

Management Whitepaper

Examination of Drinking Habits and Motives of Collegiate Student-Athletes

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I. Research Problem(s) Addressed

Problematic drinking can be found campus wide, but collegiate student-athletes represent a specific at-risk demographic. Collegiate student-athletes consume more alcohol than nonathletes and are more likely to engage in more extreme styles of alcohol consumption. The frequency of annual alcohol consumption by collegiate student-athletes is 80%, compared to 60% of nonathlete students who report consuming alcohol. Additionally, those who participate in collegiate athletics tend to be more likely to engage in a wide variety of risky behaviors, including high alcohol consumption levels, than nonathletes. This research examines the drinking patterns of intercollegiate student-athletes. The purpose of this study was to determine if student-athletes who participate in different types of sport (i.e., individual, team) and division (i.e., Division I, Division III) differ with respect to motivations to consume alcohol, alcohol consumption patterns, and alcohol-related negative consequences.

II. Issue(s)

Collegiate student-athletes have a number of distinct concerns including balancing time spent on athletics with academics; maintaining a high level of athletic performance while responding to stress and/or injuries; maintaining success or reacting to lack of success; and managing numerous relationships with coaches, teammates, family, friends, and faculty. All of these factors may contribute to their alcohol consumption, and experts have dubbed collegiate student-athletes as a high-risk group for alcohol abuse. Sixty percent of male and 50% of female collegiate student-athletes self-reported heavy episodic alcohol consumption during a two-week period. Additionally, 34% of collegiate student-athletes reported consuming 11 or more alcoholic drinks at one time in the past month. Along with engaging in a greater frequency of alcohol consumption, consuming more drinks

per episode, and participating in binge drinking more habitually than nonathletes, student-athletes have an increased likelihood to engage in risky behavior while intoxicated. Although the risky behaviors student-athletes engage in are almost identical to those of nonathletes (i.e., drinking and driving, greater number of sexual partners, and increased likelihood of involvement in physical fights), student-athletes are more likely to experience negative consequences, especially for those who are team leaders. Negative consequences of alcohol consumption include: physical illness and injury, greater likelihood of drinking and driving or riding with an intoxicated driver, increased amounts of risky sexual behavior (e.g., unprotected sex, unwanted sex), amplified amounts of sensation seeking behavior (e.g., risky, reckless behavior), and decreased academic success.

Collegiate student-athletes' alcohol consumption and drinking motives differ from that of their nonathlete counterparts. Intercollegiate student-athletes may consume higher than normal levels of alcohol in order to cope or conform. However, an increased number of social opportunities afforded to student-athletes compared to their nonathlete counterparts may lead to an increase in social motives. Student-athletes who report high levels of both coping and conformity motives experience the greatest number of alcohol-related negative consequences. Student-athletes from a variety of sports reported social motives as their greatest motive to consume alcohol; however, not all sports experienced the same amount of social motivation. Student-athletes from swimming and diving had significantly higher levels of each motivation subscale (i.e., social, enhancement, and coping motives) as compared to student-athletes who participated in soccer, basketball/volleyball, baseball/softball, and track/cross country.

Alcohol consumption patterns also differ based on specific sport and gender. Specifically, male student-athletes generally consume more than females; male student-athletes participating in swimming/diving, soccer, and baseball reported significantly higher alcohol consumption than other sports such as basketball and track and field. Moreover, research has found student-athletes participating in team sports (i.e., baseball, basketball, football, soccer, and volleyball) reported higher rates of risky drinking compared to individual sport student-athletes (i.e., golf, gymnastics, swimming and diving). Similarly, intercollegiate student-athletes participating in team sports have been found to reported higher rates of alcohol and chewing tobacco use than those in non-team (individual) sport student-athletes. Research indicates that this difference is likely to be caused by the socializing and bonding factor of drinking with teammates.

In addition, student-athletes participating in NCAA Division I sports are more likely to engage in binge drinking than Division III student-athletes. However, Division III student-athletes reported drastically higher rates of drinking across a 12-month period than Division I or II student-athletes. These differences may be due to the differing philosophies at each level of NCAA athletics or the differential demands of the in-season schedule. Additionally, Division III student-athletes

engage in lower levels of high-risk alcohol consumption. Division III student-athletes report higher levels of campus engagement than student-athletes at Division I or II institutions which may play a role in their decreased alcohol consumption.

III. Analysis

A quantitative analysis of drinking motives, alcohol consumption, and alcohol-related consequences was performed on a sample of 283 student-athletes from five Midwestern universities. Approximately 84.8% ($n = 240$) student-athletes reported that they had consumed an alcohol beverage. Scores on the Drinking Motives Questionnaire-Revised indicated social motives ($M = 3.11$, $SD = 1.14$) were the highest endorsed motive, followed by coping motives ($M = 1.75$; $SD = .78$), enhancement motives ($M = 2.52$; $SD = 1.11$), and conformity motives ($M = 1.61$; $SD = .72$), respectfully. Individual sport student-athletes had higher levels on the enhancement and conformity scales than team sport student-athletes. Analysis of the Athlete Drinking Scale found positive reinforcement motives ($M = 2.83$; $SD = 1.32$) to be the highest motive endorsed, followed by Team/Group motives ($M = 1.99$; $SD = 1.02$), and Sport-Related Coping ($M = 1.76$; $SD = 1.01$), respectfully. Significant relationships were found on both subscales when examined across gender. Participants reported drinking an average of 1.03 ($SD = 1.20$) days per week with a range from zero to seven days. Student-athletes reported consuming an average of 3.70 ($SD = 3.25$; range: 0 to 18) standard drinks on a typical drinking day and an average of 5.60 ($SD = 5.57$; range 0 to 25) standard drinks on their highest drinking occasion over the last 30 days. Male student-athletes reported consuming a higher number of drinking days than female student-athletes, as well as a higher number of drinking on a standard drinking occasion and highest drinking occasion. No significant findings were discovered across division (i.e., Division I, Division III) and sport type (i.e., individual, team) for drinking behaviors (i.e., number of drinking days, typical number of drinks per episode, and peak number of drinks consumed). Finally, male student-athletes reported experiencing a greater number of alcohol related negative consequences than female student-athletes.

