

# Addressing Diversity, Equity, and Inclusion in Athletic Training: Shifting the Focus to Athletic Training Education

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Recent events, such as the deaths of George Floyd, Breonna Taylor, and Daniel Prude and the shooting of Jacob Blake, have changed discussions on systemic racism, which remains deeply rooted in the United States. These events provide a glimpse into societal concerns involving social injustice, police brutality, and the institutionalized racism that affects underrepresented populations in 21st-century United States. As athletic training and the education of athletic trainers are not immune to the infiltration of systemic racism within the United States, we must urgently reflect on how to effectively address diversity, equity, and inclusion within the athletic training profession. It is no longer adequate to minimize or reduce policies that have led to systematic racism; rather, we are charged with actively seeking out and eliminating prejudicial policies within our profession.

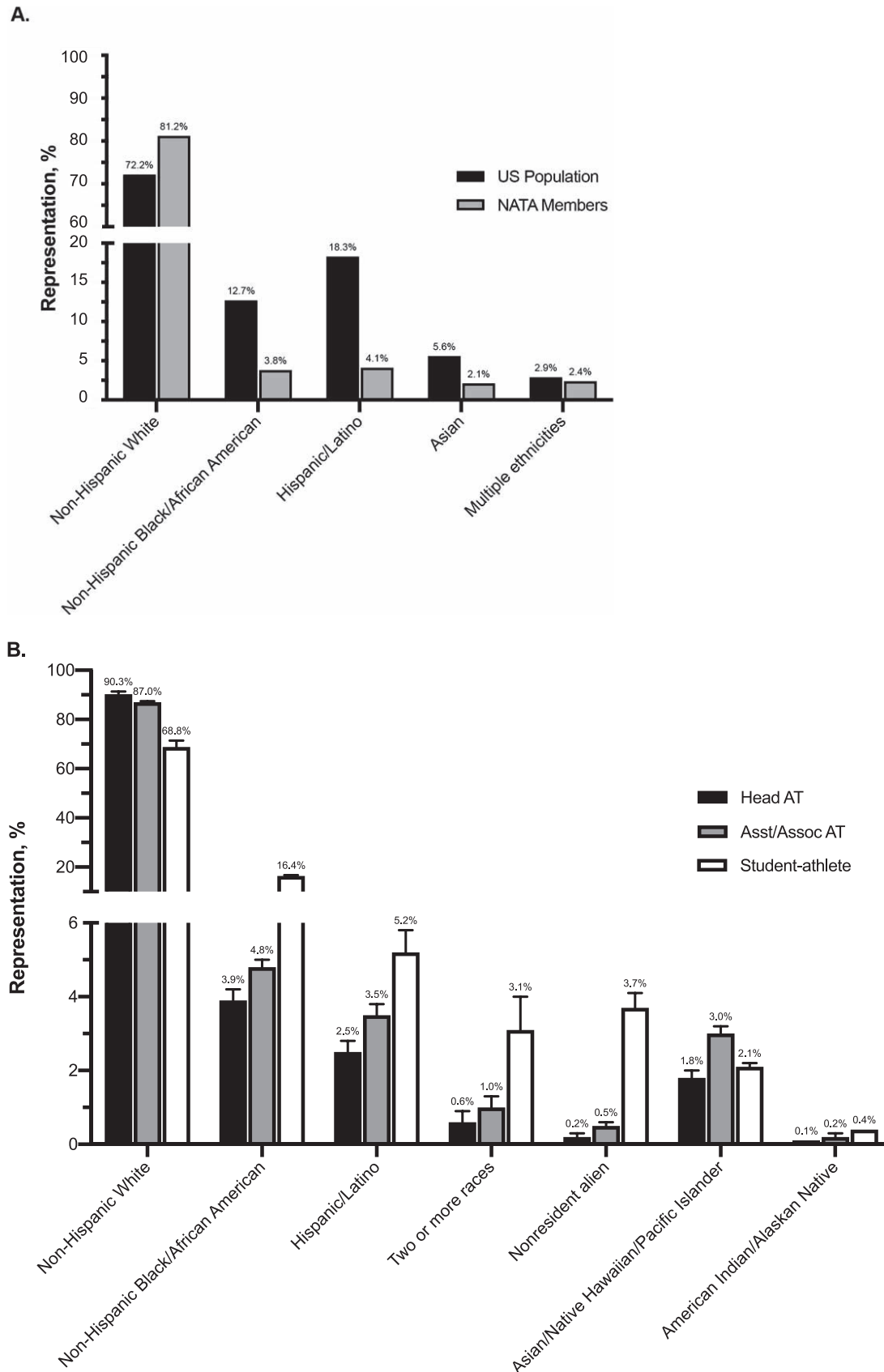
The athletic training profession should be applauded for increasing efforts to address diversity, equity, and inclusion. The formation of the National Athletic Trainers' Association (NATA) LGBTQ+ Advisory Committee and the associated "Safe Space Ally" training, the efforts by the NATA Ethnic Diversity Advisory Committee in promoting and advocating for cultural sensitivity and the development of cultural competence within the profession, and the NATA's 6-phase "Diversity, Equity, and Inclusion Response Plan" are just a few of the many examples that highlight the NATA's prioritization of this topic. The purpose of this editorial is to continue the conversation regarding factors that may affect the overall diversity and inclusive nature of athletic training, with a focus on athletic training education. Specifically, we will discuss diversity, equity, and inclusion as they relate to the pathway into the profession.

