

**Evaluation of Student-Athletes' Use of Alcohol and Other Drugs
at a State Supported Regional University**

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Abstract

The misuse of alcohol and other drugs is a health concern for National Collegiate Athletic Association (NCAA) level student-athletes. NCAA Division II level student-athletes from a State-Supported Regional University (SSRU) were part of a CHOICES Grant program which aided the athletic department as it partnered with other campus departments in the development and implementation of alcohol and drug education projects. The American College Health Association National College Health Assessment IIB Survey (ACHA-NCHA IIB) was given to the SSRU's student-athletes. Two areas of health concern (high-risk drinking, nonmedical use of prescription drugs) were identified where improvements are necessary. The results supported the SSRU's goals as it continues implementing education and prevention programs based on collaboration among student-athletes, coaches, athletics staff, and prevention specialists.

Keywords: Student-athletes, drug and alcohol misuse.

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The use and misuse of alcohol and other drugs by student-athletes at institutions of higher learning is a well-documented problem warranting best practices and model programs to be outlined by the U.S. Department of Education Office of Safe and Drug-Free Schools (2008). Alcohol is listed as the most widely used drug (Green, Uryasz, Petr, & Bray, 2001), followed by marijuana (Greene, et al., 2001). Alcohol and marijuana use is reported to be highest among Division 3 student-athletes (Green, et al., 2001) when compared to Division 1 and Division 2 athletes.

The purpose of this study was to analyze the percent of targets achieved for five (5) student objectives from two (2) of the eleven (11) Topic Areas of Healthy Campus 2020 (American College Health Association, 2016) (see Table 1). Healthy Campus 2020 is a framework to support campuses in improving the health of their students, staff and faculty (American College Health Association, 2016). The student objectives chosen for critical review were based on Healthy Campus 2020 topics under the student objective “Substance Abuse” relevant to Domain 3: Physical Conditioning: Standard 14 of the National Association for Sport and Physical Education Coaching Standards: Be an advocate for drug-free sport participation and provide accurate information about drugs and supplements (NASPE, 2006). The topic of particular focus was “Substance Abuse” which specifically speaks to the Level 1 NASPE Coaching Standard for Domain 3, Standard 14: Make clear to all athletes the established, negative consequences of using a banned substance, alcohol, tobacco, and other drugs as they relate to team rules, program policies, the law, and overall health (NASPE, 2006). The assessment of these behaviors will be used to plan and enhance educational programming sessions and interventions for this specific population to increase healthy behaviors and choices and reduce risky behaviors that might hinder educational and athletic progress.

The State Supported Regional University (SSRU) is a public institution with an undergraduate enrollment of approximately 7,000 and a student body that is approximately 75% white, 9% Black or African-American, and 8% Hispanic/Latino (see Table 2). Since 2013, a stronger effort was made by the SSRU to educate student-athletes about the risks involved with the misuse of alcohol and other drug issues. In this effort, the SSRU applied for and was awarded funding for NCAA CHOICES; a grant program for NCAA member institutions to integrate athletics departments into campus wide-efforts to reduce alcohol abuse.

Literature Review

The proportion of students who report using marijuana (pot, weed, hashish, hash oil) is the first student objective area our study compared under the Substance Abuse topic of Healthy Campus 2020. For student-athletes of both genders, being white, being past-year cigarette smokers, having higher sensation-seeking scores, and having exaggerated perceptions of student use norms were all associated with past-year marijuana use (Buckman, Yusko, Farris, White, & Pandina, 2011). Results of Buckman et al.'s (2011) preliminary study suggests that student-athletes appear to be particularly motivated to use marijuana because of its enhancement or pleasurable properties.

The proportion of students who reported engaging in high risk drinking of alcoholic beverages within the last two weeks is the second student objective area our study compared in the Substance Abuse topic area of Healthy Campus 2020. Wechsler, Davenport, Dowdall, Grossman, and Zanakos (1997) found that students involved in college athletics engaged in binge drinking (heavy, episodic alcohol consumption) more often than students not involved in athletics, but were less likely to be cigarette smokers or marijuana users. The strongest predictors of binge drinking among students involved in athletics were residence in a fraternity or a

sorority, a party lifestyle, engagement in other risky behaviors, and previous bingeing in high school (Wechsler et al., 1997). Other findings indicate that athletes are more likely to report binge drinking, in part, because they view alcohol use as being more normative (Ford, 2007). With the increased use and acceptance of energy drinks, Woolsey, Waigandt, and Beck (2010) found student-athletes who combined energy drinks and alcohol consumed significantly more alcohol and had riskier drinking habits than student-athletes who used alcohol only.