IV. Discussion/Implications

Male student-athletes consumed more alcohol, consume alcohol more frequently, reported more alcohol-related negative consequences, and tended to report higher levels of drinking motives than female student-athletes. In contrast to Brenner and colleagues (2009), the student-athletes from Division I and Division III institutions did not differ across the alcohol consumption variables, drinking motives, and alcohol-related negative consequences. Individual sports tended to report higher levels of enhancement motives, conformity and motives than team sports. This result suggests that it may not be the sport structure, or team emphasis of team sports (i.e., volleyball), but the culture created by the student-athletes and coaches that influences student-athletes' motivations for alcohol consump-

tion. Organizational, or team, culture can be defined as, “the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration.” Organizational culture is an advanced environment within which explicit circumstances are embedded. Therefore, it is rooted in history, communally held, and adequately complex to defy attempts at manipulation from organizational members. Certain teams may have cultures that are more permissive to or even encourage behaviors such as high levels of alcohol consumption including binge drinking.

Although there was no significant effect found when examining sport type (i.e., individual, team) across the Athlete Drinking Scale, there was a significant difference among Drinking Motives Questionnaire-Revised scales. Individual sport student-athletes had higher endorsements of both enhancement and conformity motives compared to team sport student-athletes. Previous research suggested that differences in alcohol consumption between individual and team sport athletes was likely to be caused by the socializing and bonding factor of drinking with teammates in team sport athletes. However, the findings of this study suggests that it may not be the sport structure, or team emphasis of team sports (i.e., volleyball, football, softball), but the culture created by the student-athletes and coaches that influences student-athletes’ motivations for alcohol consumption. Individual sport student-athletes may experienced higher endorsements of enhancement and conformity motives because their team bonding happens off the field or court.

However, in contrast to the motivation results, individual and team sport student-athletes did not differ with respect to quantity and frequency measures, alcohol-related negative consequences, and alcohol consumption across most of the days of the week. The lack of differences between quantity and frequency measures, alcohol-related negative consequences, and alcohol consumption across most of the days of the week in conjunction with significant differences in motives is interesting and may suggest several conclusions. First, differences in motives may have been found due to high number of swimmers and divers who participated in the study. Previous research has indicated that swimmers and divers consume significantly greater amounts of alcohol than student-athletes from other sports. The higher than average rates of alcohol consumption may increase motivation of alcohol consumption for the individual sport group. Second, the differences in motivation still need to be addressed. Coaches and athletic administrators need to understand what motivates their student-athletes to consume high levels of alcohol. If coaches and athletic administrators can gain insight into what motives student-athletes, they may be able to better curb their dangerous drinking habits.

Male student-athletes endorsed higher levels of all the student-athlete specific drinking motives as measured by the Athlete Drinking Scale. In contrast to the findings from the nonathlete specific drinking coping motives scale, male and

female student-athletes significantly differed with respect to sport-related coping. In nonathlete samples, increased levels of coping motives also relate to experiencing increased negative consequences from alcohol consumption. In the current sample, male student-athletes reported higher levels of alcohol-related negative consequences. In student-athletes, it is possible that the link between coping and alcohol-related negative consequences requires the use of an athlete specific coping measure. However, further research is needed to establish this link in student-athletes.

Gender differences were found for the positive reinforcement and team/group motives subscales of the Athlete Drinking Scale. Although specific research hasn't been done to examine gender across the Athlete Drinking Scale, connections can be made using the relationship between the subscales of the Athlete Drinking Scale and the Drinking Motives Questionnaire-Revised. The positive reinforcement subscale of the Athlete Drinking Scale is most closely related to the enhancement motives subscale of the DMQ-R which prior research has shown to be more highly endorsed by male than female participants (Kuntsche, Rehm, & Gmel, 2004). The team/group motives subscale reflects a combination of the social and conformity motives subscales of the DMQ-R; research indicates that male participants tend to report higher levels of social motives than female participants (Cooper, 1994; Kuntsche et al., 2006). In addition, Tricker and colleagues (1989) found that student-athletes are afforded a greater number of social opportunities than nonathletes which may lead to increased levels of team/group motives.

Significant gender differences were found in alcohol consumption patterns of the student-athletes in this study. Male student-athletes reported a significantly higher number of typical drinking days during the week, number of drinks consumed on a typical day drinking, and number of drinks consumed on the heaviest drinking occasion in the last 30 days. These findings are consistent with gender and alcohol consumption research that has found male participants to consistently surpass women in typical drinking frequency and quantities (Wilsnack, Vogeltanz, Wilsnack, & Harris, 2000). These results also suggest that male student-athletes may be a particularly at risk population for high levels of alcohol consumption and alcohol-related negative consequences. Findings suggest that athletic directors, coaches, and support staff should provide additional educational training to male student-athletes about the dangers of excessive alcohol consumption.