# The Effect of College Student Spirituality on Alcohol use and Sexual Behaviors: A Comparison of Faith-Based and non Faith-Based Institutional NCHA Data

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# The Effect of College Student Spirituality on Alcohol use and Sexual Behaviors: A Comparison of Faith-Based and non Faith-Based Institutional NCHA Data

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## Abstract

College-aged individuals have a significant impact on national health. People in this age group have the highest rates of engagement in many risky health behaviors, such as binge drinking, substance use, and engaging in unprotected sexual activity. The American College Health Association (ACHA) has been actively involved in the study of college health behavior and the initiation of information and services to college health care providers for the past decade. However, little research has been done in this area on sub-populations of the overall college population. This study aims to assess the sub-population of students who attend a faith-based institution. This population is of particular interest due to the significant impact that, both internal and external, religiosity/spirituality have on health behaviors. Data were requested from institutions that have utilized the National College Health Assessment (NCHA-II) and also have identified themselves as Protestant or Other Christian. The data was aggregated and randomly sampled for comparison to a random matched sample from the national reference group.

Comparative analyses found significant group differences in the levels of engagement in alcohol use, binge drinking, and number of sexual partners.

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# Chapter 1

## Introduction

The state of healthcare services in the U.S. is clearly a major social and economic concern. However, in recent years there has been a significant shift in focus toward the promotion of healthy lifestyle behaviors and preventative care. By reducing participation in risk behaviors and increasing participation in positive health behaviors, hundreds of thousands of accidents, illnesses, and deaths could be avoided each year (Mokdad, Marks, Stroup, & Gerberding, 2004). College-aged (18- to 24-year-old) individuals are of particular interest in this area because they have the highest rates of engagement in many risky health behaviors. They are the most likely age group to binge drink and are also more susceptible to contracting sexually transmitted diseases. Individuals in this age group are four times more likely to contract chlamydia or gonorrhea than the rest of the population combined. Additionally, an estimated 21.8% of individuals in this age group are smokers (Centers for Disease Control and Prevention, 2011).

The American College Health Association (ACHA) contributes to the preventative care movement by collecting data on health perceptions and behaviors from hundreds of colleges and universities nationwide. This data is compiled into bi-annual reports that the participating institutions can reference. By comparing the institution's data to the national reference group, each institution can begin to identify its most salient areas of concern (ACHA, 2011). However, due to the impact of religiosity on health behavior, the national reference group may not be the

best point of comparison for all institutions. The purpose of this study is to see if attendance at a faith-based institution affects students' engagement in risky health behaviors.

**American College Health Association**

The ACHA has recognized the importance of addressing the health of college-aged individuals for nearly 100 years. Developed in 1920, the ACHA aims to "provide advocacy, education, communications, products, and services, as well as promote research and culturally competent practices to enhance its members' ability to advance the health of all students and the campus community" (ACHA, 2011, para. 2). One of the major contributions the ACHA has made to the advancement of student health is through the development of the National College Health Assessment. This assessment is the most widely used college health assessment in the US. It is used by hundreds of institutions nationwide to identify which health behaviors and perceptions are most negatively impacting the health of the institution's student body.

This research has become increasingly relevant, as, according to the U.S. Department of Education, enrollment in higher education has been steadily increasing since the 1980s. In 2007, 18.2 million people were enrolled in a degree-granting institution, which is approximately 6% of the total U.S. population (US Department of Education, 2009). Furthermore, about 1.7 million of these students attend one of 900 institutions that identify themselves as religiously affiliated (Council of Christian Colleges and Universities, 2011). It is this unique subset of students, and their specific health related challenges, that will be the focus of this paper.

**Religious Institutions and Lifestyle**

Religiously affiliated, or faith-based institutions, represent a unique subset of higher education, with several behavioral factors distinguishing this type of institution. Many faith-

based institutions require that their students adhere to a "lifestyle agreement." This is a social contract that outlines the kinds of behavior an institution expects its students to engage in or abstain from. While there is considerable diversity among the requirements that each individual institution sets forth for its students, there are also many commonalities, which typically occur in the area of health behaviors such as sexual practice and substance use. In addition, many faith-based institutions consider themselves "dry" campuses, and prohibit the possession and consumption of alcohol on school grounds. Finally, faith-based institutions typically advertise to and attract a higher saturation of students that identify as religious or spiritual, which may be more likely to agree with and abide by these rules.

**Religious/Spiritual Affiliation and Health Behavior**

Based on these distinctions, it can be assumed that the standard health practices and pertinent health related issues faced by students at faith-based institutions might be somewhat different from the general population. Recent research supports this idea, finding that individuals who endorse a religious/spiritual affiliation also report significant differences in lifestyle and health related behaviors (Hill, Ellison, Burdette, & Musick, 2007; Homan & Boyatzis, 2010; Rew & Wong, 2006; Rew, Wong, Torres, & Howell, 2007). Generally speaking, current research supports the hypothesis that intrinsically endorsed religiosity/spirituality is associated with an increase in positive health behaviors, while extrinsically endorsed religiosity/spirituality is associated with decreased engagement in risky health behaviors (Homan, & Boyatzis, 2010).

Some benefits experienced by those who endorse a religious or spiritual affiliation include engaging in more health promoting behaviors such as eating healthier, exercising more, and managing stress better (Homan, & Boyatzis, 2010; Rew et al., 2007). Those who are

regularly involved in religious activities may also be less susceptible to depressive symptoms (Schapman & Inderbitzen-Nolan, 2002; Smith, McCullough, & Poll, 2003). Furthermore, this trend has been studied across many populations and appears to hold true across age, gender, ethnicity, and medical/health related situations (Hill et al., 2007; Homan, & Boyatzis, 2010; Page, Ellison, & Lee, 2009; Park, Edmondson, Hale-Smith, & Blank, 2009; Rew & Wong, 2006).

Religiosity/spirituality has also been identified as a preventative or buffering factor for many risk behaviors, especially in adolescent and college-aged populations (Galen & Rogers, 2004; Hodge, Candenas, & Montoya, 2001; Wills, Yaeger, & Sandy, 2003). Two areas of particular interest and repeated research are substance use and sexual behaviors. Studies indicate that religiosity/spirituality acts as a protective factor, to some degree, in both areas.

For example, adolescent spirituality and religious involvement may be the most effective combination at buffering against alcohol, marijuana, and hard drug use (Hodge et al., 2001), with intrinsic religiosity having the greatest impact on decreasing alcohol consumption in college-aged populations (Galen & Rogers, 2004). In regard to sexual practices, students who feel connected to their religiosity/spirituality are less likely to engage in sexual activity at a young age (Holder et al., 2000), and are more likely to delay their first intercourse until adulthood (Lammers, Ireland, Resnick, & Blum, 2000). Religiosity/spirituality has also been associated with increased sexual responsibility among adolescent girls, including fewer sexual partners, greater perceptions of the possible consequences of unprotected intercourse, and greater feelings of responsibility for and planning for the use of birth control (Miller & Gur, 2002). Furthermore, Burdette, Ellison, Hill, and Glenn (2009) found that college-aged Protestant women are

significantly less likely to engage in casual sexual relationships than Catholic women and women who do not endorse a religious affiliation.

It should be noted that some differences have been found regarding the impact of endorsing an intrinsic/private versus extrinsic/public approach to religious involvement. This is germane due to the fact that one cannot assume that all students who choose to attend a faith-based institution will be intrinsically/privately involved in religious practices. Park et al. (2009) found in a study of young adults who had survived cancer that religious service attendance alone was unrelated to positive health behaviors such as diet, exercise, and listening to their doctor's advice. However, Nonnemaker, McNeelyb, and Blumb (2003) found less definitive results. Using the National Longitudinal Study of Adolescent Health, they found that both private and public endorsements of religiosity were equally protective factors against the use of cigarettes, marijuana, and alcohol. In addition to this, public religiosity was found to be a protective factor against self-identification as a "regular user", while private religiosity was not. Choosing not to engage in sexual intercourse was also more significantly impacted by public religiosity than private. As such, it appears that public religiosity may be more strongly associated with avoiding risk behaviors, while private religiosity may be more likely to promote the addition of positive health behaviors such as diet and exercise (Homan & Boyatzis, 2010).

**Objective of the Present Study**

Clearly, students who attend faith-based institutions, whether they endorse private/ intrinsic religiosity/spirituality or not, will experience unique benefits and challenges to maintaining a healthy lifestyle. The present study aims to determine if there are significant differences in heath behavior between students at faith-based institutions and the national

reference group. It is hypothesized that the faith-based sample will differ significantly from the national sample for engagement in two specific risk behaviors: sexual practices and alcohol use.

# Chapter 2

# Methods

## Participants

Archival data from eight faith-based institutions of higher education that opted to administer the NCHA-II between Fall 2009 and Spring 2012 were used for this study. Faith-based institutions were defined as those that publically endorse a Protestant religious affiliation, endorse religion as an active part of campus life, offer or require participation in activities that promote spiritual development such as regular religious meetings on campus or required religious courses, have a published statement regarding the institution's expected lifestyle behavior for students, and require their students to endorse this statement in some way. In keeping with ACHA reference group standards, "only those institutions that surveyed all students, or used a random sampling technique were included in the analysis" (ACHA, 2010, p. ii). Eight faith-based institutions participated in the study.

A comparative sample was taken from the National reference sets based on the Fall 2011/Spring 2012 administrations. Data from the participating faith-based institutions were removed prior to this sampling. Additionally, due to the Centers for Disease Control and Prevention's age classification groups, the samples extracted only used individuals from 18 to 24 years of age. Therefore, all analysis consisted of individuals in this age range. To adequately assess for risk behavior only, comparative analyses on sexual practices excluded individuals who identified as Married/Partnered.

