

1 **Student-Athletes', Coaches' and Administrators' Perspectives of Sexual Violence**
2 **Prevention on Three Campuses with NCAA Division I and II Athletic Programs**
3

4 David Stoddard Carey^{1,2}, Stephanie Sumstine, MPH^{2,3}, Claire Amabile^{1,2,4}, Heather Helvink⁴,
5 Cierra Raine Sorin, MA^{2,5}, Dallas Swendeman, PhD, MPH^{2,3}, Eunhee Park, MPH^{2,6}, Jennifer A.
6 Wagman, PhD, MHS^{2,6}
7

8 ¹ *University of California Santa Barbara, Department of Global Studies Alumni*

9 ² *University of California Global Health Institute Women's Health, Gender, and Empowerment*
10 *Center of Expertise*

11 ³ *Department of Psychiatry & Biobehavioral Sciences, David Geffen School of Medicine,*
12 *University of California Los Angeles*

13 ⁴ *Center on Gender Equity and Health, School of Medicine, University of California San Diego*

14 ⁵ *University of California Santa Barbara, Department of Sociology*

15 ⁶ *Department of Community Health Sciences, Fielding School of Public Health, University of*
16 *California Los Angeles*
17

18 Corresponding author: Jennifer A. Wagman, PhD, MHS
19 Assistant Professor
20 UCLA Fielding School of Public Health
21 Department of Community Health Sciences
22 650 Charles E. Young Drive South
23 46-071B CHS, Box 951772
24 Los Angeles, CA 90095-1772
25 Phone: (310) 825-5047
26 Email: jennwagman@ucla.edu
27
28
29
30
31
32

33 **ACKNOWLEDGEMENTS:** This research was supported by a grant from the Centers for
34 Disease Control and Prevention (CDC) [NUF2CE002403] and the California Department of
35 Public Health (CDPH) [Agreement # 16-10844]. Additional support was provided by
36 Beneventures Foundation and the UC Global Health Institute (UCGHI) Women's Health,
37 Gender, and Empowerment Center of Expertise (WHGE COE). We would like to acknowledge
38 all the students, staff, faculty, and community stakeholders who participated in this study.
39

40 **CONFLICTS OF INTEREST:** All authors declare no conflicts of interest.
41
42

43 **Student-Athletes', Coaches' and Administrators' Perspectives of Sexual Violence**
44 **Prevention on Three Campuses with NCAA Division I and II Athletic Programs**

45

46

Abstract

47 Research has found associations between intercollegiate athletics and risk for sexual violence,
48 and that sexual violence is more pervasive at colleges and universities with National Collegiate
49 Athletic Association (NCAA) Division I athletic programs, relative to NCAA Division II, NCAA
50 Division III and no athletic programs. Simultaneously, sports involvement is linked with
51 prosocial values and there are documented developmental benefits of sports participation.
52 College athletic programs hold promise for fostering sexual violence prevention but there is
53 limited knowledge about how student-athletes conceptualize sexual violence and how athletes,
54 coaches and administrators perceive available prevention and response programs. We conducted
55 7 focus group discussions (FGDs) and 21 in-depth interviews (IDIs) with student-athletes,
56 athletic directors, and coaches from public university Division I (n=2) and Division II (n=1)
57 campuses. We assessed perceptions of sexual violence, knowledge and opinions of available
58 prevention and response programs, and sought input on how to bridge gaps in campus sexual
59 violence policies. Student-athletes associated sexual violence with alcohol in their relationships
60 with peers and asymmetrical power dynamics in relationships with coaches and faculty. Athletes
61 felt strong connections with teammates and sports programs but isolated from the larger campus.
62 This created barriers to students' use of services and the likelihood of reporting sexual violence.
63 Athletes felt the mandatory sexual violence prevention training, including additional NCAA
64 components, were ineffective and offered to protect the university and its athletic programs from
65 legal complications or cultural ridicule. Athletic staff were aware of policies and programs for

66 reporting and referring sexual violence cases but their knowledge on how these served students
67 was limited. Student-athletes were uncomfortable disclosing information regarding relationships
68 and sexual violence to coaches and preferred peer-led prevention approaches.

69 **Keywords**

70 Reporting/Disclosure < Sexual Assault, Support seeking < Sexual Assault, Sexual Harassment;
71 Prevention, Sports, College Athlete, Sport, Student resources

Accepted Draft

72 **Student-Athletes', Coaches' and Administrators' Perspectives of Sexual Violence**
73 **Prevention on Three Campuses with NCAA Division I and II Athletic Programs**

74

75

Introduction

76 In 2020, sexual violence remains a critical issue on U.S. college and university campuses, despite
77 the federal Clery Act, mandatory sexual assault prevention education at some schools, and
78 targeted campus violence prevention programs (Gash & Harding, 2018) in the #MeToo era.
79 Sexual violence is an all-encompassing, non-legal term that refers to any sexual act, comment, or
80 advance against a person's sexuality using coercion, by any person regardless of their
81 relationship to a victim that includes, but is not limited to, sexual assault (including rape) and
82 sexual harassment (WHO, 2002).

83 Estimates suggest one third of all female and one tenth of all male undergraduates in the U.S.
84 experience sexual violence at some point during their time at college or university (Fedina,
85 Holmes, & Backes, 2018). Additionally, female undergraduates report significantly more
86 incidents than male undergraduates (Banyard et al., 2007). Research also suggests other groups
87 have heightened vulnerability for experiencing campus sexual violence, including gay versus
88 heterosexual men; bisexual versus heterosexual people, and black transgender versus white
89 transgender people (Fedina et al., 2018). Identifying those at highest risk for violence on
90 campuses is essential for designing effective prevention and treatment approaches. Likewise,
91 perpetrators must be identified, held accountable, offered their own treatment and involved in
92 prevention programming.

93 Several of the most well-publicized cases of sexual violence to emerge during the #MeToo
94 era, so far, have involved key figures in intercollegiate athletics. Perpetrators have included
95 student-athletes (e.g., Baylor University Bears football players were convicted for sexual assault
96 between 2012 and 2016), coaches (e.g., Ohio State University diving coach, William Bohonyi,
97 who was found guilty of sexually abusing a 16 year-old female athlete), and athletic staff (e.g.,
98 Larry Nassar, former physician at Michigan State University convicted of sexually abusing
99 hundreds of female athletes). College sports systems represent a unique population including
100 450,000 student-athletes for understanding the problem of campus violence and for developing
101 solutions. This is particularly the case given research indicating that, compared to non-athletes,
102 male college student-athletes are more likely to use sexual violence against both female and male
103 undergraduates (Bonomi et al., 2018; Schaaf et al., 2019) and to be serial perpetrators (Foubert,
104 Clark-Taylor, & Wall, 2020; Seabrook, McMahon, & O'Connor, 2018).

105 The National Collegiate Athletic Association (NCAA) is the organization that regulates and
106 administers intercollegiate athletics at four year colleges in the U.S. NCAA member institutions
107 are divided into 3 divisions: Division I, Division II, and Division III. There are 351 colleges and
108 universities in Division I and these schools have the largest student bodies, athletics budgets, and
109 athletic scholarships. There are 308 and 443 colleges and universities in Divisions II and III,
110 respectively, and smaller schools generally compete in these two divisions (“NCAA Recruiting
111 Facts,” 2016). In 2015, the NCAA formed a Sexual Assault Task Force to help athletic
112 departments engage in education, collaboration and compliance surrounding sexual violence
113 (National Collegiate Athletic Association, 2016). To guide understanding of sexual violence, as
114 it occurs on a continuum, the NCAA provides the following definitions of sexual assault, rape
115 and sexual harassment. *Sexual assault* refers to sexual contact or behavior that occurs without

116 explicit consent and includes forcible and non-forcible rape and sexual battery. *Rape* is one form
117 of sexual assault that is uniformly defined as “penetration, no matter how slight, of the vagina or
118 anus with any body part or object, or oral penetration by a sex organ of another person, without
119 the consent of the victim.” *Sexual harassment* includes unwelcome sexual advances, requests for
120 sexual favors, and other verbal or physical harassment of a sexual nature that prohibits a person’s
121 ability to participate in, or benefit from, a school’s education program or workplace, including
122 conditioning the granting of an educational benefit based on submission of sexual conduct
123 (National Collegiate Athletic Association & Sport Science Institute, 2016).

