The Social Science Journal

Christian universities as moral communities: drinking, sex, and drug use among university students in the United States. --Manuscript Draft--

Manuscript Number:	SOCSCI-D-20-00247R3
Article Type:	Full Length Article
Keywords:	Religion, deviance, moral community.
Corresponding Author:	Jerome Koch, Ph.D Texas Tech University Lubbock, TX UNITED STATES
First Author:	Jerome Koch, Ph.D
Order of Authors:	Jerome Koch, Ph.D
	Brandon G. Wagner, Ph.D
	Alden E Roberts, Ph.D
Abstract:	Abstract We examine the effects of religious educational context, Christian fundamentalist beliefs and religiosity on alcohol use, sexual activity, and illegal drug use. Respondents are 3610 university students at six public state schools and six private schools, three of which are affiliated with conservative Christian denominations. Data were gathered from 2010-2013 and done via face-to- face distribution and collection of response. Religious context – enrollment and study at a Christian school - has the strongest negative association with deviant behavior. Religiosity is less important, and Christian fundamentalist beliefs are very weakly associated. Results support the idea of Moral Communities in which place, practices and beliefs strongly discourage deviant behavior among respondents in an explicitly religious academic environment.

Christian univer	rsities as moral communities: drinking, sex, and drug use among university st in the United States.
	By
	Jerome R. Koch, Brandon G. Wagner, and Alden E. Roberts Department of Sociology, Anthropology, and Social Work Texas Tech University
A diduces all some	
Address all corr	
Jerome R. Koch Department of S	Sociology, Anthropology, and Social Work
2500 Broadway Box 41012 (Hol	
Texas Tech Uni	versity
Lubbock, TX 7	79409

Title Page (WITH author details)

jerome.koch@ttu.edu (806) 834-3920

Christian universities as moral communities: drinking, sex, and drug use among university students in the United States.

Abstract

We examine the effects of religious educational context, Christian fundamentalist beliefs and religiosity on alcohol use, sexual activity, and illegal drug use. Respondents are 3610 university students at six public state schools and six private schools, three of which are affiliated with conservative Christian denominations. Data were gathered from 2010-2013 and done via face-to-face distribution and collection of response. Religious context – enrollment and study at a Christian school - has the strongest negative association with deviant behavior. Religiosity is less important, and Christian fundamentalist beliefs are very weakly associated. Results support the idea of Moral Communities in which place, practices and beliefs strongly discourage deviant behavior among respondents in an explicitly religious academic environment.

1. Introduction

The National Institute on Alcohol Abuse and Alcoholism (2019) summarized research findings that report drinking among American college students is annually associated with over 1,500 deaths, nearly 700,000 assaults, and nearly 100,000 incidences of sexual assault and date rape. However, colleges and universities vary in social context, with attendant variations in risky behavior among students (Lenk, Erickson, Nelson, Winters, & Toomey 2012; Page & O'Hegarty 2006; Parks & Parisi 2019). Some are large public universities, typically including an extensive Greek presence, major athletic visibility, and a widely heterogeneous student body. Large private schools may be similar in some of those respects but be more visibly characterized by an affiliation with a major religious body such as the Southern Baptist Convention or the Church of Jesus Christ of Latter Day Saints. Still other US secular colleges are small, private, and largely cerebral, with little or no athletic profile. Finally, small religious schools may reflect a culture more similar to that of a small town church. Where and why might the problems associated with drinking, sex, and drug use be more pronounced and of greater consequence?

Much of the empirical literature correlating religiosity and so-called deviant behavior — drinking and reckless sex in particular - largely shows there is an inverse relationship between the two. Individuals who express a strong religious faith and who regularly pray and attend worship, are less likely to drink alcohol illegally, use illegal drugs, exhibit sexual deviance through pre or extra marital activity, or report problems associated with gambling and offender recidivism (Brown, Parks, Zimmerman, & Phillips 2001; Cochran and Beeghley 1991; Cochran, Chamlin, Beeghley, & Fenwick, 2004; Eitle 2011; Ford & Kadushin, 2002; Jeynes 2001; Nelson & Rooney 1982; Nie & Yang, 2019; Rivera, Lauger, & Cretacci 2018; Stansfield & Mowen, 2019). The inverse relationship between religiosity and deviance also seems especially

prominent among religiously conservative individuals (Cochran, Beeghley, & Bock 1988; Peek, Chalfant, & Milton 1979; Peterson & Donnenwerth 1997; Welch & Leege 1991).

Explanations for these correlations have focused on the group dynamics associated with belonging to religious groups or organizations through which norms for appropriate behavior are initiated, negotiated, and persist over time. Religious subcultures set limits on adherents' behavior and sanction those whose behavior takes them out of bounds (Bock, Cochran, & Beeghley 1987; Gay & Ellison 1993; Wellman 1999). Friendship networks and selective interaction within religious groups have also produced normative behavior among those so involved (Adamczyk 2009; Adamczyk & Palmer 2008; Cheadle & Schwadel 2012; Stark 1996). These types of studies build their logic on reference group theory (Merton and Rossi 1968), arguing that conformity to norms and resistance to deviance are rewarded by those with whom individuals choose to interact. Goode and Willoughby (2011) extend the logic of this insight by demonstrating developmental growth as well as lower deviance among adolescents actively involved in religious groups. And again, this group dynamic seems especially salient among individuals tied to religiously conservative groups (Bock, Cochran, & Beeghley 1987; Cochran et al., 1988; Gault-Sherman & Draper 2012; Roberts et al. 2001).