An a priori test of power indicated that samples of 100 or more students from each of the two data sets would be effective for comparative analysis. In order to account for the exclusionary criteria that were applied to the overall sample, initial stratified random samples of 500 undergraduate students, age 18-24, were taken from each group for a total *n* of 1,000. Proportionate allocation was used, based on the percentage of students from each year of enrollment in the faith-based sample.

**Instruments**

**National College Health Assessment-II (NCHA-II).** The National College Health Assessment was developed by the American College Health Association and has been administered to thousands of students at colleges and universities across the US and Canada for the last 10 years (http://www.acha-ncha.org, March 16, 2011). The assessment was first implemented in the Spring of 2000 and has since been used by over 500 unique institutions. Its most recent edition, the NCHA-II, is administered both electronically and in paper format and has been in use since 2008. The assessment surveys students on a wide-range of health behaviors and perceptions, including substance use, sexual practices, nutrition, exercise, violence, personal safety, and physical and mental health, and takes about 30 minutes to complete.

The purpose of the NCHA-II is to "adequately identify factors affecting academic performance, respond to questions and concerns about the health of the nation's students, develop a means to address these concerns, and ultimately improve the health and welfare of those students" (http://www.acha-ncha.org, March 16, 2011). This goal is achieved through a five-step process that begins with collecting current and specific data from individual institutions. Each semester the ACHA compiles and analyzes the recent data to produce a

national aggregate reference group. Participating institutions are then provided with the national reports as well as their own data for comparative purposes.

Institutions then use this data to "enhance campus wide health promotion and prevention services" (http://www.acha-ncha.org/overview.html, March 16, 2011). By comparing their data to the national reference group, individual institutions are able to identify their specific problem areas and concerns. This allows institutions to focus their resources toward implementing programs that address the issues that are most salient to the students on their campuses.

It should be noted that the NCHA is administered to self-selecting higher education institutions, and as such, the information is considered informational rather than generalizable. However, the participating institutions do correspond to a wide-range of classifications (e.g., Carnegie classifications, public and private, 2-year and 4-year, local and national, etc.) and affiliations (e.g., ACHA, religious affiliations, minority serving status). Of particular interest to this study are institutions that endorse a religious affiliation.

**Procedure**

The ACHA was contacted and a requested to forward a letter of interest to the institutions that identified as Protestant or Other Christian and participated in the NCHA-II during the aforementioned time constraints. A similar letter of interest was distributed through listserves of institutions that are members of the Council of Christian Colleges and Universities. The institutions that responded were then screened for inclusionary criteria. The eligible institutions that displayed interest and willingness to participate were sent another letter containing the specifics of the study, a confidentiality agreement, and a request for their data to be released to

George Fox University via the ACHA. Follow-up was completed via phone or email. Upon receipt of the institutions' data it was compiled into a single de-identified file for analysis.

After applying the aforementioned exclusionary criteria, descriptive and comparative analyses were completed using proportionately allocated stratified random samples of the aggregate faith-based data and the national reference group data.

**Hypotheses and Proposed Analysis**

The following hypotheses were tested. Hypothesis 1: Students at faith-based institutions (FBIs) will endorse significantly different proportions of alcohol use in the past 30 days. This was measured using question 8E "Within the last 30 days, on how many days did you use: Alcohol (beer, wine, liquor)?" (ACHA, 2011, p. 3). Hypothesis 2: Students at FBIs who endorse drinking behavior will endorse having fewer drinks per hour the last time they "partied"/socialized. This was measured using question 10 "The last time you "partied"/socialized how many drinks of alcohol did you have?" and question 11 "The last time you "partied"/socialized over how many hours did you drink alcohol?" (p. 4). The number of drinks was divided by the number of hours over which they were consumed to produce drinks per hour. The NCHA-II states in this section that "One drink of alcohol is defined as a 12 oz. can or bottle of beer or wine cooler, a 4 oz. glass of wine, or a shot of liquor straight or in a mixed drink" (p. 4) Question 10 was not analyzed alone due to the wide variability of hours over which the drinks were reportedly consumed. Hypothesis 3: Students at FBIs who endorse drinking behavior will endorse fewer occurrences of binge drinking—as defined by having five or more drinks in one sitting—in the past two weeks. This was measured using question 13 "Over the last two weeks, how many times have you had five or more drinks of alcohol at a sitting?" (p. 4).

Hypothesis 4: Unmarried/un-partnered students at FBIs will endorse having had fewer sexual partners in the past year. This was measured using question 19 “Within the last 12 months, with how many partners have you had oral sex, vaginal intercourse, or anal intercourse?” (p. 6). Descriptive statistics are also reported. See appendix A for full survey with response options and demographic questions.

# Chapter 3

## Results

Demographic information describing the two samples is displayed in Table 1. Hypothesis 1 on alcohol consumption used the responses from 993 participants in the sample. From the total sample, 483 indicated that they had never used alcohol or did not have any drinks the last time they partied/socialized, thus 517 students were included in the comparative analysis for Hypotheses 2 and 3 on risky alcohol use behavior. Additionally, 39 of the 1,000 students identified themselves as Married/Partnered; therefore 961 students were included in the initial comparative analysis for Hypothesis 4 on sexual behaviors. The secondary analysis excluded individuals who endorsed having no sexual partners in the past 12 months and consisted of 457 individuals.

### Hypothesis 1

Hypothesis 1 examined the drinking behaviors of students over the past 30 days by asking "Within the last 30 days, on how many days did you use: Alcohol (beer, wine, liquor)?" (ACHA, 2011, p. 3). Students were offered 8 response options "Never used, have used but not in last 30 days, 1-2 days, 3-5 days, 6-9 days, 10-19 days, 20-29 days, and used daily." It was hypothesized that students at faith-based institutions would endorse significantly different proportions of alcohol use, with the assumption being that students at faith-based institutions would consume alcohol less frequently and that a significantly larger portion would endorse never having consumed alcohol or not having consumed it in the past 30 days. A Mann-Whitney

Table 1

*Demographic Information*

| | Faith-based sample | | Random matched sample | |
|---|---|---|---|---|
| | n | % of total | n | % of total |
| Gender | | | | |
| Female | 360 | 72.0 | 341 | 68.2 |
| Male | 140 | 28.0 | 154 | 30.8 |
| Sexual Orientation | | | | |
| Heterosexual | 493 | 98.6 | 453 | 90.6 |
| Gay/Lesbian | 2 | 0.4 | 10 | 2.0 |
| Bisexual | 3 | 0.6 | 20 | 4.0 |
| Unsure | 2 | 0.4 | 13 | 2.6 |
| Year in School | | | | |
| 1st year undergraduate | 149 | 29.7 | 149 | 29.7 |
| 2nd year undergraduate | 119 | 23.8 | 119 | 23.8 |
| 3rd year undergraduate | 117 | 23.4 | 117 | 23.4 |
| 4th year undergraduate | 97 | 19.4 | 97 | 19.4 |
| 5th year undergraduate or more | 18 | 3.6 | 18 | 3.6 |
| Race/ethnicity | | | | |
| White | 434 | 86.8 | 374 | 74.8 |
| Black or African American | 15 | 3.0 | 31 | 6.2 |
| Hispanic or Latino/a | 27 | 5.4 | 36 | 7.2 |
| Asian or Pacific Islander | 31 | 6.2 | 58 | 11.6 |
| American Indian, Native Alaskan, Native Hawaiian | 7 | 1.4 | 7 | 1.4 |
| Biracial or Multiracial | 14 | 2.8 | 22 | 4.4 |
| Other | | | | |

*Note.* Totals and percentages may not add up to 100% due to non-response. Based in part on ACHA (2010).

*U* test was calculated examining the alcohol consumption of students at faith-based and non-faith-based institutions over the past 30 days. Students at faith-based institutions endorsed significantly less frequent use of alcohol over the past 30 days than did those at non-faith-based institutions ($p < .001$). Thus, hypothesis 1 was supported, finding that a significantly larger portion of students at faith-based institutions endorsed never having consumed alcohol or not having consumed it in the past 30 days. Forty-nine-percent of students at FBIs reported never having used as compared to 25% of students in the national sample. Additionally, significantly higher proportions of students in the national reference group endorsed consuming alcohol over the 3-5, 6-9, and 10-19 days categories. See Figure 1.

**Hypothesis 2**

Hypothesis 2 examined the risky alcohol behavior of students who endorse ever having consumed alcohol by using questions 10 and 11, "The last time you "partied"/socialized how many drinks of alcohol did you have?" and "The last time you "partied"/socialized over how many hours did you drink alcohol?" to determine how many drinks are consumed on average per hour by students (p. 4). Responses for both were free-answer, with valid responses ranging from 0 to 99. An independent samples *t* test comparing the mean scores of the faith-based and national reference groups for the average number of drinks per hour the last time students who endorse drinking behavior "partied/socialized" found a significant difference between the means of the two groups ($t(515) = 2.67$, $p = .008$). Students at faith-based institutions ($m = 1.14$, $sd = 0.79$) endorsed having significantly fewer drinks per hour than student from the national reference group ($m = 1.37$, $sd = 1.05$). On average, students at FBI's that consume alcohol drink 1.14

drinks per hour compared with 1.37 drinks per hour for their non-FBI counterparts. A small effect size was found ($d = 0.26$).

