert et al., 2013). For example, Pippert et al., (2013) compared pictorial diversity in recruitment ads to actual diversity in institutions and found that the amount of actual diversity was less than that portrayed in recruitment ads. Similarly, Bell (2020) reported that academic medical institutions used images of Black physicians to claim they were diverse even though there have been several years with few to no Black physicians at those institutions.

Anti-Black racism also manifests uniquely against Black physicians when affirmative action programs (AAP) and diversity and equal employment opportunity (EEO) statements (e.g., Healthcare system X does not discriminate, or underrepresented minorities (URM) are encouraged to apply) are present in recruitment ads. Overall, EEO and diversity statements aim to attract diverse employees and promote a welcoming and inclusive environment for diverse individuals to work together; however, research shows that these statements can have counterproductive effects (Cohen, 2003; Kelly-Blake et al., 2018; Koea et al., 2021). For example, in a mixed-methods national study on effective recruitment strategies across academic medical departments, many chairs of the department of medicine noted that merely stating, "URM candidates are encouraged to apply," in a job posting was "the single most ineffective strategy" to recruit Black physicians (Peek et al., 2013). Both Carnes et al. (2019) and Kaiser et al. (2013) provided evidence that showed that declarative diversity statements that promise not to discriminate or encourage minorities to apply to jobs provide an "illusion of fairness" and a "paradox of meritocracy" that create more negative outcomes for Black physicians down the line. This is because such statements obscure the recognition of biases in recruitment and a toxic working environment.

In addition, anti-Black racism explains why even though AAP are not unlawful (Cohen, 2003), there are still reports of "reverse discrimination" and claims of infringements on the rights of White physicians, particularly White male physicians (Cohen, 2003; Koea et al., 2021). For example, a series of experiments on organizational diversity structures showed that in organizations with pro-diversity statements, White men were more likely to perceive that they would be discriminated against and undervalued (Kaiser et al., 2013). Furthermore, in healthcare systems where color-blind diversity statements and AAP policies are implemented, Black physicians report higher incidences of scrutiny in their work, discrimination, and "tokenism" and report that their voices are diluted and isolated (Cohen, 2003; Kelly-Blake et al., 2018; Koea et al., 2021). As a result, Black physicians avoid healthcare systems where they will be perceived as affirmative action or diversity hires (Carnes et al., 2019).

Anti-Black racism, which is rooted in implicit White preference, also allows Black physicians fewer opportunities to access recruiters. It explains why recruiters engage in selective recruiting by directing their recruitment efforts to "mainstream" or "traditional" recruitment pools (including personal social networks, "good ole boys' networks," and alma maters) that are likely to net a pool of predominantly White physician applicants (Boatright et al., 2020; Flores & Combs, 2013). Several studies found that despite medical societies like Alpha Omega Alpha (AOA) being predominantly White, residency programs continue recruiting from there, thus perpetuating the meritocracy myth which fails to take into consideration the structural barriers (including biases) that hinder membership for Black physicians (Akhivat et al., 2020; Boatright et al., 2020). Similarly, there is well-documented evidence that unconscious or implicit racial bias of recruiters and search committee members has impacted Black physicians disproportionally and contributed to the relative lack of Black physicians in healthcare systems (Avakame et al., 2021; Capers et al., 2017; Mehta & Hackney, 2021). For example, in a recent study in which all members of the admissions committee took the Black-White Implicit Association Test (IAT), Capers et al. (2017) found that most committee members unconsciously preferred White physicians over Black physicians. In a similar study that included both laypersons and medical doctors, Sabin et al., (2009) found both laypeople and White physicians showed an implicit preference for White Americans over Black Americans; however, Black physicians on average did not show implicit bias for either race.

Strategies to Mitigate Anti-Black Racism in Attraction (Recruitment)

Anti-Black racism in recruitment can have important implications for the under-representation of Black physicians in healthcare systems and professions. Fortunately, prior research provides evidence-based strategies on how to reduce anti-Black racism in recruitment to improve the number of Black physicians in healthcare (Mateo & Williams, 2020). As a start, it is a good practice to measure and track the recruitment of Black physicians. Data should be used to identify gaps that need to be rectified immediately, guide interventions to reduce anti-Black racism in recruitment, improve recruitment strategies, and assess progress towards diversity hiring goals. Healthcare institutions also should ensure that they are transparent about those metrics to be held accountable and keep the focus on diversity (Flores & Combs, 2013; Mateo & Williams, 2020).