This latter body of work emerged after Hirschi and Stark's (1969) astounding assertion that religious behavior and delinquency were unrelated. Stark (1996:163) states, "(W)ord spread quickly that kids on their way home from Sunday School were as likely to strip your car as were kids on the way home from the pool hall." Soon after, other studies replicated the Hirschi and Stark finding (Burkette & White 1974), while others found the contrary (Cochran & Akers 1989; Higgins & Albrecht 1977; Jensen & Erickson 1979; Rhodes & Reiss 1970). Subsequent research designed to adjudicate this debate, and to frame the debate inside sociological theory, led to what

has become known as the "Moral Communities Hypothesis." Stark (1996:164-165) states:

I suggest that what counts is not only whether a particular person is religious, but whether this religiousness is, or is not, ratified by the social environment (sic). The idea here is that religion is empowered to produce conformity to the norms only as it is sustained through interaction and is accepted by the majority as a valid basis for action. ... Religious individuals will be less likely than those who are not religious to commit delinquent acts, *but only in communities where the majority of the people are actively religious*.

Qualified support for this hypothesis has been demonstrated empirically in that "moral communities" seem to exert a positive influence on individuals by reducing the likelihood of their engaging in deviant behavior. Religious belief and practice, measured in the context of a moral community, correlates with lower probabilities of tax evasion, embezzlement, and abusing alcohol and drugs. Communal religiosity also elevates the likelihood of normative behavior such as seatbelt use, staying out of debt, and taking medication when ill (O'Donnell & Magro 2005; Sturgis & Baller 2012; Welch, Tittle, & Petee 1991; Welch, Tittle, & Grasmick 2006; Welch, Xu, Bjarnason, Petee, O'Donnell, & Magro 2005).

These studies use congregational membership, denominational affiliation, and collectivities of individuals expressing personal religiosity as proxies for distinguishing moral communities. And Stark himself (1996:165) critiques such work wherein the religious contexts in question "are analytical constructs having no physical existence."

This study is an attempt to clarify the impact of specific religious contexts in the suppression of deviant behavior. The Christian universities in this study not only physically exist, but they also exhibit the characteristics of moral communities listed above. They provide

students with opportunities for academic and social interaction within a religiously constituted social organization. Religious beliefs that constitute the denominations with which they are affiliated are clearly stated. Ritual, through corporate worship and prayer meeting opportunities are well known and well attended. Norms of Christian morality are reinforced through contextual religious homogamy, socialization, surveillance, and threat of punishment.

2. Theory

A successful society will create social institutions that integrate and regulate individuals within their social world. To the extent this process occurs, social dysfunction is reduced. Durkheim's initial conceptualization of religion as both integrative and regulative was hypothesized to reduce suicide rates, and other social manifestations of anomie (Durkheim, ([1897] 1915).

Integration and regulation are accomplished through the development of religiously constituted moral communities. Theoretical and empirical research provides three mechanisms by which this process occurs. First, individuals form and join moral communities stemming from the social need for interaction, ritual practice, and the attribution of meaning to religious symbols (Durkheim, ([1912] 1995): 419). This creates social communities among those who share those common practices and assumptions.

Second, individuals acquire "social capital" through religious selection of, and participation in, group involvement that offers them a place in a religiously regulative and supportive environment (Coleman 1988). This dynamic is especially robust when families join congregations together (Gurrentz 2017).

Finally, religiously constituted moral communities are self-regulating and self-sustaining (Ellison & George 1994; Regnerus 2003). The more engaged individuals are with others in their

religious schools, churches, or church-based civic organizations, the higher their level of social interaction, and the greater the degree to which group norms generate compliance and well-being among group members (Ellison 1994; Goode & Willoughby 2011; Welch, Tittle, & Petee 1991).

These types of moral communities have been shown to exert a positive effect on individual behavior in at least two ways. As indicated above, normative consensus in moral communities reduces the likelihood of individual members engaging in deviant behavior such as underage drinking, illegal drug use, or non-marital sexual activity (Brown, Parks, Zimmerman, & Phillips 2001; Cochran & Beeghley 1991; Cochran, Chamlin, Beeghley, & Fenwick 2004; Ford & Kadushin 2002; Jeynes 2001; Nelson & Rooney 1982). However, moral communities also generate and reinforce religious homogamy, which then strengthens marital and parent-child relationships, thereby also reducing tendencies toward deviant behavior (Gurrentz 2017; Ortega, Whitt, & Williams 1988; Pearce & Axinn 1998). Moreover, it is the precisely social dynamics of moral communities that exert a greater level of suppression of social deviance than simply individual expressions of religiosity or even strongly conservative religious beliefs.

Therefore we hypothesize: The social context of the three Christian universities will produce lower rates of social deviance than other university contexts (i.e. public or secular private), even after accounting for differences in individual religiosity or Christian Fundamentalism.

3. Methods

3.1 Data and Sample

Survey data were gathered from twelve purposive samples of lower level undergraduate sociology students. We maximized response rates by getting collegial permission to gather data face-to-face. We also targeted lower level undergraduate classes because the majority of

respondents would be underage, thus making drinking alcohol a deviation from the law. Finally respondents in this age cohort are at a phase of decision-making that makes their experiences uniquely relevant to their religious socialization (Alper 2015).

Six of these sub-samples were drawn from students at public, state universities. Six additional sub-samples were drawn from students at private universities. Three of the private schools are secular, and three are explicitly religious, affiliating with conservative Christian denominations (Smith 1990). Each private university is geographically proximal (within 300 miles) to one of the public universities. These respective pairs are all located in the United States, geographically distributed as follows: Northeast (Public/Secular Private); Southeast (Public/Secular Private); Midwest (Public/Christian); Mid-South (Public/Christian); Northwest (Public/Secular Private); Southwest (Public/Christian). Table 1 provides numbers and demographic characteristics of the respondents in each school category (N=3610).

(Table 1 about here)

After obtaining IRB approval from each school, and with the generous offer of class time from affiliated faculty, researchers travelled to each pair of localities. Questionnaires and scantron answer sheets were distributed in person and collected immediately. Our overall response rate (calculated as a percentage of official class enrollments) was 77%. Non-respondents were primarily those who were absent from class on data collection day.