124 In 2017, the NCAA Board of Governors adopted a policy on campus sexual violence that
125 requires campus leaders, including university chancellors or presidents, directors of athletics and
126 Title IX coordinators at each NCAA member institution to certify that athletes, coaches and
127 administrators have been educated on sexual violence, that athletic departments are
128 knowledgeable and compliant with school policies on sexual violence, and that institutional
129 sexual violence policies and processes and the Title IX coordinator’s contact information is
130 available to everyone in the department of athletics (National Collegiate Athletic Association &
131 Sport Science Institute, 2016). These are important actions given research suggesting higher rates
132 of sexual assault occur on NCAA campuses, relative to non-member campuses (Wiersma-
133 Mosley, Jozkowski, & Martinez, 2017) and significantly more violence against women occurs on
134 Division I campuses versus Division II, III schools and universities with no athletic programs
135 (Wiersma-Mosley & Jozkowski, 2019).

136 Individual colleges and universities have also developed policies and procedures to address
137 violence and make campuses safer for students, including focused programs for student-athletes,
138 many of which aim to develop positive player/coach relationships by capitalizing on coaches’

139 positions of authority and influence over athletes. Some institutions provide coaches with tools to
140 help student-athletes develop leadership and non-violent conflict resolution skills (Kimble,
141 Russo, Bergman, & Galindo, 2010). While few of these programs have been evaluated, some
142 evidence suggests coach-led interventions can effectively reduce college student-athletes'
143 alcohol use (Foubert et al., 2020), increase awareness of campus resources for sexual violence
144 and shift attitudes about the acceptability of interpersonal violence (Tredinnick & McMahon,
145 2019). Bystander prevention is another commonly used approach with student-athletes that is
146 promoted by the NCAA (National Collegiate Athletic Association & Sport Science Institute,
147 2016). A study with Division I football players found those trained by their coach to recognize
148 signs, symptoms and consequences of sexual violence and unhealthy relationships were more
149 likely to positively intervene as bystanders in risky situations (Kroshus, Paskus, & Bell, 2018).

150 Important gaps remain in our understanding of sexual violence prevention among
151 intercollegiate athletes. For instance, although higher rates of sexual assault have been recorded
152 on Division I campuses versus campuses with Division II or III or no athletic programs, we do
153 not know how NCAA student-athletes conceptualize sexual violence, in or out of the context of
154 sports. We are also unaware of how they perceive current sexual violence policies and programs
155 at their college/university or within their athletic program, or how athletic directors and coaches
156 feel about their role. Further, despite many colleges and the NCAA promoting coach-led
157 interventions and peer-to-peer bystander training, the acceptability of these programs has not
158 been widely assessed. The current study aimed to fill these gaps by talking with intercollegiate
159 student-athletes, coaches and administrators at three NCAA Division I and II university
160 campuses about sexual violence prevention and response in their athletic programs, and seeking

161 their thoughts on how to foster partnerships between academic and athletic departments to create
162 a climate and culture that promotes safe relationships and prevents sexual violence on campus.

163 **Methods**

164 **Research Setting**

165 The University of California is a public university system with 10 undergraduate campuses, eight
166 of which are part of the NCAA. Six are Division I, one is Division II, and one is Division III.

167 The current study took place at two of the Division I UC campuses (Los Angeles [UCLA] and
168 Santa Barbara [UCSB]) and one Division II UC campus (San Diego [UCSD]). UCLA is part of
169 the Pac-12 Conference and the Mountain Pacific Sports Federation (MPSF). Because UCLA has
170 a football program, it is further classified as one of the NCAA Division I Football Bowl

171 Subdivision (FBS) campuses, placing it in the top level of college football in the United States
172 and among the largest and most competitive schools in the NCAA. Neither UCSB nor UCSD
173 have football programs on their campus. As a Division I school, UCSB is considered a Non-
174 football, Multi-sport campus. It is part of the Big West Conference, with the exception of men's
175 water polo and volleyball teams, and men's and women's swimming, which are in the MPSF.

176 UCSD is currently Division II but in 2017 accepted an invitation to join the Big West
177 Conference and transition over a period of 6 years to NCAA Division I. Men's volleyball and
178 women's water polo have already started their Big West participation and a full Big West
179 competitive slate will take place in the current, 2020-21 academic year.

180 Research for this study was led by faculty investigators at each campus, and a team of
181 sixteen undergraduate (n=10) and graduate (n=6) student research interns at UCLA (5 students),
182 UCSB (5 students), and UCSD (6 students). Project coordinators supervised and oversaw all

183 student study activities on each campus. All research staff received comprehensive training in
184 research ethics and compliance, qualitative research methods, and trauma-informed care.

185 **Participants and Procedures**

186 Participants were recruited from each campus and included student-athletes, coaches (both
187 assistant and head coaches) and athletic directors (including overall director, associate director,
188 deputy director, etc.). Eligibility criteria for all participants were: 1) age of 18 years or older; 2)
189 currently attending or working at UCLA, UCSB, or UCSD; 3) having a way of being contacted
190 either by phone or email; 4) consenting to be involved in the study; and 5) English-speaking.
191 Students were eligible if they played on a Division I or II team. NCAA athletes were prioritized
192 for recruitment. However, we had difficulty in reaching our target number of student-athlete
193 participants so ended up allowing club-level sports athletes to participate as well, if they
194 expressed interest in enrolment. Coaches and administrators were only eligible if they had been
195 working at the campus for at least 6 months.

196 Recruitment involved a combination of targeted and snowball sampling. Email messages
197 were sent to all NCAA Division I and II student-athletes, coaches, and athletic directors (ADs),
198 recruitment flyers were posted near each campus' athletic department and a snowball sample was
199 also used. All interested individuals were asked to complete a short online survey to screen for
200 eligibility. Eligible participants were connected, via email or cell phone, to a student researcher
201 to schedule a date, time and location for an in-depth interview (IDI) or focus group discussion
202 (FGD). All data collection was done on campus, at an accessible and convenient location like
203 campus library study room and athletic department office where privacy could be ensured. All
204 participants provided written informed consent to participate in the study and to have their data

205 collection session audio recorded. All participants received a \$25 Visa gift card in compensation
206 for their time. The study protocol was approved by the UCSD Human Research Protection
207 Program, with reliance approval from the institutional review boards (IRB) at UCLA and UCSB.

208 In-Depth Interviews (IDIs) were conducted with student-athletes, coaches and athletic
209 directors. IDIs with students aimed to explore their attitudes about relationships and sex, their
210 definitions of sexual violence, sexual harassment and healthy relationships, and their awareness
211 of available services, prevention programs, and/or policies addressing sexual violence at the
212 university and in their athletic department. We sought students' opinions on how they can
213 become more involved in making the campus an environment that does not tolerate sexual or
214 gender-based violence. IDIs with coaches and athletic directors aimed to elucidate department
215 procedures, services, and protocols for sexual violence response and prevention. Focus Group
216 Discussions (FGDs) were conducted with student-athletes only and aimed to understand group
217 norms surrounding the sports environment and how athletics were felt to impact campus safety,
218 healthy socializing and acceptance/rejection of relationship violence. We explored students'
219 definitions of healthy vs. unhealthy relationships and sex as well as sexual assault and sexual
220 harassment. Each discussion was facilitated by a moderator and a note-taker. The goal of each
221 FGD was to learn how students feel about balancing life as athletes and college students during
222 the #MeToo era. FGD topics included perceptions of whether sexual violence was a problem on
223 campus, opinions on how the UC and each athletic department handles and responds to sexual
224 violence against students. Participants were asked to provide details on the types and quantity of
225 information they received at college about sexual violence and if they had heard faculty, staff, or
226 administration address sexual assault or harassment.