Mandatory implicit bias training for all recruiters should be implemented because it has been shown to reduce implicit White preference in recruiters and increase the number of Black physicians recruited and hired. For example, after Capers et al. (2017) findings on implicit White preference among members of their recruitment committee, the Ohio State University College of Medicine trained all staff in implicit bias techniques. The following year, the matriculated class was the most diverse up until that point in the college's history. A follow-up survey showed that nearly half of the admissions committee were mindful of their implicit biases, and 21% of the committee members indicated that they were aware of how their biases impacted their selection decisions (Capers et al., 2017). In addition to bias training, healthcare systems should strive to ensure recruiterapplicant concordance when recruiting Black physicians. Research shows Black physicians do not have implicit biases toward a particular race (Sabin et al., 2009), and potential Black physicians perceive healthcare institutions to be more diversity-friendly and supportive when recruiters and members of search committees look like them and share similar cultural backgrounds (Flores & Combs, 2013).

Healthcare institutions also should engage strategically and intentionally in target recruitment (Avery & McKay, 2006) to attract Black physicians. Avery and McKay (2006) proposed organization impression management (OIM) as a potentially useful tool for targeted recruitment. OIM involves purposeful actions designed to present the organization in a favorable light (Avery & McKay, 2006). According to Avery and McKay (2006), higher fit perceptions lead to higher attraction. Exposing Black physicians to people who look like them in recruitment materials about healthcare systems will lead them to form impressions and fit perspectives about the organization while shattering color-blind ideologies (Bonilla-Silva, 2020; Hall, 1997). As part of this strategy, healthcare institutions can engage in ingratiation tactics such as tailoring the demographic composition, content, and placement of recruitment ads (Avery & McKay, 2006) that are designed to attract Black physicians. For example, strategic ad placement involves targeting recruitment sources that the Black physician applicant pool access to get employment information (e.g. social media sites) to place job ads and recruiters (Flores & Combs, 2013). This includes moving away from the "good ole boys' networks" to develop relationships with Black medical schools and medical organizations like the National Medical Association (Flores & Combs, 2013). For example, several institutional leaders who have recruited Black physicians successfully report doing this by tapping into social networks of other Black physicians, having a diversity committee specifically to recruit Black physicians, and attending national conferences where promising Black physicians are in attendance (Peek et al., 2013).

Of importance, extra care should be taken not to put the burden on Black physicians to recruit other Black physicians (minority tax). In fact, the most successful search committees and recruitment teams are diverse groups composed of institutional diversity leaders (e.g., Chief Diversity Officer) and Black and White physicians as well as physicians from other minority groups (Flores & Combs, 2013; Peek et al., 2013). For example, one health system's department of surgery intentionally selected its recruitment committee to include members who were diverse with respect to academic rank, subspecialty, gender, and race. The committee was able to identify a diverse pool of applications that were previously overlooked (Davenport et al., 2022).

Another strategy is the placement of Black physicians (individuals) in recruitment ads. The research on OIM and the recruitment of Black physicians is lacking; however, organizational studies on the recruitment of minority workers have shown that minority job seekers perceived fit, and level of attractiveness increased when they saw more diversity in ads (Avery & McKay, 2006; Perkins et al., 2000). This is because representation signals to Black individuals that the organization does not discriminate, values diversity, and is inclusive (Avery & McKay, 2006; Hall, 1997; Perkins et al., 2000). For example, Perkins et al., (2000), in a study on the effect of diversity portrayed in job ads in a diverse sample of job seekers, found that diversity in job ads can assist companies in recruiting minority job seekers. The effect was less for non-minority job seekers.

Lastly, Avery and McKay (2006) indicated that AAP, EEO, and diversity statements geared towards inclusiveness are particularly important. Against the backdrop of the COVID-19 pandemic and social justice movements in 2020, several healthcare institutions increased their use of EEO, AAP policies, and diversity statements to communicate their commitment to hiring Black physicians. However, as high-lighted previously, these statements can and do backfire, so organizations must be careful when they are crafting their statements (Carnes et al., 2019; Davenport et al., 2022). Recommendations from experimental studies show that to mitigate anti-Blackness, statements must be aspirational (to avoid the illusion of fairness), emphasize autonomy (to avoid statements that appear to show diversity is forced (zero tolerance)), and value human differences through multicultural messages (to avoid color-blind statements such as, "We encourage our employees to embrace their similarities.") (Carnes et al., 2019). While research specifically focused on diversity statements and Black physician recruitment is scarce, one radiology department was able to increase their percentage of URM radiology residency applications and representation by having an explicit statement of their diversity mission as well as videos from program leadership on their department website. As a result, the percentage of URM radiology residency applications increased from 7.5% (2012-2013) to 12.6% (2017-2018), while URM resident representation increased from 0% (2013-2014) to 20% (2018–2019) (Spottswood et al., 2019).