3.2 Independent Variables

Three measures of religion were included in the analysis. These are:

Level of religiosity. This is an eleven-item scale measuring religious beliefs and
practices. It was adapted from the General Social Survey (Smith, Davern, Freese, &
Hout 2018). Items were coded (or reverse-coded when necessary) to reflect least to most

religious for the analysis. The scale scores ranged from 5-52. Items are:

- a. In general, would you consider your religious faith to be (1) Very strong (2)
 Moderately Strong (3) Moderately Weak (4) Very Weak (5) Non-existent.
- b. How close do you feel to God most of the time? (1) Very close (2) Moderately close (3) Moderately distant (4) Very distant (5) No closeness at all.
- c. Which statement comes closest to your personal beliefs about God? (Please choose only one response): (1) I have no doubts that God exists (2) I believe in God but with some doubts (3) I sometimes believe in God (4) I believe in a higher power or cosmic force (5) I don't believe in anything beyond the physical world (6) I have no opinion.
- d. Which statement comes closest to your personal beliefs about Jesus? (Please choose only one response): (1) I don't believe in Jesus (2) Jesus is a fictional character (3) Jesus probably existed, but was not special (4) Jesus was an extraordinary person, but he was not a messenger of God (5) Jesus was one of many messengers of prophets of God (6) Jesus is the Son of God.
- e. Which one statement comes closest to your personal view of religious salvation?(1) My religion is the one, true faith that leads to salvation (2) Many religions lead to salvation (3) I do not believe in religious salvation (4) I don't know.
- f. About how often do you pray? (0) Never (1) Less than once a week (2) Once a week (3) Several times a week (4) Daily (5) Several times a day.
- g. How often, if at all, do you participate in table prayers of grace before or after meals? (0) Never (1) Only on certain occasions (2) At least once a week (3) At least once a day (4) At all meals.

- h. How often do you pray about your own personal needs or your current life situation? 0) Never (1) Only on certain occasions (2) At least once a week (3) At least once a day (4) Every time I pray I do this.
- i. How often do you pray about the needs of people close to you or their current life situation? Coded as above, (h.)
- j. How often do you pray about the needs of others in general, or the state of current affairs? Coded as above (h.)
- k. How often do you attend worship services now? (0) Never (1) Once or twice a year (2) Once every month or so (3) About once a month (4) Two or three times a month (5) Weekly or more often.

This scale has a high internal consistency (Cronbach's alpha = 0.93). This scale most commonly includes an twelfth item measuring frequency of attending religious services; however, we excluded it from the index due to a high frequency of missing cases on this item. As a sensitivity check, we re-estimated all models with the subset of respondents (N= 2,754) who provided responses to the attendance item. In these additional models, we find substantively similar results to those we present below.

- 2. Level of Christian fundamentalist beliefs. This is a three-item scale, essentially measuring strength of belief in Biblical inerrancy (McFarland 1989). The scale scores ranged from 3-15. Chronbach's Alpha = .91. Response choices were: (1) Strongly Disagree (2) Disagree (3) Uncertain (4) Agree (5) Strongly agree. Items are:
 - a. I am sure the Bible contains no errors or contradictions that is, the Bible is the infallible Word of God.
 - b. It is very important for true Christians to believe that the Bible is the infallible

Word of God.

c. The Bible is the final and complete guide to morality; it contains God's answers to all important questions about right and wrong.

This scale, which essentially measures strength of belief in Biblical inerrancy (McFarland 1989), also has a high internal consistency (Cronbach's alpha = 0.91). As might be expected, Christian religiosity is strongly correlated with fundamentalism belief (r = 0.66).

3. Religious context. This item was measured through respondents' self-reporting their affiliation with a Christian, secular public, or secular private university.

3.3 Dependent Variables

To capture a variety of potentially non-normative behaviors, we construct binary indicators for six behavioral outcomes: any alcohol use, any binge drinking, ever have had sexual intercourse, have had more than one sexual partner in the last year, ever used marijuana, and ever used any other illegal drug. Each of these measures reflects levels of departure from conventional norms that are especially prominent within the context of the Christian universities.¹

The following specific measures of social behavior were included in the analysis. They were adapted from the General Social Survey (Smith, Davern, Freese, & Hout 2018).

1. Current alcohol use. How often do you consume at least one drink of alcohol each month? (0) Never (1) 1-10 times (2) 11-20 times (3) 21-30 times (4) More than 30 times. This variable was coded as 0 or 1+ in keeping with the Substance Abuse and Mental Health Services Administration's (2018) definition of "Current alcohol use."

¹ We recognize that "ever have" and "ever used" introduce the possibility of selection bias, as respondents may well have done these things prior to entering university. We address this matter more fully in the conclusion.

- 2. Incidence of binge drinking. In the past month, have you consumed five or more drinks on one occasion? (1) Yes (2) No (3) Uncertain. This variable was coded as Yes or No in keeping with the Substance Abuse and Mental Health Services Administration's (2018) definition of "Binge drinking."
- 3. Incidence of marijuana use. How often do you use cannabis (marijuana recreationally each month? (0) Never (1) 1-10 times (2) 11-20 times (3) More than 20 times. This variable was coded as 0 or 1+ in keeping with the Substance Abuse and Mental Health Services Administration's (2018) definition of "Current marijuana use."
- 4. Incidence of other illegal drug use. How often do you use any illegal drug other than marijuana recreationally each month? (0) Never (1) 1-10 times (2) 11-20 times (3) More than 20 times. This variable was coded as 0 or 1+ in keeping with the Substance Abuse and Mental Health Services Administration's (2018) definition of "Current illegal drug use."
- 5. Sexual experience. At what age did you first have sexual intercourse? (If you are married, answer for "premarital" sexual intercourse). (0) You have never had sexual intercourse (1) Under 15 (2) 15 (3) 16 (4) 17 (5) 18 (6) 19 (7) 20 (8) 21 (9) 22+ This variable was coded as 0 Never had or 1+ Ever had. Alternatively, this variable may be considered a measure of "virginity rate."
- 6. Sexually active. Approximately how many sexual partners have you had in your lifetime? (0) No sexual partners in your lifetime 1, 2, 3, 4, 5, 6, 7, 8, 9 or more. We used a cut point of 6+ to signify sample respondents with ongoing sexual activity.