227 **Qualitative Data Analysis**

228 IDIs and FGDs were audio-recorded and transcribed verbatim. Transcripts were redacted to
229 remove personal identifying information and uploaded to Dedoose version 4.5.91 (Sociocultural
230 Research Consultants 2013). A grounded theory inductive approach was used to code the data
231 and identify emergent themes and subthemes (Miles & Huberman, 1994; Ryan & Bernard,
232 2003). Analysis was done collaboratively by the authors of this paper who developed a coding
233 tree to create an analytic blueprint of the relationship between the major themes, topics, ideas,
234 concepts, and terms that emerged during the review of transcripts. During the process of reading
235 transcripts, the research team discussed the codes that emerged and agreed on categories for
236 organizing them, including groups of broad conceptual codes that were further refined into sub-
237 codes. At least two reviewers coded each transcript. The research team participated in continuous
238 meetings to iteratively revise the codes. The principal investigator (PI) reviewed and signed off
239 on all themes and helped solved discrepant codes that the team was unable to reach consensus on
240 to ensure inter-rater reliability. Codes and corresponding excerpts were retained for analysis
241 upon agreement between the coding team and PI. The first broad code theme was campus
242 culture, with sub-codes: alcohol use, and sports. Under the sports code, following five sub codes
243 were developed: coach/player relationship, hierarchy, identity, mentorship, and role as athletes.
244 The second broad code theme was services, with sub-codes: prevention, online training, and
245 NCAA requirements. The third broad code theme was knowledge and awareness. The fourth was
246 reasons for not reporting. The fifth broad code theme was values, attitudes and beliefs.

247 **Results**

248 We conducted 21 IDIs with student-athletes (n=12) and athletic directors and coaches (n=9), and
249 7 FGDs with male (n=4) and female (n=3) student-athletes. Sixty individuals participated from
250 the three campuses, including 51 student-athletes and 9 athletic department staff members,

251 including head and assistant coaches and athletic directors including deputy directors, associate
252 directors, etc. To maintain confidentiality of staff members, we collectively refer to all coaches
253 and directors as “athletic staff.” Most student-athletes (39%) and athletic staff (45%) were from
254 UCSD. Among the student-athletes, 32 (63%) were female and 19 (27%) were male. Athletes
255 were from 11 NCAA sports teams and three student-run sports clubs (see Table 1 for details).

256 [INSERT TABLE 1]

257 **Defining Sexual Assault and Sexual Harassment**

258 To understand how participants conceptualized the language of sexual violence, we asked them
259 to define ‘sexual assault’ and ‘sexual harassment’ with their own words. All struggled to
260 distinguish between the two. This lack of clarity was felt to be a barrier to violence prevention.

261 *“I think one of the biggest proponents of sexual assault is the lack of recognizing what is*
262 *sexual assault and what is not (sexual assault).” - Male Athlete, FGD participant*

264 Students explained that although they hear the vocabulary of sexual violence repeatedly, they
265 don’t regularly give much thought to what each distinct experience or term encompasses.

266 *“I hear about sexual assault all the time, like in the media and throughout the (college)*
267 *orientation programs, but it's never really been drilled into my head - like what it is and*
268 *how to deal with it.” - Female Athlete, FGD participant*

270 Students said it was further difficult to quantify the magnitude of sexual violence on their
271 campus because of “gray areas” around consent make it hard to seek services when negative
272 sexual experiences cause discomfort or feelings of harm/violation but do not fall under a legal
273 definition of sexual assault.

274 *“Let's say people are making out and that's okay. And then it seems like it's okay to go*
275 *further, but one person hesitates. They don't want to continue. But in the moment it's a*
276 *gray area. Is it sexual assault? If it was consensual in the beginning and then leads to*
277 *something else that - you know - may or may not have been consensual...Is that sexual*
278 *assault? Even though two people were like, “we're okay with it” when starting... that's*
279 *where I don't know. Where would you draw the line?” - Female Athlete, FGD participant*

281 Although anyone can experience sexual violence, participants primarily conceptualized sexual
282 assault and harassment as violence against women, perpetrated by men. The context in which
283 men used violence was consistently categorized in two main groups: violence in situations
284 defined by asymmetrical power dynamics and alcohol and drug-related violence. Two of the
285 most influential relationships in the lives of student-athletes are those with their coaches and
286 professors. All participants recognized that coaches and professors can positively influence the
287 lives of college athletes. At the same time, their power was also noted as a tool they could use to
288 manipulate students *into* abusive relationships and *out of* reporting it to anyone.

289
290 *“I have very strong feelings about the lack of major influence the university has on*
291 *faculty involved in inappropriate behavior within the college environment. And*
292 *obviously, we have those relationships too, potentially, in athletics - the relationships*
293 *with a coach... a male coach, coaching female athletes, for example. As an athletic*
294 *administrator - I'm just going to be candid - I think there needs to be some real emphasis*
295 *on the role of these adults when it comes to sexual assault and relationships.” - Athletic*
296 *Staff, IDI participant*

298 Relationships with faculty were not addressed much in interviews, but student-athletes narrated
299 feelings of limited negotiating power in their relationships with coaches. They said it was always
300 important for them to please their coaches and project strength and ability. Bringing things up to
301 their coach about sexual violence triggered fears of seeming vulnerable, weak, or like a non-team
302 player, and as a result losing playing time or a spot on the starting lineup. One female student
303 said she and other women athletes are reluctant to address abuse in the sports system because
304 they want to be recognized for their strength, and don't “want to come out about it and look all
305 prudish or lame.” A male student-athlete said he and his peers kept quiet out of “an inherent fear
306 of authority” and “social anxiety mixed with not wanting to go through a legal system.” Students
307 felt unprotected (from authority figures) by the university's policies or prevention approaches.

308
309 *“Part of the problem is you can educate people for the better, but when you have*
310 *individuals in power, like coaches, they can set the culture back and really do a lot of*

311 *damage to the way these issues, like sexual violence, are approached and talked about.”*
312 - Male Athlete, FGD participant

314 **Alcohol Use and Sexual Violence among Athletes**

315 From the perspective of student-athletes, peer-to-peer sexual violence (i.e., assault perpetrated by
316 one student against another) was thought to mostly involve alcohol or substance use. There was
317 consensus, including among staff, that drugs and alcohol were readily available on campuses.

318
319 *“These kids are coming to college and there's alcohol everywhere, right? ... Well we've*
320 *noticed it's becoming a bigger problem, you know - they are even using Oxycontin and*
321 *mixing those kinds of drugs and alcohol and it can have a real negative effect.” - Athletic*
322 *Staff, IDI participant*

324 Students perceived drinking as a ritual of college life and heavy episodic drinking (or “binge
325 drinking”) was normalized. Student-athletes ‘partied’ a lot together and, often isolated from non-
326 athlete students. Participants also felt that student athletes were more likely to “binge drink”
327 than non-athlete students, and the most severe, negative consequences were believed to be
328 experienced by female students/athletes.

329
330 *“At every party I've been to here, the guys are kind of drunk and having a good time but*
331 *the girls are blacked out.” - Male Athlete, IDI participant*

333 Participants theorized that athletes “binge” on alcohol more frequently than their non-athlete
334 counterparts because practices of their full athletic-academic schedules, leaving short periods of
335 time to socialize, where they need to compensate by cramming all their downtime activities and
336 social events, including drinking into limited windows of free time.