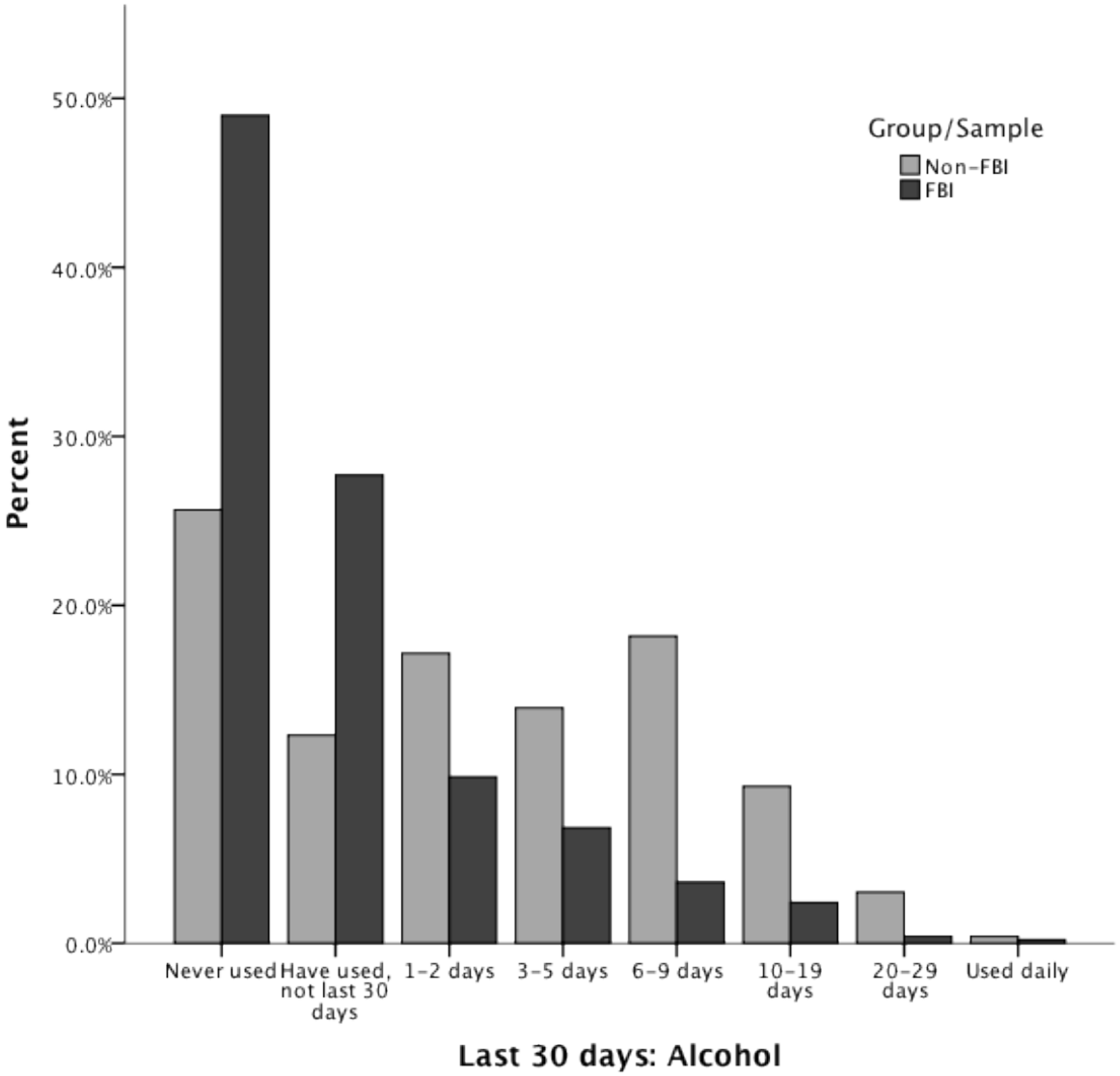


Figure 1. Distribution of alcohol consumption over the past 30 days for students at faith-based institutions and non-faith-based institutions. Group/Sample 1 represents students from the national reference group. Group/Sample 2 represents students from the faith-based institutions sample.

*Figure 1.* Alcohol use: last 30 days.

**Hypothesis 3**

Hypothesis 3 examined binge-drinking behavior by asking "Over the last two weeks, how many times have you had five or more drinks of alcohol at a sitting?" (p. 4). Students were offered 12 response options "N/A don't drink, none, 1 time, 2 times…9 times, 10 or more times." Students who had previously responded with "never used" to question 8E on alcohol consumption (see appendix A) were excluded from the analysis. An independent samples *t* test comparing the mean scores of the faith-based and national reference groups for the average number of times students engaged in binge drinking over the past two weeks found a significant difference between the means of the two groups ($t(491.01) = 8.57$, $p < .001$). Students at faith-based institutions ($m = 2.26$, $sd = 0.79$) endorsed significantly fewer instances of binge drinking than students from the national reference group ($m = 3.23$, $sd = 1.74$). On average, students at FBIs who consume alcohol engaged in binge drinking 2.26 times in the past two weeks compared with 3.23 times in the past two weeks for their non-FBI counterparts. A moderate effect size was found ($d = 0.72$).

**Hypothesis 4**

Hypothesis 4 examined the number of sexual partners that unmarried/un-partnered students endorse having over the past 12 months by asking question 19 "Within the last 12 months, with how many partners have you had oral sex, vaginal intercourse, or anal intercourse?" (p. 6) in order to assess for risky sexual behavior. The response style was free-answer, with valid responses ranging from 0 to 99. An independent samples *t* test comparing the mean scores of the faith-based and national reference groups for the average number of sexual partners in the past 12 months for unmarried/un-partnered students found a significant difference

between the means of the two groups ($t(918.02) = 8.15$, $p < .001$). Students at faith-based institutions ($m = 0.5$, $sd = 1.67$) endorsed having significantly fewer sexual partners in the past 12 months than students from the national reference group ($m = 1.51$, $sd = 2.15$). On average, unmarried/un-partnered students at FBIs have 0.5 sexual partners as compared to the 1.51 partners endorsed by their non-FBI counterparts. A moderate effect size was found ($d = 0.53$).

A follow-up demographic analysis of question 21 "Within the last 30 days, did you have: (a) oral sex, (b) vaginal intercourse, (c) anal intercourse?" (p. 6) was completed and found that 76.3% of students in the faith-based group indicated that they have never had vaginal intercourse, compared with only 34.9% of those in the national reference group. Similarly 68.3% of students at faith-based institutions denied ever having oral sex, compared to 31.6% of students in the national sample. Therefore, a secondary analysis of question 19 was run with the 457 participants who reported being sexually active, with a partner, in the past 12 months. An independent samples *t* test comparing the mean scores of the faith-based and national reference groups for the average number of sexual partners in the past 12 months for unmarried/un-partnered students who endorsed having at least one sexual partner in the past 12 months found no significant difference between the means of the two groups ($t(455) = 1.75$, $p = .08$). Students at faith-based institutions ($m = 1.82$, $sd = 2.79$) endorsed having no fewer sexual partners in the past 12 months than students from the national reference group ($m = 2.26$, $sd = 2.28$). Thus, students at both FBIs and non-FBIs who endorse having had at least one sexual partner in the past 12 months endorse having an average of about two sexual partners in the past 12 months. Therefore, hypothesis 4 is partially supported.

# Chapter 4

## Discussion

This study aimed to examine the differences in health behaviors among students who attend faith-based and non-faith-based institutions. Prior research has found that endorsing religiosity/spirituality has an impact on health behaviors. Homan and Boyatzis (2010) found that endorsing public/extrinsic religiosity is associated with avoiding risk behaviors, while private/intrinsic religiosity may be more likely to promote the addition of positive health behaviors. In the literature, specific attention has been given to how religiosity/spirituality mediates and reduces engagement in risky health behaviors, such as substance use and sexual behavior (Galen & Rogers, 2004; Hodge et al., 2001; Wills et al., 2003). This study examined four hypotheses to determine if students at faith-based institutions, and thus endorse a public/extrinsic religiosity/spirituality, are less engaged in risky health behaviors than their non-faith-based counterparts.

Hypothesis 1 was supported, finding that a significantly larger portion of students at faith-based institutions engage in less frequent alcohol consumption, never having consumed alcohol, or not having consumed it in the past 30 days. Additionally, 49% of students at FBIs reported never having used alcohol as compared to 25% of students in the national sample. Therefore, not only do fewer students at FBIs engage in alcohol consumption, they also do so with less frequency than their non-faith-based counterparts. Figure 1 highlights the difference in distribution of the two groups. This is consistent with research that has found religiosity/

spirituality to be a buffer against alcohol consumption (Galen & Rogers, 2004; Hodge et al., 2001).

Hypotheses 2 and 3 examined risky drinking behaviors among the students who endorse consuming alcohol. Hypothesis 2 was supported, with a small effect size, finding that on average, among students who endorse consuming alcohol, students at faith-based-institutions consume significantly less alcohol per hour when they "party"/socialize than their counterparts at non-faith-based institutions. Similarly, Hypothesis 3 was supported, with a moderate effect size, finding that, among students who endorse consuming alcohol, students at faith-based-institutions engage in binge drinking significantly less frequently than their non-faith-based counterparts. Therefore, on average, the students at FBIs who engage in alcohol consumption engage in fewer alcohol risk behaviors as measured by quantity consumed and instances of binge drinking.

According to the Centers for Disease Control and Prevention (CDC) "Binge drinking is the most common pattern of excessive alcohol use in the United States" (CDC, 2012a, para. 1). The effects of excessive alcohol use, including binge drinking, cost the United States $223.5 billion in 2006, and cause about 80,000 deaths annually. The largest proportion of binge drinkers falls in the 18-34 years of age category. Due to this, there are many community-based interventions and laws in place to help reduce the misuse of alcohol and other substances on college campuses. The Drug-Free Schools and Communities Act of 1989 (PL 101-226) states that institutions of higher education cannot receive any federal funding, including student loan programs, unless it "has implemented a program to prevent the use of illicit drugs and the abuse of alcohol by students and employees" (Sec 21, para. 2). These programs must include, at a minimum, standards of conduct and information regarding prohibition and sanctions for unlawful

possession, information on associated health risks, and a description of available treatment options. Furthermore, these programs must be evaluated for effectiveness biennially; institutions are free to augment their programs to increase their effectiveness.