Despite many individuals' efforts to address diversity, equity, and inclusion in athletic training (none of which should be minimized), as a profession, we have yet to make drastic improvements in one particularly important area: increasing the number of athletic trainers from racial and ethnic minority groups. As of June 2020, 81.17% ( $n = 30\,895$ ) of the NATA's 38 063 members identified as non-Hispanic White. Only 3.79% ( $n = 1441$ ) identified as non-Hispanic Black or African American, 5.27% ( $n = 2007$ ) as

Hispanic, 4.1% ( $n = 1561$ ) as Asian or Pacific Islander, 2.1% ( $n = 799$ ) as multiple ethnicities, and 2.42% ( $n = 920$ ) as other.<sup>1</sup> We are not alone, as other health professions, such as nursing (eg, 5.4% African American and 3.6% Hispanic representation)<sup>2</sup> and physical therapy (eg, 9.7% from underrepresented racial and ethnic minority populations)<sup>3</sup> face similar issues with respect to the need for a culturally diverse workforce. This lack of diversity within health care and among providers may result in implicit biases toward racial and ethnic minority patients, as evident in the work of Sabin et al.<sup>4</sup>

As the demographic profile of the United States continues to change rapidly, the athletic training profession must strive to recruit, admit, and retain students who represent the diverse communities we serve. To provide some perspective, the racial and ethnic backgrounds of athletic trainers differ markedly from current United States Census data (Figure 1A).<sup>5</sup> More importantly, when we compare the demographics of student-athletes participating in collegiate athletics (National Collegiate Athletics Association Divisions I–III) with those of the athletic trainers who provide their medical care, this disparate representation is even greater (Figure 1B).<sup>6</sup> Without making a concerted effort to recruit, admit, and retain a student body that is more representative of our patient population and ensuring their success in the athletic training profession, we will continue to propagate these disparities. This in turn will result in the continued selection and election of leaders in athletic training who are largely non-Hispanic White,<sup>7</sup> and the leadership will continue to be unrepresentative of the profession as a whole and of the populations we serve from cultural, racial, and ethnic perspectives.

Given our perspectives as athletic training educators, self-reflection led us to examine whether our educational programs could be contributing to these problems. Although barriers in higher education (eg, racial and ethnic disparities in access to higher education, performance on achievement tests such as the SAT, ACT, and Graduate Record Examinations) may partially explain some of the lack of diversity within the athletic training profession, the larger onus is on individual programs to admit diverse students and advance the profession. One area that warrants further