The National Collegiate Athletic Association (NCAA) has indicated progress in the alcohol abuse arena. In 2013, the NCAA surveyed roughly 21,000 student-athletes regarding their substance use habits as part of an ongoing assessment conducted every four years (Rexroat, 2014). In 2009, 63% of male student-athletes reported drinking more than five drinks in a sitting. Interestingly, by 2013 that male student-athlete statistic had dropped to 44%. Female student-athletes reported a smaller, but still significant, decline in excessive drinking, with 33% reporting drinking four or more drinks, down from 41%. While excessive drinking is down, about 80% of student-athletes reported using alcohol within the past year, which is on par with the rate among the general collegiate population (Rexroat, 2014). Student-athletes are shown to be at greater risk for abusing alcohol and they experience more frequent negative consequences (Brenner & Swanik, 2007).

Drinking is not harmless and is among the most serious public health problems of American college students (Hingson, Zha & Weitzman 2009). Student-athletes with the heaviest drinking patterns are 6.15 times more likely to experience unintentional alcohol-related injuries, including those that may be season- or career-ending (Brenner, Metz & Entriken, 2014). Student-athletes' heavy drinking can result in a "hangover effect" which may reduce athletic performance by 11.4% (O'Brien & Lyons, 2000). Male student-athletes also reported drinking significantly

more drinks on their heaviest day in the last year (Yusko, Buckman, White & Pandina, 2008) while female student-athletes reported consuming alcohol significantly less frequently over the past month (Yusko, et al., 2008).

The proportion of students who report nonmedical use of prescription drugs within the last 12 months is the third student objective area our study compared in the Substance Abuse topic area of Healthy Campus 2020. Ford (2008) analyzed data from 2001 and the results indicate that student-athletes are less likely to report nonmedical prescription drug use. There is more interest in performance enhancing drugs; athletes use ephedrine and amphetamines to boost metabolism and endurance (Tokish, Kocher & Hawkins, 2004), nutritional supplements and weight loss products to control weight and improve health (Froiland, Koszewski, Hingst & Kopecky, 2004), and prescription painkillers (used with or without a valid prescription) to mask injury (Tricker, 2000). The use of nutritional supplements is common (Froiland, et al., 2004) and the use of painkillers is evident in a sizeable subset of student-athletes (Froiland, 2004). Velez, Quyen, Austic, Boyd, and McCabe (2015) found indications that there is an association between previous involvement in interscholastic sports and prescription opioid use and misuse. Male student-athletes were significantly less likely to report cigarette, smokeless tobacco, marijuana, cocaine or crack, hallucinogens, methamphetamines, and prescription drug (without prescription) use during their athletic season compared with off-season use (Yusko, 2008); and female student-athletes were significantly less likely to report use of cocaine or crack, hallucinogens, prescription drugs without a prescription, and weight-loss products in-season versus offseason (Yusko, 2008).

The proportion of students who report driving after consuming any alcohol is the fourth student objective area our study compared in the Substance Abuse topic area of Healthy Campus

2020. Despite widespread prevention efforts, approximately 3.4 million (30%) college students report driving after drinking alcohol (Hingson et al., 2009). College students are more likely to drive after drinking than their same-aged peers who do not attend college (Paschall, 2003). Students who reported consuming alcohol mixed with energy drinks were more than twice as likely to report riding with an intoxicated driver (O'Brien, McCoy, Rhodes, Wagoner, & Wolfson, 2008). O'Brien, et. al's (2008) results suggest that the association of energy drink ingestion with alcohol on driving a car under the influence was heightened at lower levels of alcohol consumption. One piece of positive data indicates that during a study by Teeters, Borsari, Martens, and Murphy, (2015), counselor-administered brief motivational interventions that include descriptive normative feedback were associated with significant reductions in alcohol-impaired driving compared with controls.