To account for individual level variation relevant to delinquent behavior engagement, we control for age (18 or under, 19, 20, 21, 22, or 23 or older), sex (female or male), and

race/ethnicity (White, Black, Hispanic, Asian, or Other Race) in the analytical models.

3.4 Model

Models for each behavioral outcome are estimated via mixed effects logistic regressions incorporating school-level random effects to account for clustering of students within universities.

4. Analysis and Results

Table 1 provides a description of demographic characteristics of the respondents in each school category (N=3,066) as well as percentages of respondents in each school category who report drinking, sexual, and drug use behavior. In this table, we also compare the composition of the samples across school types, using public school respondents as the reference category. Comparisons between categorical variables (age and race/ethnicity) are calculated using chisquare tests, other comparisons are calculated via t-test (religiosity and fundamentalism scale score) or z-test for proportions (sex, social behaviors).

Figure 1 compares scale scores for religiosity and for Christian fundamentalism across categories of respondents by school. As might be expected, respondents from Christian school report highest levels of both Christian religiosity and fundamentalism. Respondents from secular private school respondents report the lowest levels of religiosity and Christian fundamentalist beliefs and those from public schools report intermediate values on both variables. Religiosity and fundamentalism scores are significantly different across school types (Table 1).

(Figure 1 about here)

Figure 2 shows comparative percentages of respondents in each school category who report drinking, sexual behavior, and drug use. Across these behaviors, respondents attending Christian schools report the lowest levels of "deviance;" public school respondents are

essentially in the middle; secular private school students report the most. As indicated in Table 1, we find several significant differences in behaviors between those in public universities and those at either private or Christian schools.

(Figure 2 about here)

Results of the regression models predicting behavioral outcomes are shown in Table 2. The coefficients show in this table can be interpreted the change in the log odds of the modelled outcome associated with a 1-unit increase in the predictor. Consistent with previous work, we find that women were generally less likely to engage in these behavioral outcomes, with women having significantly lower likelihood of reporting binge drinking, multiple sexual partners, marijuana usage, or other drug usage than do men. We also some find differences between racial groups, notably that white respondents are more likely to engage in alcohol related behaviors (ever drinking or binge drinking) than are other respondents.

(Table 2 about here)

Except for the multiple sexual partners within a year outcome, religiosity is negatively associated with respondents reported engagement in these behavioral outcomes. Increased individual religiosity is significantly and negatively associated with ever drinking, ever binge drinking, ever having had sex, using marijuana in the past year, and using any other illegal drug in the last year. That we do not find a significant association in the case of having multiple sexual partners in a year is likely due to the low prevalence of this behavior within the sample. Fundamentalism is also significantly associated with binge drinking or having had sex; individuals higher on fundamentalism are less likely to have binge drunk or ever had sex. All significant associations noted here are net of control variables (sex, age, race/ethnicity).

The type of university which students attend is also relevant to engaging in these

behaviors. Students who attend Christian universities are significantly less likely to engage in these behaviors than are students attending public universities. Relative to those attending public institutions, students at Christian affiliated universities are less likely to have ever drunk, ever binge drunk, ever had sex, used marijuana in the last year. Students at private, secular universities are, except for multiple sexual partners in a year, not significantly different than their counterparts at public universities, after accounting for demographic characteristics and individual-level religious beliefs.

As multilevel logistic models can be difficult to interpret, we graph the predicted probability of each outcome by student's religiosity scale score and the type of school they attend (Figure 3). In these predicted probability graphs, all other control variables (e.g., sex, age, and race/ethnicity) are held at their most common value. As suggested by the model output, these figures depict both a decreasing likelihood of engaging in alcohol, sexual, or drug related behavior by religiosity across all settings as well as a similar reduction based on the university context.

(Figure 3 about here)

In sum, context counts, especially a religious context or "moral community, "when explaining the inverse and negative association between religion and deviance. Thus we conclude that our data and analysis support our hypothesis.

5. Discussion

This research advances the discussion of the how religion elevates conformity to moral norms in three ways. First, our findings support many previous studies showing an inverse relationship between religiosity and underage drinking, pre/extra-marital sex, and illegal drug use (Brown, Parks, Zimmerman, & Phillips 2001; Cochran & Beeghley 1991; Cochran, Chamlin,

Beeghley, & Fenwick, 2004; Eitle 2011; Ford & Kadushin, 2002; Jeynes 2001; Nelson & Rooney 1982.)

Second, consistent with previous findings, we show the inverse relationship between religion and deviance is more prominent among Christian conservatives (Cochran, Beeghley, & Bock 1988; Gault-Sherman & Draper 2012; Peek, Chalfant, & Milton 1979; Peterson & Donnenwerth 1997; Welch & Leege 1991). Moreover, we find an independent association between Christian fundamentalist beliefs and two measures of non-normative behavior (ever having sex and binge drinking).

Finally, we note statistically significant findings which show religious context has a consistently negative association with measures of non-normative behavior. Even after accounting for personal religiosity and fundamentalism, respondents from the Christian schools - contexts where fundamentalist beliefs are the most prominent – report substantially less drinking, sexual behavior, and drug use.