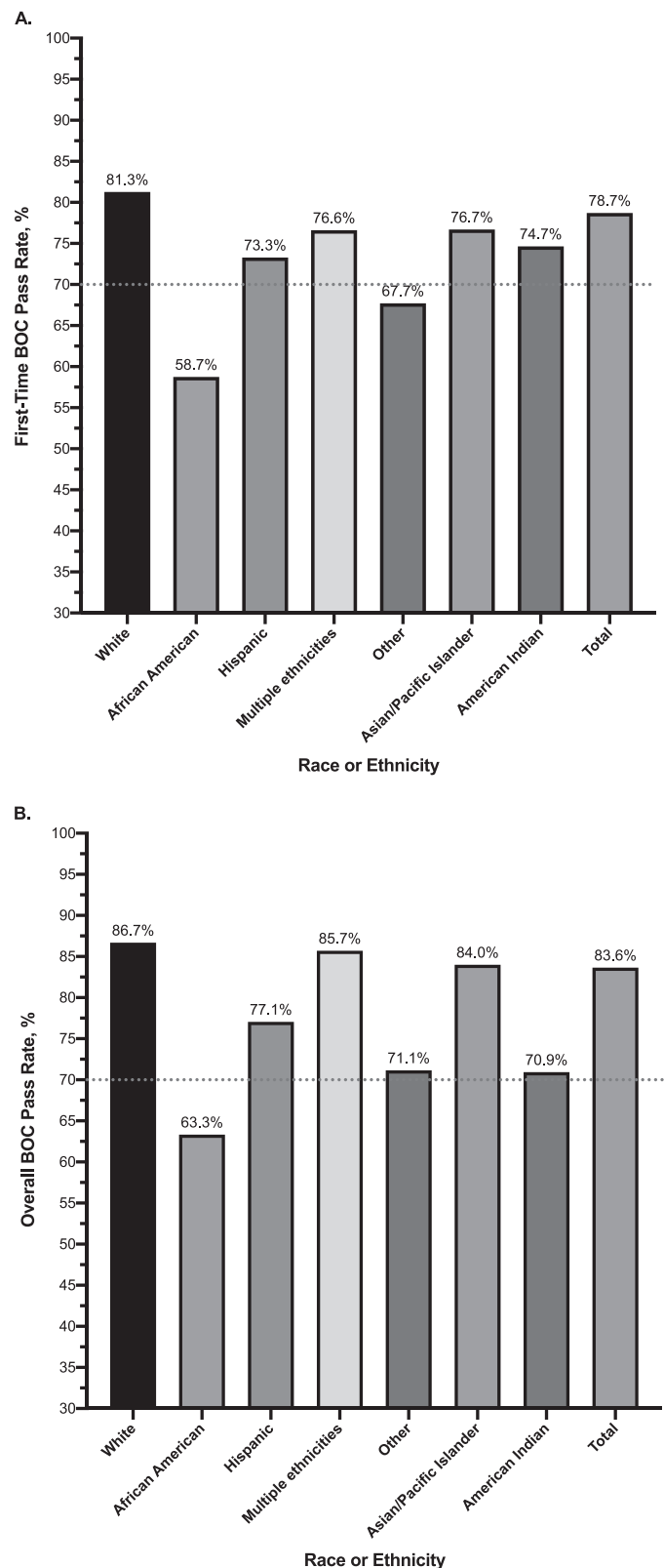


**Figure 1.** Race or ethnicity of athletic trainers and participating student-athletes at National Collegiate Athletic Association member schools (all divisions). **A**, US population and National Athletic Trainers' Association membership and, **B**, head athletic trainers (black bars), assistant or associate athletic trainers (gray bars), and student-athletes (white bars). Abbreviations: AT, athletic trainer; Asst/Assoc, assistant or associate.

inquiry and actionable solutions is the assessment of program success by the Commission on Accreditation of Athletic Training Education (CAATE). Specifically, standards 6 (“The program meets or exceeds a 3-year aggregate of 70% first-time pass rate on the Board of Certification [BOC] examination”) and 7 (“The program meets or exceeds a 3-year aggregate of 70% of an overall pass rate on the [BOC] examination”) of the CAATE “2020 Professional Standards”<sup>8</sup> must be analyzed and reconsidered with respect to inclusion. These standards,<sup>8</sup> both of which automatically place athletic training programs on probation for not achieving these thresholds, are fraught with concerns that we believe directly and indirectly inhibit the advancement of persons of color and those from communities that are traditionally underserved in higher education.

Standards 6 and 7 of the CAATE “2020 Professional Standards” rely on students’ ability to pass the BOC examination, a standardized test, and use this as an indicator of the adequacy of the educational program. Although this is a seemingly appropriate method of gauging program effectiveness by objectively assessing a student’s competence in the 5 domains of athletic training practice, we find this process an impediment to enhancing diversity, equity, and inclusion in our profession. Standardized testing was started in the early 20th century by Edward Thorndike, one of the most prominent psychologists in history,<sup>9,10</sup> as a means of assessing the academic competence of students. From Taylorism, an approach used to standardize American industry and reduce inefficiency,<sup>11,12</sup> Thorndike developed a means of standardizing the educational system in the United States through the lens of identifying “superior” and “inferior” students.<sup>9,10</sup> Specifically, Thorndike created standardized tests, which remain commonplace at all levels of our educational system today, to rank students on their abilities. This undoubtedly and purposely excluded non-White students, as evident from Thorndike’s own belief in diverting resources away from “inferior” students and toward “superior” students, which was coupled with his idea that individuals from different ethnic backgrounds had various levels of mental abilities.<sup>9,13</sup> The exclusionary design of standardized testing, which persists in 2020, is an example of systemic racism built into the US education system. Substantial evidence indicates that racial and ethnic minorities, particularly non-Hispanic Black or African American and Hispanic populations, perform markedly worse than their non-Hispanic White counterparts.<sup>14–26</sup>

The achievement gaps in standardized testing between non-Hispanic White and non-Hispanic Black or African American and Hispanic students permeate performance on the BOC examination over the last 3 academic years (2017–2018 through 2019–2020; Figure 2). The disparities in BOC exam performance between non-Hispanic White and non-Hispanic Black or African American students is particularly alarming: the first-time and overall 3-year aggregate BOC pass rates of non-Hispanic Black or African Americans were 22.6% and 23.4% lower, respectively, than for non-Hispanic Whites.<sup>27</sup> Further, to provide a specific case example and offer transparency to readers, within the entry-level master’s athletic training program in which the first 2 authors (W.M.A. and A.B.T.) serve as the core faculty, the