Anti-Black Racism in Selection Processes

The selection stage of the ASA model involves the techniques healthcare systems use to select the most "suitable" candidate for the job (Avery-Desmarais et al., 2021; Schneider, 1987). In this stage, individuals are selected based on their similarity in knowledge, skills, and experience with existing employees in the organization (Schneider, 1987). The selection process for physicians involves reviewing standardized test scores (e.g., United States Medical Licensing Exam (USMLE) scores), performance evaluations from medical schools, letters of recommendations, curriculum vitae/resumes, and personal statements to determine who gets invited to an interview (Gardner, 2018). Scholars have long argued that the screening/selection process is rife with anti-Black racism practices that favor White physicians over Black physicians and hinder the selection of Black physicians (Gardner, 2018; Mehta & Hackney, 2021).

Although Title VII of the Civil Rights Act made it illegal for employers to engage in discriminatory selection practices intentionally, subtle racial cues (e.g., Black sounding names) may result in at least 50% fewer callbacks for job interviews for Black applicants (Bertrand & Mullainathan, 2004), but practicing "resume whitening" (removing racial cues from resume) may lead to more opportunities for interviews and employment offers (Kang et al., 2016). Scholars noted that Black physicians who engaged in less "resume whitening" received fewer callbacks particularly when healthcare institutions had standard diversity statements that gave the illusion of fairness (Gardner, 2018; Kelly-Blake et al., 2018; Sotto-Santiago, 2019). This is particularly harmful to Black physicians because they are more likely than White physicians to practice in underserved communities and do diversity-related work. As a result, the perceived need to mask accomplishments, extra-curricular activities, and community

work to bolster their applications, perpetuates the myth of meritocracy, which demeans the full value of Black physicians (Owoyemi & Aakhus, 2021).

Additionally, it is mandatory that applicants submit a photograph to the Electronic Residency Application Service (ERAS), which can introduce appearance-based bias that may affect Black physicians disproportionately (Edmond et al., 2001). For example, using photographs from ERAS to assess the impact of USMLE cutoff scores on Black physicians, Edmonds et al., (2001) found that people who looked African American/Black were less likely to be called for interviews depending on the cut-off score used. Similarly, studies in radiology and dermatology departments have shown that those who "smiled" or were considered physically attractive were more likely to be selected for interviews (Corcimaru et al., 2018; Maxfield et al., 2019). Considering implicit White preference, this has tremendous implications for Black physicians (Capers et al., 2017).

There is well-documented evidence demonstrating how anti-Black racism influences standardized test scores, research publications, awards, honor society membership selection, and letters of recommendation. For example, Edmond et al. (2001) found that Black physicians (mean score 187.9) were three to six times less likely to be offered an interview than White physicians (mean score 210). Yet, data from the National Resident Matching Program show that 82% of residency programs require USMLE Step 1 scores for the interview selection process, even though those scores are not predictive of future clinical performance (Akhiyat et al., 2020; Owoyemi & Aakhus, 2021).

Anti-Black racism is also embedded in an inherently subjective and exclusionary process that gives certain accomplishments more weight over others. For example, Boatright et al., (2020) demonstrated that compared to Black physicians, White physicians were 6 times more likely to be members of AOA, even after controlling for USMLE step 1 scores, community service, research productivity, leadership activity, and Gold Humanist membership. Similarly, Black physicians are less likely to receive academic awards, which negatively impacts their chances of securing an interview in specialties like radiology and dermatology (Akhiyat et al., 2020; Mehta & Hackney, 2021). Ginther et al., (2016) found that Black scientists were less likely than White scientists to receive National Institutes of Health (NIH) funding, a disparity which was even lower for Black women physicians. Furthermore, Hoppe et al. (2019) found that the reasons behind this disparity were the topics that Black physicians proposed to study such as community-based interventions and health disparities. Additionally, the work that Black physicians value such as health disparities and community work is often undervalued as measures of achievement (Bell, 2020; Hoppe et al., 2019; Kelly-Blake et al., 2018). Overall, the overreliance on test scores and extra-curricular activities

is an institutionalized mechanism for anti-Black racism that disproportionately affects Black physicians (Freeman et al., 2016; Gardner, 2018; Williams et al., 2020).

Anti-Black racism explains why in letters of recommendation (LOR), White physicians consistently are described as "exceptional, standout, and outstanding," but Black physicians are described as "competent" (Mehta & Hackney, 2021; Pope et al., 2021; Ross et al., 2017). For example, Chapman et al., (2020) found that compared to White physicians, Black physicians in radiology oncology, were less likely to have standout descriptors like "best", "leader," and exceptional" in their LORs. Similarly, Rojek et al. (2019) found that Black physicians' LOR more frequently included wording associated with personal attributes (e.g., pleasant) than competency-related behaviors (e.g., knowledgeable). Reducing a Black physician to personal attributes rather than highlighting key performance-based competencies hurts the physician's chances of being selected for an interview (Pope et al., 2021). Additionally, studies show that LORs are susceptible to implicit biases based on Eurocentric standards of professional appearance and behavior that have traditionally been used to unfairly assess Black physicians (Deville et al., 2020; Osseo-Asare et al., 2018).