337
338 *“Because of their seasons and their practice and game structure - binge drinking*
339 *happens. Because the student can't drink and then suddenly they CAN for one night. You*
340 *know when you tie all that to the issues that occur when both men and women are*
341 *together and have been drinking, um, that that's where we end up - with athletes having*
342 *more problems than the average student. I think those are things we can continue to*
343 *address in multiple ways. It's not just, ‘Oh, these are athletes so they're more likely to be*
344 *rapists,’ which is what the misconception is. It's more of how they end up in situations*
345 *and how we can educate them not to.” - Athletic Staff, IDI participant*

347 As illustrated in the above quote, participants linked alcohol use with increased risk for sexual
348 assault by complicating someone’s ability to negotiate sexual consent.

349
350 *“With drinking...I think that hinders the ability to recognize sexual assault even worse. I*
351 *think wholeheartedly that alcohol does contribute to sexual assault.” - Male Athlete,*
352 *FGD participant*

354 With a better sense of participants’ understanding of sexual violence, we asked them about their
355 involvement on campus and within the sports system and how it influenced their feelings of
356 connectedness to school and their perceived risk for sexual violence.

357 **Athletic Identity and Campus Involvement**

358 Membership to NCAA athletic program was a great source of pride as well as stress for student-
359 athletes. It is important to understand the identity as a student-athlete when designing sexual
360 violence prevention programs and services. Student-athletes repeatedly narrated pride
361 surrounding their membership - as an elite athlete - in the large, nationally recognized University
362 of California athletic system.

363
364 *“I am proud... we’ve moved up in the rankings nationally from public institution and*
365 *stuff. So it’s really become more of a, like, prestigious university. It’s really cool to be at*
366 *a place that has that much respect, national respect.” - Female Athlete, FGD participant*

368 Many felt honored to serve as NCAA athletic representatives of their campus. Participation in
369 sports contributed to a strong and positive identity among athletes, making them feel like unique
370 members of campus who were not only students, but serving as the face of university.

371
372 *“I think my personal pride comes from being in athletics and that makes me feel rooted*
373 *with teammates, and other people are looking out for me. And then that's what I value*
374 *most - I'm an athlete not just a student.” - Female Athlete, FGD participant*

376 Athletes also recognized the benefit of being part of an organized team, including learning the
377 importance of cooperation, building on each other’s strengths while accepting each other’s
378 weaknesses, providing physical and emotional support to others, and developing respect for self
379 and teammates. These attributes carried a powerful sense of commitment to “having your
380 teammates’ backs” - both on and off the field.

381

382 *"I think for a fact if I was ever at a party and my teammates were there and I got into any*
383 *sort of altercation with someone else, I know every single person on my team that was*
~~384~~ *there that saw it would instantly jump in."* - Male Athlete, FGD participant

386 For some, particularly male athletes, the ongoing sense of alliance and loyalty among teammates
387 created a strong sense of belonging on campus.

388 *"I think athletics definitely has a stronger sense of belonging just because we are here to*
389 *support each other in athletics."*- Male Athlete, FGD participant
~~390~~

392 Some of the club-level female-athletes felt the closeness of teammates increased their safety.

393 *"You need a group of people looking out for you all the time. I usually go out with my*
394 *friends from rugby. We are a lot more aggressive than your typical women. So we see*
~~395~~ *something, we do something."* - Female Athlete, IDI participant

397 Overwhelmingly, however, most student-athletes felt a substantial divide between the academic
398 and athletic sides of their own campus lives. Students narrated limited feelings of connection
399 with the larger campus community and, sometimes, even beyond their own team.

400 *"I'm more connected with my team than the Triton community as a whole, just because*
401 *we spend so much time together and also have the same schedule so we hang out, outside*
402 *of practice a lot, but, as a whole community, it's not like we do a lot. There's not a whole*
~~403~~ *lot of community in general at UCSD."* - Male Athlete, FGD participant

406 A consistent message was that student-athletes face great pressure to balance two equally
407 demanding endeavors - a sports career and full-time enrolment at an academically competitive
408 university. Students struggled to "do it all" and athletic staff also recognized athletes' ongoing
409 challenges with anxiety over sports and academic performance, pressure to maintain athletic
410 scholarships, and fear of disappointing parents or coaches, among other stressors.

411 *"....dealing with some of the pressures and some of the common things that student*
412 *athletes say they deal with, as it relates to social media, and failure, and feeling anxiety,*
413 *and home sick, depression...some of those things. I definitely think students face so many*
414 *unique stressors and then with athletics on top, plus many other responsibilities."*-
~~415~~ Athletic Staff, IDI participant

418 Athletic departments respond with attempts to mitigate stresses and offer resources and services
419 for student-athletes, particularly in the area of academic support.

420

421 *"They have help - tutors and mentors and study groups. They really have a lot of*
422 *resources for them to use."*- Athletic Staff, IDI participant

424 Despite these resources, students said they felt pressed to do everything well, and additional
425 anxiety from always needing to act like leaders of their campus and the UC system. While - as
426 noted - this ambassador-type identity sometimes created pride for students, it also commonly
427 added to what seemed like a stretched, sometimes unattainable, list of responsibilities.

428 *"...student conduct has come up a lot, because they drill it into our mindset. We're*
429 *representing the university and all that. We're playing other teams and other schools so*
430 *we have to really be model citizens, model students."* - Male Athlete, IDI participant

433 **Associations between Intercollegiate Athletics, Mental Health and Sexual Violence**

434 In addition to enriching their lives, participants narrated how playing competitive sports took
435 away from time for other activities, interests, relationships. Division I and II athletes said
436 dedication to their sport came at the expense of taking part in activities most students look
437 forward to in college, such as time with friends, parties and social events. Many club-level
438 athletes specifically decided against NCAA-level play in order to have more rounded college
439 experience, where they were not limited by their sport schedule.

440 *"You can miss out on a lot of things with practices and games from travel and stuff. So I*
441 *feel like if we were just regular students, we would be able to do more."* - Female
442 Athlete, IDI participant

443 The pressures felt by many NCAA athletes gave them a sense of social isolation and limited
444 social support, both of which are associated with adverse health outcomes (Leigh-Hunt et al.,
445 2017) and were referenced in our study. Interviews with students, coaches and directors revealed
446 rising numbers of student-athletes are living with anxiety and depression.

449 *"I've worked at [named 3 private colleges] and I'd say this (UC campus) is probably the*
450 *hardest to do well in, academically. The stress and pressure here... I think it probably*
451 *adds up and gets to the kids. A lot of those kids - maybe half of them - don't have a great*
452 *network of friends, or the social skills or time to make those friends. I think that can be*
453 *internalized and turned into anxieties and depression."* - Athletic Staff, IDI participant

455

456 Stigma was noted a main reason given for student-athletes choosing to not seek assistance for
457 mental health issues or sexual violence. Athletes feared disclosing mental health symptoms like
458 depression or reporting sexual assault or harassment would make them seem weak or
459 problematic, potentially impacting their athletic career and future chances of professional play.

460
461 *“There is stigma around being the victim in any situation, whether it's sexual assault or*
462 *anything else. I think this is especially so, being an athlete. You don't necessarily want to*
463 *be portrayed as being weak. There's talk of mental strength and the mental part of being*
464 *an athlete. I think that's a huge part of what is encouraged of us, or voiced to us. So I*
465 *think it's like, ‘oh this [referring to being a victim of sexual assault] is just another way*
466 *for me to NOT be mentally stronger.’ I think it kind of also plays into the mental illness*
467 *stigma and how you're kind of looked down upon... if you come out as being vulnerable*
468 *and weak, as an athlete.” - Female Athlete, FGD participant*

470 Some female NCAA athletes felt the high-profile image of being a Division I or II player and the
471 tight-knit nature of the athletic department reduced their ability to self-protect from harm and
472 discrimination, particularly in light of new Title IX rules on college campuses, allowing accused
473 perpetrators to cross-examine the victim during a live hearing. Some women interpreted this
474 policy change, precluding a victim's ability to remain anonymous, as a major gap in support for
475 survivors on college campuses - particularly student-athlete survivors who are assaulted by
476 another student-athlete, in a system where players are shaped to feel obligated to protect fellow
477 athletes and the interests of the athletic department, even if it compromises their own welfare.