The CDC, as well as various other organizations, including the ACHA Alcohol, Tobacco, and Other Drugs Coalition, The National Institute on Alcohol Abuse and Alcoholism, and the Guide to Community Preventive Services, has been researching effective interventions for binge drinking for the last decade. Currently, evidence-based interventions focus on regulating the sale of alcohol and increased law enforcement for alcohol related crimes (CDC, 2012b; Guide to Community Preventive Services, 2013). However, the CDC (2012b) has also recently begun promoting community involvement, including "Develop[ing] community coalitions that build partnerships among … faith-based organizations … to reduce binge drinking" (What can be done, para. 2). This indicates a budding awareness of the positive effects religious/spiritual involvement can have on high-risk alcohol behaviors. Therefore, it would be reasonable for non-faith-based institutions to consider the potentially beneficial effects of supporting religiosity/spirituality among their students as a protective factor against risky alcohol consumption behaviors.

Hypothesis 4, which examined sex behaviors via the number of sexual partners that students had in the past 12 months, was partially supported. An initial analysis of the data found a significant difference, with a moderate effect size, between the number of sexual partners reported in the past 12 months, with students at faith-based institutions endorsing significantly fewer sexual partners in the past 12 months than their counterparts at non-faith-based institutions. However, upon further analysis, it was found that 76.3% of students in the faith-

based group indicated that they have never had vaginal intercourse, compared with only 34.9% of those in the national reference group and that 68.3% of students at faith-based institutions denied ever have oral sex, compared to 31.6% of students in the national sample. Therefore, a secondary analysis of the data was done, excluding those individuals who denied having any sexual partners in the past 12 months. This analysis found no significant difference between the groups, indicating that on average, among students who endorse being sexually active in the past 12 months, attendance at a faith-based institution did not significantly impact the number of sexual partners that students reported having.

The noticeably larger proportion of students at faith-based institutions who indicated that they have not engaged in sexual activity is consistent with the research on sexual behavior among religious/spiritual youth. Studies have shown that religious/spiritual youth are less likely to engage in sexual activity at a young age and are more likely to delay their first intercourse (Holder et al., 2000; Lammers et al., 2000). However, Jones, Darroch, and Singh (2005) found that although religious involvement did delay the age of first intercourse of women, it had little subsequent impact on their sexual behavior once intercourse had occurred, including in the number of sexual partners reported. Furthermore, Njus and Bane (2009) found that men with low intrinsic religiosity desired significantly more sexual partners in their lifetime than men with high intrinsic religiosity, but the same was not true for women. Therefore, it seems that, in addition to gender effects, extrinsic religiosity may account for a delay in first intercourse and intrinsic religiosity may more strongly affect sexual behaviors after first intercourse.

**Implications**

There are several large-scale implications for the findings of this research, as well as the literature that supports it. First, it seems that the religiosity/spirituality associated with attendance at a faith-based institution, is able to significantly moderate several risky health behaviors. A significantly larger proportion of students at FBIs abstain from alcohol use and early sexual activity, and those students who do engage in these behaviors do so more responsibly than students at non-FBIs. Given the data currently available, there is no way to measure the intrinsic or extrinsic nature of the religiosity/spirituality of the students attending either FBIs or non-FBIs. Thus, it is impossible to discern whether intrinsic or extrinsic religiosity/spirituality, the environment, or a combination of factors is most related to the findings of this study. However, it appears clear that religiosity/spirituality is able to significantly decrease students' engagement in these risk behaviors.

As previously discussed, institutions of higher education have an obligation to prevent risky health behaviors and promote the legal and responsible use of substances. Given the literature discussed and the results of this research supporting the positive effects of religiosity/spirituality on health behavior, it seems reasonable that all universities could benefit by finding ways to support student spirituality. However, the general atmosphere in much of the American educational system has for many years been one that is, at best, cautious of the presence of religion/spirituality in education and, at worst, has focused on systematically eradicating religion/spirituality from both curriculum and conversation.

While promoting a certain form of religion would be inappropriate and could inhibit the intellectual and academic freedom we value in our educational system in the United States, the

results of this study and others demonstrate discouraging student involvement with or dedication to their religiosity/spirituality can result in higher risk alcohol and sexual practices. On the contrary, being supportive of student religious/spiritual exploration and involvement coupled with the presence of religious/spiritual groups/clubs/organizations on campus could provide direct health benefits to the student body at large by altering campus environments in ways that result in improved personal health and a more socially responsible ethos.

A movement in this direction also is consistent with the rise in sensitivity to and celebration of culture and diversity in that universities should encourage greater religious/spiritual tolerance and celebration, for both minority and majority cultures. Institutions of higher education are often the frontrunners of such movements as they aim to set an example for the population at large by educating the future leaders and workforce of the nation, and are uniquely positioned to promote conversations and further research in this area.

**Limitations**

As mentioned above, it cannot be assumed that all students who attend a faith-based institution will also endorse private/intrinsic or public/extrinsic religiosity. Likewise, there are most certainly students attending non-FBIs that would endorse private/intrinsic or public/extrinsic religiosity. However, it is reasonable to expect that the concentration of students endorsing either (or both) private/intrinsic or public/extrinsic religiosity/spirituality is greater at FBIs than non-FBIs and thus, this increased religiosity/spirituality likely accounts for much of the findings. In keeping with Homan and Boyatzis's (2010) findings, that public/extrinsic religiosity is associated with a decrease in risk behaviors, while private/intrinsic religiosity is

associated with an increase in positive health behaviors, it is likely that the present findings may be more associated with the public/extrinsic religiosity characteristic of FBI campuses.

Another limitation involves the different educational environments of the FBIs and non-FBIs. FBIs are generally private institutions with small campus sizes and they often have more stringent standards of conduct or lifestyle agreements which students are asked to abide by. Small private campuses, while often having fewer resources than large public campuses, also have fewer students to monitor and may find it easier to enforce rules about drinking behavior on campus. Additionally, small private institutions are likely to attract a different demographic of students than large public institutions. Therefore, it is difficult to extrapolate the effects this type of educational environment, with its embedded culture and values, from the effects of religiosity/spirituality.

Finally, there are many intrinsically and extrinsically religious/spiritual students who attend non-FBIs. Based on the literature regarding the effects of religiosity/spirituality on health behavior, it is likely that religious/spiritual students who attend non-FBIs engage in health behaviors that are more similar to those of religious/spiritual students at FBIs. Therefore, the presence of these students in the national reference set may mask an even greater discrepancy between the health behaviors of religious/spiritual and non-religious/spiritual students.

**Areas for Future Research**

First, research assessing intrinsic and extrinsic religiosity/spirituality in both FBIs and non-FBIs while collecting NCHA data would be very informative and could be gathered with as little as two additional demographic questions. Intrinsic religiosity could easily be measured by having students rate the statement “I consider myself a religious/spiritual person” on a Likert

scale ranging from *not at all true* to *very true*. Extrinsic religiosity could be measured in ratio form by asking, "How many times per month do you attend religious/spiritual events/services?" This additional data would allow the exploration of the amount of variance in these alcohol and sex behaviors are accounted for by intrinsic-, extrinsic-religiosity/spirituality, or environmental factors (e.g., lifestyle contracts). This would aid in delineation the specific variables that are most related to the decrease in alcohol and sex risk behaviors thus allowing non-FBIs to implement or promote the most effective variables.

Another area for future research stems from the fact that all of the participating faith-based institutions were private Protestant institutions, which is not necessarily representative of all types of religiosity/spirituality. There are many additional types of religious/spiritual individuals who might be investigated regarding these issues. It would be interesting not only to compare intrinsic to extrinsic types of religiosity, but also between faith-backgrounds: Protestant, Mormon, Catholic, eastern religions such as Buddhism and Hinduism, atheists and agnostics, etc. In doing so, we might better understand how each group's religiosity/spirituality (or lack thereof) impacts health behaviors.

Third, establishing a separate reference group for faith-based institutions may also be warranted. To date, FBIs can only compare their data to the national reference group. Because the groups differ significantly in their levels of engagement in risky health behaviors, this type of comparison could likely lead to FBIs under-identifying problem areas in their health care and prevention programs. A faith-based reference group would allow FBIs to see how the behaviors of their students compare to the behaviors of students with similar values and environmental

factors and thus allow for a more precise assessment of their campus' health behavior related needs.

**Conclusion**

In conclusion, it is clear from the literature and the findings of this study, that the religiosity/spirituality associated with attending a faith-based institution has a significant moderating effect on students' engagement in risky health behaviors, specifically those related to alcohol consumption and number of sexual partners. Students attending FBIs engage in alcohol consumption and sexual activity significantly less than students at non-FBIs and, additionally, when they do engage in these behaviors, they do so more responsibly. This has significant implications for any institution of higher education that wishes to decrease their students' engagement in risky health behaviors. As a matter of both the celebration of diversity as well as the promotion of positive health behaviors, institutions of higher education should consider how they can better understand these religiosity/spirituality mediating factors and encourage the implementation of them on their own campuses.

