

Addressing mental health needs of NCAA student-athletes of colour: foundational concepts from the NCAA Summit on Diverse Student-Athlete Mental Health and Well-Being

Emily Kroshus ^{1,2}, Stephany Coakley,³ Darryl Conway,⁴ Kenneth Chew,⁵ Niya Blair,⁶ Jessica M. Mohler,⁷ Jessica Wagner,⁶ Brian Hainline ⁶

► Additional supplemental material is published online only. To view, please visit the journal online (<http://dx.doi.org/10.1136/bjsports-2022-105891>).

¹Department of Pediatrics, University of Washington School of Medicine, Seattle, Washington, USA

²Center for Child Health, Behavior and Development, Seattle Children's Research Institute, Seattle, Washington, USA

³Department of Intercollegiate Athletics, Temple University, Philadelphia, Pennsylvania, USA

⁴Department of Intercollegiate Athletics, University of Michigan, Ann Arbor, Michigan, USA

⁵Student Counseling Center, Indiana State University, Terre Haute, Indiana, USA

⁶National Collegiate Athletic Association, Indianapolis, Indiana, USA

⁷Midshipmen Development Center, US Naval Institute, Annapolis, Maryland, USA

Correspondence to

Dr Emily Kroshus, Department of Pediatrics, University of Washington School of Medicine, Seattle, WA 98195, USA; ekroshus@u.washington.edu

Accepted 22 August 2022

Published Online First
7 September 2022



© Author(s) (or their employer(s)) 2023. No commercial re-use. See rights and permissions. Published by BMJ.

To cite: Kroshus E, Coakley S, Conway D, et al. *Br J Sports Med* 2023;**57**:137–145.

ABSTRACT

We sought to identify concepts that may facilitate National Collegiate Athletic Association efforts to assist member institutions in addressing the mental health needs of student-athletes of colour. A two-step process was followed to generate and refine concepts, guided by Delphi methodology. First, a scoping review was conducted, including original peer-reviewed research articles that quantified or qualitatively described determinant(s) of racial or ethnic differences in athlete mental health or mental healthcare. Next, a multiday virtual meeting was facilitated to review the results of the scoping review, discuss lived experiences and generate potential concepts. Participants included a racially and ethnically diverse group of student-athletes, medical and mental health professionals, athletics administrators, diversity, equity and inclusion experts, health educators and representatives from leading organisations involved in athlete mental health. Through the consensus process, participants identified 42 concepts that member institutions might consider implementing on their campuses. Concepts were largely focused on organisational policies and practices such as staffing diversity and inclusion, expanded options for clinical support (ie, identity-relevant support groups) and within-organisation accountability. Concepts related to specific areas for stakeholder education were also identified. Institutions have the potential to play an important role in supporting the mental well being of student-athletes of colour, and the present concepts can help inform institutional action. While concepts proposed are believed to be broadly relevant across athletics settings, they would need to be further considered and tailored to reflect setting-specific organisational structures, resources and needs.

College students of colour, including student-athletes, are at elevated risk of poor mental health.^{1–5} Race itself is not a risk factor for poor mental health.⁶ Rather, race is a social construction based on visible characteristics and ancestry,⁷ and racial inequities are the result of racism.⁸ Exposure to interpersonal and institutional racism and other forms of trauma and chronic stress across the lifespan that are rooted in systemic racism can negatively impact mental health.⁹ Systemic marginalisation of individuals of colour in mental healthcare settings can negatively impact mental healthcare

Key points

- ⇒ The majority of concepts were focused on organisational policies and practices, including staffing diversity, mechanisms for reporting experiences of discrimination and feedback and accountability.
- ⇒ Externally reinforced athlete identity and the transition from sport were identified as sources of stress for athletes. Support for non-sport skill building was identified as one organisational strategy that could help mitigate these sources of stress.
- ⇒ Clinical care considerations included access to appropriate care and care continuity, and the potential for different models (eg, telemedicine, identity-relevant support groups) to help meet care needs in some settings.
- ⇒ Education/training was proposed as being important for all stakeholders involved in collegiate athletics (eg, athletes, coaches, clinicians, athletics administrators and families of athletes), addressing role-relevant topics (eg, trauma-informed coaching).

experiences and outcomes.^{10 11} Given this context, as the National Collegiate Athletic Association (NCAA) and its member institutions continue to focus on student-athlete mental health,^{12 13} the mental health needs of student-athletes of colour must be addressed explicitly. We use the term ‘student-athletes of colour’ to refer to all student-athletes who identify as a race or ethnicity other than non-Hispanic white, while recognising that different racial and ethnic groups will have different lived experiences that impact their mental health and well-being. In 2021, 16% of NCAA student-athletes identified as black, 6% as Hispanic or Latino, and 5% as two or more races.¹⁴

As part of the NCAA's Summit on Diverse Student-Athlete Mental Health and Well-Being (“Summit”), consensus methods were used to identify concepts that the NCAA and its member institutions might consider to address the mental health and well-being needs of student-athletes of colour. We describe this stepwise process and discuss the results with reference to implementation considerations.

METHODS

Overview

The consensus process was guided by modified Delphi methodology, broadly organised with an exploration phase and an evaluation phase.¹⁵ The exploration phase began with a scoping review on factors in the collegiate sport setting that may impact the mental health needs of student-athletes of colour. This was done to help identify knowledge gaps that could be addressed by the Summit, and so that Summit participants would have a common knowledge base of current scholarship that may be relevant to identifying concepts for member institutions. Subsequently, the NCAA convened a 2-day Summit, attended by a diverse group of stakeholders, during which the exploration phase continued with didactic presentations and discussions, leading to drafting of preliminary foundational concepts. The evaluation phase followed the conclusion of synchronous Summit activities, and included anonymous ratings and revisions of foundational concepts by Summit participants. Details on consensus participants and procedures are provided below.

Scoping review

Theoretical framework

Contemporary scholarship about the unique mental health needs and challenges of people of colour emphasises a multilevel^{16–18} and intersectional^{19–20} aetiology, and provides frameworks that can structure our thinking about this topic. A commonly used theoretical framework, the National Institute of Minority Health Disparities (NIMHD) framework, considers different potential domains of influence (ie, individual behaviour, physical environments, sociocultural environments and the health-care system) and levels of influence (ie, individual, interpersonal, community/organisational and societal).¹⁶ Applying this framework to understanding the relationship between race and mental health outside of sport highlights how individual behaviour is nested in contexts that produce and maintain disparate health outcomes.^{8 18 21} This multilevel theoretical framework guided the scoping review.

Search procedure

Literature included in this review was retrieved from two electronic databases (PubMed and PsycINFO). Our article keyword search included “(athletes or sports or athletics) AND (mental health) AND (minorities or ethnic groups or race or racial).” Additional articles were identified through manual review of reference lists of eligible articles. There were no restrictions on study designs. Grey literature, such as unpublished studies and dissertations, was not included. The search was conducted in July 2020. Articles were eligible for inclusion if they were original primary research published between January 2010 and July 2020, in an English language peer-reviewed journal, and they quantified or qualitatively described determinant(s) of racial or ethnic differences in athlete mental health or mental healthcare. Publications were not restricted to NCAA student-athlete study populations or any specific geography.

