

## A National Study of the Reasons for Use and Non-Use of Alcohol Among College Student-Athletes by Sex, Race, and NCAA Division

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### **Abstract:**

Alcohol use among college student-athletes should be of great concern due to their risk for excessive consumption and related negative consequences compared to their non-athlete peers. Previous research has focused on reasons and/or motives for alcohol and other drug use among student-athletes, rather than non-use. Additionally, previous studies on student-athletes have typically focused on a single NCAA division. Therefore, the purpose of this study sought to identify both reasons for use and nonuse of alcohol among NCAA student-athletes, and explore potential differences by gender/sex, race/ethnicity and NCAA Division. In summary, there are significant differences for use and non-use of alcohol between males and female student-athletes, White and Black student-athletes, and student-athletes of differencing NCAA divisions (I, II, and III).

**Keywords:** alcohol use | college | student athletes | NCAA | risk

### **Article:**

**\*\*\*Note: Full text of article below**

# **A National Study of the Reasons for Use and Non-Use of Alcohol Among College Student-Athletes by Sex, Race, and NCAA Division**

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## **ABSTRACT**

*Alcohol use among college student-athletes should be of great concern due to their risk for excessive consumption and related negative consequences compared to their non-athlete peers. Previous research has focused on reasons and/or motives for alcohol and other drug use among student-athletes, rather than non-use. Additionally, previous studies on student-athletes have typically focused on a single NCAA division. Therefore, the purpose of this study sought to identify both reasons for use and non-use of alcohol among NCAA student-athletes, and explore potential differences by gender/sex, race/ethnicity and NCAA Division. In summary, there are significant differences for use and non-use of alcohol between males and female student-athletes, White and Black student-athletes, and student-athletes of differencing NCAA divisions (I, II, and III).*

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Data reported by the National Collegiate Athletic Association (2012) suggest that alcohol use among college student-athletes should be of great concern because they are more likely to engage in excessive consumption of alcohol and experience serious negative consequences when compared to their non-athlete peers (Martens, Dams-O'Connor, & Beck, 2006). In the same report, the NCAA presented substance abuse trends of NCAA student-athletes; 83.1% of respondents reported drinking alcohol within the last 12 months and of this group 49% reported drinking five or more drinks in one sitting (binge drinking/heavy episodic drinking). Moreover, student-athletes that engage in alcohol abuse have reported that they believe this behavior is a normal part of college life for most student-athletes (LaBrie, Hummer, Huchting, & Neighbors, 2009).

Not only are college student-athletes susceptible to the same physical, cognitive, and social consequences of alcohol and other drug use as their non-athlete peers, these effects are often exacerbated by the demands that intercollegiate sports place on them (Denny & Steiner, 2009; Venne, Laguna, Walk, & Ravizza, 2006). Whereas physical and cognitive side effects of substance use such as dehydration, increased blood pressure, and difficulty concentrating are of concern for everyone, these same side effects among athletes can cause serious performance impairments, injury, and longer recovery from injury (Murphy, Snape, Minett, Skein, & Duffield, 2012). There is also a growing body of research on the relationship between substance use and psychosocial consequences among college student-athletes. Compared to non-athletes, student-athletes are more likely to experience negative alcohol related consequences such as driving under the influence or riding with someone under the influence, risky sexual behavior, and physical and/or sexual violence (Brenner & Swanik, 2007; LaBrie et al., 2009).

Consumption of alcohol by student-athletes differs due to many varying factors. For example, peer norms, environmental influences, and parental communication are all significant mediators of the athlete-heavy drinking relationship (Turrisi, Mastroleo, Mallett, Larimer, & Kilmer, 2007). Another consideration is the unique social environments, heightened physical and psychological stress, and greater time constraints experienced by student-athletes as a result of their dual status as an athlete and as a student (Yusko, Buckman, White, & Pandina, 2008). For exam-

ple, alcohol use has been shown to be related to in-season/out-of-season fluctuations (Yusko et al., 2008) and peer and environmental influences (Mastroleo, Marzell, Turrisi, & Borsari, 2012; Turrisi et al., 2007).