By these measures, these three Christian universities are moral communities; they physically exist in time and space. Our respondents who attend Christian universities live, study, socialize, and choose how to behave in real time, places, and shared space. The norms within and missions of these schools generate differences in behavior that suggest they are "Moral Communities" as compared to public and secular private schools. Thus, our findings resonate with Stark's (1996:165) insight that " (moral) conformity ... is sustained through interaction and is accepted by the majority as a valid basis for action." Regulations, surveillance, and sanctions, regarding particularly drinking and sexual behavior, are more explicit when the educational environment is constituted by Christian moral norms. One Christian school administrator noted to us in passing that, while the school had no formal academic honor code, students were

required to absolutely abstain from drinking, drugging, and non-marital sex AND report those who do not, under threat of severe sanctions.

We acknowledge that this research is illustrative and not definitive. We caution against generalizing from this sample. Despite the relatively large sample, we only have data from twelve schools. As individual schools and their undergraduate population may be idiosyncratic, our sampled schools may not adequately represent the American undergraduate population. However, even this cross-sectional analysis of data from purposive samples tells a compelling story. Context matters. More definitively, Moore & Vanneman (2003: 115) assert, "Contextual effects are at the heart of the sociological enterprise."

We are also aware that selection bias and reverse causality form an alternative interpretation of our findings. Prospective college students who are highly religious and, thus normatively compliant, would likely be drawn to a religiously constituted school where norms are similarly strict. However, we contend that selection creates moral community in at least the same way as selection creates normative friendships. Studies using probability samples note the effects of religious friendships in generating quasi-moral communities (Adamczyk & Palmer 2008; Cheadle & Schwadel 2012). We highlight especially Adamczyk's (2009) report that teens desiring to maintain virginity seek out religious friends for reinforcement. Moreover, Roberts, Koch, and Johnson (2001) note that religious college students who seek and maintain religious friendships after entering a public university report less non-normative behavior than those who don't. Further research that more explicitly examines the comparative effects of friendship networks, within and apart from contexts such as religious schools, may add more insight and specificity to the study of moral communities.

Finally, over the last 20 years, American Christianity has changed in significant ways

regarding its organizational forms. Gallup polling data (Newport 2017) show that, from 2000-2016, the percentage of self-identified mainline Protestants declined from 50% to 30%. The percentage of practicing Christians who do not identify with any denomination doubled from 9% to 17% over the same time period. Intriguingly, this shift suggests individuals report their religious identities in terms of who they are *not* as opposed to who they *are*. And yet, especially Christian colleges persist as a vivid and emotional source of collective identity. They are also, seemingly, moral communities where the behavior which leads to trauma for college students may be less prominent or prevalent.

6. References

Adamczyk, A. (2009). Socialization and Selection in the Link between Friends' Religiosity and the Transition to Sexual Intercourse, *Sociology of Religion* 70, 5-27.

Adamczyk, A., & Palmer, I. (2008). Religion and Initiation Into Marijuana Use: The Deterring Role of Religious Friends, *Journal of Drug Issues*, 38, 717-742.

Alper, B. A. 2015. "Millennials are Less Religious than Older Americans, but Just as Spiritual." Pew Research Center, November 23 http://www.pewresearch.org/fact-tank/2015/11/23/millennials-are-less-religious-than-olderamericans-but-just-as-spiritual/.

Bock, E.W., Cochran, J.K., & Beeghley, L. (1987). Moral messages: the relative influence of denomination on the religiosity-alcohol relationship, *Sociological Quarterly* 28, 89-103.

Brown, T.L., Parks, G.S., Zimmerman, R.S., & Phillips, C.M. (2001). The role of religion in predicting adolescent alcohol use and problem drinking. *Journal of Studies on Alcohol*, 62, 696-705.

Burkett, S.R., & White, M. (1974). Hellfire and delinquency: Another look. *Journal for the Scientific Study of Religion*, 16, 455-462.

Cheadle, J.E., & Schwadel, P. (2012). The 'friendship dynamics of religion,' or the 'religious dynamics of friendship'? A social network analysis of adolescents who attend small schools. *Social Science Research*, 41, 1198-1212.

Cochran, J.K., & Akers, R.L. (1989). Beyond hellfire: An exploration of the variable effects of religiosity on adolescent marijuana and alcohol use. *Journal of Research in Crime and Delinquency*, 26, 198-225.

Cochran, J.K., & Beeghley, L. (1991). The influence of religion on attitudes toward non-marital sexuality: a preliminary assessment of reference group theory. *Journal for the Scientific Study of Religion*, *30*, 45-62.

Cochran, J.K., Beeghley, L., & and Bock, E.W. (1988). Religiosity and alcohol behavior: an exploration of reference group theory. *Sociological Forum*, 256-276.

Cochran, J.K., Chamlin, M.B., Beeghley, L., & Fenwick, M. (2004). Religion, Religiosity, and Nonmarital Sexual Conduct: An Application of Reference Group Theory. *Sociological Inquiry*, 74, 102-127.

Coleman, J.A. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, 95-120.

Durkheim, E. [1897] (1951). Suicide: A Study in Sociology. New York: The Free Press.

Durkheim, E. [1912] (1995). *The Elementary Forms of Religious Life*. New York: The Free Press.

Eitle, D. (2011). Religion and Gambling Among Young Adults in the United States: Moral Communities and the Deterrence Hypothesis. *Journal for the Scientific Study of Religion*, 50, 61-81.

Ellison, C.G. (1994). Religion, the Life Stress Paradigm, and the Study of Depression. In J. Levin (Ed.), *Religion in Aging and Health: Theoretical Foundations and Methodological Frontiers* (pp. 78-121). New York: Sage Publications.

Ellison, C.G., & George. L.K. (1994). Religious Involvement, Social Ties, and Social Support in a Southeastern Community. *Journal for the Scientific Study of Religion*, *33*, 46-61.