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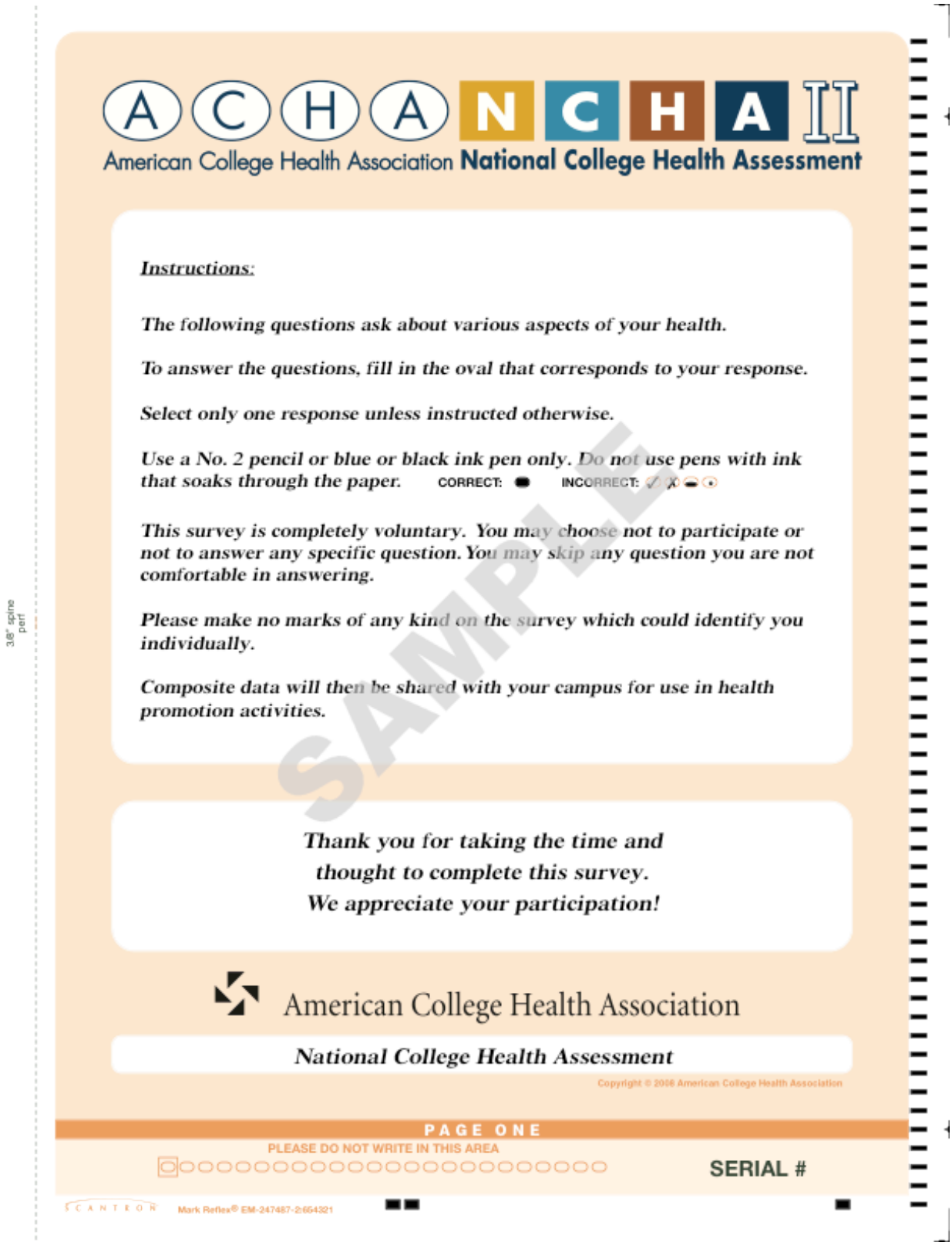
# Appendix A

## National College Health Assessment II



ACHA NCHA II

American College Health Association National College Health Assessment

*Instructions:*

*The following questions ask about various aspects of your health.*

*To answer the questions, fill in the oval that corresponds to your response.*

*Select only one response unless instructed otherwise.*

*Use a No. 2 pencil or blue or black ink pen only. Do not use pens with ink that soaks through the paper.* CORRECT: ● INCORRECT: ✓ ✗ ◒ ⊙

*This survey is completely voluntary. You may choose not to participate or not to answer any specific question. You may skip any question you are not comfortable in answering.*

*Please make no marks of any kind on the survey which could identify you individually.*

*Composite data will then be shared with your campus for use in health promotion activities.*

SAMPLE

*Thank you for taking the time and thought to complete this survey. We appreciate your participation!*

American College Health Association

*National College Health Assessment*



PAGE ONE

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## Health, Health Education and Safety

1. How would you describe your general health?
   ○ Excellent ○ Very good ○ Good ○ Fair ○ Poor ○ Don't know

| (Please mark the appropriate column for each question to the right) | 2. Have you received information on the following topics from your college or university? | | 3. Are you interested in receiving information on the following topics from your college or university? | |
|---|---|---|---|---|
| | No | Yes | No | Yes |
| Alcohol and other drug use | ○ | ○ | ○ | ○ |
| Cold/Flu/Sore throat | ○ | ○ | ○ | ○ |
| Depression/Anxiety | ○ | ○ | ○ | ○ |
| Eating disorders | ○ | ○ | ○ | ○ |
| Grief and loss | ○ | ○ | ○ | ○ |
| How to help others in distress | ○ | ○ | ○ | ○ |
| Injury prevention | ○ | ○ | ○ | ○ |
| Nutrition | ○ | ○ | ○ | ○ |
| Physical activity | ○ | ○ | ○ | ○ |
| Pregnancy prevention | ○ | ○ | ○ | ○ |
| Problem use of Internet/computer games | ○ | ○ | ○ | ○ |
| Relationship difficulties | ○ | ○ | ○ | ○ |
| Sexual assault/Relationship violence prevention | ○ | ○ | ○ | ○ |
| Sexually transmitted disease/infection (STD/I) prevention | ○ | ○ | ○ | ○ |
| Sleep difficulties | ○ | ○ | ○ | ○ |
| Stress reduction | ○ | ○ | ○ | ○ |
| Suicide prevention | ○ | ○ | ○ | ○ |
| Tobacco use | ○ | ○ | ○ | ○ |
| Violence prevention | ○ | ○ | ○ | ○ |

4. Within the **last 12 months**, how often did you:
   (Please mark the appropriate column for each row)

| | Always | Most of the time | Sometimes | Rarely | Never | N/A, did not do this activity within the last 12 months |
|---|---|---|---|---|---|---|
| Wear a seatbelt when you rode in a car? | ○ | ○ | ○ | ○ | ○ | ○ |
| Wear a helmet when you rode a bicycle? | ○ | ○ | ○ | ○ | ○ | ○ |
| Wear a helmet when you rode a motorcycle? | ○ | ○ | ○ | ○ | ○ | ○ |
| Wear a helmet when you were inline skating? | ○ | ○ | ○ | ○ | ○ | ○ |

5. Within the **last 12 months**:
   (Please mark the appropriate column for each row)

| | Yes | No |
|---|---|---|
| Were you in a physical fight? | ○ | ○ |
| Were you physically assaulted (do not include sexual assault)? | ○ | ○ |
| Were you verbally threatened? | ○ | ○ |
| Were you sexually touched without your consent? | ○ | ○ |
| Was sexual penetration attempted (vaginal, anal, oral) without your consent? | ○ | ○ |
| Were you sexually penetrated (vaginal, anal, oral) without your consent? | ○ | ○ |
| Were you a victim of stalking (e.g., waiting for you outside your classroom, residence, or office; repeated emails/phone calls)? | ○ | ○ |

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6. Within the **last 12 months**, have you been in an intimate (coupled/partnered) relationship that was:
(Please mark the appropriate column for each row)

| | Yes | No |
|---|---|---|
| Emotionally abusive? (e.g., called derogatory names, yelled at, ridiculed) | ○ | ○ |
| Physically abusive? (e.g., kicked, slapped, punched) | ○ | ○ |
| Sexually abusive? (e.g., forced to have sex when you didn't want it, forced to perform or have an unwanted sexual act performed on you) | ○ | ○ |

7. How safe do you feel:
(Please mark the appropriate column for each row)

| | Very safe | Somewhat safe | Somewhat unsafe | Not safe at all |
|---|---|---|---|---|
| On this campus (daytime)? | ○ | ○ | ○ | ○ |
| On this campus (nighttime)? | ○ | ○ | ○ | ○ |
| In the community surrounding this school (daytime)? | ○ | ○ | ○ | ○ |
| In the community surrounding this school (nighttime)? | ○ | ○ | ○ | ○ |

## Alcohol, Tobacco, and Drugs

8. Within the **last 30 days**, on how many days did you use:
(Please mark the appropriate column for each row)

| | Never used | Have used, but not in last 30 days | 1-2 days | 3-5 days | 6-9 days | 10-19 days | 20-29 days | Used daily |
|---|---|---|---|---|---|---|---|---|
| Cigarettes | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Tobacco from a water pipe (hookah) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Cigars, little cigars, clove cigarettes | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Smokeless tobacco | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Alcohol (beer, wine, liquor) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Marijuana (pot, weed, hashish, hash oil) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Cocaine (crack, rock, freebase) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Methamphetamine (crystal meth, ice, crank) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Other amphetamines (diet pills, bennies) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Sedatives (downers, ludes) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Hallucinogens (LSD, PCP) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Anabolic steroids (Testosterone) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Opiates (heroin, smack) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Inhalants (glue, solvents, gas) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| MDMA (Ecstacy) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Other club drugs (GHB, Ketamine, Rohypnol) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Other illegal drugs | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |



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9. Within the **last 30 days**, how often do you think **the typical student at your school** used:

(State your best estimate; Please mark the appropriate column for each row)

| | Never used | Have used, but not in last 30 days | 1-2 days | 3-5 days | 6-9 days | 10-19 days | 20-29 days | Used daily |
|---|---|---|---|---|---|---|---|---|
| Cigarettes | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Tobacco from a water pipe (hookah) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Cigars, little cigars, clove cigarettes | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Smokeless tobacco | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Alcohol (beer, wine, liquor) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Marijuana (pot, weed, hashish, hash oil) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Cocaine (crack, rock, freebase) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Methamphetamine (crystal meth, ice, crank) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Other amphetamines (diet pills, bennies) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Sedatives (downers, ludes) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Hallucinogens (LSD, PCP) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Anabolic steroids (Testosterone) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Opiates (heroin, smack) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Inhalants (glue, solvents, gas) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| MDMA (Ecstacy) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Other club drugs (GHB, Ketamine, Rohypnol) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Other illegal drugs | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

**One drink of alcohol is defined as a 12 oz. can or bottle of beer or wine cooler, a 4 oz. glass of wine, or a shot of liquor straight or in a mixed drink.**

10. The **last time** you "partied"/socialized how many **drinks of alcohol** did you have? (If you did not drink alcohol, please enter 00. If less than 10, enter 01, 02, 03, etc.)