Previous research has examined the concepts of motives and reasons for alcohol use in an effort to postulate why student-athletes use alcohol (Wahesh, Milroy, Lewis, Orsini, Wyrick, 2013). The terms *motive* and *reason* are often not differentiated and used interchangeably. According to Merriam-Webster (n.d.), *motive* is defined as a need or desire that causes a person to act; whereas, *reason* is a statement offered in explanation or justification (e.g., a rational ground or motive). In other words, although there may be many reasons for using alcohol; only some of those reasons qualify as motives. There is a need to distinguish these two terms while at the same time not limiting studies to one or the other. By doing so, future research will not only explore needs and desires (motives) for alcohol use and non-use held by student-athletes, but also all other potential explanations or justifications that may assist in developing effective behavioral interventions aimed at addressing the problem.

At present time, much of what has been published focuses on reasons and/or motives for alcohol and other drug use among student-athletes, rather than non-use. Additionally, previous studies on student-athletes have typically focused on a single NCAA division (Martens & Martin 2010); doing so disregards important distinctions between NCAA divisions such as number of scholarship student-athletes and sports, both of which may contribute to potential differences among student-athletes within each division. Therefore, the purpose of this study sought to identify both reasons for use and non-use of alcohol among NCAA student-athletes, and explores potential differences by gender/sex, race/ethnicity and NCAA Division.

## METHODS

### *Participants*

In the spring of 2012, 54 NCAA member institutions agreed to participate in a study designed to optimize *myPlaybook*, an online alcohol and other drug prevention program designed for NCAA student-athletes. All new student-athletes ( $n = 5,935$ ) at each of

the colleges/universities were invited to access and complete a web-based pretest survey, *myPlaybook*, an immediate web-based posttest survey, and a web-based 30-day follow-up survey. Findings reported come from a cross-section of items from the pretest (descriptive data) and posttest surveys (reasons). A total of 3,932 (66.3%) student-athletes complete the pretest and posttest surveys.

Although the ages of student-athletes ranged from 18 to 25 or more years, most participants were 18 or 19 years of age ( $M = 18.56$ ,  $SD = 2.36$ ). Participants described their race/ethnicity as White/Caucasian (72%), Black (13%), Hispanic (4%), or Asian (2%). Similar numbers of Male (51%) and Female (49%) students-athletes participated in the study.

All 3 NCAA divisions were represented in similar proportions, yet there were slightly less student-athletes from Division III (22.9%) schools. However, it should be noted that 17% of respondents chose not to report their division. Although the year of athletic eligibility of student-athletes ranged from 1 to 5 years, most participants were in their first year of eligibility (85%). This was expected due to the fact that recruitment strategies targeted first year student-athletes to which *myPlaybook* is intended. Lastly, in-season and out-of-season student-athletes were represented.

Among male and female sports, 20 teams were represented in the sample. The most common male sports were football, baseball, soccer, basketball and track and field (indoor/outdoor) and accounted for 39% of participating Males. The most common female sports were soccer, softball, basketball, track & field (indoor), volleyball, and track & field (outdoor) and accounted for 34% of participating females.

### *Measures & Instrumentation*

Student-athletes responded to a variety of questions related to their past-year alcohol use as well as other variables of interest. Participants who answered yes to using alcohol in the past year were directed to respond to survey items related to reasons for using alcohol in the past. Likewise, participants who answered no to using alcohol in the past year were directed to respond to items related to reasons for not using alcohol in the past.

Survey items related to reasons were presented to participants using a Likert scale. Participants were presented a list of reasons why people choose to use or not use alcohol. They were then asked to rate how important the reasons were for their decision to use or not use in the past year. For example, those who reported drinking alcohol in the past year rated the importance of *drinking to get drunk*; whereas, those who reported not drinking alcohol in the past year rated the importance of *not drinking because I was not old enough to drink legally*. Based on the target population, the development of the items consisted of a two-step strategy. First, survey items addressing reasons for use and non-use of alcohol were identified and adapted from instruments with previously reported reliability and validity (Miller, 2004; Cooper, Russell, Skinner, & Windle, 1992). Second, content validity of the instrument was established via AOD prevention expert and student-athlete review to determine the relevancy and clarity of items (Litwin, 1995).