Analysis

A standard coding form was developed based on the NIMHD framework¹⁶ and Boyd *et al*'s standards for publishing on racial differences.²² Boyd *et al*'s standards are designed to ensure that research is not ‘incorrectly assigning race as a risk factor when racism is the risk factor for racially disparate outcomes’,²² and that research on racial inequities is situated in a critical theoretical framework that prioritises systemic change. This meant we

Table 1 Race-related and racial inequity-related coding framework

Component	Detail
Define race	A definition for race is provided using ‘a sociopolitical framework, not a biological one, that explicitly reviews all relevant social, environmental and structural factors for which race may serve as a proxy measure.’ ²²
Name racism	Racism is named, its form identified (interpersonal, institutional or internalised) and ‘the mechanism by which it may be operating’ proposed. ²²
Mental health outcome	Description of study’s primary mental health-related outcome.
Domain and level of influence	Domain and level of influence on racial inequities, using categories from the NIMHD framework. ¹⁶
Determinant	Specific determinant proposed for racial inequity given the domain and level, using those listed in the NIMHD framework ¹⁶ while remaining open to other determinants not listed.
NIMHD, National Institute of Minority Health Disparities.	

first coded articles based on whether they defined race, specified its reason for use, and named racism and other intersecting forms of oppression that may be influencing the outcomes observed. Next, we extracted the primary mental health outcome(s) for the study (ie, symptomatology, health service utilisation), and categorised the theorised determinant(s) of racial differences in this outcome in terms of the corresponding domain and level of influence from the NIMHD framework.¹⁶ Although coding was primarily deductive, we remained open to other determinants not listed in the NIMHD framework. Codes and code definitions are provided in [table 1](#).

Summit

Participants

A total of 45 individuals participated in the consensus process (see online supplemental table 3). Paid NCAA staff members helped facilitate consensus procedures, including conducting the scoping review and facilitating Summit activities, but they were not involved in rating any foundational statement. Summit co-chairs and steering committee members were identified via a key informed-led process that prioritised relevant clinical expertise and lived experiences. These individuals provided feedback to paid NCAA staff members on Summit participant recruitment and consensus procedures. Representatives from NCAA member institutions (ie, colleges and universities that participate in NCAA competition) serve on voluntary committees that provide feedback to the paid NCAA staff on member institution needs and priorities. Committees with responsibilities relevant to the mental health of student-athletes of colour (eg, Committee on Promoting Cultural Diversity and Excellence) were asked to identify one member to participate in Summit activities. Additionally, leading national organisations involved in sport and mental health (eg, Alliance of Social Workers in Sport) were provided with information about Summit goals and invited to send an individual with relevant expertise to the Summit. Finally, individuals with relevant lived experiences and identities not otherwise represented through the aforementioned recruitment process, including student-athletes of colour, were invited to participate using key informant-led purposive recruitment. Of participants who self-reported their racial and ethnic identity, 62% identified as African American, 7% as Hispanic or Latino, and 3% as Native Hawaiian or Pacific Islander. Of participants who self-reported their gender identity, 52% identified as male and 48% as female. In sum, Summit participants had relevant professional expertise (ie, licensed mental healthcare provider,

athletics administrator, student-athlete, health educator), there was over-representation by individuals of colour, and there was relative balance across male and female gender identities.

Exploration procedure

Prior to the Summit, participants received a copy of results from the scoping review. The first day of the Summit included didactic presentations addressing the content of the scoping review and other issues such as epidemiology, risk factors, and current practices and resources. Small group breakout sessions allowed participants to discuss and reflect on the content shared. At the end of the first day, participants were invited to use an anonymous online link hosted on the Qualtrics survey platform to submit their preliminary recommendations about steps that institutions can take to improve the mental health and well-being of student-athletes of colour.

Prior to the start of day 2, an internal working group synthesised this feedback. The internal working group was comprised of the Summit co-chairs, steering committee members and NCAA staff members. One member of the working group assigned inductive descriptive codes to passages of text. Codes were subsequently grouped into higher order themes reflecting core recommendations (eg, 'provide education about racism in sport'). Next, these themes were organised by stakeholder target (athlete, coach, healthcare staff, athletics administration). The other members of the working group subsequently reviewed open-ended written data to affirm the coding and thematic grouping decisions.

On the second day of the Summit, participants broke into small groups that were purposively organised to include a range of professional roles and lived experiences. Groups sequentially reviewed recommendation themes by stakeholder group that were emergent from day 1. They were tasked with working together to discuss potential implementation barriers/facilitators, and to contest or further refine and operationalise ideas. After each stakeholder-specific small group discussion, Summit participants gathered as a large group to share their main discussion points. Each small group identified a note-taker, and at the end of the Summit, they submitted a written record of their group discussion, highlighting their ideas and implementation considerations. At the conclusion of the Summit, this written documentation was aggregated and synthesised by the internal working group, following the coding process previously described. Next, preliminary statements describing concepts to facilitate and support mental wellness of racial minority student-athletes were generated. These concepts incorporated the ideas and implementation considerations provided by Summit participants, such as cost, time demands and prioritisation from athletics administration. The internal working group reviewed proposed concepts to confirm consistency with emergent themes and written documentation from the Summit.

Evaluation procedure

Summit participants were contacted by email with a link to an online survey containing the preliminary statements that were generated during the exploration phase. They were asked to rate each proposed concept in terms of its perceived utility and feasibility. Utility was defined as their perception that, if implemented with fidelity, it would benefit student-athletes of colour. Feasibility was defined as their perception about how possible it would be for it to be implemented by institutions. Response options for each dimension were on a 1–9 scale, where higher scores indicated the concept was more useful/feasible. When participants rated a statement 6 or lower, they were asked to

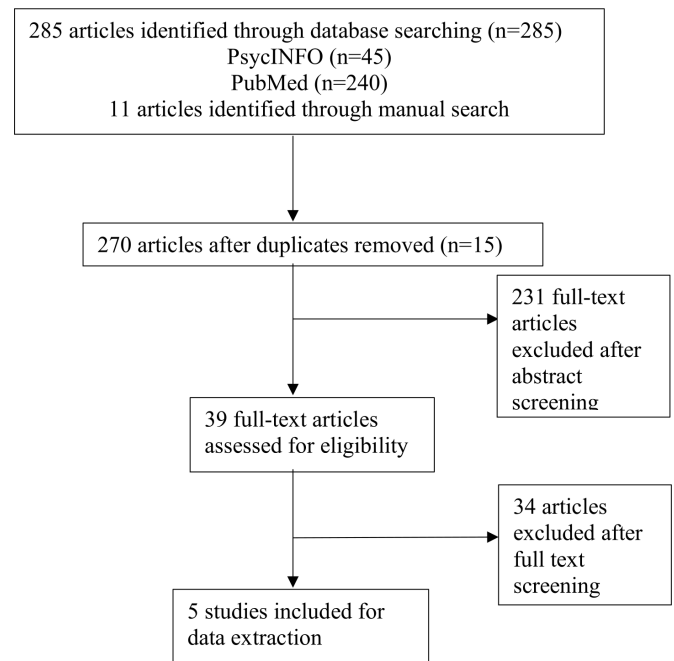


Figure 1 Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow chart for study selection.

provide open-ended written feedback about their rationale. Summary statistics were calculated for each proposed concept for utility and feasibility. Modelled on prior similar consensus processes,^{23 24} utility and feasibility means of >7.00 were established a priori as thresholds for consensus. The internal working group also inspected the distribution of responses by calculating the percentage of proposed concepts with a score of >7.00, with a target of 75% or more.

For concepts not reaching these thresholds, the internal working group reviewed the open-ended participant feedback to identify emergent reasons for lack of consensus on utility or feasibility. Where possible, proposed concepts were modified based on this feedback. Modified concept proposals, along with the results of the first round of ratings, were sent back to Summit participants. They were asked to follow the same rating and open-ended feedback as before on this limited subset of proposed concepts.