DRINKS ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○

11. The **last time** you "partied"/socialized over how many hours did you drink alcohol? (If you did not drink alcohol, please enter 00. If less than 10, enter 01, 02, 03, etc.)

HOURS ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○

12. How many **drinks of alcohol** do you think **the typical student at your school** had the **last time** he/she "partied"/socialized? (If you think the typical student at your school does not drink alcohol, please enter 00. If less than 10, enter 01, 02, 03, etc.)

DRINKS ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○ ○○

13. Over the **last two weeks**, how many times have you had five or more drinks of alcohol at a sitting?

| | | | |
|---|---|---|---|
| ○ N/A, don't drink | ○ 2 times | ○ 5 times | ○ 8 times |
| ○ None | ○ 3 times | ○ 6 times | ○ 9 times |
| ○ 1 time | ○ 4 times | ○ 7 times | ○ 10 or more times |

14. Within the **last 30 days**, did you:

(Please mark the appropriate column for each row)

| | N/A, don't drive | N/A, don't drink | No | Yes |
|---|---|---|---|---|
| Drive after drinking any alcohol at all | ○ | ○ | ○ | ○ |
| Drive after drinking five or more drinks of alcohol | ○ | ○ | ○ | ○ |

15. During the **last 12 months**, when you "partied"/socialized, how often did you:
(Please mark the appropriate column for each row)

| | Never | Rarely | Sometimes | Most of the time | Always | N/A, don't drink |
|---|---|---|---|---|---|---|
| Alternate non-alcoholic with alcoholic beverages | ○ | ○ | ○ | ○ | ○ | ○ |
| Avoid drinking games | ○ | ○ | ○ | ○ | ○ | ○ |
| Choose not to drink alcohol | ○ | ○ | ○ | ○ | ○ | ○ |
| Determine, in advance, not to exceed a set number of drinks | ○ | ○ | ○ | ○ | ○ | ○ |
| Eat before and/or during drinking | ○ | ○ | ○ | ○ | ○ | ○ |
| Have a friend let you know when you have had enough | ○ | ○ | ○ | ○ | ○ | ○ |
| Keep track of how many drinks you were having | ○ | ○ | ○ | ○ | ○ | ○ |
| Pace your drinks to 1 or fewer per hour | ○ | ○ | ○ | ○ | ○ | ○ |
| Stay with the same group of friends the entire time you were drinking | ○ | ○ | ○ | ○ | ○ | ○ |
| Stick with only one kind of alcohol when drinking | ○ | ○ | ○ | ○ | ○ | ○ |
| Use a designated driver | ○ | ○ | ○ | ○ | ○ | ○ |

16. Within the **last 12 months**, have you experienced any of the following **as a consequence of your drinking?**
(Please mark the appropriate column for each row)

| | Yes | No | N/A, don't drink |
|---|---|---|---|
| Did something you later regretted | ○ | ○ | ○ |
| Forgot where you were or what you did | ○ | ○ | ○ |
| Got in trouble with the police | ○ | ○ | ○ |
| Had sex with someone **without giving** your consent | ○ | ○ | ○ |
| Had sex with someone **without getting** their consent | ○ | ○ | ○ |
| Had unprotected sex | ○ | ○ | ○ |
| Physically injured yourself | ○ | ○ | ○ |
| Physically injured another person | ○ | ○ | ○ |
| Seriously considered suicide | ○ | ○ | ○ |

17. Within the **last 30 days**, what **percent** of students at your school used:
State your best estimate. (If less than 10, please enter 00, 01, 02, etc.)

| Cigarettes % Used | Alcohol % Used | Marijuana % Used |
|---|---|---|
| 00 01 02 03 04 05 06 07 08 09 | 00 01 02 03 04 05 06 07 08 09 | 00 01 02 03 04 05 06 07 08 09 |

18. Within the **last 12 months**, have you taken any of the following **prescription drugs** that were not prescribed to you?
(Please mark the appropriate column for each row)

| | Yes | No |
|---|---|---|
| Antidepressants (e.g., Celexa, Lexapro, Prozac, Wellbutrin, Zoloft) | ○ | ○ |
| Erectile dysfunction drugs (e.g., Viagra, Cialis, Levitra) | ○ | ○ |
| Pain killers (e.g., OxyContin, Vicodin, Codeine) | ○ | ○ |
| Sedatives (e.g., Xanax, Valium) | ○ | ○ |
| Stimulants (e.g., Ritalin, Adderall) | ○ | ○ |



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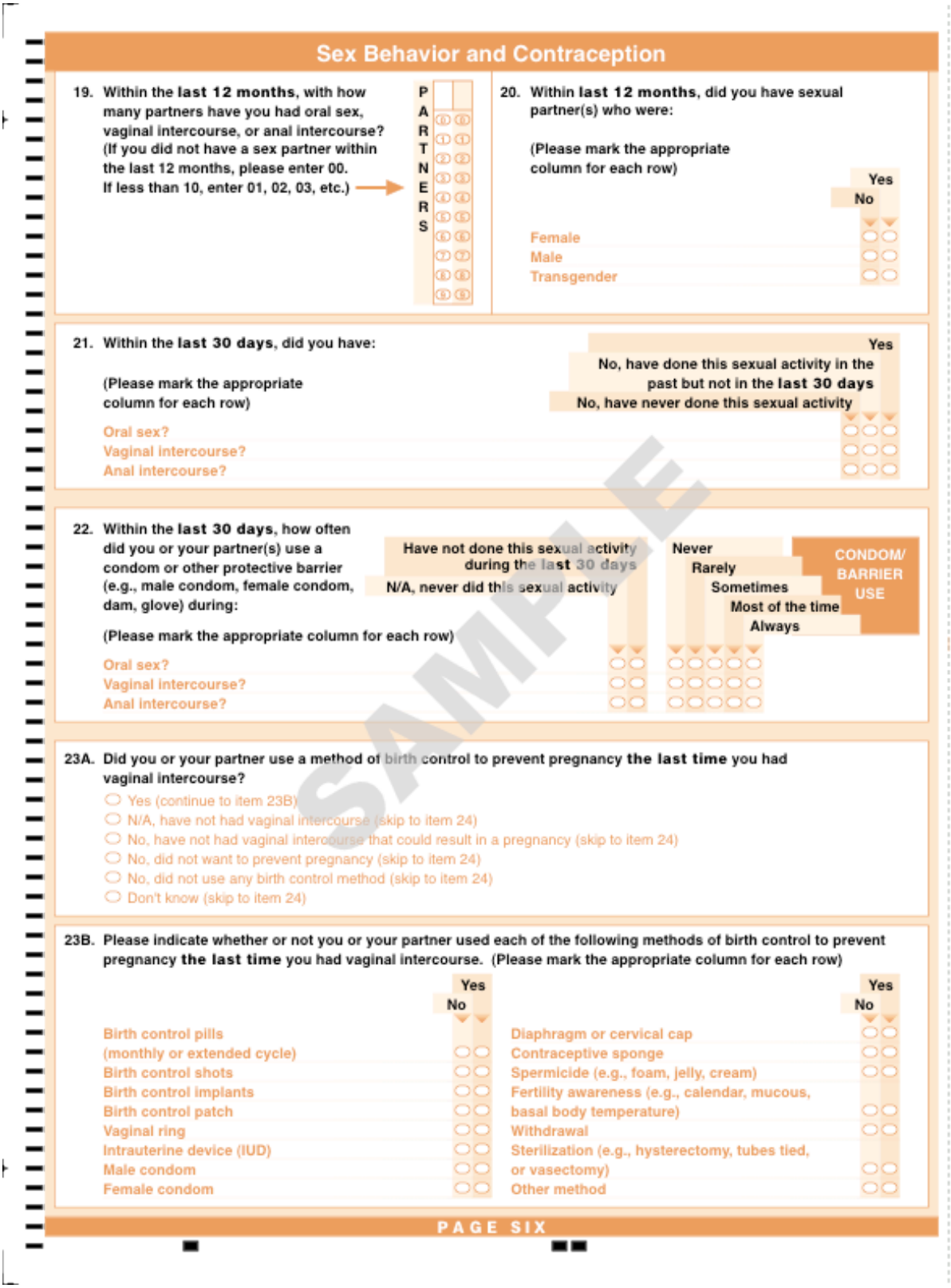

## Sex Behavior and Contraception

19. Within the **last 12 months**, with how many partners have you had oral sex, vaginal intercourse, or anal intercourse? (If you did not have a sex partner within the last 12 months, please enter 00. If less than 10, enter 01, 02, 03, etc.) → PARTNERS

20. Within **last 12 months**, did you have sexual partner(s) who were:

(Please mark the appropriate column for each row)

| | Yes | No |
|---|---|---|
| Female | ○ | ○ |
| Male | ○ | ○ |
| Transgender | ○ | ○ |

21. Within the **last 30 days**, did you have:

(Please mark the appropriate column for each row)

| | Yes | No, have done this sexual activity in the past but not in the **last 30 days** | No, have never done this sexual activity |
|---|---|---|---|
| Oral sex? | ○ | ○ | ○ |
| Vaginal intercourse? | ○ | ○ | ○ |
| Anal intercourse? | ○ | ○ | ○ |

22. Within the **last 30 days**, how often did you or your partner(s) use a condom or other protective barrier (e.g., male condom, female condom, dam, glove) during:

(Please mark the appropriate column for each row)

| | Have not done this sexual activity during the last 30 days | N/A, never did this sexual activity | Never | Rarely | Sometimes | Most of the time | Always |
|---|---|---|---|---|---|---|---|
| Oral sex? | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Vaginal intercourse? | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Anal intercourse? | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

CONDOM/ BARRIER USE

23A. Did you or your partner use a method of birth control to prevent pregnancy **the last time** you had vaginal intercourse?