### *Plan of Analysis*

To develop a profile of participants, descriptive statistics were used to identify their age, race/ethnicity, sex, NCAA division (i.e., I, II, III), year of athletic eligibility, and season status of sport. Contingency table analyses using the Chi-square statistic were used to determine whether the reasons for use and non-use were independent of the descriptive variables mentioned above. The objective was to identify whether reasons for use and non-use differ significantly among subgroups of student-athletes. Only findings in which there was a significant Chi-square ( $p < .05$ ), a standard residual  $\geq 2$ , and more than 5 respondents in the cell are reported.

Findings are presented in frequency tables and report the percentage of student-athletes that rated the reason as unimportant (*not at all important* and *somewhat unimportant*) compared to those that rated the reason as important (*somewhat important* and *very important*). Table notes indicate that the reason was not independent of descriptive variables.

### *Procedures*

In an electronic invitation, participants were assigned a unique username and password that would provide them with access to

*myPlaybook* and the associated surveys (pretest, posttest, and follow-up). As approved by the host institution's IRB, once logged in participants were provided with a detailed description of the optimization study, were informed that participation was voluntary, and given a choice to by-pass data collection procedures. Those who agreed to participate in data collection were automatically directed to a web-based pretest survey; whereas, those who opted out of data collection were automatically directed to *myPlaybook*. Anonymity of responses was assured by the generation of a unique code for each participant upon accessing each survey. To increase the accurate tracking of data over time, participants could only access each survey once, requiring them to respond to all survey items in one sitting. Following the pretest survey, participants were provided access to *myPlaybook*. Immediately upon completing *myPlaybook*, participants were then directed to a web-based posttest survey.

## RESULTS

### *Reasons for Use and Non-use of Alcohol by Gender*

Chi-square analyses indicate that the reasons for use and non-use of alcohol among student-athletes were not independent of gender. In other words, there were significantly different reasons for use and non-use of alcohol between Male and Female student-athletes.

Table 1 presents the percentage of Male and Female student-athletes that rated listed reasons as important for use of alcohol in the past year and Chi-square statistics. Significantly more Male than Female student-athletes rated *to have more fun, to meet people, to get drunk, to relax / lower my inhibitions, and nothing else to do* as important reasons for use of alcohol in the past year. In contrast, significantly more Female than Male student-athletes rated *my team's dry season had just ended* as important reasons for use of alcohol in the past year.

Table 2 presents the percentage of Male and Female student-athletes that rated listed reasons as important for non-use of alcohol in the past year and Chi-square statistics. Significantly more Female than Male student-athletes rated *I was not old enough to drink legally, I was worried about the negative effects on my athletic performance in competition, I was worried about*

*the negative effects on my athletic performance in practice, my coach would have disapproved, drinking would have interfered with my school work, I was going to drive, my teammates would have disapproved, I was worried about being drug tested, my team had agreed to a dry season, my team had a 24/48 no drinking rule, I did not like the way I act when drinking, alcohol is fattening, and my teammates did not drink* as important reasons for non-use of alcohol in the past year.

### *Reasons for Use and Non-use of Alcohol by Race/Ethnicity*

Chi-square analyses indicate that the reasons for use and non-use of alcohol among student-athletes were not independent of race/ethnicity. In other words, there were significantly different reasons for use and non-use of alcohol between student-athletes of different race/ethnicities. The following tables most often present only the percentage of White and Black student-athletes that rated listed reasons as important because they were the only race categories in which significant differences occurred. When not the case, statistics for other race/ethnicity categories are reported.

Table 3 presents the percentage of White and Black student-athletes that rated listed reasons as important for use of alcohol in the past year and Chi-square statistics. Significantly more White than Black student-athletes rated *to celebrate, my teammates or friends were drinking, to have more fun, to meet people, to get drunk, to relax / lower my inhibitions, and my team's dry season had just ended* as important reasons for use of alcohol in the past year.