In addition, although the interview is one of the most pivotal parts of the selection process, it also is infamous for being the stage that is the most subjective and susceptible to anti-Black racism practices (Consul et al., 2021; Mehta & Hackney, 2021). Interviews are likely to be unstructured even though research shows that unstructured interviews have poor validity for screening decisions (Gardner et al., 2018; McDaniel et al., 1994). In addition, interviewers are known to make "gut feeling" decisions and to mask microaggressions under vague and/or illegal questions prohibited under Title VII of the Civil Rights Act (Consul et al., 2021; Mehta & Hackney, 2021). For example, Ellis et al., (2020) noted asking Black male physicians who graduated from an Ivy League university "Did you play football in college?" can serve as a microaggression because it unfairly assumes that Black males who attend Ivy League universities only do so because of their athletic ability and not their intellectual capabilities.

Moreover, in unstructured interviews, anti-Black racism is also evident in the increased likelihood of interviewer subjectivity ("just like me" bias) or similarity-attraction paradigm (i.e., people are attracted to people who have similar background and interests as them) which can influence the interviewer's perceived fit with the applicant and create homophily (Consul et al., 2021; Ellis et al., 2020). In a recent article, Ellis et al., (2020, p. 2402) recounted their interviewing experience and stated that "Being interviewed while Black involves a collision of microaggressions and feelings and experiences related to stereotype threat, tokenism, imposter syndrome, and homophily." Ellis et al., (2020) also noted that the interviewing experiences of Black physicians are rooted in both covert and overt anti-Black racism that leaves them feeling unwelcomed and doubtful of their place in healthcare systems.

Anti-Black racism is also evident in health systems' historical portraiture of images of individuals who directly or indirectly participated in and benefited from colonization, slavery, and the oppression of Black physicians and people (Ellis et al., 2020; Fitzsousa et al., 2019). It explains why when Black physicians in in-person interviews see these paintings on the wall, they identify the values of the institution as being rooted in "elitism, power, whiteness and maleness" (Fitzsousa et al., 2019), and express an attitude of resignation and lack of belonging, as well as feelings of being unwelcome and judged. Those sentiments lead to questions such as, "Do I fit in here" or statements such as "This institution was never meant for me" (Ellis et al., 2020; Fitzsousa et al., 2019).

More recently, during the COVID-19 pandemic, healthcare systems moved to virtual interviews. Emerging literature shows that virtual interviewing introduces new sources of anti-Black racism while exacerbating existing sources during the interviewing process (Marbin et al., 2021). In the absence of evidence in healthcare populations, we borrow from organizational studies to support our points. Newly introduced biases include structural inequities from "digital redlining" (decreased access to broadband internet particularly in marginalized communities), and the inability to afford high-quality peripherals like cameras or microphones can be disadvantageous for Black physicians. (Marbin et al., 2021). For example, Schoenenberg et al., (2014; as cited in Marbin et al., 2021) found that even when interviewers were told to disregard glitches in virtual interviews, they still selected those whose audio and video quality was better. Interviewers considered applicants with lower audio and video quality to be less friendly, active, and attentive (Schoenenberg et al., 2014). Another newly potential source of bias is the use of video cameras during interviews (Marbin et al., 2021). This bias is rooted in developers' programming of cameras to recognize Whiteness and White skin as the default, thus introducing both colorism and an extra burden on Black physicians to ensure proper lighting (Marbin et al., 2021).

As stated earlier, virtual interviews can also exacerbate existing anti-Black racism. The increased cognitive load from "Zoom fatigue" can lead interviewers to unconsciously resort to implicit biases and stereotypes to make decisions. The presence of previously unavailable environmental cues (e.g., child or eldercare responsibilities), as well as lack of access to a "quiet," "clean and neat" space, may lead to assumptions about Black physicians which is rooted in anti-Black racism (Marbin et al., 2021). Also, the trap of "affinity bias" (e.g., alma matters and hometown) may disadvantage Black physicians during the interview. To appear relatable interviewers may share information about themselves (verbally or visually via images in the background). This may unintentionally alienate Black physicians by sending both implicit and explicit messages of belonging and inclusion, especially if the "shared" information signifies privileges that have been historically unavailable to Black physicians (Marbin et al., 2021).