The proportion of students who report receiving information on alcohol and other drug use from their institution is the fifth student objective our study compared. This student objective resides in the Health Communication topic area of Healthy Campus 2020. In 2010, The Office of Safe and Drug-Free Schools at the U.S. Department of Education published a document summarizing the fundamental parts of effective campus-based alcohol and other drug abuse prevention practices (2010). This document highlights communication as the core of prevention efforts: formal social norms campaigns, community/campus meetings, printed and electronic newsletters, posters, flyers, calendars, web-sites, videos, and curriculum infusion (U.S. Department of Education, 2010). Results from a study by Hoffman, Pinkleton, Austin, and Reyes-Velazquez (2014) suggest that colleges should consider social, cultural, and cognitive factors when organizing and planning alcohol education programming.

The literature indicates that NCAA level student-athletes report misusing alcohol and other drugs which emphasizes the necessity for more intentional efforts for alcohol and other drug education and prevention programming. In an effort to be more intentional in their prevention and education efforts, the SSRU participated in the American College Health Association's National Collegiate Health Assessment Iib (ACHA-NCHA, 2015).

Method

During the spring of 2016, one hundred and eighty-nine (189) student-athletes from the National Collegiate Athletic Association (NCAA) Division II level SSRU program filled out the American College Health Association-National College Health Assessment (ACHA-NCHA) Iib online survey. The student-athlete population was either in the 18 to 20-year-old age range (67%) or in the 21 to 24-year-old age range (33%). Females identified as 57.1% of the surveyed student-athlete population which is very similar to the total SSRU female population of 55.7%. Males identified as 42.9% of the surveyed student-athlete population which is also similar to the total SSRU male population of 44.3 % (see Table 2). The surveyed student-athlete population was unduplicated as the survey was administered by an e-mail invitation which was sent to all undergraduate email addresses of currently registered undergraduate students at the SSRU. The email announcement included a link to the ACHA-NCHA Iib survey. Multi-sport student-athletes would only be sent one link to the survey. All student-athletes at the SSRU were part of the NCAA CHOICES grant program integrating the athletics department into campus wide-efforts to reduce alcohol abuse.

Students consented and voluntarily participated in the survey which they had the right to refuse at any time. The incentive given to complete the survey included five dollars on their university account for the first 50 students and their emails were entered into a drawing for

electronics. The confidential survey required about 30 to 40 minutes to complete. Students' email addresses or names were not attached to their response.

Results

Healthy Campus 2020 Topic: Substance Abuse

Student-Athlete objective: Reduce the proportion of students who report using marijuana (pot, weed, hashish, hash oil) within the last 30 days. The Healthy Campus 2020 target is set at 15.30% and the SSRU's student-athletes' results were at 12.10%. This is a 20.9% difference and indicates that the SSRU is already below the healthy Campus 2020 target.

Student-Athlete objective: Reduce the proportion of students who report engaging in high-risk drinking of alcoholic beverages within the last two weeks. The Healthy Campus 2020 target is set at 31.60% and the SSRU's student-athletes' results were 48.06%. This is a 53.8% difference and indicates that the SSRU is above the Healthy Campus 2020 goal.

Student-Athlete objective: Reduce the proportion of students who report nonmedical use of prescription drugs within the last 12 months. The Healthy Campus 2020 target is set at 13.8% and the SSRU's student-athletes' results are at 17.9%. This is a 29.7% difference and indicates that the SSRU is above the Healthy Campus 2020 target.

Student-Athlete objective: Reduce the proportion of students who report driving after consuming any alcohol within the last 30 days. The Healthy Campus 2020 target is set at 16.1% and the SSRU's student-athletes' results are at 8.5%. This is a 47.2% difference and indicates that the SSRU is already below the Healthy Campus 2020 target.

Healthy Campus 2020 Topic: Health Communication

Student-Athlete objective: Increase the proportion of students who report receiving information on alcohol and other drug use from their institution. The Healthy Campus 2020

target is set at 71.3% and the SSRU's student-athletes results are at 95.8%. This is a 34.4% difference and indicates that the SSRU is already above the Healthy Campus 2020 target.

Limitations

The limitations for this descriptive study should be noted. The number of student-athlete respondents (189 student-athletes) was small. Second, the study was limited by self-reporting truthfulness of the participants. Third, the sample was limited to undergraduate student-athletes at one rural, Division II, SSRU, and therefore, the results should not be generalized to undergraduate student-athletes in other regions of the United States.