478
479 *“This past month, someone on our team was assaulted by another athlete and she's not*
480 *reporting it, since he's a part of the athletic department. If we say his name, then Title IX*
481 *- because the rule just changed - would, instead of putting it under Title IX as his case, it*
482 *would go under her name. She (the assault victim) sent out a text to make sure it was in*
483 *his name. Because if it gets out that she reported him, he will be notified through the*
484 *athletic department and there would be charges - so he'd know which team it came from.*
485 *They would know who it was and it would be really scary for her - that they would know*
486 *who specifically she was. It would harm her more than it would harm him.” - Female*
487 *Athlete, FGD participant*

489 Male athletes also felt a strong sense of loyalty to their team and to upholding its reputation,
490 leading some to feel pressured to protect their teammates, even in a case of sexual violence.

491 *"I've heard that a lot of time, players won't say anything - if they know about a sexual*
492 *assault - because they don't want to get him (their teammate) in trouble. They also don't*
493 *want to get in trouble, themselves. They don't want to have their name in the news." -*
494 *Male Athlete, IDI participant*

495 Some female athletes found it hard to acknowledge sexual assault as sexual assault when they
496 knew the perpetrator, and sometimes empathized with the person who attacked them, trying to
497 see the incident from his point of view. The quote below illustrates how one participant justified
498 the assaulter's behavior and expressed concern about causing him harm.

499 *"It kinda hurt my life, but do I need to ruin yours because of it? Cause I know you, and I*
500 *think there's sympathy - probably especially with people they know. 'They didn't mean to*
501 *and they're my friend, and they misunderstood.'" Giving sympathy to their assaulter*
502 *happens by the victim 'cause they know them.'" Female Athlete, IDI participant*

504 **Perceptions of NCAA Programming for Campus Sexual Violence Response and Prevention**

505 To address and respond to sexual violence in NCAA sports programs, the Sport Science Institute
506 of the NCAA developed the "Athletics Tool Kit for a Healthy and Safe Culture" (National
507 Collegiate Athletic Association & Sport Science Institute, 2016) for implementation on all NCAA
508 member campuses, including UCLA, UCSB and UCSD. In the 2018-2019 academic year, all
509 three campuses attested to following the requirements of the NCAA Policy on Campus Sexual
510 Violence. We asked participants to share their feelings on how well their campus did in
511 demonstrating their commitments to engaging college leadership in sexual violence prevention
512 and offering evidence-based educational programming. We did not investigate similar
513 programming for club-level sports programs on the UC campuses.

514 **NCAA's commitment to engaging college leadership in sexual violence prevention.**

515 The NCAA's first core commitment area to preventing sexual violence in intercollegiate sports is
516 leadership and making violence prevention a priority for college presidents/chancellors, athletics
517 directors, coaches, sports medicine personnel and other athletics stakeholders (National
518 Collegiate Athletic Association & Sport Science Institute, 2016). Staff members, coaches in

519 particular, were keenly aware of their important role as active promoters of prosocial individual
520 and culture change - on campus and within the lives of student-athletes.

521 *“It's my job – to help them become responsible adults. I mean, look, there's only so much*
522 *basketball we can teach ... and the teaching part means you teach them about life. How to*
523 *be a good person, how to be responsible, how to be a man of your word, how to be on*
524 *time, how to compete, how to be a great teammate. You know, how to have empathy for*
525 *others who aren't as fortunate as you. You're an elite athlete. We're less than 1% of the*
526 *population, right? If they don't learn these things and they're around us for four years,*
527 *what are we doing? I shouldn't be coaching. Right?” - Athletic Staff, IDI participant*

529 Student-athletes in leadership positions, such as team captain, are also required per NCAA
530 guidelines to participate in formal training. Compared to the rest of the players, student leaders
531 said they were exposed to more of what is going on among campus and athletic leadership, with
532 regard to education and prevention. In theory, they are to pass these lessons along to their team.

533 *“As a team captain, before the season we watch a video with the EDI (Equity, Diversity*
534 *and Inclusion) Director and our coaches. It's an anti-hazing video but also encompasses*
535 *anti-sexual assault and anti-sexual harassment and anti-harassment. I think in my*
536 *position, where I've put myself as a leader in the program, I've seen a lot more of the*
537 *preventative tactics that the school is putting forward.” - Female Athlete, IDI participant*

538 A noted gap in university leadership was a lack of evaluation of violence prevention efforts on
540 campus. The National College Health Assessment (NCHA) is an NCAA-recommended research
541 survey on student health habits, behaviors, and perceptions. Some participants had completed it
542 during the prior year but none were aware of the results, demonstrating a missed opportunity for
543 prevention education. Students and staff unanimously felt more should be done by the UC to
544 develop and assess campus climate regarding sexual violence, overall and as it relates to
545 athletics. When discussing why more research has not been done on the UC campuses, and how
546 some leaders have expressed concerns about studies on violence, one participant said:

548 *“Quite frankly I don't understand why (some are concerned about research). Well I can*
549 *understand it, but personally I don't understand what the concerns would be because*
550 *sexual violence is a problem that needs to be addressed.... and the reason it's a problem*
551 *that needs to be addressed is because we don't do things like research, which allows*
552 *things to continue as is. To me, it's almost like research on racism, you know? A lot of*
553

554 *people don't want to talk about those things and that's why we continue to have the issues*
555 *we have - because we don't have that collection of information about some ideas to work*
556 *on it and so forth.” -Athletic Staff, IDI participant*

558 **NCAA’s commitment to educational programming to change behaviors and cultures.**

559 The NCAA requires its member campuses to provide evidence-based educational programming,
560 tailored to meet the needs of student-athletes and provided to all who directly influence student-
561 athletes’ decision making and behaviors (e.g., coaches, athletics administrators, sports medicine
562 staff, academic support personnel, faculty, family of student-athletes). Student-athletes recalled
563 educational programming during orientation, team meetings and specially arranged sessions
564 focused on distinct topics like substance abuse or the relationship between sexual violence and
565 alcohol. Many indicated that they valued the positive intent of the UC education programming
566 but felt it was devalued by athletes who saw it as one more obligation to take care of in their
567 already limited time.

568 *“I feel there is really good information and the intent is there but people don't take it*
569 *seriously - just because it's another thing we have to do.” Female Athlete, FGD*
570 *participant*

571
572
573 Most emphasis in the athletic programs was said to be placed on having students complete brief,
574 one-off trainings on how to understand consensual sex before a sexual encounter and on
575 bystander intervention methodology. Athletes expressed authentic interest in learning more about
576 relationship dynamics and sexual health and thought the NCAA training programs were a real
577 start, but most felt the offerings availed to them were prescribed and inadequate.

578 *“I think (the training) was as helpful as a 6 minute video could be, but the idea of it is*
579 *more like the NCAA is mandating that everybody gets this training. So it was like, ‘okay,*
580 *let’s meet the requirement and check the box,’ but it wasn't sufficient.” - Male Athlete,*
581 *FGD participant*

583 Student-athletes, especially women, felt the NCAA education on negative language choices and
584 their adverse impact on team culture was ineffective, or was not provided at all as some

585 participants were unaware of this programming. Many female athletes noted there was ongoing
586 use of misogynistic and demeaning language in the sports system.

587
588 *“Their entire team (referring to one of the NCAA men’s teams), as a whole, makes sexist*
589 *comments. They’re not perfect little boys. They are college men and they cross the line in*
590 *other ways too.” -Female Athlete, IDI participant*

591 Staff also recognized a need for prevention education to be more comprehensive and revised to
592 be more survivor-centered. Current approaches - particularly those offered as brief training
593 modules, followed by comprehension quizzes - were thought by many to be lacking in their
594 ability to cultivate a true understanding, compassion and empathy.

