



## Drinking During the Week? Alcohol Use and Religion among College Students

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### Abstract

Alcohol use among college students has been correlated with academic performance, major choice, and risky behaviors, such as impaired driving and high-risk sexual encounters. As college students matriculate, they learn to make decisions about who they are now, and who they will become in the future; decisions that include choices about religion. The study explored the differences in religious self-identification and alcohol use among students who identified themselves as unsure of their religious beliefs, those who were spiritual, and those who were religious; results found that students who self-identified as religious were less likely to drink alcohol within the past month.

*Keywords:* College student alcohol use, religion, drinking during the week, alcohol and religion.

The undergraduate collegiate experience has its foundation in a developmental approach to social and personal development. Through a series of decision-making events and encountering challenges and crises, individuals who enter college are forced to confront their own beliefs and make choices about who they are, how they view themselves, and ultimately, who they will be in their own lives. The development of identity has been subsequently been key to how and why institutions make decisions about things like student housing, elective systems, and even honor codes.

As a developmental period and institution, colleges generally provide students a great deal of flexibility in conducting themselves, and among many different trends that have arisen, alcohol use is prominent. In the early 1990s, over 40% of all college students engaged in binge drinking, and by 2001, that number had increased to almost 50% (Wechsler et al., 2002). According to the National Survey on Drug Use and Health (2015), 58% of full-time college students reported drinking within the past month, over 10% reported heavy drinking, and over 1,800 students die each year from alcohol related deaths, including motor vehicle accidents. Despite these high numbers, institutions are challenged to allow students make their own decisions while also teaching responsible substance use.

Concurrent to making decisions about drinking and other healthy living choices, students are faced with addressing their own spirituality. Moving away from family or parent-driven religious behaviors, college students are confronted with making their own choices about what to believe and how to practice or live those beliefs. For many students, this is an empowering and growing period in their lives when they can experiment with thinking differently about the world around them and making choices that they will live with for the rest of their lives.

Research has suggested that the decision to drink (and how much) and the decision about what to believe are correlated. Some religious faiths have a lenient or open approach to alcohol use, while other more stringent faiths do not allow adherents to use substances such as alcohol and tobacco. Additionally, the strength of an individual's adherence to religious doctrine can be a factor in a student's decision to use alcohol. This study was designed to explore the relationship between religious adherence and alcohol use among college students, specifically identifying differences between an individual's strength of religious adherence and alcohol frequency use.



### **Background of the Study**

The collegiate experience has increasingly moved to one of professional preparation, a dramatic departure from its historical foundation as a developmental time in a young person's life to experiment with life choices and come to identity foreclosure (Karabel, 1998; Miller & Nadler, 2016). The college experience for a young adult is a time to transition from a dependent-family environment to an independent state of life, free to make choices and decisions about what and how to value the world around themselves. Such a perspective on higher education has been described as a student-development approach to higher education, where the institution accepts a responsibility to provide a safe environment for taking chances (Evans, Forney, Guido, Patton, & Renn, 2009).

Controlling student behaviors on a college campus is problematic for many reasons, including unsupervised and unregulated interactions between students and others on a continuous basis along with the physical growth and maturation of students in this age group. Students come from divergent backgrounds and interact in person, with technology, and in groups, and individual behaviors often become influenced by group behaviors, resulting in sporadic and often unpredictable sets of behaviors. This includes individual contemplation on personal beliefs in areas such as religion, but also includes experimentation with alcohol and other substances.

Alcohol use is a public health issue that can impact job and academic performance, professional opportunities and job retention, social and quality of life dimensions, and, overall individual health. Alcohol use and misuse has been found to be common among college students (Demers, Beauregard, & Gliksman, 2013; Hingson, 2010), and college students have been alternatively found to be greater users of alcohol as a population (Carter, Brandon, & Goldman, 2010), and conversely, not greater users of alcohol (Goldman, Greenbaum, Darkes, Brandon, & Del Boca, 2011). Carter et al. (2010) did find that variables such as Greek-life membership and college sports participation were positively correlated with excessive alcohol use.

Alcohol use among college students has been stable to slightly increasing over the past several decades, noting that collegiate intervention programs appear to have had little effect in curbing drinking behaviors (Hingson, 2010). The impact of this alcohol use has been recognized in the rise in what has been defined as high-risk behaviors, such as driving under the influence of alcohol (Hingson, 2010) and risky sexual behavior, such as un-protected sex (Cooper, 2002).