Strategies to Mitigate Anti-Black Racism in Selection

At the selection stage, anti-Black racism is first introduced during the application screening process through USMLE cut-off scores and recommendation letters. Reliance on standardized test scores has been shown to have an adverse impact and contribute to the under-representation of Black physicians (Edmonds, 2001; Williams, 2020). As of January 2022, the USMLE Step 1 scores have moved from a 3-point score to a pass/fail score (United States Medical Licensing Examination, 2021); a move that many say will help reduce anti-Black racism in selection (McDade et al., 2020; Pope et al., 2021; Williams et al., 2020). However, some worry that this may introduce or exacerbate anti-Black racism practices and lead to unintended consequences similar to the "Ban the Box" law in employment applications (McDade et al., 2020). Specifically, researchers found that with the introduction of "Ban the Box" laws which required employers to remove criminal history from employment applications, Black applicants were disproportionately impacted because recruiters assumed that all Black men had a felony charge (Doleac & Hansen, 2020; McDade et al., 2020). Similarly, with USMLE Step 1 scores as pass/fail, there is the possibility that all Black physicians may be considered to have failed, because of the historical adverse impact of the test (McDade et al., 2020).

It may be a while before the impact of the new reporting for USMLE Step 1 scores are known, in the meantime, we recommend that healthcare systems incorporate industryvalidated selection tools that are known to have no adverse impact and predict job performance. The selection literature in the field of Industrial/Organizational (I/O) psychology can provide guidance on validated selection methodologies and assessment strategies (Bowe et al., 2017; Gardner et al., 2018). Research, including meta-analytic evidence, has shown a strong relationship between personality characteristics (Hogan et al., 1996; Newman, 2009; Tett et al., 1991), and situational just tasks (SJT) (Gardner et al., 2020; McDaniel et al., 2001) and job performance. Unlike cut-off scores and other quantitative metrics that create significant adverse impacts, screening on personality characteristics (e.g., conscientiousness) can complement the interview and provide the selection committee with more standardized and job-related data (Bowe et al., 2017; Gardner et al., 2018).

SJTs (written vignettes of common yet challenging on-thejob scenarios that measure an applicants' judgment) can be customized to measure several key competencies (e.g. leadership, problem-solving, communication, teamwork, crisis management, etc.) and provide a realistic job preview (Gardner et al., 2018; McDaniel et al., 2001). Although no study has been done specifically to measure the impact of SJTs and personalities on increasing the selection of Black physicians, studies on URMs show that it is effective. For example, Gardner et al., (2020) found that when SJTs were included in the application process, 8% more URMs were invited to interview compared to when USMLE Step 1 cutoff scores were used.

As recommended by the Association of American Medical Colleges (AAMC), several healthcare institutions have adopted a more holistic application review process to increase the number of Black physicians selected for an interview and decrease anti-Black racism. This allows for selection committees to assess applicants as a "whole," rather than focusing solely on one aspect of the application (e.g., USMLE Step 1 scores) to make a decision (Mehta & Hackney, 2021; Pope et al., 2021; Williams et al., 2020). The holistic approach is tied to the health institution's diversity mission and goals to promote various aspects of diversity (Pope et al., 2021). The holistic approach does not disregard traditional aspects of the application completely, but rather, it gives equal consideration to the experiences, attributes, and academic metrics of physicians (Consul et al., 2021). For example, over a three-year period of using a holistic application review approach, Butler et al. (2019) saw 12.1%, 12.5%, and 18.8% increase, respectively, in the number of URM participants interviewed in their surgical departments. The most significant increases were among Black physicians selected to be interviewed. Similarly, Pershing et al. (2021) found that with a holistic approach, the redaction of racial identifiers (e.g., names) was not associated with a difference in application scores for interviews between Black physicians and White physicians.

We also recommend the use of structured interviews to complement the holistic application review process (Consul et al., 2021; Gardner, 2018) as research shows structured interviews have better predictive validity than unstructured interviews (McDaniel et al., 1994). With structured interviews, interviewers ask more job-related performance questions, there is less adverse impact (to cognitive tests), lower group differences between Black and White job applications, and more objective evaluation procedures (McDaniel et al., 1994). We also recommend that interviewers receive frameof-reference training on the basics of structured interviews and training to help them reduce biases such as microaggressions and stereotype threat. Additionally, all interviewers should use rating forms, a set of clearly defined job performance-related questions (to avoid illegal questions), and standardized performance-based criteria with a scoring rubric (Consul et al., 2021; Gardner et al., 2018). We also suggest blinding reviewers to academic metrics and photographs prior to the interview to ensure the risk of bias is reduced (Capers, 2020; Pershing et al., 2021). Capers et al., (2018) saw a significant increase in the number of Black physicians selected after implementing the strategies outlined above.