Discussion

Since 2013, a stronger effort was made by the SSRU to educate student-athletes about the risks involved with the misuse of alcohol and other drug issues. In this effort, the SSRU applied for and was awarded funding for NCAA CHOICES; a grant program for NCAA member institutions to integrate athletics departments into campus wide-efforts to reduce alcohol abuse. Since receiving the grant, the athletic department has partnered with other campus departments in the development and implementation of effective alcohol and drug education projects. The prevention programs for student-athletes have focused on the social and environmental influences that are exclusive to college athletes. The CHOICES program goals include:

- Increasing peer to peer education among student athletes and the campus community,
- Challenging the norm that all student athletes drink in excessive and dangerous ways,
- Increasing night programming offer to students,

- Raising self-awareness about personal alcohol risk among high risk student groups.

The results of this survey demonstrate continued efforts are necessary to affect alcohol and other drug education and prevention efforts on behalf of the student-athletes. To align the student health objectives with the Healthy Campus 2020 targets for the student-athletes, the SSRU has identified the following areas which need additional efforts: high-risk drinking and the nonmedical use of prescription drugs.

Interventions aimed explicitly at collegiate student-athletes have been shown to be successful at changing perceptions of drinking norms on campus, but have not been as successful at reducing drinking behavior among student-athletes (Thombs & Hamilton, 2002). Results by Taylor, Ward, and Hardin (2017) suggest that it may not be the sport structure (Team vs. Individual) or the specific sport team, but the culture created by the student-athletes and the coaches that effects student-athletes' motivations for alcohol consumption. A recent study by Fetherman and Bachman (2016) researching Division III student-athletes suggests that teammates do influence health behaviors such as alcohol consumption. Research has also shown that Athletic Departments' alcohol policies and prevention programming for first-year student-athletes should address the potential influence of different types of friends on alcohol use (Massengale, Ma, Rulison, Milroy, & Wyrick, 2017).

The development and utilization of effective prevention and early intervention programs should remain a priority for universities emphasizing protective factors and risk reducing factors. The SSRU is utilizing data from this study to design and implement programs that employ collaboration among student-athletes, their respective coaches, the athletics staff, and prevention specialists.

Table 1

Topic Areas Related to Healthy Campus 2020

Topic Area: Substance Abuse	Data Source	Baseline	Target	% Difference
		2016	2020	
Reduce the proportion of students who report using marijuana (pot, weed, hashish, hash oil) within the last 30 days.	American College Health Association – National College Health Assessment II (ACHA-NCHA II), Question 8A6	12.10%	15.30%	-0.20
Reduce the proportion of students who report engaging in high-risk drinking of alcoholic beverages within the last two weeks.	American College Health Association- National College Health Assessment II (ACHA-NCHA II), Question 13	48.60%	31.60%	0.53
Reduce the proportion of students who report nonmedical use of prescription drugs within the last 12 months.	American College Health Association- National College Health Assessment II (ACHA-NCHA II), Question 18A-E	17.90%	13.80%	0.29
Reduce the proportion of students who report driving after consuming any alcohol within the last 30 days.	American College Health Association- National College Health Assessment II (ACHA-NCHA II), Question 14A	8.50%	16.10%	-0.47
Increase the proportion of students who report receiving information on alcohol and other drug use from their institution.	American College Health Association- National College Health Assessment II (ACHA-NCHA II), Question 2A1	95.80%	71.30%	0.34

Table 2

Demographics of Sample Population (N= 189)

Student-Athlete Demographics	n	%
Age		
18-20	127	67
21-24	62	33
25-29	0	0
30+	0	0
Sex		
Females	108	57.1
Males	81	42.9
Full –time student status		
Yes	185	97.9
No	4	2.1
Ethnicity		
White	148	78.3
Black or African American	25	13.2
Hispanic or Latino	7	3.7
Asian or Pacific Islander	0	0
American Indian or Alaskan Native Or Native Hawaiian:	3	1.6
Biracial or Multiracial	4	2.1
Other	2	1.1
Relationships status		
Single	175	92.6
Married/Partnered	6	3.2
Separated/Divorced/Other:	8	4.2

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