

Church Attendance and Alcohol Consumption Level: Reasons for not Drinking Alcohol among College Students

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Abstract

This paper explores the relationship between church attendance (religiosity) and reasons for not drinking alcohol among undergraduate college student in historically black university. The data for this study was based on a self-administered survey of 188 student volunteers from various classes from a 4-year historically black university in Southwest Georgia. The findings indicate that church attendance and the number of alcoholic beverages consumed are not independent but strongly related. Analysis of the data suggests that those who attend church regularly tend to drink fewer alcoholic beverages than those who attend church less regularly.

Key words: alcohol, church attendance, religiosity, Historically Black University undergraduate students

INTRODUCTION

A large and growing literature in the United States deals with the causes and consequences of alcohol consumption on college campuses. The growing interest in examining factors associated with alcohol consumption is, perhaps, the results of continuous alcohol use and abuse on many college campuses around the country. There is evidence to suggest that drinking on college campuses declined over the past 10 years (Kapner 2008; Burwell, Dewald, and Grizzell 2010). Additionally, there is evidence to suggest that white students drink more frequently than African American students (Kapner 2008), yet the proportion of the African American students who drink heavily and frequently still remain high (Kapner 2008). Previous research suggests that alcohol is the drug of choice among college students, given the unavailability of “hard to find drugs” (Haberman 1994; Johnson, Amatetti, and Johnson 1988) and the most pervasively misused substance on campus (Dowdall and Welchler 2002). Because the prevalence and use of alcohol is distinctive among college students, there are many who provide reasons for not drinking and religious involvement.

Previous studies have examined reasons students engage in drinking with variables such as day of the week (Wood, Sher, and Rutledge 2007), environmental predictors of episodic drinking (Clapp and Shillington 2001), situational pressures such as peer pressure, pleasant times as triggers for drinking, religious change and adolescent family dynamics (Regnerus and Burdette 2006), and individual variations in college drinking (Baer 2002). Further examinations of previous literature on reasons students drink alcohol include variables such as sociability and extraversion. For example, Schulenberg and colleagues (2001) concluded that sociability and extraversion are two reasons that partly explain why college students temporarily drink more than their non-college counterparts do.

Available empirical evidence suggests that there is a link between alcohol consumption and religion. In an earlier study Slicker found that light drinkers are more likely to provide moral reasons for not drinking compared to heavy drinkers (Slicker 1997). Prior study suggests that black college students are more spiritual than whites (Dennis, Hicks, Banerjee, and Dennis 2005). Additionally, it was argued that African American higher levels of spirituality have a potential effect on their decision to use alcohol and drugs. Despite the flurry of research into the association between alcohol consumption and social, psychological and economic factors, few studies have examined the effect of religion for those who did not drink. Although few social scientists have examined reasons for not drinking alcohol with a cursory mention of religion, we have been unable to document any published studies that have specifically examined student's reasons for not drinking and its relationship to religious beliefs among African American student population. The present study addresses this dearth of knowledge by assessing reasons for not drinking and religious beliefs in a sample of Historically Black University college students.

The purpose of this study is to examine: (a) the major reasons provided by students for not drinking alcohol (b) how religious involvement is related to alcohol consumption level, and c) whether students varying reasons for not drinking alcoholic beverages and church attendance are significantly related given their level of alcohol consumption. Specifically, we hypothesize that the more religious involvement among college students, the less alcohol they will consume.

METHOD

Recruitment of participants

Participants included several convenience samples of undergraduate students enrolled in sociology, psychology and criminal justice classes from a Historically Black University in the southern region of United States. The research instruments used in this survey were reviewed and approved by the Institutional Review Board at the participating university. All participation was strictly voluntary and no form of identification of the participants was obtained. In addition, all participants read and sign informed consent before anonymously completing the questionnaires. Students who completed a survey in a previous class were instructed not to complete the survey the second time. A trained undergraduate research assistant read the information about the instruction to participants and then distributed the survey items. Participants completed the questionnaire within ten minutes and were assured that completion of the survey had no effect on their remaining class time or future class grade.

One hundred and eighty-eight students completed appropriate questionnaires related to their alcohol consumption level, religious involvement, reasons for not drinking and demographic characteristics. Breakdown of the sample suggests that 13.5 percent were males and 86.5 percent were females. According to the sample 82.5% were between 18 and 24 years old (n=156) while 17.5% were 25-52 years old (n=32) with a mean age 23 (SD=5.81) and a modal age of 21 years old. There were 1.6 freshmen (n = 3), 13.1 sophomores (n=25, 33.0% juniors (n=63) and 43.7% seniors (n=93). Seven (3.7%) of the students did not report their class status (see Table 2).