Ford, J., & Kadushin, C. (2002). Between sacral belief and moral community: a multidimensional approach to the relationship between religion and alcohol among blacks and whites. *Sociological Forum*, 17, 255-279.

Gault-Sherman, M., & Draper, S. (2012). What Will the Neighbors Think? The Effect of Moral Communities on Cohabitation. *Review of Religious Research*, *54*, 45-67.

Gay, D.A., & Ellison, C.G. (1993). Religious subcultures and political tolerance: do denominations still matter? *Review of Religious Research*, *34*, 311-342.

Goode, M., & Willoughby, T. (2011). Evaluating the Direction of Effects in the Relationship Between Religious Versus Non-Religious Activities, Academic Success, and Substance Use. *Journal of Youth Adolescence*, 40, 680-693.

Gurrentz, B. (2017). Family Formation and Close Social Ties Within Religious Congregations. *Journal of Marriage and Family, 79,* 1125-1143.

Higgins, P.C., & Albrecht, G.L. (1977). Hellfire and delinquency revisited. *Social Forces*, 55, 952-958.

Hirschi, T. & Stark, R. (1969). Hellfire and Delinquency. Social Problems, 17, 202-213.

Jensen, G. & M.L. Erickson. (1979). The religious factor and delinquency: Another look at the Hellfire hypothesis. In R. Wuthnow (Ed.), *The Religious Dimension* (pp. 157-177). New York: Academic Press.

Jeynes, W.H. (2001). Religious commitment and adolescent behavior. *Journal of Interdisciplinary Studies*, 13, 31-50.

Link, K. M., Erickson, D. J., Nelson, T. F., Winters, K. C., & Toomey, T. L. (2012). Alcohol Policies and Practices Among Four-Year Colleges in the United States: Prevalence and Patterns. *Journal of Studies on Alcohol & Drugs*, 73(3), 361–367.

McFarland, S.G. (1989). Religious Orientations and the Targets of Discrimination. *Journal* for the Scientific Study of Religion, 28, 324-336.

Merton R.K., & Rossi, A. (1968). Contributions to the Theory of Reference Group Behavior. In R.K. Merton (Ed.), *Social Theory and Social Structure* (pp. 279-334). New York: Free Press.

Moore, L.M., & Vanneman, R. (2003). Context Matters: Effects of the Proportion of Fundamentalists in Gender Attitudes. *Social Forces*, *81*, 115-139.

National Institute on Alcohol Abuse and Alcoholism. (2019). Fall Semester—A Time for Parents to Discuss the Risks of College Drinking. https://www.niaaa.nih.gov/sites/default/files/publications/NIAAA_BacktoCollege_Fact_sheet.pdf. Accessed June 8, 2020.

Nelson, H.M., & and Rooney, J.F. (1982). Fire and brimstone, lager and pot: religious involvement and substance use. *Sociological Analysis*, 43, 247-255.

Newport, F. (2017). More US Protestants Have No Specific Religious Identity. https://news.gallup.com/poll/214208/protestants-no-specific-denominational-identity.aspx Accessed June 8, 2020.

Nie, F., & Yang, X. Y. (2019). The Moral Community Divide: Underage Marijuana Use Across Religious Contexts. *Journal for the Scientific Study of Religion*, 58(1), 153–173.

Ortega, S.T., Whitt, H.P., & Williams, J.A., Jr. (1988). Religious Homogamy and Family Happiness. *Journal of Family Issues*, *9*, 224-239.

Page, R. M., & O'Hegarty, M. (2006). Type of Student Residence as a Factor in College Students' Alcohol Consumption and Social Normative Perceptions Regarding Alcohol Use. *Journal of Child & Adolescent Substance Abuse*, 15(3), 15–31.

Parks, G. S., & Parisi, S. (2019). White Boy Wasted: Race, Sex, and Alcohol Use in Fraternity Hazing. Wisconsin Journal of Law, Gender & Society, 34(1), 1–38.

Pearce, L.D., & Axinn, W.G. (1998). The Impact of Family Religious Life on the Quality of Parent-Child Relationships. *American Sociological Review*, *63*, 810-828.

Peek, C.W., Chalfant, H.P., & Milton, E.V. (1979). Sinners in the hands of an angry God: Fundamentalist fears about drunken driving. *Journal for the Scientific Study of Religion*, 18, 29-39.

Peterson, L.R., & Donnenwerth, G.V. (1997). Secularization and the influence of religion on beliefs about premarital sex. *Social Forces*, 75, 1071-1088.

Regnerus, M.D. (2003). Moral Communities and Adolescent Delinquency: Religious Contexts and Community Social Control. *The Sociological Quarterly*, 44, 523-554.

Rhodes, A.L. & Reiss, A.J., Jr. (1970). The 'religious factor' and delinquent behavior. *Journal of Research in Crime and Delinquency*, 7, 83-98.

Rivera, C.J., Lauger, T.T., & Cretacci, M.A. (2018). Religiosity, Marijuana Use, and Binge Drinking: A Test of the Moral Community Hypothesis. *Sociology of Religion*, 79, 356-378.

Roberts, A.E., Koch, J.R., & Johnson, D.P. (2001). Religious reference group and the persistence of normative behavior: an empirical test. *Sociological Spectrum*, 21, 81-97.

Smith, T.W. 1990. Classifying Protestant Denominations. *Review of Religious Research*, *31*, 225-245.

Smith, T.W., Davern, M., Freese, J., & Hout, M. (2018). *General Social Surveys, 1972-2016* [machine-readable data file] /Principal Investigator, Tom W. Smith; Co-Principal Investigator, Michael Davern; Co-Principal Investigator, Jeremy Freese; Co-Principal Investigator, Michael Hout; Sponsored by National Science Foundation. --NORC ed.-- Chicago: NORC at the University of Chiago [producer]; Storrs, CT: The Roper Center for Public Opinion Research, University of Connecticut [distributor].