As it relates to virtual interviewing, recommendations for strategies are still emerging; therefore, in addition to the strategies mentioned above, we borrow some of the suggestions put forth by Marbin et al. (2021). This includes training interviewers about Zoom fatigue and implicit bias, avoiding multi-tasking during interviews, using standardized virtual backgrounds (e.g., institution logo), raising awareness of digital redlining and its impact on applicants, creating backup plans for technology fails, sticking to standardized questions, and providing arrangements for quiet, protected places with a strong and stable internet connection (Marbin et al., 2021).

As it relates to historical portraiture and visual culture, in the quest to create a more inclusive culture, we encourage healthcare systems to reflect on the implicit message that they may be conveying while establishing space for the representation of Black physicians both on the walls and in the halls (Ellis et al., 2020; Fitzsousa et al., 2019). A few healthcare institutions have taken some action to increase the diversity of their historical portraiture. For example, Owoseni (2020) documented feeling hopeful and inspired by seeing the representation of Black physicians, after one healthcare institution placed a portrait of a Black physician in a sea of White physician photographs. Similarly, another healthcare institution reported removing paintings of the mostly White men who were former department chairs from the auditorium and dispersing them throughout the hospital as part of their broader diversity initiative aimed at increasing belonging (Blackstock, 2020).

Anti-Black Racism in Attrition (Retention)

The final stage of the ASA model is attrition (Schenider, 1987). At this stage, individuals who no longer "fit" or who are dissimilar to others in the organization will leave. This creates homogeneity in the organization (Avery-Desmarais et al., 2021; Schneider, 1987). For Black physicians, race powerfully shapes their workplace experiences and opportunities through anti-Black racism (King et al., 2022). Research shows that more than any other racial group, Black physicians are more likely to experience workplace discrimination from both co-workers and patients (Nunez-Smith, 2007; Liebschutz et al.,; 2006). Specifically, Nunez et al., (2009) found that at least 71% of Black physicians said they

had experienced discrimination "sometimes, often, or very often" throughout their career, while 59% of them reported experiencing it at the same frequency in their current work setting. Black physicians have reported both overt forms of racism (e.g., being called a racial slur by a patient or told "you people" by a supervisor) (Liebschutz et al., 2006), and subtle forms (e.g., devaluing interests in studying health disparities) (Pololi et al., 2010). Research has linked Black physicians perceived racial discrimination to fewer opportunities for career advancement (Nunez-Smith et al., 2009; Pololi et al., 2010).

Anti-Black racism toward Black physicians is pervasive in healthcare systems (Avakame et al., 2021; King et al., 2022). Over a century ago, Black physicians were discriminated against institutionally when Abraham Flexner, a White non-physician, single-handedly shut down all but two Black medical colleges. It was a move that set the trajectory for the under-representation of Black physicians in healthcare professions (Montgomery Rice, 2021). Based on extrapolation of the 2 medical schools that were not closed (Howard and Meharry), it is estimated that there could have been 10,000 more Black doctors if the 5 other medical schools remained open (Campbell et al., 2020; Montgomery Rice, 2021). The Flexner Report was rooted in the belief that White physicians at Johns Hopkins were the standard of excellence in medical practice, but Black physicians possessed less ability and potential (Montgomery Rice, 2021). Today, manifestations of anti-Black racism, though still overt, are more subtle and upheld by color-blind policies, processes, and ideologies that continue to disadvantage Black physicians (Bonilla-Silva, 2020; Wingfield & Alston, 2014). Anti-Black racism explains why compared to White physicians, Black physicians are less likely to be promoted (Price et al., 2005), receive institutional support (Pololi et al., 2010), are paid less (Ly et al., 2016), are the "only" in medical sub-specialties like radiation oncology (Balzora, 2020; Deville, 2020), and have higher rates of micro-aggressions and turnover (Blackstock, 2020; Nunez-Smith et al., 2009).

Anti-Black racism is also insidious (Avakame et al., 2021; Betancourt & Reid, 2007). Vast evidence demonstrates the harmful effects of anti-Black racism on Black physicians' well-being and organizational outcomes such as job satisfaction and turnover intentions (Betancourt & Reid, 2007; Filut et al., 2020; Nunez-Smith et al., 2009; Osseo-Asare et al., 2018). Deville (2020), in detailing his experiences as "the only" Black radiation oncologist in his department, reported feeling "uncomfortable" and "suffocating"; stating, "I can't breathe." Similarly, Balzora (2020) explained how being "double only" (both as the only woman in the room and the only person of her race), that is a Black female gastroenterologist in a White male-dominated field exacerbated her experiences with tokenism and otherness which asserted racist and misogynistic beliefs. Balzora (2020) recounted the incredible costs she had to bear that led to imposter syndrome and burnout. Elsewhere, Black physicians have reported that the silence or inaction of their healthcare institutions to address issues of race has led to feelings of loneliness, anxiety, and depression, and a collective experience of "racial fatigue" (Avakame et al., 2021; Betancourt & Reid, 2007; Serafini et al., 2020). The minority tax (the extra responsibility of diversity efforts placed on Black physicians) has been linked to higher rates of burnout, job stress, and turnover intentions and lower rates of job satisfaction and affective commitment (Avakame et al., 2021; Balzora, 2020; Liebschutz et al., 2006; Osseo-Asare et al., 2018).