Proposed concepts reaching consensus thresholds at the end of these two rounds of review were included in the final set of concepts. These were shared with key NCAA committees and governance bodies that have responsibilities related to the areas of diversity and inclusion, and health and safety. No modifications were made to statements in this phase. The goal of this communication was to allow committees and governance bodies to identify whether and how the consensus process results can inform ongoing efforts to support and address the specific mental health needs of student-athletes of colour.

RESULTS

Scoping review

As presented in figure 1, a total of 285 articles were identified through database searching and 11 additional articles through manual search. After screening, a total of five studies met inclusion criteria. Of the five eligible papers, four were original analyses of quantitative data, and one was qualitative. All related to US college-level sport participants. Three

Table 2 Determinants of racial/ethnic disparities in athlete mental health

Reference	Sample size and detail	Racial/ethnic categories	Define race, describe mechanism and name racism ²²	Primary study outcome(s)	Domain, level of influence and determinants of racial disparities ¹⁶
Ballesteros and Tran ²	n=241 Self-identified 'varsity' athletes from ACHA-NCHA II dataset who also self-identified as African American, Latinx or Asian American, and were categorised as 'in need' of mental health services based on their responses to the ACHA-NCHA II mental health symptom questions.	Self-identification as African American, Latinx or Asian American.	Define race: no Describe mechanism: yes Name racism: no	Mental health psychotherapy utilisation, measured as a yes/no response to the question: 'Have you ever received psychological or mental health services from your current college/university's counselling or health service?'	Domain: sociocultural Level of influence: individual Determinant: sociodemographic
Naoui <i>et al</i> ²⁶	n=271 Varsity athletes at one Division I university and one Division II university.	Self-identification as Caucasian, black, Hispanic, Asian, Native American or other; dichotomised into Caucasian and minority.	Define race: no Describe mechanism: no Name racism: no	Interest in discussing mental health concerns (depression, anxiety, eating disorder), or dealing with pressure/stress during a hypothetical sports psychology consultation (yes/no)	Domain: healthcare system Level of influence: individual Determinant: treatment preferences
				Preference for sport psychology consultant being of same race	Domain: healthcare system Level of influence: interpersonal Determinant: patient–clinician relationship
Sadberry and Mobley ²⁷	n=98 Collegiate athletes from four institutions (two historically black and two predominantly white institutions).	Self-identification as: African American, black, biracial/multiracial, African, Haitian, Jamaican, Central/South American.	Define race: no Describe mechanism: race-related stress Name racism: yes 'Perceived racism', 'institutional racism' and 'individual racism'	Subscales of the College Adjustment Scale (anxiety, depression, self-esteem, substance abuse, interpersonal relationships, family problems and academic concerns)	Domain: sociocultural environment Level of influence: individual Determinant: response to discrimination
Steinfeldt and Steinfeldt ²⁵	n=245 Male college football players at four institutions (two Division II and two Division III).	Self-identification as white, black, Hispanic, Asian, American Indian, multiracial, other.	Define race: no Describe mechanism: no Name racism: no	Attitudes towards help-seeking, measures by the Self-Stigma of Seeking Help Scale	Domain: sociocultural environment Level of influence: individual Determinant: perceived norms and stigma
Wilkerson <i>et al</i> ²⁸	n=9 Black male Division I football players from a highly competitive institution.	Black	Define race: no Describe mechanism: yes Name racism: yes 'Healthcare discrimination' and 'interpersonal racism'	Qualitative study exploring perceived barriers to seeking professional mental health services	Domain: sociocultural environment Level of influence: interpersonal Determinant: family norms

Statistical significance refers to p<0.05 unless otherwise indicated.
ACHA-NCHA, American College Health Association's National College Health Assessment.

papers used the word 'racism' and none defined race using a sociopolitical framework. Determinants were largely at the individual and interpersonal level, and are detailed in [table 2](#) and summarised below.

Help-seeking

Two quantitative papers addressed topics related to race and help-seeking. Ballesteros and Tran² conducted a secondary analysis of American College Health Association's National College Health Assessment II survey data, restricting the sample to a subset of 241 varsity athletes who self-identified as African American, Latinx or Asian American, and were categorised as 'in need' of mental health services. They found no statistically significant pairwise differences by race in the percentage of athletes who said they would consider seeking mental health services in the future. Steinfeldt and Steinfeldt²⁵ collected original survey data from 245 male football players at four US colleges, with athletes in the sample self-identifying as white, Black, Hispanic, Asian, American Indian, multiracial or other. The primary goal of the study was to determine how help-seeking stigma was associated with different profiles (or 'clusters') of conformity to

traditionally masculine norms. Results indicated that perceived stigma was lowest among non-conforming male athletes. Additional analyses found that race was not significantly associated with cluster membership, suggesting that racial differences in help-seeking stigma may not be explained by differences in conformity to masculine norms.

Treatment preferences

Naoui *et al*²⁶ surveyed 271 varsity athletes from two US colleges, and grouped them into two racial categories ('Caucasian' and 'minority') based on their self-reported race. No significant differences between the two groups were observed for self-reported interest in discussing mental health concerns (depression, anxiety, eating disorder) during a hypothetical sports psychology consultation, or in their acceptance of taking medication to treat hypothetical mental health issues. Significantly, more athletes categorised as Caucasian (46.9%) as compared with those categorised as minority (29.0%) expressed interest in discussing dealing with pressure/stress during a hypothetical sport psychology consultation.

Response to discrimination

Sadberry and Mobley²⁷ surveyed 98 collegiate athletes at four colleges in the USA (two historically Black colleges and universities (HBCUs) and two predominantly white institutions (PWI)), with participants restricted to those self-identifying as African American, Black, biracial/multiracial, African, Haitian, Jamaican or Central/South American. Individuals experiencing more stress related to their minority racial identity (as measured by higher scores on the Minority Student Stress Scale) tended to have significantly more depressive symptoms (as measured by the Depression domain of the College Adjustment Scale). The Minority Student Stress Scale reflects experiences of stress related to institutional, interpersonal and internalised racism, with subscales for social climate stressors (eg, few professors of my race, few students of my race in my classes), inter-racial stressors (eg, white-oriented campus culture, negative relationship between different ethnic groups), intragroup or within-group stressors (eg, pressure to show loyalty to own race), racism and discrimination stressors (eg, being treated rudely or unfairly due to race) and achievement stressors (eg, doubts about abilities, family expectations).

Patient–clinician relationship

In their sample of 271 varsity athletes from two US colleges, Naoi *et al*²⁶ found that compared with athletes categorised as ‘Caucasian’, racial minority athletes reported a stronger preference for seeing a sport psychology consultant of the same race, and for seeing a sport psychology consultant who has experience working with diverse populations.

Norms and stigma

Wilkerson *et al*²⁸ conducted a qualitative study with nine Black male Division I football players from a US college characterised as ‘highly competitive’. Individual interviews explored attitudes about mental health help-seeking. Primary themes relating to help-seeking included ‘silence’ and perceptions that it indicated ‘weakness’, with family-reinforced cultural context contributing to their communication and help-seeking practices.