595
596 *“Do the tests make you understand how the victim feels or anything close to it?*
597 *Absolutely not. Of course not. I’m a man. Do most men understand what it’s like to walk*
598 *in a woman’s shoes to feel that fear and all that? No. That’s like saying, do most men*
599 *understand what it’s like to have a baby. No. Can there be a lot better understanding?*
600 *Absolutely. I know guys that have daughters are a little more sensitive to it, and also if*
601 *they have wives. Sometimes they could be [more understanding] but taking a test will not*
602 *change anything.” -Athletic Staff, IDI participant*

603
604 Most staff only recalled completing the NCAA’s online training program which was available
605 for student-athletes as well. Student-athletes felt these sessions lacked authenticity and meaning
606 and could be completed rapidly, without actually learning anything.

607
608 *“People would scroll through (the online program) and be like, ‘whoa!’ Like it was a*
609 *joke. ...it was just very cringy kind of... I think it was well intended, but it wasn’t the best*
610 *way to convey it. And no one did it and then we got to the last day and our coaches were*
611 *like, ‘This is a list of everyone who hasn’t checked off that they’ve watched the video.*
612 *Please do it by the end of the day.’” -Female Athlete, FGD participant*

613
614 A common reflection on the education provided through the athletic department - including both
615 in-person and online offerings - was it reflected little thought from leadership and likely only
616 served to achieve compliance with NCAA’s requirements. This was narrated by both students...

617
618 *“Every single thing I see [about violence prevention] looks like they’re being forced to do*
619 *it. It all looks like this is some kind of legal requirement from some other thing, like the*
620 *government or the NCAA. Just nothing that looks like its actually, like there’s any real*
621 *investment in it, other than a liability dodge.” -Male Athlete, FGD participant*

622
623
624 ...and athletic department staff members:

625
626 *“They did this out of CYA, which means ‘cover your ass.’ All University of California*
627 *campuses have to take this online training about sexual assault and about these types of*
628 *things. It's about an hour. It's taken online and you know that's what everybody has to*
629 *do. That's what I call a CYA fix.” Athletic Staff 2, IDI participant*

631 Students said they thought the education was supposed to promote prevention of sexual violence
632 but felt that most measures used by the UC were “reactionary,” not preventative. One-off
633 trainings, lack of participatory approaches that offer iterative platforms for learning, and the
634 provision of basic contact information for campus sexual assault centers (referred to as CARE
635 offices at the UC) and the school-wide Counseling and Psychological Services (CAPS) were
636 perceived as “bandaid” approaches to claim compliance with the Department of Education and
637 maintain NCAA membership status.

638
639 *“I think the UC’s entire preventative measures can be summed up as ‘too little, too late’*
640 *because they DO have CAPS and CARE and stuff like that, but it’s like - we don’t even*
641 *know what they do. So like, having these [measures] is too little, and it’s only after the*
642 *fact.” -Male Athlete, FGD participant*

644 **College Athletic Programs as a Platform for Sexual Violence Prevention**

645 Intercollegiate athletics are one of the most well established systems on many college and
646 university campuses and hold promise for serving as a platform to prevent sexual violence
647 among athletes and the larger campus community. Coach-led interventions are widely promoted
648 and implemented to work toward these goals but participants expressed strong reservations about
649 the acceptability and effectiveness of student-athletes turning to their coaches for guidance on
650 healthy sexual experiences and intimate relationships. Both athletes and coaches were fully
651 comfortable with an approach of working together on developing positive team relationships and
652 athletic and academic competency. On the contrary, the head coach-athlete relationship was seen
653 as unacceptable for addressing personal issues, unless absolutely necessary. Coaches recognized
654 and understood that their student-athletes almost always only wanted them to see their best side.
655

656 *"I oftentimes am the decision-maker of their playing time, which can skew the*
657 *relationship a little bit. They tend to get a little closer to the assistant coaches. For*
658 *instance, when we drive the vans at the airport, it's a mad dash to get into the one with*
659 *the assistant coach. The last couple of stragglers get into my van. There is a separation*
660 *there and I think there needs to be. And there's more of a separation during the fall*
661 *season because that's kind of when the results really are the emphasis of what we do....*
662 *I've always thought that I'm a fairly approachable guy, but much more so out of season*
663 *than in season. In season is hard. My one assistant especially, is the most approachable*
664 *guy, in season."* -Athletic Staff, IDI participant

665 Almost all student-athletes felt wary of sharing non-sports information about their lives with
666 their coaches. It felt uncomfortable and inappropriate and students believed it was also awkward
667 for the coaches - thinking they, too, would rather avoid knowing about student problems.

668
669 *"I feel like most coaches would be scared for their athletes to come out and admit*
670 *something out of fear that that could either ruin the face of the athletic department and*
671 *they wouldn't want any scandals, so I feel like they'd usually rather sweep it under the*
672 *rug, just to avoid any problems."* -Male Athlete, FGD participant

673
674 Athletes said they would not feel comfortable confiding in their coaches about sexual violence.

675
676
677 *"If I were [sexually assaulted]....I probably wouldn't go to my coaches, not because*
678 *they're not supportive but I just wouldn't feel as comfortable talking about that personal*
679 *of a topic with them."* -Female Athlete, FGD participant

680 Assistant coaches were felt to be better placed than head coaches to help student-athletes handle
681 or avoid relationship-level problems in their lives. Instead, students unanimously stated a
682 preference for peer-to-peer mentorship frameworks. Athletes felt more comfortable interacting
683 with their peers, overall, and particularly when it came to addressing intimate details about their
684 lives, let alone a potentially traumatizing event such as sexual violence. Student-athletes said
685 they prefer receiving guidance from other student-athletes, because their shared generational and
686 athletic experiences cultivate stronger feelings of comfort and safety - to disclose information,
687 ask questions, and receive meaningful feedback.

688
689
690 *"In my experiences with our coaches, they haven't given us any strong guidance in terms*
691 *of matters that really pertain to our lives and have really serious implications, aside from*
692 *the scope of "Hey, study" and "Don't do stupid shit!" With a situation like sexual assault,*
693 *it would be very meaningful to have members, like for example, within the scope of*

694 *athletics, members of a team, for example, speaking out on this type of stuff.” -Male*
695 *Athlete, FGD participant*
697 Student-Athlete Mentor (SAMs) programs were seen as a successful way to provide help and
698 support to other athletes - through education, raising awareness, and promoting healthy lifestyles.
699 The SAM approach was implemented for first year players on one of the study campuses and
700 both the athletes and staff members felt strongly about its positive impact.

701
702 *“We have a [peer] mentoring program just for our freshmen. So we require our freshmen*
703 *to be in it because it's a transitional thing plus it's a way for us to monitor their academic*
704 *performance, as well. So they meet with their mentors once a week ... we think it's a*
705 *resource we really have to take advantage of.” -Athletic Staff, IDI participant*
707 Some student-athletes said peer mentors might be preferred over formal services on campus.

708 *“We had a girl on our team who had been sexually assaulted in high school. She told our*
709 *team openly about it and I think our coaches know about it too. I think she went to CAPS*
710 *and said she's getting help but I feel like if someone on our team were to experience*
711 *sexual assault and they know she has already been through, she would definitely be a*
712 *person our team members would approach... I feel like it's better going to someone who*
713 *is your same age and plays the same sport. There are so many similarities. I feel like that*
714 *would make me more comfortable.” -Female Athlete, FGD participant*

716 Team captains, in particular, were thought to be ideal mentors for raising awareness, modeling
717 prosocial behaviors and offering guidance on how to have healthy relationships.