Table 4 presents the percentage of White and Black student-athletes that rated listed reasons as important for non-use of alcohol in the past year and Chi-square statistics. Significantly more White than Black student-athletes rated *I was worried about the negative effects on my athletic performance in practice, I was worried about the negative effects on my athletic performance in competition, drinking would have interfered with my school work, I was not old enough to drink legally, my coach would have disapproved, I was going to drive, and I did not like the way I act when drinking* as important reasons for non-use of alcohol in the past year. Additionally, significantly lesser Asian student-athletes (43.5%) than others rated *I did not like the way I act when drinking* as an important reason for non-use of alcohol in the past year.



Furthermore, the percentage of Hispanic student-athletes (70.2%) that rated *I was not old enough to drink legally* as an important reason for non-use of alcohol in the past year was significantly less than White (79.8%) and significantly more than Black student-athletes (60.6%).

#### *Reasons for Use and Non-use of Alcohol by NCAA Division*

Chi-square analyses indicate that the reasons for use and non-use of alcohol among student-athletes were not independent of NCAA divisions. In other words, there were significantly different reasons for use and non-use of alcohol between student-athletes of different NCAA divisions.

Table 5 presents the percentage of NCAA Division I, II, and III student-athletes that rated listed reasons as important for use of alcohol in the past year and Chi-square statistics. Significantly fewer Division I student-athletes than Division II and III student-athletes rated *nothing else to do* as important reasons for use of alcohol in the past year. Significantly fewer Division II than Division III as compared to Division I student-athletes rated *to celebrate, to have more fun, my teammates or friends were drinking, to meet people, to get drunk, to relax / lower my inhibitions, I felt stressed / to manage stress better, and my team's dry season had just ended* as important reasons for use of alcohol in the past year. Significantly more Division III student-athletes than others rated *to celebrate, to have more fun, my teammates or friends were drinking, to meet people, to get drunk, to relax / lower my inhibitions, I felt stressed / to manage stress better, my team's dry season had just ended, and nothing else to do* as important reasons for use of alcohol in the past year.

Table 6 presents the percentage of NCAA Division I, II, and III student-athletes that rated listed reasons as important for non-use of alcohol in the past year and Chi-square statistics. Significantly fewer Division I than Division II and III student-athletes rated *drinking would have interfered with my school work* and *my team had agreed to a dry season* as important reasons for non-use of alcohol in the past year. Additionally, significantly more Division III than Division I and II student-athletes rated *drinking would have interfered with my school work* as important reasons for non-use of alcohol in the past year. Significantly more Division II student-athletes than Division I and III student-athletes rated *my*

*team had agreed to a dry season* as an important reason for non-use of alcohol in the past year. Additionally, significantly fewer Division I student-athletes than Division II and III student-athletes rated *my team had agreed to a dry season* as an important reason for non-use of alcohol in the past year.

## DISCUSSION

The primary purpose of this study was to investigate reasons for use as well as non-use of alcohol by college student-athletes and explore differences between subgroups. In summary, there are significant differences for use and non-use of alcohol between males and female student-athletes, White and Black student-athletes, and student-athletes of differing NCAA divisions (I, II, and III). Generally speaking, female student-athletes consistently endorsed survey items as more important than males for alcohol non-use, suggesting that reasons for non-use represent a more powerful influence on behavior for females. Regardless, male and female student-athletes rated to celebrate as their top reason to drink and teammate non-use of alcohol as the least important reason. Their low rating of teammate non-use is particularly interesting because it suggests that what they observe or perceive has little effect on their drinking behavior which is inconsistent with social norms literature suggesting descriptive norms (perceptions of others' use) are a power influence on alcohol use (Bosari & Carey, 2003). Theoretically, these findings may suggest that descriptive norms are not as important to alcohol non-use as they are for alcohol use. Likewise, male and female college student-athletes rated nothing else to do as their least important reason to drink, contrary to literature that suggests alternative activities can be effectively used to deter drinking on college campuses (Maney et al., 2002; Vangsness & Oster-Aaland, 2009). In contrast, male student-athletes rated not being of legal drinking age as their most important reasons for not drinking, whereas females were worried about its effect on their athletic performance.