The current state of research on determinants of racial disparities in the mental health of athletes is highly limited in terms of the number of articles published, the types of determinants studied, and the theoretical conceptualisation and discussion of race. Individual-level determinants (help-seeking attitudes, treatment preferences and individual stress in response to discrimination) were the focus of most studies that we identified as eligible for inclusion. These determinants were largely not situated in a multilevel theoretical framework addressing structural mechanisms for hypothesised relationships between race and mental health-related outcomes. With the exception of Sadberry and Mobley’s²⁷ study, mention of racism was largely with respect to interpersonal interactions rather than structural conditions and institutional policies and practices.

Focus on individual, rather than systemic or institutional, causes of racial inequities is a trend that is also observed in recent consensus statements/position stands on athlete mental health. For example, the International Olympic Committee’s consensus statement notes that ‘negative attitudes about mental health services are associated with several factors, including identification as male, younger age, Black (vs Caucasian) race’.¹² We note that the two quantitative papers that addressed topics related to help-seeking found no significant racial differences in self-reported likelihood of future help-seeking, or in conformity to traditionally masculine norms that were associated

with help-seeking stigma. However, significant methodological limitations make it difficult to determine whether these findings reflect a true lack of racial differences in help-seeking among athletes. Limitations include outcomes that were not actual help-seeking behaviour, and small samples that limit power to detect differences even if present or to examine potentially important risk modifiers related to intersectional identities. These and other papers included in this review are also limited in how race is measured. Others have cautioned that how race is operationalised (eg, grouping all non-white athletes into a ‘minority’ category) and how reference categories are selected (eg, foregrounding white race as the default reference category) can obscure and affect the interpretability of results.²⁹

In sum, the literature review was useful largely in identifying significant gaps in research on the mental health of college-level athletes of colour. This included a lack of data about organisational and systemic determinants of mental health-related behaviours and outcomes. These gaps meant that the current evidence base did not provide a robust set of data or information that could be used to directly generate concepts for NCAA member institutions to consider as they seek to address the mental health needs of student-athletes of colour. We note that recently several authors have described their lived experiences and observations of racism in sports medicine,^{30–32} perspectives and experiences that provide an important starting point for a more expansive approach to research in this area.

Consensus ratings

The exploration phase generated 45 proposed concepts, grouped broadly across 6 categories of stakeholders involved in NCAA college athletics (coaches, student-athletes, athletics department administrative staff, families of student-athletes, healthcare personnel and athletics department administration). Eighteen Summit participants participated in the first round of concept ratings. Eleven of the initially proposed concepts did not meet a priori consensus thresholds for perceived feasibility, and one of the concepts also fell short of the threshold for perceived utility (‘documented plan for coach support of student-athletes in non-sport skill development opportunities, including accommodation of such opportunities as part of practice, competition and travel schedules’). Proposed concepts were revised based on themes emergent from open-ended participant feedback and in some cases, initial concepts were combined. Ten modified concept proposals were rated in a second round. Of these, all met thresholds for perceived utility, and two were marginally below thresholds for perceived feasibility, with 69% of respondents rating the respective concepts 7 or more out of 9. The working group decided to include these two statements with additional minor modifications to address identified feasibility concerns. Final foundational concepts are presented in [box 1](#), and concepts and corresponding scores from the first and second round of ratings are provided as an online supplement (online supplemental tables 1 and 2).

DISCUSSION

The consensus process resulted in proposed concepts that were largely focused on organisational policies and practices related to staffing, feedback and accountability, and programming to support student-athlete well-being. Other concepts were focused on modifications to interpersonal determinants through education/training. Only one proposed concept focused on individual athlete behaviour (training in culturally sensitive skills for coping with stress).

Box 1 Proposed concepts from consensus process that may be leveraged by National Collegiate Athletic Association member institutions to support the mental health needs of racial minority student-athletes

Athletic department personnel and practices

Training: athletic department staff annual training that addresses:

- ⇒ The history of racism in sport.
- ⇒ Anti-racism, as applied to the sport and college setting.
- ⇒ Self-assessment of implicit biases and attitudes as they relate to the experiences and well-being of student-athletes of colour.

Reporting experiences of discrimination

- ⇒ Department and/or campus policies/processes that encourage and facilitate the reporting of experiences of racial discrimination and support individual reporting of experiences of racial discrimination.
- ⇒ Annual student-athlete surveys designed to anonymously solicit information about experiences of racial trauma and discrimination in athletics settings (ie, as perpetuated by coaching staff, teammates medical staff, athletics department administration, fans).
- ⇒ Annual dissemination of information to all athletics personnel (student-athletes, coaches, staff) about institutional process for reporting experiences of discrimination.

Communication

- ⇒ Annual statement affirming that discrimination on the basis of race, gender or sexual orientation will not be tolerated.
- ⇒ Public identification and recognition of positive contributions to diversity and inclusion within athletics department.

Staff hiring and retention

- ⇒ Regular review of policies and practices related to inclusion in the employment process (eg, recruiting, hiring, retention), and engagement in goal setting and action planning related to supporting increased staff diversity.
- ⇒ Processes for considering racial and ethnic diversity as a factor in staff hiring.
- ⇒ Review of relevant anonymous and other feedback about discrimination as part of annual review process for coaches and other athletics department staff.

Non-sport skill development and career planning

- ⇒ Cross-campus department support of students of colour (including student-athletes) in learning about, preparing for and pursuing careers in mental health professions (eg, psychology, social work, nursing).
- ⇒ Meetings, at least annually, between faculty athletics representatives, coaching staff, and team captains to identify barriers and opportunities to support non-sport skill development.
- ⇒ Annual student-athlete surveys designed to anonymously solicit feedback on engagement in non-sport skill building activities, and on barriers in the athletics setting (ie, scheduling) to engaging in such activities.
- ⇒ Regular self-evaluation, goal setting and action planning related to athletic department initiatives designed to support student-athletes' transition to life after sport.
- ⇒ Inclusion of coach engagement in supporting athletes in non-sport skill development as part of coach evaluations performed by the athletics department.

Quality improvement and accountability

Continued

Box 1 Continued

- ⇒ Annual student-athlete surveys to anonymously solicit feedback on athletic department initiatives related to racism (eg, reporting, education).
- ⇒ Annual athletics department self-evaluations of current racial and ethnic representation among student-athletes, coaches, sports medicine staff, athletics administration and other student-athlete support positions such as student-athlete development personnel.
- ⇒ Regular review of internal student-athlete survey data with a multidisciplinary group that includes representatives from outside of athletics.
- ⇒ Regular meetings with an advisory board that includes student-athletes of colour to review and discuss race-related initiatives, including but not limited to: education, non-sport skill building and transition from sport.

Healthcare personnel and practices

Training: healthcare personnel annual training that addresses:

- ⇒ The history of racism in healthcare/medicine.
- ⇒ Culturally competent healthcare.
- ⇒ Trauma-informed clinical practices.

Screening

- ⇒ Inclusion of screening for mental health disorders as part of the annual pre-participation examination, administered in a manner that allows for student-athlete privacy.
- ⇒ Dissemination of information about institutional services to support mental health as part of annual mental health screening for student-athletes.

Clinical care

- ⇒ Student-athlete-accessible identity-based support groups that are supervised by a licensed mental healthcare professional.
- ⇒ Student-athlete-accessible telehealth and/or other clinical care alternatives that recognise that different student-athletes will prioritise different types of care and characteristics of care providers.
- ⇒ Annual reviews of institutional procedures that support continuity of coverage for student-athlete mental healthcare, including aspects of off-campus care (eg, during school breaks or remote schooling due to external events) and care away from and after collegiate competition (eg, during periods of injury, graduation or other departure).