- ○ Yes (continue to item 23B)
- ○ N/A, have not had vaginal intercourse (skip to item 24)
- ○ No, have not had vaginal intercourse that could result in a pregnancy (skip to item 24)
- ○ No, did not want to prevent pregnancy (skip to item 24)
- ○ No, did not use any birth control method (skip to item 24)
- ○ Don't know (skip to item 24)

23B. Please indicate whether or not you or your partner used each of the following methods of birth control to prevent pregnancy **the last time** you had vaginal intercourse. (Please mark the appropriate column for each row)

| | Yes | No | | Yes | No |
|---|---|---|---|---|---|
| Birth control pills (monthly or extended cycle) | ○ | ○ | Diaphragm or cervical cap | ○ | ○ |
| Birth control shots | ○ | ○ | Contraceptive sponge | ○ | ○ |
| Birth control implants | ○ | ○ | Spermicide (e.g., foam, jelly, cream) | ○ | ○ |
| Birth control patch | ○ | ○ | Fertility awareness (e.g., calendar, mucous, basal body temperature) | ○ | ○ |
| Vaginal ring | ○ | ○ | Withdrawal | ○ | ○ |
| Intrauterine device (IUD) | ○ | ○ | Sterilization (e.g., hysterectomy, tubes tied, or vasectomy) | ○ | ○ |
| Male condom | ○ | ○ | | | |
| Female condom | ○ | ○ | Other method | ○ | ○ |

PAGE SIX



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24. **Within the last 12 months**, have you or your partner(s) used emergency contraception ("morning after pill")?

- ○ N/A, have not had vaginal intercourse in the **last 12 months**
- ○ No
- ○ Yes
- ○ Don't know

25. **Within the last 12 months**, have you or your partner(s) become pregnant?

- ○ N/A, have not had vaginal intercourse in the **last 12 months**
- ○ No
- ○ Yes, unintentionally
- ○ Yes, intentionally
- ○ Don't know

## Weight, Nutrition, and Exercise

26. How do you describe your weight?

- ○ Very underweight
- ○ Slightly underweight
- ○ About the right weight
- ○ Slightly overweight
- ○ Very overweight

27. Are you trying to do any of the following about your weight?

- ○ I am not trying to do anything about my weight
- ○ Stay the same weight
- ○ Lose weight
- ○ Gain weight

28. How many servings of fruits and vegetables do you usually have **per day**? (1 serving = 1 medium piece of fruit; 1/2 cup fresh, frozen, or canned fruits/vegetables; 3/4 cup fruit/vegetable juice; 1 cup salad greens; or 1/4 cup dried fruit)

○ 0 servings per day ○ 1–2 servings per day ○ 3–4 servings per day ○ 5 or more servings per day

29. On how many of the **past 7 days** did you:

(Please mark the appropriate column for each row)

| | 0 days | 1 day | 2 days | 3 days | 4 days | 5 days | 6 days | 7 days |
|---|---|---|---|---|---|---|---|---|
| Do **moderate-intensity** cardio or aerobic exercise (caused a noticeable increase in heart rate, such as a brisk walk) for at least **30 minutes**? | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Do **vigorous-intensity** cardio or aerobic exercise (caused large increases in breathing or heart rate, such as jogging) for at least **20 minutes**? | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Do 8-10 strength training exercises (such as resistance weight machines) for 8-12 repetitions each? | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

## Mental Health

30. Have you ever:

(Please mark the appropriate column for each row)

| | Yes, in the **last 12 months** | Yes, in the **last 30 days** | Yes, in the **last 2 weeks** | No, not in **last 12 months** | No, never |
|---|---|---|---|---|---|
| Felt things were hopeless | ○ | ○ | ○ | ○ | ○ |
| Felt overwhelmed by all you had to do | ○ | ○ | ○ | ○ | ○ |
| Felt exhausted (not from physical activity) | ○ | ○ | ○ | ○ | ○ |
| Felt very lonely | ○ | ○ | ○ | ○ | ○ |
| Felt very sad | ○ | ○ | ○ | ○ | ○ |
| Felt so depressed that it was difficult to function | ○ | ○ | ○ | ○ | ○ |
| Felt overwhelming anxiety | ○ | ○ | ○ | ○ | ○ |
| Felt overwhelming anger | ○ | ○ | ○ | ○ | ○ |
| Intentionally cut, burned, bruised, or otherwise injured yourself | ○ | ○ | ○ | ○ | ○ |
| Seriously considered suicide | ○ | ○ | ○ | ○ | ○ |
| Attempted suicide | ○ | ○ | ○ | ○ | ○ |



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31. Within the **last 12 months**, have you been diagnosed or treated **by a professional** for any of the following?

(Please mark the appropriate column for each row)

| | Yes, other treatment | Yes, treated with medication and psychotherapy | Yes, treated with psychotherapy | Yes, treated with medication | Yes, diagnosed but not treated | No |
|---|---|---|---|---|---|---|
| Anorexia | ○ | ○ | ○ | ○ | ○ | ○ |
| Anxiety | ○ | ○ | ○ | ○ | ○ | ○ |
| Attention Deficit and Hyperactivity Disorder (ADHD) | ○ | ○ | ○ | ○ | ○ | ○ |
| Bipolar Disorder | ○ | ○ | ○ | ○ | ○ | ○ |
| Bulimia | ○ | ○ | ○ | ○ | ○ | ○ |
| Depression | ○ | ○ | ○ | ○ | ○ | ○ |
| Insomnia | ○ | ○ | ○ | ○ | ○ | ○ |
| Other sleep disorder | ○ | ○ | ○ | ○ | ○ | ○ |
| Obsessive Compulsive Disorder (OCD) | ○ | ○ | ○ | ○ | ○ | ○ |
| Panic attacks | ○ | ○ | ○ | ○ | ○ | ○ |
| Phobia | ○ | ○ | ○ | ○ | ○ | ○ |
| Schizophrenia | ○ | ○ | ○ | ○ | ○ | ○ |
| Substance abuse or addiction (alcohol or other drugs) | ○ | ○ | ○ | ○ | ○ | ○ |
| Other addiction (e.g., gambling, internet, sexual) | ○ | ○ | ○ | ○ | ○ | ○ |
| Other mental health condition | ○ | ○ | ○ | ○ | ○ | ○ |

32. Have you ever been diagnosed with depression? ○ No ○ Yes

33. Within the **last 12 months**, have any of the following been traumatic or very difficult for you to handle?

(Please mark the appropriate column for each row)

| | Yes | No |
|---|---|---|
| Academics | ○ | ○ |
| Career-related issue | ○ | ○ |
| Death of a family member or friend | ○ | ○ |
| Family problems | ○ | ○ |
| Intimate relationships | ○ | ○ |
| Other social relationships | ○ | ○ |
| Finances | ○ | ○ |
| Health problem of a family member or partner | ○ | ○ |
| Personal appearance | ○ | ○ |
| Personal health issue | ○ | ○ |
| Sleep difficulties | ○ | ○ |
| Other | ○ | ○ |

34. Have you ever received psychological or mental health services from any of the following?

(Please mark the appropriate column for each row)

| | Yes | No |
|---|---|---|
| Counselor/Therapist/Psychologist | ○ | ○ |
| Psychiatrist | ○ | ○ |
| Other medical provider (e.g., physician, nurse practitioner) | ○ | ○ |
| Minister/Priest/Rabbi/Other clergy | ○ | ○ |





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35. Have you ever received psychological or mental health services from your **current** college/university's Counseling or Health Service?
○ No ○ Yes

36. If in the future you were having a personal problem that was really bothering you, would you consider seeking help from a mental health professional?
○ No ○ Yes

37. Within the **last 12 months**, how would you rate the overall level of stress you have experienced?
○ No stress
○ Less than average stress
○ Average stress
○ More than average stress
○ Tremendous stress

## Physical Health

38. Within the **last 30 days**, did you do any of the following?
(Please mark the appropriate column for each row)

| | Yes | No |
|---|---|---|
| Exercise to lose weight | ○ | ○ |
| Diet to lose weight | ○ | ○ |
| Vomit or take laxatives to lose weight | ○ | ○ |
| Take diet pills to lose weight | ○ | ○ |

39. Have you:
(Please mark the appropriate column for each row)

| | Don't know | Yes | No |
|---|---|---|---|
| Had a dental exam and cleaning in the **last 12 months**? | ○ | ○ | ○ |
| (Males) Performed testicular self exam in the **last 30 days**? | ○ | ○ | ○ |
| (Females) Performed breast self exam in the **last 30 days**? | ○ | ○ | ○ |
| (Females) Had a routine gynecological exam in the **last 12 months**? | ○ | ○ | ○ |
| Used sunscreen regularly with sun exposure? | ○ | ○ | ○ |
| Ever been tested for Human Immunodeficiency Virus (HIV) infection? | ○ | ○ | ○ |

40. Have you received the following vaccinations (shots)?
(Please mark the appropriate column for each row)

| | Don't know | Yes | No |
|---|---|---|---|
| Hepatitis B | ○ | ○ | ○ |
| Human Papillomavirus/HPV (cervical cancer vaccine) | ○ | ○ | ○ |
| Influenza (the flu) in the **last 12 months** (shot or nasal mist) | ○ | ○ | ○ |
| Measles, Mumps, Rubella | ○ | ○ | ○ |
| Meningococcal disease (meningococcal meningitis) | ○ | ○ | ○ |
| Varicella (chicken pox) | ○ | ○ | ○ |



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41. Within the **last 12 months**, have you been diagnosed or treated **by a professional** for any of the following?