Several researchers have found that religiosity has been correlated with other types of high-risk behavior, including criminal activity and drug use (Baier & Wright, 2001; Borynski, 2003). In both at-risk behaviors, individuals who had higher religious-identifications were less likely to engage in illegal drug use or criminal activity. Wallace and Forman (1998) reported that religious participation was correlated with lower and non-alcohol consumption by teenagers, and Brown, Salsman, Brechting, and Carlson (2007) and Wallace et al. (2007) found similar results among college students.

Aside from the positive correlations between religious behavior and substance use, religious identification among college students is decreasing (Astin, Astin, & Lindholm, 2011). Drawing upon data from the Cooperative Institutional Research Program (CIRP) data, over 10% of college students stop praying or meditating during their first year of college and they documented a 27% decrease in student participation in organized religious activities during their first year (Austin et al., 2011).

The trends of increasing alcohol consumption on campus and among college students coupled with the decrease in religious participation suggest a growing crisis on college campuses. As students seek to find their own identity, they appear to participate in more high-risk activities and although many students may return to religious participation, many begin their journey to independence by breaking the habits learned in high school and with their upbringing family. The current study fills a void by directly addressing the differences between the spirituality of students and alcohol consumption, specifically examining the self-reported intensity and volume of alcohol consumption when compared to the strength of religious adherence and participation.

### **Methodology**

Data collection took place at a mid-sized, mid-western comprehensive university of approximately 9,000 undergraduate students. A stratified random sample of 250 students was selected from each class level of full-time students for a total sample of 1,000 students.

An electronic-delivered survey instrument was administered to the sample population, and the instrument included the 13-item Religious Background and Behavior Survey created by Connors, Tonigan, and Miller (1996) and the 5-item Alcohol Use Disorders Identification Test (AUDIT) (Lee et al., 2012). The Connors et al. (1996) survey consistently has reported



Cronbach alpha levels of .85 and higher and has a test-retest correlation of .94. The AUDIT questions were drawn from a Saunders, Aasland, Babor de la Fuente, and Grant (1993) instrument that was originally developed for the World Health Organization. This instrument has been administered over 20 times with different populations and has a reported reliability level of .83 (Reinert & Allen, 2007).

The survey was administered during a spring term with two reminders sent to sample members. A total of 166 (16.6%) students completed the entire survey and were included in the data analysis. The number of respondents was identified to be consistent with previous research on online survey research methods among college students (Antons, Dilla, & Fultz, 1997; Astin, 2003).

### Results

Of the 166 respondents, 132 self-identified as either unsure of their religious beliefs ( $n=10$ ; 16.6%), spiritual ( $n=47$ ; 28.3%), or religious ( $n=75$ ; 45.25%). Of these respondents, 25% were male ( $n=33$ ) and the remainder were female, the majority were White/Caucasian ( $n=111$ ; 84%), and the average age of a respondent was 20 years old. Two goodness of fit tests revealed that the distribution of males and females was not representative of the population [ $X^2(1, N=166)=9.54, p<.05$ ], but the racial identification was statistically representative of the undergraduate student body [ $X^2(4, N=166)=5.56, p>.05$ ].

The first section of the survey provided an opportunity for respondents to self-identify as an atheist, agnostic, unsure, spiritual, or religious, and to indicate their drinking behaviors during the past week. The response rates by the atheist and agnostic self-identified students was too small to be included in the analysis. Those students who identified themselves as unsure about their religious beliefs reported drinking an average of 2.30 alcoholic drinks in the past seven days ( $n=10$ ;  $SD=3.16$ ), those who reported being spiritual drank an average of 5.45 drinks in the past seven days ( $n=45$ ;  $SD=9.64$ ), and in that same period of time, those self-identifying as religious drank 3.16 alcoholic drinks ( $n=75$ ;  $SD=5.90$ ). As shown in Table 1, an Analysis of Variance identified no significant difference among the self-reported alcoholic drinks that each group consumed in the past week.



Table 1.

*One-Way ANOVA Results for Self-Identified Religion Classification and Drinks per Week*

Source	Sums of Squares	df	Mean Square	F	p
Between groups	179.11	2	89.56	1.66	.19
Within groups	6945.80	129	53.84		
Total	7124.91	131			

Note:  $p = 0.05$ .  $N = 132$ .