Coaches

Training: coach annual training that addresses:

- ⇒ The history of racism in US sport.
- ⇒ Anti-racist coaching practices.
- ⇒ Trauma-sensitive coaching practices.
- ⇒ Self-assessment of implicit biases, attitudes, and coaching practices as they relate to the experiences and well-being of student-athletes of color.
- ⇒ Self-assessment of the extent to which team members are encouraged or supported to participate in non-sport skill development opportunities.

Communication

- ⇒ Annual statement to team members affirming that they will not tolerate discrimination on the basis of race, ethnicity or other identities, including but not limited to gender or sexual orientation.
- ⇒ Dissemination of information to team members on an annual basis about institutional process for reporting experiences of discrimination.

Student-athletes

Continued

Box 1 Continued

Training: student-athlete annual training that addresses:

- ⇒ The history of racism in US sport.
- ⇒ Anti-racism, as applied to the sport and college setting.
- ⇒ Culturally sensitive skills for coping with stress.

Career planning

- ⇒ Meetings with career services or similar personnel at least annually to discuss career planning for life after sport.

Families of student-athletes

Share information: annual dissemination of information to families of student-athletes that addresses:

- ⇒ The mental health services on campus and how to access those services.
- ⇒ The benefits of mental healthcare for athletic and academic performance.
- ⇒ Normalisation of mental health help-seeking including, for example, statistics on use of mental health services and/or affirmation by key athletics stakeholders (eg, coaches) about the value of mental healthcare.

Stakeholder education

Proposed concepts related to education/training included all stakeholders involved in collegiate athletics: athletes, coaches, clinicians, athletics administrators and families of athletes. Broadly, education/training is thought to have the potential to increase the knowledge, motivation and ability of stakeholders to engage in role-relevant behaviours that positively impact the mental health of racial minority student-athletes. For all stakeholder groups, education related to the history of racism in sport/sports medicine was believed to be important. Other content varied by stakeholder group, including topics such as implicit biases, trauma-informed coaching and healthcare practices, and culturally competent healthcare practices. Summit participants cautioned that not all educational programmes/training about the same topic are of equivalent quality, meaning that institutions should pay close attention to the evidence base about the effectiveness of the programmes they are selecting.

Screening

Screening for mental health disorders and the use of screening as an opportunity to strengthen help-seeking were also included in proposed concepts. Summit participants emphasised the importance of pairing of screening activities with communication with student-athletes about the resources available, procedures and benefits of mental health help-seeking. We note that screening is also addressed in the NCAA Mental Health Best Practices,³³ which emphasises the importance of having procedures in place for what to do if an individual has a positive screen, including access to licensed professionals from which care can be sought. While screening is an initiative that has the potential to benefit athletes broadly, it has the potential to disproportionately benefit individuals who might otherwise have missed being identified as needing support.

Clinical care

Proposed concepts focused broadly on organisational practices for expanding options for clinical care while recognising that in many settings, there are unmet mental healthcare needs. Summit participants acknowledged the importance of each institution in identifying the types and levels of services that are needed and appropriate for their respective student-athletes. One key area of

feedback from stakeholders during the consensus process was the benefit of increased diversity among mental healthcare providers. The group also shared concerns that, at this time and at many institutions, there are limitations on the number of trained clinicians who are competent to work with the specific mental health issues facing student-athletes, and that this shortage of trained individuals means that access to counsellors of colour may be even further limited. Community collaborations or partnerships, telehealth and/or other clinical care alternatives were identified as approaches to explore that may help expand access to care. Summit participants also addressed the need for wellness services to support student-athletes of colour who are not necessarily experiencing clinical mental health issues, but nonetheless experiencing stressors that are impacting their well-being, including racism and balancing athletic and academic demands. Proposed concepts included convening identity-based support groups that are supervised by a licensed mental healthcare professional to meet the subclinical needs of these student-athletes. A final proposed clinical care-related concept addressed continuity of coverage for mental health services (eg, during school breaks or remote schooling due to external events) and care away from and after collegiate competition during the sport-career transition. Stakeholder feedback emphasised that such transitions can be a source of stress and present structural challenges to continuity of care.

Staffing

Proposed concepts related to the benefits of diversity in organisational staffing, and the need for organisational quality improvement procedures related to staffing diversity. This included the importance of regularly reviewing policies and practices related to inclusion in employment practices (eg, recruiting, hiring, retention), and engaging in goal setting and action planning related to staff diversity. Also raised for consideration was having relevant anonymous and other feedback about discrimination included as part of the annual review process for coaches and other athletics department staff.

Support for whole person/transition from sport

Stakeholder feedback during the exploration phase identified internal and external conflicts between athlete and non-athlete roles, and the transition from sport, as potential stressors for student-athletes of colour. Proposed concepts focused on organisational strategies that address athlete identity and supporting non-sport skill building. To the extent such initiatives are implemented universally, institutions should monitor uptake and obtain feedback about acceptability and impact to determine whether they are being used by, and meeting the needs of, student-athletes of colour. Also addressed was cross-campus departmental support for student-athletes of colour in learning about, preparing for and pursuing careers in mental health professions (eg, psychology, social work, nursing). At an individual level, such practices have the potential to support non-sport identity and transition from sport; at a systemic level, such steps could help address the shortage of mental health clinicians of colour.

Reporting experiences of discrimination

Summit participants discussed the importance of student-athletes of colour being able to safely report experiences of discrimination, and the need for organisational accountability about reports of discrimination. Participants expressed concerns about retribution, and a possible reluctance by student-athletes

to use existing reporting mechanisms. Concepts did not address specific reporting mechanisms, as more research is needed to evaluate the acceptability and impact of different reporting mechanisms across sport settings. Recognising that not everyone will feel comfortable engaging in formal and identifiable reporting processes, Summit participants suggested an annual student-athlete survey designed to anonymously solicit information about experiences of racial trauma and discrimination in athletics settings (eg, as perpetuated by coaching staff, teammates medical staff, athletics department administration, fans). This was framed as a possible mechanism for increasing organisational accountability.

Organisational communication

Summit participants emphasised the importance of explicit communication (at least annually) by coaches and athletics department staff that they will not tolerate discrimination on the basis of race, ethnicity or other identities, including but not limited to gender or sexual orientation. However, they also cautioned that such statements cannot stand alone, and must be a reflection of the organisation's engagement in real and sustained efforts to address discrimination.

Accountability

A major theme in stakeholder feedback throughout the consensus process was the importance—and difficulty—of accountability. Proposed ideas included conducting an annual student-athlete survey to anonymously solicit feedback on athletic department initiatives related to racism (eg, reporting, education) and conducting an annual athletic department self-evaluation of current racial and ethnic representation among student-athletes, coaches, sports medicine staff, athletics administration and other student-athlete support positions such as student-athlete development personnel. Recognising that simply collecting this information is not sufficient, proposed concepts also attended to how this information might be used by institutions. Regularly reviewing internal student-athlete survey data with a multidisciplinary group that includes representatives from outside of athletics and engaging diverse stakeholders in agenda setting was one idea that was specifically referenced.