718
719 *“I'm pretty sure if the team captain said something like ‘sexual assault is a problem and*
720 *we need to make sure we all have the same mentality towards this type of issue,*
721 *particularly if we're going to be partying or if people want to pursue avenues of sexual*
722 *interactions with other people’ that would help. It's nice when it comes from somebody*
723 *you have an intimate relationship with, telling you about these types of things. It needs to*
724 *come from somebody there's a form of respect with. I feel like if a captain said a few*
725 *words about that, that would be a good thing to do, a good way to educate people about*
726 *these types of things.” -Male Athlete, FGD participant*

727
728

Discussion

729 Our research yields three main findings. First, student-athletes and athletic department staff
730 members associated college sports participation with increased risk for sexual violence but felt
731 the prevention education and response programs available to them through either the university
732 or the NCAA failed to effectively address key issues at the root of this synergistic relationship.

733 The second main finding is that NCAA athletes felt academically and socially isolated from the
734 larger campus community. This sense of a disconnection was perceived to contribute to
735 increased rates of mental health problems among student-athletes, and decreased likelihood of
736 their use of important campus resources (e.g., psychosocial and counseling services) and of
737 reporting sexual violence. Lastly, despite widespread promotion and implementation of coach-
738 led “character education” training for college athletes - on topics including bystander
739 intervention, and relationship violence - student-athletes expressed discomfort with disclosing
740 information to their coaches about their intimate sexual relationships.

741 Corroborating prior findings that sexual assault and harassment are often misunderstood by
742 student-athletes and intercollegiate athletic department staff (Rahimi & Liston, 2009), our
743 participants struggled to define these concepts. Athletes said that, apart from completing
744 mandatory university and NCAA sexual violence prevention education training, they had never
745 spent time assessing their understanding of the continuum of sexual violence, let alone what
746 could be done to stop it. Participants referred to a previously coined “Checkbox Culture” in
747 athletic departments that is limited to what is necessary to meet requirements set by their
748 university, Title IX or the NCAA. Athletic departments provided referrals or resources when
749 necessary without overtly supporting survivors (McCray, Sutherland, & Pastore, 2018). Building
750 on previous studies (Long, Rahimi, & Liston, 2015; McCray et al., 2018), our findings imply a
751 need for more nuanced sexual assault education that is tailored to meet the distinct needs of
752 different genders and sports teams, and account for other key social determinants.

753 We suggest moving away from top-down decision-making and program implementation, and
754 toward student-led approaches that encourage critical thought, opportunities for open-discussion
755 and emergent problem solving techniques. Student-athletes should not only be participants, but

756 leaders in all efforts to design, implement and refine programs and policies related to sexual
757 violence prevention and response on campus and in athletic departments. Including student
758 voices in research, as we have done in our study, is informative but it is not enough. We argue
759 that university administrators and athletic/academic leaders also need to begin radically listening
760 to student-athletes and responding to their suggestions on their own education and outreach
761 needs. Students consistently reported that sporadic, one-off trainings that provide general
762 awareness-raising or one-way instructional messaging on consensual sexual encounters do not
763 succeed in educating athletes on consent, survivors services or intervention approaches. It is time
764 for university and college leadership to listen to and really hear what student-athletes are saying,
765 and respond with meaningful change.

766 We would benefit from borrowing lessons from the global field of violence against women
767 prevention programming and research. Decades of experience reveals that effective
768 transformation requires focusing on violence more broadly (i.e., not only as it relates to sports),
769 and coordinating systems to promote insightful reflection on sexual assault and harassment as
770 public health problems and to ensure critical connections are made (i.e., between athletes and the
771 overarching campus community) (Michau, Horn, Bank, Dutt, & Zimmerman, 2015). NCAA
772 athletes described their lives as so narrowly focused on their sport that they felt disconnected
773 from the campus community around them. This isolation was often compounded by a strong pull
774 from athletic departments for athletes to turn to internal resources of support (e.g., student-athlete
775 tutors) and to their coaches for guidance on personal problems. Student-athletes expressed
776 discomfort, however, with the idea of sharing details about their sexual experiences and intimate
777 relationships with coaches. Athletes were loosely aware of sexual violence and mental health
778 resources on the broader campus with female student-athletes demonstrating significantly more

779 knowledge than males. Most student-athletes in our study showed reluctance to use available
780 resources because of limited time, and concerns that seeking assistance outside of the athletic
781 department would cause more problems than benefit. To understand prevalence and risk factors
782 for sexual violence victimization and perpetration, as well as barriers and facilitators to service
783 utilization among student-athletes, we recommend representative, quantitative research for
784 measuring these estimates. Our qualitative research does suggest, however, that strong loyalty to
785 the sports system served as a barrier to athletes' willingness to seek assistance for services and,
786 for female athletes, to report perpetrators of violence, particularly if the abuser was also within
787 the athletic system.

788 Student-athletes provided other important recommendations for improving sexual violence
789 education programs and resources on campus. Participants from both men's and women's teams
790 felt stronger connections with their teammates and team captains than with any of their coaches.
791 Athletes requested that programming be redesigned so other athletes are able to lead systems
792 change efforts focused on understanding and preventing sexual violence and addressing its
793 intersections with salient issues such as alcohol related concerns. A small liberal arts college
794 study recently found exposure to bystander training that addressed heavy drinking increased
795 athlete's prosocial bystander behaviors and decreased high-risk alcohol use (Morean et al.,
796 2018). This type of approach warrants pilot-testing for feasibility and impact on large campuses
797 like those in our study. Students and staff alike felt the university should put more resources into
798 increasing staffing in the counseling and sexual violence service offices, and efforts should be
799 placed on better coordinating targeted programming for student-athletes so they feel more
800 connected.

801 While our study informs gaps in current sexual violence prevention efforts through in-depth
802 analysis of student-athletes', coaches' and administrators' perspectives, there are limitations worth
803 noting. First, our findings are likely not generalizable to all NCAA sports and the student-
804 athletes who play them – both on our three study campuses and across the UC system and
805 beyond. This is because our sample was small and lacked representation from athletes and staff
806 from all of the NCAA sports teams at UCLA, UCSD and UCSB. Most notably missing from our
807 pool of participants were football players, the athletes most commonly accused of perpetrating
808 sexual assault on college and university campuses (Wiersma-Mosley & Jozkowski, 2019).
809 Further, while 2 men's basketball players participated in a focus group, we largely lacked
810 representation from male student-athletes who played other than football and basketball contact,
811 team-sports where aggression is common including hockey, lacrosse, wrestling, etc. Research
812 has found that boys and men who play these heavy-contact sports are significantly more likely to
813 perpetrate sexual assault, physical violence and psychological aggression, relative to players of
814 non-contact, individual sports such as cross country (Forbes, Adams-Curtis, Pakalka, & White,
815 2006; Trebon, 2007). Despite extensive efforts to engage male student-athletes and their coaches
816 in our study, we were commonly met with non-response and/or declined participation. Receiving
817 endorsement of our study from NCAA leadership and university athletic directors facilitated
818 enrolment of participants, but these endorsements and their benefits were limited. Some athletic
819 leaders seemed reluctant to participate or have their staff and students get involved in our
820 research due to concerns about how the information they shared with us would be portrayed or
821 disseminated to the public. These worries seemed amplified as a result of both high profile
822 scandals and negative local news stories in the media over the past few years, involving NCAA
823 players, coaches and directors. We tried to mitigate these concerns by providing detailed

824 information on how our public health research aimed to minimize bias that can occur in data
825 collection, analysis and reporting. Nonetheless, it took an extensive amount of effort and time to
826 involve participants from the athletic departments and we were unsuccessful in recruiting more
827 players and staff from the most popular and highest revenue-generating sports at UCLA
828 (football), UCSD (men's basketball) and UCSB (men's basketball). These shortcomings limit
829 our ability to make between- or within-group inferences from our findings, and to speak to the
830 perspectives of the most highly valued and prestigious and possibly most violent student-athletes
831 on our campuses. An ideal future research design would use stratified sampling methods to
832 ensure equal representation of student-athletes from men's and women's teams and non-contact
833 individual and contact team-level sports. Also important would be ensuring participation of
834 athletes from the most popular and highest revenue-earning sports.