There are significant differences for use and non-use of alcohol between White and Black student-athletes. Generally speaking, White student-athletes consistently endorsed survey items as more important than other races for alcohol use and non-use, suggesting that reasons for use and non-use of alcohol represent a more powerful influence on behavior for White student-athletes. For example, although White and Black student-athletes rated

worry about the negative effects on their athletic performance as their top reason for non-use of alcohol, there were significantly more White than Black student-athletes who reported the reason as important. This may suggest that White student-athletes place a greater emphasis of the negative impact of alcohol use on their athletic performance than Black student-athletes.

Whereas most literature to date covers student-athletes within a single division, this study investigated and uncovered significant differences for alcohol use and non-use between NCAA divisions. Currently, there is discussion within higher education and intercollegiate athletics about important differences between NCAA divisions (Brenner & Swanik, 2007). This study produced evidence of these potentially important differences. Specifically, Division III consistently rated reasons for use of alcohol significantly higher than DI and DII, whereas DII consistently rated reasons for use significantly lower than DI and DIII, suggesting that reasons for non-use represent a more powerful influence on behavior for Division III student-athletes. Regardless, similar to gender and race, to celebrate is the most important and nothing else to do is the least important reason for alcohol use across all three divisions. Unlike other subgroup comparisons, there are few significant differences among reasons for non-use of alcohol between NCAA divisions. However, significantly less Division I student-athletes rated drinking would have interfered with my school work as an important reason for non-use of alcohol when compared to Division III student-athletes, which may be due to the more demanding and structured schedule (Brenner & Swanik, 2007) imposed on Division I student-athletes that diminish their perception of the negative impact alcohol use would have on their school work.

Although the primary purpose of this study was to investigate reasons for use as well as non-use of alcohol and other drugs by college student-athletes and explore differences between subgroups, there are important implications for both practice and research.

### *Implications for Practice*

Whereas there are different reasons for alcohol use and non-use between gender, race/ethnicity, and NCAA division, the authors do not suggest that these findings should necessitate

customized programming for every potential sub population. Developing behavioral interventions that recognize and address the unique needs of every major student-athlete subgroup would lead to an unmanageable number of programs and an inefficient use of resources. Additionally, doing so would be complicated by the inherent lag time between research and subsequent publication and the possibility of ever evolving needs of the population changing prior to program development. One strategy to address the challenges presented above and to ensure that important differences are considered during program development, the authors suggest collaborative intervention development, such as involving student-athletes in program design. Another strategy would be to consider the utility of an adaptive behavioral intervention (Lagoa, Bekiroglu, Lanza, & Murphy, in press) that can accommodate the unique needs of each student-athlete rather than content targeted at a predetermined number of subgroups.

However, the authors do suggest that practitioners consider including both reasons for use and non-use in designing future programs. Prior to now, programs have been designed with a primary focus on reasons for use, which fails to address the importance of the behavior of interest (non-use). Additionally, for all substances other than alcohol, there are a greater number of individuals who ought to be targeted by primary prevention approaches that reinforce positive reasons for non-use rather than targeting the limited number of individuals who would benefit from secondary prevention.

One of the greatest challenges in completing this research study was the lack of clarity between reasons and motives in the current literature. Regardless, it's suggested that practitioners and developers alike consider both reasons and motives during program development. By definition, motives are internal, whereas reasons refer to internal and external factors. Considering reasons and motives during program development increases the likelihood of addressing individual and environmental factors related to alcohol use and non-use.

#### *Implications for future research*

In general, instruments with previously established validity elicit motives and not reasons for alcohol use. Although this study takes the first step in exploring reasons and motives, further

research is warranted. To do so necessitates the continued development of data collection instruments and procedures that assess motives and reasons.

As previously mentioned the importance of reasons for non use cannot be underestimated. Therefore, continued research investigating reasons and motives for non-use is needed. Afterword, specific reasons for non-use that mediate substance use may be potentially identified and integrated into behavioral intervention development.