In addition, anti-black racism ideologies (e.g., myth of meritocracy) lead to inconsistent expectations and unequal treatment of Black physicians compared to White physicians to the extent that many Black physicians have reported that they "have to work twice as hard to be half as good" (Balzora, 2020; Bell et al., 2020; Deville et al., 2020; Ellis et al., 2020). In one qualitative study, a majority of Black physicians reported disproportionately greater punishments for Black physicians who made mistakes compared to their White counterparts (Liebschutz et al., 2006). Black physicians consistently are held to higher standards, experience constant microaggressions, have their credentials and competencies questioned, and are mistaken for maintenance and housekeeping workers, even while wearing white coats or being the lead surgeon (Deville, 2020; Osseo-Asare et al., 2018; Pololi et al., 2010).

Furthermore, although Black individuals make up 13% of the US population, only 5% of practicing physicians are Black, and this under-representation is even more pronounced in leadership positions (Ly, 2021). Research shows that a combination of historically anti-Black policies (Montgomery Rice, 2021), exclusionary practices (Deville et al., 2020), denial of access to quality mentorship (Martinez et al., 2021; Owoseni, 2020), inadequate compensation (Ly, 2021), a lack of career development and promotional opportunities (Nunez-Smith et al., 2012), implicit belief that White men are the prototypical leaders (Capers et al., 2017; Flores & Combs, 2013), and inadequate medical education resources/opportunities (Osseo-Asare et al., 2018), hinder the promotion of Black physicians into executive leadership at a rate substantially lower than that of White physicians (Flores & Combs, 2013). Therefore, it is not surprising that for all the reasons listed above Black physicians leave medicine at a disproportionally higher rate than White physicians (Betancourt & Reid, 2007).

Strategies To Mitigate Anti-Black Racism in Attrition (Retention)

To retain Black physicians in healthcare systems, it is necessary that a culture/climate that fosters inclusion and belonging and promotes cultural competency and understanding is created (Davenport et al., 2022). Often, the first course of action is to conduct a needs assessment to determine the existing organizational climate (Avakame et al., 2021; Deville et al., 2020). The Culture-Change Survey (C-Change) (Pololi, 2012) has been used by academic medical facilities to assess existing racial biases in healthcare systems across all levels of the physicians' careers (e.g. students, residents, and faculty) (Pololi et al., 2010). Similarly needs assessments should be conducted for promotion, compensation, recruitment, and selection processes throughout the healthcare system (Boatright et al., 2018). Additionally, system-wide diversity, cultural sensitivity, and unconscious bias training (including bystander/upstander training) should be held to respond to structural anti-Black racism, address implicit biases and create constructive conversations to reduce misinformation and prejudice (Boatright et al., 2018; Capers, 2020; Davenport, 2022). For example, Capers et al. (2017) found tremendous success in implicit bias training for all department members. We also suggest that healthcare systems assess the impact of those trainings and make them continuous as opposed to yearly/one-time trainings (Capers et al., 2018). Furthermore, there should be support for Black physicians who report discriminatory behaviors, and accountability and disciplinary action must be taken against perpetrators of those behaviors (e.g., human resources or ombudsman) (Davenport et al., 2022).

Next, for retention programs to be successful, there must be buy-in and active support from leadership through advocacy, mentorship, sponsorship, and providing financial and dedicated resources (Boatright et al., 2018). Leaders also can foster a culture of change and equity through a visibly thoughtful and carefully crafted mission statement that speaks to retention goals and is aligned with the measurable and trackable goals and objectives of the organization and leader (Boatright et al., 2018; Mateo & Williams, 2020). In a mixed-methods study of over 125 medical institutions, Peek et al., (2013) found one of the top themes for retaining Black physicians was having visionary leaders who have a strong commitment to the diversification of the physician workforce.