The next level of analysis included the AUDIT-5 as an indicator of excessive drinking, with a scoring range of a low of five to a maximum of 20 (Kim et al., 2013), with the higher scores representing higher at-risk behavior with alcohol. Again using the three groups with at least 10 students, those unsure of their personal beliefs about religion had a mean score of 9.24 ( $SD=2.53$ ); those self-identified as spiritual had a mean of 8.98 ( $SD=2.44$ ); and those self-identified as religious had a mean of 8.67 ( $SD=2.83$ ). Although the means suggested a trend of those with a stronger religious belief having a lower AUDIT-5 score, an analysis of variance test identified no significant differences among the three groups (see Table 2).

Table 2

*One-Way Analysis of Variance of Self-Identified Religiosity and AUDIT Scores*

Source	Sums of Squares	df	Mean Square	F	p
Between groups	4.76	2	2.38	0.33	.72
Within groups	925.90	129	7.18		
Total	930.66	131			

Note:  $p = 0.05$ .  $N = 132$ .

The third analysis of data included an exploration of differences among those with unsure, spiritual, and religious students as the independent variable and self-reported binge drinking behaviors as the dependent variable. Binge drinking was identified by asking survey participants how many drinks they consumed within a two-hour time period, with four drinks consumed for women being identified as binge, and five drinks for men in the same time period.



Using a chi-square test of independence, no significant difference was identified between the three groups of responding students ( $X^2(2, N=132) = 4.01, p=.013$ ).

The final analysis used a chi-square test of independence to explore differences between the three groups of students and the frequency of student drinking, measured on a self-reported scale of number of days in which a student drank an alcoholic beverage. Due to inconsistent cell sizes, the categories were collapsed into three groups: no drinks within the past 30 days, 1-9 days in which alcohol was consumed in the past 30 days, and 10-30 days of alcohol consumption. The results of the analysis identified a significant difference (see Table 3,  $X^2(4, N=132) = 14.74, p.005$ ), with religiously-identified students consuming alcohol the least and spiritual-identified students consuming alcohol on the most days of the past month.

Table 3

*Chi-Square of Relationship Between Religiosity and Frequency of Drinking*

Frequency of Drinking	Self-Identified Religiosity			Total	$X^2$	$\Phi$
	Unsure	Spiritual	Religious			
0 Days	1	6*	22**	29	14.74	.005
1-9 Days	9**	29	48	86		
10-30 Days	0	12**	5*	17		
Total	10	47	75	132		

Note: 2 cells (22.2%) have a count less than 5;  $p = 0.05$ .  $N = 132$ . \* indicates that the distribution was significantly lower than in the other 2 groups; \*\* indicates that the distribution was significantly higher than in the other 2 groups.

### Discussion and Conclusions

Although the current study was conducted at a single institution, the findings have some application to other collegiate institutions and students. First and foremost, students with a stronger sense of religious identification consumed alcohol less frequently, although they still participated in binge-drinking behaviors. This suggests that some of the religious attitudes about alcohol use could be mitigating factors in the decision to drink, although more research into types of religious beliefs needs to be explored to see if attitudes about alcohol impact the decision to drink or whether there are other variables that might influence such behaviors (e.g., perceptions of morality).



From an institutional perspective, these findings may be of interest to student affairs professionals who are charged with fostering student development. The religious self-identification and binge drinking behaviors, for example, illustrate the developmental atmosphere of college, as the two activities seem to suggest divergent perceptions of alcohol use. These further suggest the trait-state differential of moral development while in college, meaning that students challenge themselves and their traditional beliefs about their upbringing and future views of themselves. Students may enter college with some perceptions of their traits, and come to realize that they transition through different states of beliefs, including beliefs about alcohol use. Such thinking is critical to developing effective alcohol education programs, and programs that use experimentation with punishments for inappropriate alcohol use so that students learn to make their own choices and decisions about healthy life behaviors.

An additional value of the study is that it further adds to the overall understanding of alcohol use among college students, in this case at a comprehensive public institution, and suggests direction for future research. Exploring religious denomination affiliation could be important to understanding perceptions about alcohol use, and the strength of that religious adherence could similarly be correlated to alcohol use. Research tracking moral dimensions and beliefs along with substance abuse through a college career would also be helpful in further understanding student development, but is also critical in understanding how to design programs that can be used to help students make positive choices for a balanced life.





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