Stansfield, R., & Mowen, T. J. (2019). Religious Involvement, Moral Community and Social Ecology: New Considerations in the Study of Religion and Reentry. *Journal of Quantitative Criminology*, *35*(3), 493–516

Stark, R. (1996). Religion as Context: Hellfire and Delinquency One More Time. *Sociology of Religion*, *57*, 163-173.

Sturgis, P.W., & Baller, R.D. (2012). Religiosity and Deviance: An Examination of the Moral Community and Antiasceticism Hypothesis Among U.S. Adults. *Journal for the Scientific Study of Religion*, *51*, 809-820.

Sturgis, P.W. (2010). Faith Behind Bars: An Explicit Test of the Moral Community Hypothesis in the Correctional Environment. *Journal of Offender Rehabilitation*, 49, 342-362.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2018). National Survey on Drug Use and Health. https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/Assistant-Secretary-nsduh2018 presentation.pdf Retrieved June 9, 2020.

Welch, M.R., & Leege, D.C. (1991). Dual reference groups and political orientations: an examination of evangelically oriented Catholics. *American Journal of Political Science* 35, 28-56.

Welch, M.R., Tittle, C.R., & Grasmick, H.G. (2006). Christian Religiosity, Self-Control and Social Conformity. *Social Forces*, *84*, 1605-1623.

Welch, M.R., Tittle, C.R., & and Petee, T. (1991). Religion and Deviance among Adult

Catholics: A Test of the Moral Communities Hypothesis. *Journal for the Scientific Study of Religion, 30,* 159-172.

Welch, M.R., Xu, Y., Bjarnason, T., Petee, T., O'Donnell, P., & Magro, P. (2005). But Everybody Does It...: The Effects of Perceptions, Moral Pressures, and Informal Sanctions on Tax Cheating. *Sociological Spectrum* 25, 21-52.

Wellman, James K., Jr. 1999. Introduction: the debate over homosexual ordination: Subcultural identity theory in American religious organizations. *Review of Religious Research*, 41, 184-206.

7. Acknowledgements

The authors gratefully acknowledge the generous support for this research by the E.A. Franklin Charitable Trust.

 Table 1

 Proportion or Mean (Standard Deviation) for Respondent Characteristics by Type of School.

X7 · 11	All		D						
Variable	Respondents	D. 1.1: .	By Type of School	Christian					
Outcomes		Public	Private	Christian					
Use Marijuana	0.22	0.26	0.33*	0.08***					
5				0.08***					
Use Other Drugs	0.06	0.06	0.11**	0.02***					
Multiple Sexual Partners in Year	0.04	0.04	0.09***	0.02**					
Ever Have Sex	0.62	0.68	0.74*	0.40***					
Ever Drink	0.71	0.77	0.86**	0.46***					
Ever Binge Drink	0.50	0.57	0.59	0.25***					
Predictors									
Religiosity	32.00 (10.80)	31.80 (9.59)	27.30 (10.90)***	40.20 (8.03)***					
Fundamentalism	9.00 (3.92)	8.81 (3.79)	6.02 (3.24)***	11.00 (3.55)***					
Demographics									
Female	0.62	0.60	0.67*	0.69***					
Age									
18 or Under	0.32	0.32	0.08***	0.44***					
19	0.30	0.31	0.23	0.32					
20	0.18	0.19	0.28	0.11					
21	0.11	0.10	0.26	0.07					
22	0.05	0.04	0.12	0.04					
23 or more	0.03	0.04	0.02	0.02					
Race/Ethnicity									
White	0.69	0.69	0.66**	0.70**					
Black	0.08	0.07	0.13	0.11					
Hispanic	0.09	0.10	0.06	0.08					
Asian	0.10	0.10	0.1	0.08					
Other	0.04	0.04	0.06	0.04					
N	2066	2045	225	(0)					
N	3066	2045	325	696					

All comparisons relative to respondents at public schools. Distributions of categorical variables compared via chi-square test.

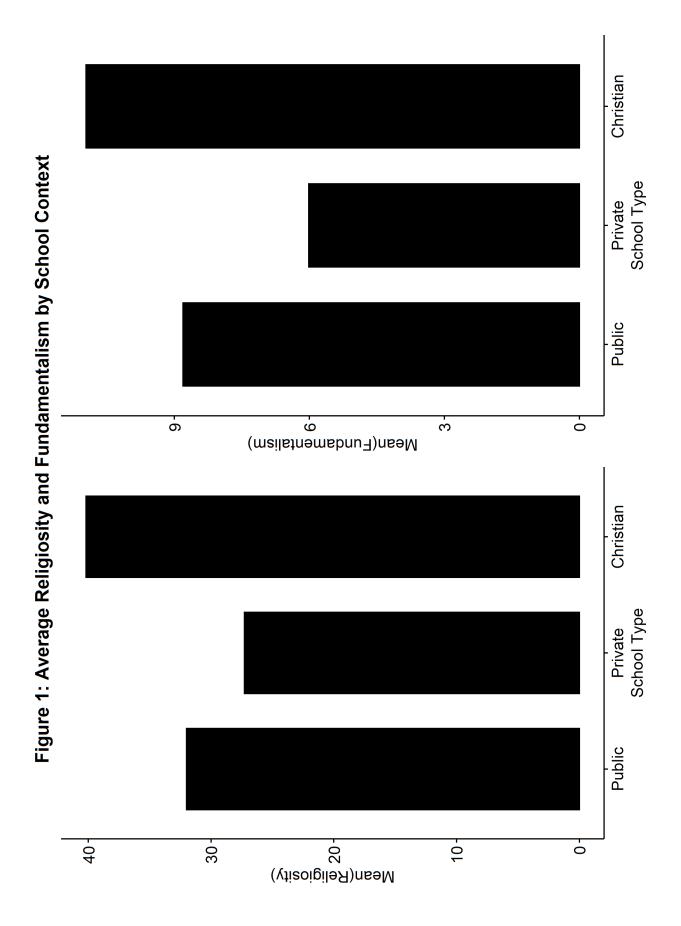
⁺p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001