835 Because our research was conducted on three, large public university system campuses, our
836 findings should be interpreted with caution when considering their applicability to the culture at
837 smaller schools and/or private institutions. Further, this assessment was a sub-study of a larger
838 project focused on overarching perspectives on sexual and intimate relationships and campus
839 environment related to relationship health. As such, the IDI and FGD guides we used were
840 developed for broader discussion and were not created specifically for examination of violence
841 within sports culture. Thus, sports specific probing was not uniformly enforced or outlined,
842 potentially missing important nuances and findings. Lastly, some participants did not feel
843 comfortable providing us with their complete demographic information in the pre-interview /
844 pre-focus group survey. This resulted in an incomplete dataset on participants' identifying
845 characteristics, such as age, race and ethnicity, gender, and sexual identity and orientation. This
846 precludes our ability to understand potentially important differences between participants and

847 examine how student-athletes from historically marginalized populations experience and
848 perceive sexual violence. We believe, however, that ensuring confidentiality and offering the
849 option of anonymity are critical when conducting research on highly sensitive topics, such as
850 sexual violence, in a such close community.

851 Despite the small scale of this study, we feel the findings are important and actionable,
852 providing insights into some changes that can be made immediately, such as bringing student-
853 athletes to the forefront of program and policy reform. This study highlights student-athletes'
854 needs, concerns, and reasons for not seeking care which could inform student engagement and
855 participation efforts. We intend to use what we have learned from this study to guide next steps
856 in research on the UC campuses and hope our results might help others think through future
857 prevention and response efforts on their own campuses.

858

859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881

References

Banyard, V. L., Ward, S., Cohn, E. S., Plante, E. G., Moorhead, C., & Walsh, W. (2007). Unwanted sexual contact on campus: a comparison of women's and men's experiences. *Violence Vict*, 22(1), 52-70.

Bonomi, A., Nichols, E., Kammes, R., Chugani, C. D., De Genna, N. M., Jones, K., et al. (2018). Alcohol Use, Mental Health Disability, and Violence Victimization in College Women: Exploring Connections. *Violence Against Women*, 24(11), 1314-1326.

Fedina, L., Holmes, J. L., & Backes, B. L. (2018). Campus Sexual Assault: A Systematic Review of Prevalence Research From 2000 to 2015. *Trauma Violence Abuse*, 19(1), 76-93.

Forbes, G. B., Adams-Curtis, L. E., Pakalka, A. H., & White, K. B. (2006). Dating aggression, sexual coercion, and aggression-supporting attitudes among college men as a function of participation in aggressive high school sports. *Violence against women*, 12(5), 441-455.

Foubert, J. D., Clark-Taylor, A., & Wall, A. F. (2020). Is Campus Rape Primarily a Serial or One-Time Problem? Evidence From a Multicampus Study. *Violence Against Women*, 26(3-4), 296-311.

Gash, A., & Harding, R. (2018). # MeToo? Legal discourse and everyday responses to sexual violence. *Laws*, 7(2), 21.

Kimble, N. B., Russo, S. A., Bergman, B. G., & Galindo, V. H. (2010). Revealing an empirical understanding of aggression and violent behavior in athletics. *Aggression and violent behavior*, 15(6), 446-462.

Kroshus, E., Paskus, T., & Bell, L. (2018). Coach expectations about off-field conduct and bystander intervention by US college football players to prevent inappropriate sexual behavior. *Journal of interpersonal violence*, 33(2), 293-315.

- 882 Long, L. H., Rahimi, R., & Liston, D. D. (2015). Student Athletes' Perception of Sexual
883 Harassment. *International Journal of Education and Social Science*, 2 (11), 45-54.
- 884 McCray, K. L., Sutherland, S., & Pastore, D. L. (2018). Creating change in intercollegiate
885 athletics: The sexual assault prevention paradigm for athletic departments. *Journal of*
886 *Higher Education Athletics & Innovation*, 1(4), 25.
- 887 Michau, L., Horn, J., Bank, A., Dutt, M., & Zimmerman, C. (2015). Prevention of violence
888 against women and girls: lessons from practice. *Lancet*, 385(9978), 1672-1684.
- 889 Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*:
890 SAGE Publications Inc.
- 891 Morean, M. E., Darling, N., Smit, J., DeFeis, J., Wergeles, M., Kurzer-Yashin, D., et al. (2018).
892 Preventing and Responding to Sexual Misconduct: Preliminary Efficacy of a Peer-Led
893 Bystander Training Program for Preventing Sexual Misconduct and Reducing Heavy
894 Drinking Among Collegiate Athletes. *J Interpers Violence*, 886260518777555.
- 895 National Collegiate Athletic Association. (2016). *NCAA Recruiting Facts*.
- 896 National Collegiate Athletic Association, & Sport Science Institute. (2016). *Sexual Violence*
897 *Prevention: An Athletics Tool Kit for a Healthy and Safe Culture*.
- 898 Rahimi, R., & Liston, D. D. (2009). What Does She Expect When She Dresses Like That?
899 Teacher Interpretation of Emerging Adolescent Female Sexuality. *Educational Studies*,
900 45(6), 512-533.
- 901 Ryan, G. W., & Bernard, H. R. (2003). Techniques to Identify Themes. *Field Methods*, 15(1),
902 85-109.
- 903 Schaaf, S. M., Lamade, R. V. P., Burgess Aw Dnsc, A. F., Koss, M. P., Lopez, E. D., & Prentky,
904 R. P. (2019). Student views on campus sexual assault. *J Am Coll Health*, 67(7), 698-705.

- 905 Seabrook, R. C., McMahon, S., & O'Connor, J. (2018). A longitudinal study of interest and
906 membership in a fraternity, rape myth acceptance, and proclivity to perpetrate sexual
907 assault. *J Am Coll Health*, 66(6), 510-518.
- 908 Trebon, K. M. (2007). There is no I in team: The commission of group sexual assault by
909 collegiate and professional athletes. *DePaul J. Sports L. & Contemp. Probs.*, 4, 65.
- 910 Tredinnick, L., & McMahon, S. (2019). College coaches' influence on student-athlete
911 engagement in sexual violence prevention: promoting readiness to help and awareness of
912 campus resources. *Sport in Society*, 1-17.
- 913 WHO. (2002). *World report on violence and health*. Geneva, Switzerland: World Health
914 Organization.
- 915 Wiersma-Mosley, J. D., & Jozkowski, K. N. (2019). A Brief Report of Sexual Violence among
916 Universities with NCAA Division I Athletic Programs. *Behavioral sciences (Basel,*
917 *Switzerland)*, 9(2), 17.
- 918 Wiersma-Mosley, J. D., Jozkowski, K. N., & Martinez, T. (2017). An empirical investigation of
919 campus demographics and reported rapes. *J Am Coll Health*, 65(7), 482-491.
- 920
- 921

Table 1. Participant characteristics of 51 student-athlete and 9 staff member participants from UCLA, UCSB and UCSD

	Campus	Number	Percentage	
Student-athletes by campus (n=51)	UCLA	13	26%	
	UCSB	18	35%	
	UCSD	20	39%	
Athletic staff members by campus (n=9)	UCLA	3	33%	
	UCSB	2	22%	
	UCSD	4	45%	
Number of NCAA (n=47) and club (n=4) athletes by type of sport (n=13)				
Sport	NCAA men	NCAA women	Club athletes	% of sample by sport
Soccer	3	8	0	22%
Volleyball	3	7	0	20%
Water polo	1	6	0	14%
Basketball	2	4	0	12%
Swimming	0	3	2	10%
Rowing	0	3	0	6%
Fencing	2	0	0	4%
Baseball	1	0	0	2%
Tennis	0	2	0	4%
Softball	0	1	0	2%
Track and field	0	1	0	2%
Rugby	0	0	1	2%
Sailing	0	0	1	2%