Limitations

The small number of relevant original peer-reviewed publications available at the time of the Summit limited the exploration phase of the study. As more research is conducted, concepts should be revisited. The present consensus process was focused narrowly on identifying concepts that might facilitate the efforts of NCAA member schools as they aim to support the mental health needs of student-athletes of colour. Concepts were perceived by Summit participants to be usable, feasible and otherwise appropriate for the range of resource levels and administrative structures of NCAA member schools. Further research is needed to evaluate their adoption, implementation and effectiveness in improving athlete well-being within collegiate athletics. Such information can inform a continued process of refining the guidance and support that is provided to member institutions. We note that the consensus process focused broadly on student-athletes of colour, while recognising that this group of more than one-quarter of all collegiate athletes in the USA have noteworthy variability in terms of their identities, lived experiences, and risk and protective factors related to mental health. Further, the majority of student-athletes of colour in the USA attend predominantly PWIs, with an additional group

attending HBCUs. Representatives from HBCUs participated as part of the consensus process; however, the resulting foundational concepts may not fully reflect the experiences of this group of student-athletes. More research is needed on determinants of racial and ethnic differences in mental health among student-athletes, including the role of institutional and peer factors—at HBCUs and PWIs. Generalisability to other sport systems within the USA, and in other countries, may be limited. Statements require further consideration and potentially adaptation to fit with setting-specific organisational structures, resources and cultural contexts.

CONCLUSION

The present consensus process produced a number of concepts that can serve to inform and shape NCAA membership efforts and potentially those of other sporting organisations, to support the mental health needs of student-athletes of colour.

Twitter Emily Kroshus @ekroshus

Acknowledgements We thank all participants in the NCAA Summit on Diverse Student-Athlete Mental Health and Well-Being (see online supplemental table 3). Special thanks to Victor Kidd for assistance with the narrative review.

Contributors All authors made substantial contributions to the conception or design of the work or the acquisition, analysis or interpretation of data for the work; and drafting the work or revising it critically for important intellectual content; and provided final approval of the version to be published; and agree to be accountable for all aspects of the work.

Funding This study was funded by the National Collegiate Athletic Association.

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval This study involves human participants but the University of Washington IRB (STUDY00011065) exempted this study. Participants (eg, summit attendees involved in rating concepts) were provided with information about the study, per IRB-approved methods.

Provenance and peer review Not commissioned; externally peer reviewed.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

ORCID iDs

Emily Kroshus <http://orcid.org/0000-0002-7484-2601>

Brian Hainline <http://orcid.org/0000-0002-0233-2434>

REFERENCES

- Kroshus E, Davoren AK. Mental health and substance use of sexual minority college athletes. *J Am Coll Health* 2016;64:371–9.
- Ballesteros J, Tran AGTT. Under the face mask: Racial-ethnic minority student-athletes and mental health use. *Journal of American College Health* 2020;68:169–75.
- Tran AGTT. Looking forward to student-athlete mental health: racial/ethnic trends from 2010 to 2015. *J Am Coll Health* 2021;69:1–9.
- Rao AL, Asif IM, Drezner JA, et al. Suicide in national collegiate athletic association (NCAA) athletes: a 9-year analysis of the NCAA resolutions database. *Sports Health* 2015;7:452–7.
- Li H, Moreland JJ, Peek-Asa C, et al. Preseason anxiety and depressive symptoms and prospective injury risk in collegiate athletes. *Am J Sports Med* 2017;45:2148–55.
- Smedley A, Smedley BD. Race as biology is fiction, racism as a social problem is real: anthropological and historical perspectives on the social construction of race. *Am Psychol* 2005;60:16–26.
- Anon. *Who invented the concept of race?* Routledge, 2020: 83–103.
- Bailey ZD, Krieger N, Agénor M, et al. Structural racism and health inequities in the USA: evidence and interventions. *Lancet* 2017;389:1453–63.
- Williams DR, Lawrence JA, Davis BA. Racism and health: evidence and needed research. *Annu Rev Public Health* 2019;40:105–25.

- 10 McGuire TG, Miranda J. New evidence regarding racial and ethnic disparities in mental health: policy implications. *Health Aff* 2008;27:393–403.
- 11 Betancourt JR, Green AR, Carrillo JE, et al. Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Rep* 2003;118:293–302.
- 12 Reardon CL, Hainline B, Aron CM, et al. Mental health in elite athletes: international Olympic Committee consensus statement (2019). *Br J Sports Med* 2019;53:667–99.
- 13 Mental health best practices. Available: <http://www.ncaa.org/sport-science-institute/mental-health-best-practices> [Accessed 24 Jun 2020].
- 14 NCAA. NCAA demographics database. Available: <https://www.ncaa.org/sports/2018/12/13/ncaa-demographics-database.aspx> [Accessed 24 Feb 2022].
- 15 Adler M, Ziglio E. *Gazing into the Oracle: the Delphi method and its application to social policy and public health*. Jessica Kingsley Publishers, 1996.
- 16 Alvidrez J, Castille D, Laude-Sharp M, et al. The National Institute on minority health and health disparities research framework. *Am J Public Health* 2019;109:S16–20.
- 17 Alegria M, Alvarez K, Ishikawa RZ, et al. Removing obstacles to eliminating racial and ethnic disparities in behavioral health care. *Health Aff* 2016;35:991–9.
- 18 Brown AF, Ma GX, Miranda J, et al. Structural interventions to reduce and eliminate health disparities. *Am J Public Health* 2019;109:S72–8.
- 19 Ghavami N, Katsiaficas D, Rogers LO. Chapter Two - Toward an Intersectional Approach in Developmental Science: The Role of Race, Gender, Sexual Orientation, and Immigrant Status. In: Horn SS, Ruck MD, Liben LS, eds. *Advances in child development and behavior*. Elsevier, 2016: 31–73.
- 20 Vu M, Li J, Haardörfer R, et al. Mental health and substance use among women and men at the intersections of identities and experiences of discrimination: insights from the intersectionality framework. *BMC Public Health* 2019;19:108.
- 21 Feagin J, Bennefield Z. Systemic racism and U.S. health care. *Soc Sci Med* 2014;103:7–14.
- 22 Boyd R, Lindo E, Weeks L. On racism: a new standard for publishing on racial health inequities. *Health Affairs* 2020 https://www.healthaffairs.org/doi/10.1377/hblog20200630.939347/full/?fbclid=IwAR1DIY-iv5RR4G9Tum3PIHy6hVcl6u7g_UlieBE4YJw_sf1h6W8ouMns2U&
- 23 Kroshus E, Cameron KL, Coatsworth JD, et al. Improving concussion education: consensus from the NCAA-Department of Defense Mind Matters Research & Education Grand Challenge. *Br J Sports Med* 2020;54:1314–20.
- 24 Kroshus E, Wagner J, Wyrick D, et al. Wake up call for collegiate athlete sleep: narrative review and consensus recommendations from the NCAA Interassociation Task force on sleep and wellness. *Br J Sports Med* 2019;53:731–6.
- 25 Steinfeldt JA, Steinfeldt MC. Profile of masculine norms and help-seeking stigma in college football. *Sport Exerc Perform Psychol* 2012;1:58–71.
- 26 Naoi A, Watson J, Deaner H, et al. Multicultural issues in sport psychology and consultation. *Int J Sport Exerc Psychol* 2011;9:110–25.
- 27 Sadberry S, Mobley M. Sociocultural and mental health adjustment of black Student-Athletes: Within-Group differences and institutional setting. *J Clin Sport Psychol* 2013;7:1–21.
- 28 Wilkerson T, Stokowski S, Fridley A. Black Football Student-Athletes' Perceived Barriers to Seeking Mental Health Services. *J Issues Intercol Athl* 2020.
- 29 Johfre SS, Freese J. Reconsidering the reference category. *Social Methodol* 2021;008117502098263.
- 30 Blake T. In the fight for racial justice, the sidelines are no longer an option. *Br J Sports Med* 2020;54:1245–6.
- 31 Zondi PC, Austin AV. A question of colour: systemic racism in sports and exercise medicine. *Br J Sports Med* 2021;55:526–7.
- 32 Marino KR, Vishnubala D, Ahmed OH, et al. Embrace your discomfort: leadership and unconscious bias in sport and exercise medicine. *Br J Sports Med* 2021;55:303–4.
- 33 NCAA Sport Science Institute. Mental health best practices. *NCAA Best Pract*.