Many healthcare systems are now hiring Chief Diversity Officers (CDO), whose sole responsibility is improving equitable organizational cultures and increasing the representation of Black physicians in leadership roles and through recruitment and selection. In addition, academic medical institutions are also introducing assistant/associated deans of diversity, who work together with the CDO. It should be noted that for these individuals to be effective they must be given equitable power and influence and a seat at the table. For example, as part of their initiative to increase the representation of Black physicians in the radiology department, Spottswood et al., (2019) found tremendous success from leadership providing financial support, enthusiastic commitment, and championing diversity and inclusion initiatives. In addition, the newly created Vice Chair of Diversity was offered a seat at the table and worked closely with the healthcare system's Office of Diversity and Associate Vice Dean of Diversity.

As much as possible, healthcare institutions should take extra care to avoid exacerbating the "minority tax", particularly for junior faculty (Avakame et al., 2021; Betancourt & Reid, 2007; Davenport et al., 2022). Engaging in extra-curricular diversity initiatives in addition to their day-to-day clinical workload can detract and take away from dedicated time to participate in scholarly work (e.g. grants) which are seen as currency for promotions (Davenport et al., 2022). When Black physicians do take part in diversity initiatives, they should be rewarded with career advancement opportunities and financial compensation; additionally, opportunities for wellness and mental health services should be provided to all Black physicians (Davenport et al., 2022). Likewise, all members of the healthcare system should be equally responsible for championing diversity initiatives, creating a culture of inclusion, and improving health equity (Davenport et al., 2022; Kelly-Blake et al., 2018).

Mentorship and promotion are two of the key factors for the retention of Black physicians; therefore, it is imperative that organizations implement successful mentorship programs (Boatright et al., 2018; Martinez et al., 2021). As it relates to promotional opportunities, healthcare systems should ensure that there is transparency in the criteria for promotion and equitable advancement of Black physicians. There should also be a plan to address promotions, faculty development and leadership, sponsorship, and mentoring programs for Black physicians (Davenport et al., 2022; Martinez et al., 2021). Previous research on mentorship programs shows that the most effective strategies for successful mentorship programs include organizational-wide mentorship programs, equal mentorship from both Black and non-Black physicians, and one-on-one mentoring and group-based skill-building programs that are in collaboration with national organizations (Martinez et al., 2021). In a qualitative study of junior Black physicians' professional identity formation, Wyatt et al., (2020) found that when mentored by non-Black physicians, Black physicians felt that they were able to be both accepted for being Black and a physician. Similarly, through its national mentorship program, the Association of Black Cardiologists was able to provide financial scholarship and mentorship for cardiology subspecialty training for 44 black cardiologists which has helped increase opportunities for leadership and visibility in the field (Kuehn, 2019).

Practical Implications and Future Research

We highlight three important implications of this paper. First, practitioners from healthcare systems interested in reducing anti-Black racism practices should draw from work in other fields such as I/O psychology to inform their work. This is particularly important for work on recruitment and selection strategies where validated selection tools are warranted. Future research should be theorydriven to examine issues related to both the validity of instruments and strategies for mitigating anti-Black racism (Bowe et al., 2017; Gardner et al., 2018; Gardner & Ahmed, 2020). Second, research on the association between patient-physician concordance and health disparities can limit the career trajectory of Black physicians with the expectation that Black physicians should enter primary care, work, and do research in underserved populations. Care should be taken to explore other interests of Black physicians such as radiology and dermatology, as Black physicians are not a monolith. Future studies should explore anti-Black racism through an intersectionality lens (e.g. gender and national origin) to determine how different groups under the umbrella of Black physicians are impacted by anti-Black racism and how this impacts their career choices and trajectory. Third, several healthcare systems are implementing diversity-related programs to reduce anti-Black racism; however, there is a lack of documented evidence on the effects of these programs (Bowe et al., 2017). Future research should therefore design and test the efficacy and feasibility of such interventions on both the Black physician workforce and subsequent outcomes (e.g. health equity).

Conclusion

As we have well documented in this paper, anti-Black racism toward Black physicians is both pervasive and insidious throughout the attraction, selection, and retention process. Now more than ever, against the backdrop of COVID-19 and social justice movements, healthcare institutions have prioritized diversity and inclusion initiatives aimed at Black physicians. Our goal for this paper includes raising awareness and providing an organizational-based framework to examine the impact of anti-Black racism on the work experiences of Black physicians. While we highlight those experiences, we want to underscore that there is a significant amount of literature on how to reduce bias and discrimination in healthcare for Black physicians than most are aware of. Like King et al., (2022), it is our hope that this paper provides a framework for practitioners, to initiate a marriage between medical and organizational research, and contribute to the eradication of anti-Black racism in healthcare.

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Code Availability Not applicable.

Declarations

Ethics approval The proposed study activities do not meet the definition of human subject research. Therefore, they do not involve research on human subjects.

Consent to participate (include appropriate statements) Not applicable.

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