Measures

Religious Involvement

Religious Involvement is one of the main variables considered in this study. Discussions about the validity of religious involvement measured by church attendance as opposed to head count have been documented in the literature (Smith 1998; Hadaway, Marler, and Chaves 1998). Religious attendance has been commonly used and found to be the most robust indicator of religious involvement (Hammer, Rogers, Nam, and Ellison 1999). Religious attendance is measured by creating four categories: (1) those who never attended church services, (2) those who attend less than once a week, and (3) those who attend weekly and (4) those who attend more than once a week. Following previous studies, we created three categories of this measure: those who attend church less once a year, those who attend 1 to 3 times a month, and those who attend 1 or more a week. In order to assess respondent's level of religiosity one item asked, "I consider myself as." The response options were given in a Likert-type scale format ranging from (1) "very religious", (2) "religious" (3) "somewhat religious and (4) "not religious".

Demographic Characteristics

Demographic information, including age, classification, religious affiliation, and GPA were provided by the respondents. We also include sex. Sex is a dichotomous variable.

Reasons for Not Drinking Alcohol

We also asked students questions about their decisions for not drinking. This question was asked twice. First students were asked to provide reasons they decided not to drink alcohol. The responses include religious or moral concerns, availability concerns, health concerns, taste concerns, social image concerns, economic concerns, safety concerns, peer/family concerns and control and alertness concerns.

Alcohol use

We assessed student patterns of alcohol use by asking respondents if they had consumed alcohol in the past month. The responses include 0 drinks, 1 to 2 drinks, 3 to 4 drinks, 5 to 6 drinks and 7 or more drinks. Their responses were used to assess students drinking patterns. We re-categorized the number of drinks into three categories: 1) Normal drinkers are those who consume drink 3-6 drinks, 2) light drinkers are those who consume 1 to 2 drinks and 3) those who consume 0 drinks were classified as non drinkers.

Analyses

The data obtained from this study was used to produce a quantitative picture of religious involvement and reasons for not drinking. Because an important goal was to identify relationship between church attendance as a proxy for religiosity and reasons for not drinking alcohol, we employed a chi-square test of independence.

RESULTS

Table 2 displays percentage distribution for the variables used in the analysis. Since the respondents may have more than one reason for not drinking, we also reported descriptive statistics for multiple reasons for not drinking. Two major findings are noteworthy. First, the responses reported by the respondents about their reasons for not drinking alcohol varied. The results suggest that the top three reasons provided by the students for not drinking alcohol were health, taste and religious concerns compared to safety, health and taste concerns when participants circled more than one reason (multiple response category). For example, 16.9% of the students reported that religious and moral concerns were the primary reasons for not drinking with 19.2% and 20.9% citing taste and health concerns as the primary concern, respectively. In the case of multiple responses, it was interesting to note that 51.4% were concerns about safety compared to 34.7% who gave religious and moral reasons for not drinking. Second, religious and moral concerns were ranked third as the primary reason for not drinking and fourth when asked to provide multiple reasons for not drinking alcohol.

Tables 1 and 2 about here

To examine the relationship between alcohol consumption and demographic factors we crosstabulated several subgroups such as sex, classification, and age. We also examined the relationship between alcohol consumption and church attendance. We tested these relationships for statistical significance using the chi square distribution. The results are shown in Tables 3 and 4. For example, a chi square of independence was used to examine the relationship among alcohol consumption levels and participant's sex, (see Table 3). The result of the chi square test of independence of sex and alcohol consumption was statistically not related. That is, knowing the sex of students does not help predict alcohol consumption, $\chi^2(3, n = 188) = 2.168, p > .34$. This indicates that while in this sample a higher percentage of females tend to abstain from drinking alcohol than males, a higher percentage also tend to drink more than 3 drinks.

In regards to the impact of age on alcohol consumption, there was no statistically significant difference between 18-24 year olds and 25 years and older, $\chi^2(2, n = 188) = 2.857, p > .24$. What this finding indicates is there is no difference in the drinking patterns between students under 24 years old and older students. The results, however, suggest that younger students when they drink tend to consume more alcohol than older students. It is interesting to note that the chi square test of independence between classification and level of alcohol consumption was independent. The overall chi square for independence, $\chi^2(6, n = 183) = 3.389, p > .759$, suggested that classification and consumption of alcohol were not related.

Table 4 shows a bivariate distribution of respondent's church attendance and reasons for not drinking alcohol. As shown in Table 4 29.3% of the respondents who attend church one or more times in a week cited religious concerns for not drinking alcohol compared to 6.7% and 3.3% for those who attended church one (1) to three (3) times a month and less than once a year, respectively.