Supplementary Table 1. Stakeholder ratings of institutional-level actions to improve mental wellness of BIPOC athletes (n=18)

Action	Utility Mean (SD) % ≥ 7	Feasibility Mean (SD) % ≥ 7
Coaches		
1. Annual coach self-assessment of implicit biases, attitudes, and coaching practices as they relate to the experiences and wellbeing of BIPOC athletes	8.22 (1.26) 89%	7.44 (1.58) 78%
2. Annual coach training that addresses the history of racism in US sport	7.78 (1.22) 89%	7.67 (1.61) 83%
3. Annual coach training that addresses anti-racist coaching practices	8.50 (1.15) 89%	8.28 (1.36) 89%
4. Annual coach training that addresses trauma-sensitive coaching practices	8.33 (0.91) 100%	7.94 (1.21) 94%
5. Annual statement by coaches to team members affirming that discrimination on the basis of race, ethnicity, or other identities, including but not limited to gender, or sexual orientation will not be tolerated.	8.22 (1.52) 94%	8.39 (1.09) 89%
6. Annual dissemination of information from coaches to team members about institutional process for reporting experiences of discrimination	8.00 (1.64) 83%	7.94 (1.43) 83%
7. Documented plan for coach support of student-athletes in non-sport skill development opportunities, including accommodation of such opportunities as part of practice, competition and travel schedules	7.78 (1.59) 72%	6.61 (1.94) 50%
8. Annual evaluation of coach non-sport skill development plan with athletics administration	7.67 (1.64) 83%	7.44 (1.38) 72%
Student athletes		
1. Annual training for student-athletes that addresses the history of racism in US sport	7.78 (1.80) 83%	7.78 (1.66) 78%
2. Annual training for student-athletes that addresses anti-racism, as applied to the sport and college setting	8.28 (1.23) 94%	7.83 (1.50) 78%
3. Annual training for student-athletes that supports culturally sensitive skills for coping with stress	8.50 (0.79) 94%	8.00 (1.24) 89%
4. Meetings for student-athletes with career services or similar personnel at least an annually to discuss career planning for life after sport	8.33 (1.57) 89%	8.00 (1.53) 83%
Athletic department administrative staff		
1. Annual athletic department staff self-assessment of implicit biases and attitudes as they related to the experiences and wellbeing of BIPOC athletes.	8.17 (1.72) 83%	8.17 (1.25) 89%
2. Annual training for athletic department staff related to implicit biases and anti-racism.	8.33 (1.64) 89%	8.39 (1.20) 89%
3. Annual training for athletic department staff that addresses the history of racism in sport.	8.00 (1.78) 89%	7.44 (2.23) 83%
Families of student-athletes		
1. Annual dissemination to families of student-athletes information about the mental health services on campus and how to access those services.	8.44 (1.10) 94%	8.33 (1.33) 89%
2. Annual dissemination to families of student-athletes information about the benefits of mental health care for athletic and academic performance.	8.39 (1.20) 94%	8.33 (1.28) 83%
3. Annual dissemination to families of student-athletes information aimed at normalizing mental health help seeking including, for example, statistics on use of mental health services and/or affirmation by key athletic stakeholders (e.g., coaches) about the value of mental health care.	8.17 (1.82) 83%	7.89 (1.78) 83%
Healthcare personnel		
1. Annual training of healthcare personnel on the history of racism in healthcare/medicine.	8.28 (1.64) 94%	7.50 (2.07) 83%
2. Annual training of healthcare personnel on culturally competent healthcare.	8.61 (0.85) 94%	7.94 (1.30) 83%
3. Annual training of healthcare personnel on trauma informed clinical practices.	8.50 (0.92)	7.94 (1.26)

	94%	89%
4. Inclusion of screening for mental health disorders as part of the annual pre-participation exam in each case administered in a manner that allows for student-athlete privacy.	8.72 (0.57) 100%	7.44 (2.06) 78%
5. Dissemination of information about institutional services to support mental health as part of annual mental health screening for student-athletes.	8.78 (0.55) 8.79 100%	7.94 (2.10) 83%
6. Student-athlete accessible identity-based support groups that are supervised by a licensed mental healthcare professional.	8.17 (1.82) 83%	7.22 (2.02) 67%
7. Student-athlete accessible telehealth and/or other clinical care alternatives that recognize that different student-athletes will prioritize different types of care and characteristics of care providers.	8.39 (1.33) 89%	7.56 (1.79) 72%
8. Annual review of institutional procedures that support continuity of and coverage for student-athlete mental health care including aspects of off campus care (e.g., during school breaks, or remote schooling due to external events) and care away from and after collegiate competition (i.e., during periods of injury and removal from team for following graduation or other departure).	8.56 (1.04) 94%	7.78 (1.70) 78%
Athletic department administrative leadership		
1. Prioritization of racial/ethnic diversity of mental healthcare providers in the hiring process.	8.00 (1.85) 83%	7.06 (2.18) 67%
2. Collaborative identification by athletics and other campus departments of opportunities to better support BIPOC students (including student-athletes) in their evaluation and pursuit of mental health professions (e.g., psychology, social work, nursing). Such support could include helping fund a student stipend, providing access to athletes for supervised clinical training, and engaging current licensed mental health professionals in athletics in helping provide supervision or training for athletics-specific issues in mental healthcare.	7.89 (2.03) 89%	6.89 (1.57) 61%
3. Department and/or campus policies/processes that encourage and facilitate the reporting of experiences of racial discrimination, and for supporting the individual reporting the experience of racial discrimination.	8.44 (1.15) 89%	8.00 (1.24) 89%
4. Annual student-athlete survey designed to anonymously solicit information about experiences of racial trauma and discrimination in athletics settings (i.e., as perpetuated by coaching staff, teammates medical staff, athletic department administration, fans).	8.78 (0.43) 100%	8.67 (0.59) 100%
5. Annual student-athlete survey designed to anonymously solicit feedback on athletics department initiatives related to racism (e.g., reporting, education).	8.67 (0.69) 100%	8.50 (0.92) 94%
6. Annual review of all student-athlete surveys with a multi-disciplinary group that includes representatives from institutional leadership outside of athletics.	8.28 (1.18) 89%	7.17 (2.01) 61%
7. Annual dissemination of information to all athletics personnel (student-athletes, coaches, staff) about institutional process for reporting experiences of discrimination.	8.28 (1.41) 89%	8.06 (1.59) 78%
8. Annual statement affirming that discrimination on the basis of race, gender, or sexual orientation will not be tolerated.	7.67 (2.43) 83%	7.89 (2.52) 83%
9. Incorporation of review of relevant anonymous and other feedback about discrimination as part of annual review process for coaches and other athletic department staff.	8.65 (0.86) 94%	8.24 (1.25) 83%
10. Public identification and recognition of positive contributions to diversity and inclusion within athletic department.	7.61 (2.45) 94%	7.50 (2.57) 83%
11. Annual athletics department self-evaluation of current racial/ethnic representation among student-athletes, coaches, sports medicine staff, athletics administration, and other student-athlete support positions such as student-athlete development personnel	8.33 (1.19) 89%	7.89 (1.53) 83%
12. Annual athletics department self-evaluation of current policies and practices related to inclusion in the hiring process.	7.61 (2.09) 78%	7.11 (2.25) 67%
13. Annual athletics department self-evaluation of current policies and practices related to inclusion in the retention process.	7.56 (2.15) 78%	6.94 (2.13) 61%
14. Demonstrated commitment by athletics department to the development of student-athletes who successfully transition to life after sport.	8.39 (1.29) 89%	7.56 (1.92) 72%
15. Documented departmental process for supporting student-athletes in the transition from sport (due to injury or following graduation or other departure).	8.39 (1.20) 89%	7.33 (2.17) 72%
16. Annual review of departmental process for support student-athlete transition from sport	7.94 (1.39)	6.50 (2.15)