Lastly, students low rating of their teammate's behavior as unimportant for alcohol non-use warrants further exploration.

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## REFERENCES

- Brenner, J., & Swanik, K. (2007). High-risk drinking characteristics in collegiate athletes. *Journal of American College Health, 56*(3), 267-272.
- Bosari, B., & Carey, K. B. (2003). Descriptive and injunctive norms in college drinking: A meta-analytic integration. *Journal of Studies on Alcohol, 64*(3):331-341.
- Cooper, M. L., Russell, M., Skinner, J. B., & Windle, M. (1992). Development and validation of a three-dimensional measure of drinking motives. *Psychological Assessment, 4*(2), 123-132.
- Denny, K. G., & Steiner, H. (2009). External and internal factors influencing happiness in elite collegiate athletes. *Child Psychiatry and Human Development, 40*(1), 55-72.
- LaBrie, J. W., Hummer, J. F., Huchting, K. K., & Neighbors, C. (2009). A brief live interactive normative group intervention using wireless keypads to reduce drinking and alcohol consequences in college student athletes. *Drug & Alcohol Review, 28*(1), 40-47.
- Lagoa, C., Bekiroglu, K., Lanza, S. T., & Murphy, S. (in press). Designing adaptive intensive interventions using methods from engineering. *Journal of Consulting and Clinical Psychology*.
- Litwin, M. (1995). *How to measure survey reliability and validity*. Thousand Oaks, CA: Sage.
- Maney, D. W., Mortensen, S., Powell, M. P., Lozinska-Lee, M., Kennedy, S., & Moore, B. (2002). Alcohol-free alternative activities for university students: Modeling associated drinking behavior. *American Journal of Health Education, 33*(4), 225-233.
- Martens, M. P., Dams-O'Connor, K., & Beck, N. C. (2006). A systematic review of college student-athlete drinking: Prevalence rates, sport-related factors, and interventions. *Journal of Substance Abuse Treatment, 31*(3), 305-316.

- Martens, M. P., & Martin, J. L. (2010). College athletes' drinking motives and competitive seasonal status: Additional examination of the athlete drinking scale. *Addiction Research & Theory, 18*(1), 23-32.
- Mastroleo, N. R., Marzell, M., Turrisi, R., & Borsari, B. (2012). Do coaches make a difference off the field? The examination of athletic coach influence on early college student drinking. *Addiction Research & Theory, 20*(1), 64-71.
- Miller, W. R. (Ed.) (2004). *Combined Behavioral Intervention manual: A clinical research guide for therapists treating people with alcohol abuse and dependence*. COMBINE Monograph Series, (Vol.1). Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism. DHHS No. 04-5288.
- Motive. (n.d.) In *Merriam-Webster Online Dictionary*. (11<sup>th</sup> ed.). Retrieved from <http://www.merriam-webster.com/dictionary/motive>.
- Murphy, A., Snape, A., Minett, G. M., Skein, M., & Duffield, R. (2012). The effect of post-match alcohol ingestion on recovery from competitive Rugby League matches. *Journal of Strength and Conditioning Research, 26*(5), 1304-1312.
- Reason (n.d.) In *Merriam-Webster Online Dictionary*. (11<sup>th</sup> ed.). Retrieved from <http://www.merriam-webster.com/dictionary/reason>.
- National Collegiate Athletic Association. (2012). *National study of substance use trends among NCAA college student-athletes*. Retrieved from <http://www.ncaapublications.com/productdownloads/SAHS09.pdf>
- Turrisi, R., Mastroleo, N. R., Mallett, K. A., Larimer, M. E., & Kilmer, J. R. (2007). Examination of the mediational influences of peer norms, environmental influences, and parent communications on heavy drinking in athletes and nonathletes. *Psychology of Addictive Behaviors, 21*(4), 453-461.
- Vangsness, J. & Oster-Aaland, L. (2009, January). *Club NDSU: Assessing the effectiveness of late-night programming through direct and indirect measures*. Paper presented at the

National Association of Student Affairs Administrators in Higher Education Strategies Conference, Boston, MA.