On the other hand, students who attend church less than once a year were more likely to report health (33.3%) and alertness (23.3%) concerns as reasons for not drinking alcohol compared with those who attend church on a regular basis: one (1) or more times a week. Concerns such as social image, peer-family, economic and availability concerns were least cited, irrespective of student's church attendance (i.e., religious involvement). Further analysis shows that reasons for not drinking and self-reported church attendance were strongly related (χ^2 (18, n=172) = 38.592, $p < .003$).

Table 5 shows the percentage distribution of church attendance by number of alcoholic drinks consumed in the past year. Among those who attend church regularly i.e. 1 or more times a week 55.5% abstained from drinking alcoholic beverages compared to 38.5% and 28.6% for those who attend church 1 to 3 times a month and less than once a year, respectively. It is interesting to note that those who attend church regularly tend to drink fewer alcoholic beverages than those who attend church less regularly. The findings provided in Table 5 show that church attendance influences the number of alcoholic beverages consumed, χ^2 (4, n=190) = 9.873, $p < .04$.

Further analysis show that there is statistically significant relationship between the church attendance and reasons for not drinking controlling for alcohol consumption (see Table 6). When the results in Table 6 are compared against Table 5, it is clear that relationship works differently depending on the alcohol consumption level. For example, those who described themselves as attending church regularly abstained from alcohol for religious reasons compared to those who do not attend on a regular basis. Among those who attend church less than once a year and cited alertness concerns are four times as likely to consume 1-2 drinks (29.4% to 6.9%). Similarly, among students who attend church less than once a year, and who chose health concerns are twice as likely to abstain from drinking alcohol (40% to 20%). However, church attendance does not eliminate all differences in the number of alcohol beverages consumed. In fact, student's religious involvement does not preclude them from drinking alcohol despite reasons provided for not drinking.

COMMENTS

This article provides the link between church attendance and alcohol consumption at a Historically Black University. To our knowledge, no studies have examined the relationship between alcohol consumption and church attendance or religiosity. Prior study suggests that religion and spirituality serves as critical buffer against the challenges faced by black students in their quest to obtain career goals (Constantine 2006). The study has a number of limitations that must be considered when evaluating the findings. The first limitation of the study is that not every student in the classes selected participated in the self administered instrument. Second, because the study is self administered the student's responses may reflect a socially approved desirability that may not be a real reflection for not consuming alcohol. A final limitation is that the study was conducted in a Historically Black University because it tends to be highly homogeneous in terms of student body composition. Therefore, the results of this study cannot be generalized to other institutions beyond the current sample. In addition, the relationship between alcohol consumption and religiosity/church attendance and reasons for not drinking at other colleges and universities would be expected to vary by sex, age, and race/ethnicity composition of the student body.

Given the limitations of the study, the findings of this research do help us understand patterns of alcohol consumption among college students, particularly in a historically black university. The bivariate analysis confirmed that abstention from alcohol beverages is related to religious beliefs, despite the negative images of college student's alcoholic consumption. Our results show that religious involvement is significantly related to reasons for not drinking alcohol beverages. The results also suggest that students who do attend church regularly compared to those who do not attend church regularly were more likely to abstain from drinking alcoholic beverages. Another important finding is that those students who do not attend church on a regular basis tend to give health and alert reasons for not drinking alcohol compared with those who attend church service regularly. Our results also indicated that those who attend church regularly tend to drink fewer alcoholic beverages than those who attend church less regularly. Although there is evidence to suggest that regular church attendance relates to fewer consumption of alcohol, the results also suggest that those who attend church on a regular basis still consume alcoholic beverages. The findings indicate that church attendance and the number of alcoholic beverages consumed are not independent but strongly related.

A significant finding of the study revealed that students consumed alcohol despite their strong religious beliefs. Previous research showed that religion has played a distinctive role in the collective and individual lives of African Americans. Throughout US history, the Black Church has served as a symbolic center of African American life, as one of the only institutions operated and controlled by African Americans. Religious organizations have served a range of functions, promoting individual and collective self-help, community leadership and economic development, racial socialization and political mobilization (Lincoln and Mamiya 1990; Ellison 1991). Previous studies also show that levels of church attendance and participation, as well as other aspects of religious practice and subjective religiosity, are significantly higher among African Americans than among whites from comparable backgrounds (Taylor, Chatters, Jayakody, and Levin 1996), and they are higher still for older Blacks. The results from this research offers insights into how college students church attendance and religious beliefs are related to consumption of alcoholic beverages.