by a multidisciplinary team that includes representation by a racially diverse group of former athletes	83%	50%
17. Meetings between Faculty Athletic Reps (FARs), coaching staff, and team captains, at least annually, to identify barriers and opportunities to support team members to pursue non-sport skill development opportunities.	8.33 (1.14) 83%	7.78 (1.73) 83%
18. Annual review of practices and processes to confirm that responsibility for stakeholder education about issues related to racism does not fall to BIPOC student-athletes.	7.94 (1.63) 78%	7.50 (1.76) 72%
19. Annual meeting of BIPOC advisory board and athletic department staff to review and discuss race-related initiatives and identify approaches to education related to racism/anti-racism.	7.94 (1.83) 83%	7.89 (1.91) 83%

Supplementary Table 2. Results of second round of participant ratings on institutional-level actions to improve mental wellness that were modified after first round of ratings (n=16)

Action	Utility Mean (SD) % ≥ 7	Feasibility Mean (SD) % ≥ 7
1. Coaches complete an annual self-assessment about the extent to which they are supporting or encouraging team members to participate in non-sport skill development opportunities.	8.4 (0.9) 94%	7.3 (1.5) 69%
Athletic departments address coach engagement in supporting athletes in non-sport skill development as part of coach evaluations.	8.1 (1.2) 88%	7.6 (1.4) 81%
3. Athletic departments ensure that a process is in place for considering racial/ethnicity diversity as a factor in staff hiring.	8.6 (0.8) 93%	7.9 (1.2) 87%
4. Athletic departments work with other campus departments to better support BIPOC students (including student-athletes) in learning about, preparing for, and pursuing careers in mental health professions (e.g., psychology, social work, nursing).	8.3 (1.0) 94%	7.3 (1.4) 75%
5. Athletic departments conduct an annual student-athlete survey designed to anonymously solicit feedback on engagement in non-sport skill building activities, and barriers in the athletic setting (i.e., scheduling) to engaging in such activities.	8.4 (1.1) 94%	7.8 (1.7) 88%
6. Athletic departments regularly review internal student-athlete survey data with a multi-disciplinary group that includes representatives from outside of athletics.	8.1 (1.1) 94%	7.8 (1.3) 88%
7. Athletic departments regularly conduct a self-evaluation of current policies and practices related to inclusion in the hiring process, and engage in goal setting and action planning related to achieving desired levels of staff diversity.	8.1 (1.3) 94%	6.9 (1.7) 69%
8. Athletic departments regularly conduct a self-evaluation of current policies, practices, and outcomes related to inclusion in staff retention, and engage in goal setting and action planning related to addressing inclusion in the retention process.	7.9 (2.0) 94%	7.3 (2.1) 75%
9. Athletic departments regularly conduct a self-evaluation of policies and practices related to supporting student-athletes transition to life after sport, and engage in goal setting and action planning related to supporting this transition.	8.3 (0.9) 94%	7.8 (1.4) 81%
10. Athletic departments hold a regular meeting with a BIPOC advisory board to review and discuss race-related initiatives, including but not limited to: education, non-sport skill building and transition from sport.	8.4 (1.0) 94%	8.0 (1.2) 81%

Supplementary Table 3. Voting-eligible participants in NCAA Summit on Diverse Student-Athlete Mental Health and Wellbeing

Steering committee member affiliation	Name
Senior Associate Athletic Director for Mental Health, Athletics Diversity Equity and Inclusion, Temple University	Dr. Stephany Coakley (Co-chair)
Senior Associate Athletic Director and Chief Health & Welfare Officer, University of Michigan	Darryl Conway (Co-chair)
Director of Student Counseling, Indiana State University	Dr. Ken Chew,
NCAA Committee on Competitive Safeguards and Medical Aspects of Sports Chair	Dr. Jess Mohler,
National organization	Representative
AAKOMA Project	Dr. Alfiée Breland-Noble
Alliance of Social Workers in Sports	Anita Daniels
American Medical Society for Sports Medicine	Dr. Ashwin Rao
American Orthopaedic Society for Sports	Dr. Timothy Johnson
APA Division 47, Society for Sport, Exercise & Performance Psychology	Dr. Brandonn Harris
Association for Applied Sport Psychology	Dr. Kensa Gunter
Athletes & Advocates for Social Justice Sports	Emmett Gill
Clinical & Counseling Sport Psychology Association	Dr. Chris Bader
College Athletic Trainers Society	Josephine Lee
College Football Parents 24/7	Mya Hinton
Department of Defense	CAPT Chad Bradford
Faculty Athletics Representatives Association	Dr. Brian Janssen
Higher Education Mental Health Alliance	Dr. Chris Corbett
International Olympic Committee	Dr. Claudia Reardon
International Society for Sport Psychiatry	Dr. Todd Stull
National Alliance on Mental Illness	Katrina Gay
National Athletic Trainers' Association	Carla Gilson
National Medical Association	Dr. Yolanda Malone-Gilbert
Silence the Shame	Shanti Das
Steve Fund	Dr. Ketra Armstrong
United States Olympic & Paralympic Committee	Nzingha Prescod
United States Tennis Association	Violet Clark
NCAA Membership Affiliation	Representative
NCAA Board of Governors Student-Athlete Engagement Committee	Jalia Tolbert
NCAA Committee on Promoting Cultural Diversity and Excellence	Dr. Britton Katz
NCAA Committee on Women's Athletics	Miriam Merrill
NCAA Division I Student-Athlete Advisory Committee	Alexis Garrett
NCAA Division II Student-Athlete Advisory Committee	Angel Bautista-Ponce
NCAA Division III Student-Athlete Advisory Committee	Devonte Amos

NCAA Football Student-Athlete	Kassidy Woods
NCAA Basketball Student-Athlete	John-Michael Wright
Former NCAA Student-Athlete	Courtney Turner
NCAA Division I Governance	Shamaree Brown
NCAA Division II Governance	Kerri Nakamoto
NCAA Division Governance	Adam Hutchinson
Historically Black Colleges and Universities	Dozie Iguagwu
NCAA Minority Opportunities and Interests Committee	Roy Brown III
NCAA Committee on Woman's Athletics	Miriam Merrill
Iowa State University, Sport and Counseling Psychologist	Dr. Marty Martinez
Pac-12 Mental Health Task Force Vice-Chair	Dr. Robin Scholefield
University of Michigan, Clinical Assistant Professor of Social Work, Assistant Athletic Director, Director of Athletic Counseling	Dr. Abigail Eiler
Virginia Commonwealth University, School of Social Work, Adjunct Faculty/Program Director, Office of Victim Services And Justice Grants, Sports psychotherapist	Dr. Victor Kidd