- Venne, S. A., Laguna, P., Walk, S., & Ravizza, K. (2006). Optimism levels among collegiate athletes and non-athletes. *International Journal of Sport and Exercise Psychology*, 4(2), 182-195.
- Wahesh, E., Milroy, J. J., Lewis, T. F., Orsini, M. M., Wyrick, D. L. (2013). Hazardous drinking by first-year college-athletes: The differential roles of drinking motives, alcohol consequences, and season status. *Journal of Alcohol and Drug Education*, 57(2), 66-84.
- Yusko, D. A., Buckman, J. F., White, H. R., & Pandina, R. J. (2008). Risk for excessive alcohol use and drinking-related problems in college student athletes. *Addictive Behaviors*, 33(12), 1546-1556.



**TABLE 1**  
*Reasons for Use of Alcohol by Male and Female Student-Athletes*

<b>Reason</b>	<b>Male Reason Important (%)</b>	<b>Female Reason Important (%)</b>	<b>n<sup>a</sup></b>	<b><math>\chi^2</math></b>	<b>p</b>
To celebrate	64.4	66.2	2188	15.48	.00
To have more fun	46.9**	40.8**	2178	13.59	.00
My teammates or friends were drinking	44.7	42.3	2182	4.52	.21
To meet people	38.6*	34.5*	2185	9.08	.03
To get drunk	34.3**	25.7**	2184	24.00	.00
To relax / lower my inhibitions	25.4**	18.2**	2175	26.35	.00
I felt stressed / to manage stress better	19.3	17.4	2182	6.13	.11
My team's dry season had just ended	18.7*	20.6*	2179	9.33	.03
Nothing else to do	17.9**	13.4**	2179	23.13	.00

<sup>a</sup>df = 3.

\* $p < .05$ . \*\* $p < .01$ .

**TABLE 2**  
*Reasons for Non-Use of Alcohol by Male and Female Student-Athletes*

<b>Reason</b>	<b>Male Reason Important (%)</b>	<b>Female Reason Important (%)</b>	<b>n<sup>a</sup></b>	<b><math>\chi^2</math></b>	<b>p</b>
I was not old enough to drink legally	74.9**	83.4**	1048	43.07	.00
I was worried about the negative effects on my athletic performance in competition	71.4**	85.1**	1040	33.82	.00
I was worried about the negative effects on my athletic performance in practice	71.3**	85.9**	1038	33.98	.00
My coach would have disapproved	67.2**	83.1**	1040	40.77	.00
Drinking would have interfered with my school work	66.7**	84.8**	1038	48.56	.00
I was going to drive	64.7**	79.1**	1039	18.44	.00
My teammates would have disapproved	56.4**	69.3**	1036	25.19	.00
I was worried about being drug tested	56.0**	67.5**	1039	18.44	.00
My team had agreed to a dry season	50.9**	65.7**	1031	29.64	.00
My team had a 24/48 no drinking rule	48.9**	66.8**	1032	34.90	.00
I did not like the way I act when drinking	47.3**	60.7**	1030	22.46	.00
Alcohol is fattening	45.8**	57.9**	1040	27.36	.00
My teammates did not drink	44.4**	53.4**	1037	18.44	.00

<sup>a</sup>df = 3.

\*\*p < .01.

**TABLE 3**  
*Reasons for Use of Alcohol by White and Black Student-Athletes*

Reason	White Reason Important (%)	Black Reason Important (%)	n <sup>a</sup>	$\chi^2$	p
To celebrate	66.4*	57.9*	2184	32.75	.05
My teammates or friends were drinking	46.5**	23.8**	2177	82.56	.00
To have more fun	45.4**	33.9**	2173	45.53	.00
To meet people	40.4**	16.3**	2180	104.33	.00
To get drunk	31.8**	21.6**	2180	45.89	.00
To relax / lower my inhibitions	23.2**	15.5**	2170	52.70	.00
My team's dry season had just ended	21.0**	10.2**	2175	39.39	.01
I felt stressed / to manage stress better	18.6	14.2	2178	32.35	.05
Nothing else to do	16.1	12.2	2174	31.04	.07

<sup>a</sup>df = 21.