How do the findings from this research fit into the larger debate regarding Healthy Campus 2010 objectives? Recent Healthy Campus 2010 midcourse review by Burwell, Dewald and Grizzell (2010) suggests that there was no change in higher drinking among college students, while American College Health Association (ACHA–NCHA) (2008a) data provide evidence to suggest that males and females drinking patterns declined. There was no clear explanation for the stabilization or decline in drinking of alcohol among college students. The results from this study provide strong evidence to support link between alcohol use and religious beliefs.

Finally, future research into the link between church attendance, religious beliefs and consumption of alcohol would be served by studying in greater detail the role race plays in alcohol consumption on college campuses. For example would similar findings be found in large college campuses where there is not only large racial mix but where binge drinking is common? As a whole social science researchers need to re-examine the nature of church attendance and religious beliefs on alcohol consumption on college campuses.

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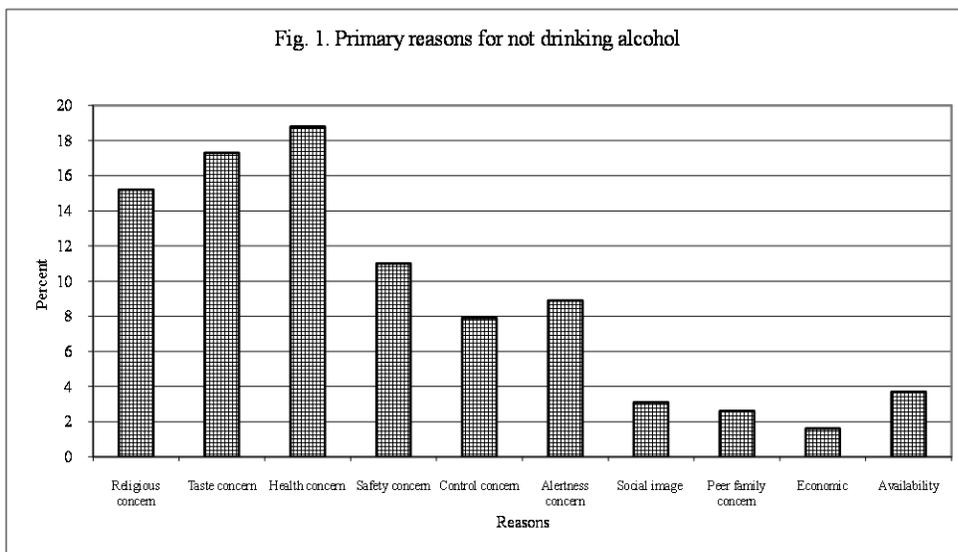


Table 1. Descriptive Statistics of Reasons for Not Drinking Alcohol- All ages and 18-24

Variable	Primary Reason –All ages		Primary Reasons – ages 18-24	
	n	%	n	%
Primary Reasons for not drinking				
Religious and moral concerns	29	16.9	24	15.4
Taste concerns	33	19.2	27	17.3
Health concerns	36	20.9	26	16.7
Safety concerns	21	12.2	20	12.8
Control concerns	15	8.7	12	7.7
Alertness concerns	17	9.9	15	9.6
Social image concerns	6	3.5	6	3.8
Peer family concerns	5	2.9	5	3.2
Economic concerns	3	1.7	2	1.3
Availability concerns	7	4.1	7	4.5

Table 2. Descriptive Statistics for Variables Used in the Analysis

Variable	All ages		18-24 yrs old	
	n	%	n	%
Religiosity				
Very religious or religious	144	75.4	117	75.0
Somewhat religious or not religious	46	24.1	39	25.0
Religious church attendance (Involvement)				
Once a month to less than a year	35	18.3	28	17.9
2-3 times a month	65	34.0	57	36.5
Nearly every week and several time a week	91	47.6	71	45.5
Student Classification				
Freshmen	3	1.1	3	1.9
Sophomore	25	13.1	23	14.7
Junior	63	33.0	56	35.9
Senior	93	43.7	72	46.2
No Response	7	3.7	2	1.3
Alcoholic Drinks in past month				
0 = No drinks	85	44.2	67	43.2
1-2 = light drinks	77	40.5	62	40.0
3+ = normal drinks	28	14.7	26	16.8
Gender				
Male	30	15.9	24	15.4
Female	161	85.1	132	84.6
GPA				
2.0-3.0	102	54.3	87	56.5
3.1-4.0	56	45.7	67	43.5

Table 3. Characteristics in percentage (and frequency) by level of alcohol consumption and Chi square Test of Independence on each characteristic