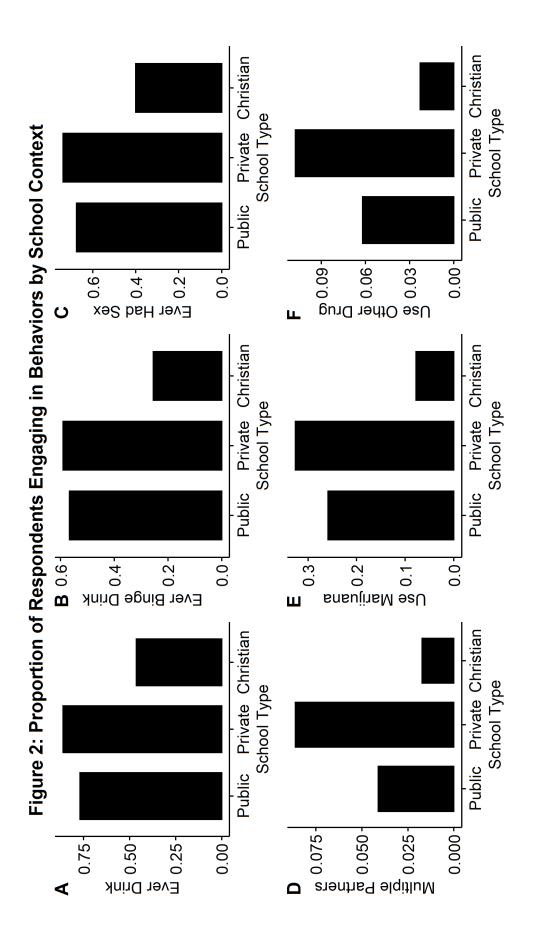
 Table 2

 Estimates from Mixed Effect Logistic Regression Models Predicting Behavioral Outcomes (N = 3,066)

	Ever Dr	rink	Ever Binge Drink		Ever Had Sex		Multiple Sexual Partners in a Year		Use Marijuana		Use Other Illegal Drug	
Religious Belief or Behavior	b	SE	b	SE	b	SE	b	SE	b	SE	b	SE
Religiosity	-0.04***	0.01	-0.03***	0.01	-0.04***	0.01	-0.01	0.01	-0.04***	0.01	-0.03**	0.01
Fundamentalism	-0.02	0.01	-0.01	0.01	-0.03*	0.01	-0.02	0.03	-0.03*	0.02	-0.05+	0.03
Demographics												
Female	-0.18 ⁺	0.09	-0.56***	0.08	-0.13	0.09	-0.073	0.19	-0.57***	0.09	-0.68***	0.16
Age												
18 or Less (ref)	-		-		-		-		-		-	
19 years old	0.18+	0.11	0.24*	0.10	0.15	0.10	0.69*	0.31	0.07	0.12	0.52*	0.23
20 years old	0.47***	0.13	0.37**	0.12	0.58***	0.12	1.19***	0.31	0.24^{+}	0.13	0.71**	0.24
21 years old	1.43***	0.20	0.60***	0.15	0.72***	0.15	1.07**	0.35	-0.22	0.17	0.63*	0.29
22 years old	1.19***	0.26	0.71***	0.20	0.89***	0.22	0.66	0.48	-0.08	0.22	0.24	0.40
23 or More	0.12	0.27	-0.25	0.24	1.33***	0.30	1.44**	0.45	-0.76**	0.30	0.87*	0.38
Race/Ethnicity												
White (ref)	-		-		-		-		-		-	
Black	-0.61***	0.15	-1.04***	0.16	0.31*	0.15	0.32	0.32	0.17	0.18	-0.04	0.34
Hispanic	-0.40**	0.15	-0.18	0.14	-0.17	0.14	-0.35	0.41	-0.14	0.17	-0.81*	0.40
Asian	-1.07***	0.15	-1.16***	0.15	-1.20***	0.15	-0.47	0.38	-0.72***	0.19	-0.28	0.30
Other	-0.66**	0.22	-0.24	0.21	-0.15	0.21	-0.14	0.48	-0.20	0.25	0.18	0.37
School Type												
Public (ref)	-		-		-		-		-		-	
Private	0.17	0.37	-0.13	0.36	-0.02	0.27	0.55*	0.27	0.30	0.25	0.45	0.34
Christian	-1.09**	0.34	-1.14**	0.36	-0.82***	0.24	-0.54	0.35	-1.02***	0.27	-0.38	0.40

Notes: p < 0.1; * p < 0.05; ** p < 0.01; *** p < 0.001





Ever Drink В Ever Binge Drink 90% Predicted Probability Predicted Probability 80% 60% 70% 60% 40% 50% 40% 20% 30 20 40 10 20 30 10 50 40 50 Religiosity Scale Religiosity Scale C **Ever Had Sex** D Multiple Sexual Partners in Year 80% 6% Predicted Probability
3%
5%
5%
7% Predicted Probability 60% 40% 30 50 30 10 20 40 10 20 40 50 Religiosity Scale Religiosity Scale Ε Marijuana Use F Other Drug Use 12% 50% Predicted Probability Predicted Probability 10% 40% 8% 30% 5% 20% 10% 2% 30 20 30 10 40 50 10 40 50 Religiosity Scale Religiosity Scale Type of School -Public Private Christian

Figure 3: Predicted Probability of Behavior by Context and Religiosity