\* $p < .05$ . \*\* $p < .01$ .

**TABLE 4**  
*Reasons for Non-Use of Alcohol by White and Black Student-Athletes*

Reason	White Reason Important (%)	Black Reason Important (%)	n <sup>a</sup>	$\chi^2$	p
I was worried about the negative effects on my athletic performance in practice	83.4**	64.3**	1036	55.85	.00
I was worried about the negative effects on my athletic performance in competition	82.5**	65.9**	1038	55.51	.00
Drinking would have interfered with my school work	80.1**	64.0**	1036	51.05	.00
I was not old enough to drink legally	79.8**	60.6**	1046	57.00	.00
My coach would have disapproved	79.1**	63.7**	1038	45.08	.00
I was going to drive	76.9**	58.3**	1038	54.20	.00
My teammates would have disapproved	64.3	58.7	1034	30.32	.09
I was worried about being drug tested	62.4	55.9	1037	29.52	.10
My team had agreed to a dry season	61.4	51.6	1029	31.55	.07
My team had a 24/48 no drinking rule	60.7	50.0	1030	26.65	.18
I did not like the way I act when drinking	56.1*	51.5*	1028	36.85	.02
Alcohol is fattening	53.2	47.9	1038	32.34	.05
My teammates did not drink	49.3	48.7	1035	27.97	.14

<sup>a</sup>df = 21.

\* $p < .05$ . \*\* $p < .01$ .

**TABLE 5**  
*Reasons for Use of Alcohol by NCAA Division I, II, and III Student-Athletes*

Reason	Division I Reason Important (%)	Division II Reason Important (%)	Division III Reason Important (%)	n <sup>a</sup>	$\chi^2$	p
To celebrate	66.1	60.6*	69.4*	2192	16.13	.01
To have more fun	42.5	38.9**	51.4**	2182	28.81	.00
My teammates or friends were drinking	42.8	40.1**	48.0**	2186	19.92	.00
To meet people	37.7	31.7**	40.6**	2189	19.09	.00
To get drunk	28.9	25.7**	36.6**	2188	30.03	.00
To relax / lower my inhibitions	20.0	20.9*	25.4*	2179	13.44	.04
I felt stressed / to manage stress better	15.9	17.8*	20.2*	2186	14.32	.03
My team's dry season had just ended	19.3	16.7*	23.1*	2183	13.71	.03
Nothing else to do	12.8**	15.0	19.8**	2183	28.01	.00

<sup>a</sup>df = 6.

\*p < .05. \*\*p < .01.

**TABLE 6**  
*Reasons for Non-Use of Alcohol by NCAA Division I, II, and III Student-Athletes*

Reason	Division I	Division II	Division III	n <sup>a</sup>	$\chi^2$	P
	Reason Important (%)	Reason Important (%)	Reason Important (%)			
I was worried about the negative effects on my athletic performance in practice	78.1	74.3	70.8	1039	8.71	.19
I was worried about the negative effects on my athletic performance in competition	78.1	77.9	79.5	1041	9.73	.14
Drinking would have interfered with my school work	72.6**	76.1	80.4**	1039	18.58	.01
I was not old enough to drink legally	71.7	75.1	78.9	1049	10.62	.10
My coach would have disapproved	71.5	77.2	77.7	1041	7.86	.25
I was going to drive	70.3	71.5	75.6	1041	10.02	.12
My teammates would have disapproved	60.3	66.8	60.3	1037	12.53	.05
I was worried about being drug tested	60.4	65.3	58.1	1040	12.95	.04
My team had agreed to a dry season	53.1**	62.8**	58.7	1032	18.06	.01
My team had a 24/48 no drinking rule	53.6	61.3	58.7	1033	7.46	.28
I did not like the way I act when drinking	53.0	56.8	51.2	1031	10.89	.09
Alcohol is fattening	49.0	54.0	51.3	1041	3.67	.72
My teammates did not drink	48.3	51.7	45.3	1038	11.12	.09

<sup>a</sup>df = 6.

\*\*p < .01.

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