Characteristics	No drinks	1-2 drinks	3-6 or more	Total
Male	13.3 (11)	15.6 (12)	25.0 (7)	16.0 (30)
Female	86.7 (72)	84.4 (65)	75.0 (21)	
$\chi^2 (3, n=188) = 2.168, p > .34$				
Age				
18-24	78.8 (67)	80.5 (62)	92.9 (26)	16.0 (155)
25 or older	21.2 (18)	19.5 (15)	7.1 (2)	84.0 (35)
$\chi^2 (2, n=188) = 2.857, p > .24$				
Classification				
Freshmen	2.5 (2)	1.4 (1)	0 (0)	1.6 (3)
Sophomores	16 (13)	12.2 (9)	10.7 (3)	13.7 (25)
Juniors	32.1 (26)	32.4 (24)	46.4 (13)	34.4 (63)
Seniors	49.4 (40)	54.1 (40)	42.9 (12)	50.3 (92)
$\chi^2 (6, n=183) = 3.389, p > .759$				

Table 4. Reasons for Not Drinking and Self-reported Religious Beliefs

Reasons for Not drinking	Religious Involvement –Church Attendance		
	>1 year % (n)	1-3 times a month	1 or more a week
Religious concern	3.3 (1)	6.7 (4)	29.3 (24)
Taste concern	10.0 (3)	28.3 (17)	15.9 (13)
Health concern	33.3 (10)	13.3 (8)	22.0 (18)
Safety concern	13.3 (4)	13.3 (8)	11.0 (9)
Control concern	10 (3)	15.0 (9)	3.7 (3)
Alertness concern	23.3 (7)	10.0 (6)	4.9 (4)
Other			
Social Image concern	0 (0)	5.0 (3)	3.7 (3)
Peer and Family concern	3.3 (1)	1.7 (1)	3.7 (3)
Economic	0(0)	1.7 (1)	2.4 (2)
Availability	3.3 (1)	5.0 (3)	3.7 (3)

$\chi^2 (18, n =172) = 38.59 p < .003$

Table 5. Number of Alcohol drinks consumed in the past year by religious involvement (i.e., Church Attendance)

Number of Alcohol Drinks	Religious Involvement –Church Attendance		
	Less than 1 yr % (n)	1-3 times a month % (n)	1 or more a week % (n)
No drinks	28.6 (10)	38.5 (25)	55.5 (50)
1-2 drinks	48.6 (17)	47.7 (31)	32.2 (29)
3 or more drinks	22.9 (8)	13.8 (9)	12.2 (11)

$\chi^2 (4, n =190) = 9.873, p < .04$

Table 6. Reasons for Not Drinking and Self-reported Religious Beliefs controlling for Alcohol consumption Level

Alcohol Consumption Level	Reasons for Not Drinking	Religious Involvement – Church Attendance			Chi Square and
		>1 year % (n)	1-3 times a month % (n)	1 + a week % (n)	
No drinks	Religious concern	0 (0)	4.0 (1)	30 (15)	$\chi^2 = 25.905, df =12$ $p < .01$
	Taste concern	0 (0)	28 (7)	12 (6)	
	Health concern	40 (4)	24 (6)	20 (10)	
	Safety concern	10 (1)	8 (2)	8 (4)	
	Control concerns	0 (0)	4 (1)	0 (0)	
	Alertness concerns	10 (1)	20 (5)	2 (1)	
1-2 drinks	Other concerns	40 (4)	12 (3)	28 (14)	$\chi^2 = 22.79, df =12; p > .03$
	Religious concern	0 (0)	9.7 (3)	24.1 (7)	
	Taste concern	5.9 (1)	25.8 (8)	17.2 (5)	
	Health concern	17.6 (3)	6.5 (2)	24.1 (7)	
	Safety concern	17.6 (3)	16.1 (5)	10.3 (3)	
	Control concerns	17.6 (3)	16.1 (5)	3.4 (1)	
	Alertness concerns	29.4 (5)	3.2 (1)	6.9 (2)	
3 or more drinks	Other concerns	11.8 (2)	22.6 (7)	13.8 (4)	$\chi^2 = 13.69, df =12; p > .32$
	Religious concern	12.5 (1)	0 (0)	18.2 (2)	
	Taste concern	25 (2)	22.2 (20)	18.2 (2)	
	Health concern	37.5 (3)	0 (0)	9.1 (1)	
	Safety concern	0 (0)	11.1 (1)	18.2 (3)	
	Control concerns	0 (0)	33.3 (3)	18.2 (2)	
	Alertness concerns	12.5 (1)	0	0	
Other concerns	12.5 (1)	33.3 (3)	18.2 (2)		