**Figure 2.** Average pass rates on the Board of Certification examination by race and ethnicity during the 2017–2018 through 2019–2020 examination periods. A, First-time pass rates and, B, overall pass rates. Race and ethnicity data were included for populations with at least 50 exam candidates during the timeframe. The dashed line represents the 3-year aggregate threshold required of athletic training programs to meet accreditation standards put forth by the Commission on Accreditation of Athletic Training Education. Abbreviation: BOC, Board of Certification.

first-time BOC pass rate during the previous 3 academic years (2017–2018 through 2019–2020) was calculated at 70.5% (24/34). A closer examination of these data revealed that, of the 10 students who failed the BOC exam on the first attempt, 70% (7/10) identified as non-White. Regardless of the cause of this disparity, it is abundantly clear that non-White students face a disadvantage in becoming credentialed athletic trainers. Additionally, we believe that the CAATE standards limit educational programs' ability to address this deficiency.

Because of standards 6 and 7, athletic training programs must become more selective in their student recruitment and enrollment based on the perceived ability of an individual student to pass a standardized exam rather than the student's ability to become a competent clinician. Also, the use of the first-time pass rate as a metric of athletic training program performance creates a stigma among students that first-time performance on the BOC exam dictates one's ability to be a competent clinician. These suggestions are speculative, and we are not aware of published evidence to support this notion in athletic training, yet we would be remiss if we failed to initiate this necessary discussion to advance our profession in becoming a leader within health care. We urge researchers to conduct a robust analysis of athletic training programs' BOC pass-rate data and relevant student demographics to gain a better understanding of how these factors influence student recruitment and program admissions.

Although using students' BOC exam performance as an accreditation standard is consistent with other health care professions, such as physical therapy,<sup>28</sup> occupational therapy,<sup>29</sup> and nursing,<sup>30</sup> where the respective accrediting bodies assess program effectiveness via an overall pass rate, the racial and ethnic disparities outlined earlier provide compelling evidence against the use of this metric. As a profession, we must ensure that students are acquiring the knowledge needed to become entry-level health care providers upon graduation, and we must hold athletic training programs responsible for students achieving this threshold. Therefore, we recommend that the following items be fully considered by CAATE and other members of the Strategic Alliance (BOC and NATA):

- (1) Given the inherent flaws in standardized testing and the evidenced disparities in exam performance by persons of color, CAATE should remove standards 6 and 7 from the "2020 Professional Standards" and all future iterations for entry-level, residency, and fellowship programs.
- (2) Rather than relying solely on standardized testing to determine a student's eligibility to become a credentialed athletic trainer, methods of assessing a student's performance in making evidence-based and patient-centered clinical decisions as the basis for granting the athletic training credential should be developed and implemented. Regardless of the mode of assessment, equity and cultural competence clearly need to be key components.
- (3) We call for accredited athletic training programs to assess their admission requirements to guarantee that the standards used for determining acceptance are

equitable. We also encourage CAATE to make the admission of a diverse student body a nationwide priority, with emphasis equal to other professional standards, by using the metrics provided by programs to initiate change.

- (4) Efforts should be made to focus on the recruitment, admission, and retention of athletic training students from racially and ethnically diverse and other minority backgrounds. In collaboration with the other members of the Strategic Alliance, CAATE should evaluate the demographics of accredited athletic training programs and create a strategic plan to include historically Black colleges and universities and other minority-serving institutions in offering accredited athletic training programs.
- (5) The BOC should develop a task force consisting of a representative and diverse sample of athletic trainers (practicing athletic trainers, educators, etc) to develop a strategic plan that addresses issues related to diversity, equity, inclusion, and advocacy.

Many factors are involved in discussing diversity, equity, and inclusion within athletic training. We have addressed only 1 specific topic as it relates to the assessment of athletic training programs by CAATE and how programs may be influenced during the student admissions process. We acknowledge that many more areas must be considered to fully address diversity, equity, and inclusion. We also recognize that the individuals charged in making these decisions are actively working to improve the profession. Our hope is that this commentary does not diminish their efforts to date but provides a platform for others to make their voices heard, so that collectively, we as a profession continue to work together. We also hope that this discussion serves as a catalyst for all athletic trainers to reflect on their practices and engagement with educational programs to ensure that everyone, regardless of race or ethnicity, can become an athletic trainer. We seek to make the athletic training profession a leader in the field of health care diversity, equity, and inclusion, even if it requires a change in the status quo from our normal practices. Therefore, we look for a collective effort to achieve culturally competent care and the true provision of athletic trainers for all.

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