(Please mark the appropriate column for each row)

| | Yes | No | | Yes | No |
|---|---|---|---|---|---|
| Allergies | ○ | ○ | High blood pressure | ○ | ○ |
| Asthma | ○ | ○ | High cholesterol | ○ | ○ |
| Back pain | ○ | ○ | Human Immunodeficiency Virus (HIV) | ○ | ○ |
| Broken bone/Fracture/Sprain | ○ | ○ | Irritable Bowel Syndrome (IBS) | ○ | ○ |
| Bronchitis | ○ | ○ | Migraine headache | ○ | ○ |
| Chlamydia | ○ | ○ | Mononucleosis | ○ | ○ |
| Diabetes | ○ | ○ | Pelvic Inflammatory Disease (PID) | ○ | ○ |
| Ear infection | ○ | ○ | Repetitive stress injury | | |
| Endometriosis | ○ | ○ | (e.g., carpal tunnel syndrome) | ○ | ○ |
| Genital herpes | ○ | ○ | Sinus infection | ○ | ○ |
| Genital warts/Human Papillomavirus (HPV) | ○ | ○ | Strep throat | ○ | ○ |
| Gonorrhea | ○ | ○ | Tuberculosis | ○ | ○ |
| Hepatitis B or C | ○ | ○ | Urinary tract infection | ○ | ○ |

42. On how many of the **past 7 days** did you get enough sleep so that you felt rested when you woke up in the morning?

○ 0 days ○ 1 day ○ 2 days ○ 3 days ○ 4 days ○ 5 days ○ 6 days ○ 7 days

43. People sometimes feel sleepy during the daytime. In the **past 7 days**, how much of a problem have you had with sleepiness (feeling sleepy, struggling to stay awake) during your daytime activities?

○ No problem at all
○ A little problem
○ More than a little problem
○ A big problem
○ A very big problem

44. In the **past 7 days**, how often have you:

(Please mark the appropriate column for each row)

| | 0 days | 1 day | 2 days | 3 days | 4 days | 5 days | 6 days | 7 days |
|---|---|---|---|---|---|---|---|---|
| Awakened too early in the morning and couldn't get back to sleep? | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Felt tired, dragged out, or sleepy during the day? | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Gone to bed because you just could not stay awake any longer? | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| Had an extremely hard time falling asleep? | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |





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## Impediments to Academic Performance

(Please select the most serious outcome for each item below)

| | Significant disruption in thesis, dissertation, research, or practicum work | Received an incomplete or dropped the course | Received a lower grade in the course | Received a lower grade on an exam or important project | I have experienced this issue but my academics have not been affected | This did not happen to me/not applicable |
|---|---|---|---|---|---|---|
| 45. Within the **last 12 months**, have any of the following affected your academic performance? | | | | | | |
| Alcohol use | ○ | ○ | ○ | ○ | ○ | ○ |
| Allergies | ○ | ○ | ○ | ○ | ○ | ○ |
| Anxiety | ○ | ○ | ○ | ○ | ○ | ○ |
| Assault (physical) | ○ | ○ | ○ | ○ | ○ | ○ |
| Assault (sexual) | ○ | ○ | ○ | ○ | ○ | ○ |
| Attention Deficit and Hyperactivity Disorder (ADHD) | ○ | ○ | ○ | ○ | ○ | ○ |
| Cold/Flu/Sore throat | ○ | ○ | ○ | ○ | ○ | ○ |
| Concern for a troubled friend or family member | ○ | ○ | ○ | ○ | ○ | ○ |
| Chronic health problem or serious illness (e.g., diabetes, asthma, cancer) | ○ | ○ | ○ | ○ | ○ | ○ |
| Chronic pain | ○ | ○ | ○ | ○ | ○ | ○ |
| Death of a friend or family member | ○ | ○ | ○ | ○ | ○ | ○ |
| Depression | ○ | ○ | ○ | ○ | ○ | ○ |
| Discrimination (e.g., homophobia, racism, sexism) | ○ | ○ | ○ | ○ | ○ | ○ |
| Drug use | ○ | ○ | ○ | ○ | ○ | ○ |
| Eating disorder/problem | ○ | ○ | ○ | ○ | ○ | ○ |
| Finances | ○ | ○ | ○ | ○ | ○ | ○ |
| Gambling | ○ | ○ | ○ | ○ | ○ | ○ |
| Homesickness | ○ | ○ | ○ | ○ | ○ | ○ |
| Injury (fracture, sprain, strain, cut) | ○ | ○ | ○ | ○ | ○ | ○ |
| Internet use/computer games | ○ | ○ | ○ | ○ | ○ | ○ |
| Learning disability | ○ | ○ | ○ | ○ | ○ | ○ |
| Participation in extracurricular activities (e.g., campus clubs, organizations, athletics) | ○ | ○ | ○ | ○ | ○ | ○ |
| Pregnancy (yours or your partner's) | ○ | ○ | ○ | ○ | ○ | ○ |
| Relationship difficulties | ○ | ○ | ○ | ○ | ○ | ○ |
| Roommate difficulties | ○ | ○ | ○ | ○ | ○ | ○ |
| Sexually transmitted disease/infection (STD/I) | ○ | ○ | ○ | ○ | ○ | ○ |
| Sinus infection/Ear infection/Bronchitis/Strep throat | ○ | ○ | ○ | ○ | ○ | ○ |
| Sleep difficulties | ○ | ○ | ○ | ○ | ○ | ○ |
| Stress | ○ | ○ | ○ | ○ | ○ | ○ |
| Work | ○ | ○ | ○ | ○ | ○ | ○ |
| Other (please specify _____) | ○ | ○ | ○ | ○ | ○ | ○ |



## Demographic Characteristics

46. How old are you? → Years

47. What is your gender?
- ○ Female
- ○ Male
- ○ Transgender

48. What is your sexual orientation?
- ○ Heterosexual
- ○ Gay/Lesbian
- ○ Bisexual
- ○ Unsure

49. What is your height in feet and inches? → Ft. / Inch (HEIGHT)

50. What is your weight in pounds? → Pounds (WEIGHT)

51. **What is your year in school?**
- ○ 1st year undergraduate
- ○ 2nd year undergraduate
- ○ 3rd year undergraduate
- ○ 4th year undergraduate
- ○ 5th year or more undergraduate
- ○ Graduate or professional
- ○ Not seeking a degree
- ○ Other

52. **What is your enrollment status?**
- ○ Full-time ○ Part-time ○ Other

53. **Have you transferred to this college or university within the last 12 months?**
- ○ No ○ Yes

54. **How do you usually describe yourself?** *(Mark all that apply)*
- ○ White, non Hispanic (includes Middle Eastern)
- ○ Black, non Hispanic
- ○ Hispanic or Latino/a
- ○ Asian or Pacific Islander
- ○ American Indian, Alaskan Native, or Native Hawaiian
- ○ Biracial or Multiracial
- ○ Other

55. **Are you an international student?**
- ○ No ○ Yes

56. **What is your relationship status?**
- ○ Not in a relationship
- ○ In a relationship but not living together
- ○ In a relationship and living together

57. **What is your marital status?**
- ○ Single ○ Divorced
- ○ Married/Partnered ○ Other
- ○ Separated

58. **Where do you currently live?**
- ○ Campus residence hall
- ○ Fraternity or sorority house
- ○ Other college/university housing
- ○ Parent/guardian's home
- ○ Other off-campus housing
- ○ Other

59. **Are you a member of a social fraternity or sorority? (e.g., National Interfraternity Conference, National Panhellenic Conference, National Pan-Hellenic Council, National Association of Latino Fraternal Organizations)**
- ○ No ○ Yes

60. **How many hours a week do you work for pay?**
- ○ 0 hours ○ 30–39 hours
- ○ 1–9 hours ○ 40 hours
- ○ 10–19 hours ○ More than 40 hours
- ○ 20–29 hours

61. **How many hours a week do you volunteer?**
- ○ 0 hours ○ 30–39 hours
- ○ 1–9 hours ○ 40 hours
- ○ 10–19 hours ○ More than 40 hours
- ○ 20–29 hours

62. **What is your primary source of health insurance?**
- ○ My college/university sponsored plan
- ○ My parents' plan
- ○ Another plan
- ○ I don't have health insurance
- ○ I am not sure if I have health insurance

63. **What is your approximate cumulative grade average?**
- ○ A ○ B ○ C ○ D/F ○ N/A

64. **Within the last 12 months, have you participated in organized college athletics at any of the following levels?**

| (Please mark the appropriate column for each row) | Yes | No |
|---|---|---|
| Varsity | ○ | ○ |
| Club sports | ○ | ○ |
| Intramurals | ○ | ○ |

65. **Do you have any of the following disabilities or medical conditions?**

| (Please mark the appropriate column for each row) | Yes | No |
|---|---|---|
| Attention Deficit and Hyperactivity Disorder (ADHD) | ○ | ○ |
| Chronic illness (e.g., cancer, diabetes, auto-immune disorders) | ○ | ○ |
| Deaf/Hard of hearing | ○ | ○ |
| Learning disability | ○ | ○ |
| Mobility/Dexterity disability | ○ | ○ |
| Partially sighted/Blind | ○ | ○ |
| Psychiatric condition | ○ | ○ |
| Speech or language disorder | ○ | ○ |
| Other disability | ○ | ○ |

**THANK YOU FOR COMPLETING THIS SURVEY**



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# Appendix B

## Curriculum Vitae

**Kristen S. Miller**

**Address:** 10982 SW Durham Rd. #48 Tigard, OR 97224
**Email:** kmiller07@georgefox.edu
**Phone:** 707-951-1231

## Education

**Doctoral Student of Clinical Psychology** 2009-present
Graduate School of Clinical Psychology, *APA Accredited*
George Fox University, Newberg, Oregon

**Master's of Clinical Psychology** 2011
Graduate School of Clinical Psychology, *APA Accredited*
George Fox University, Newberg Oregon

**Bachelor of Arts, Psychology,** *Summa Cum Laude* 2009
George Fox University, Newberg, Oregon

**Associate of Arts, University Studies,** *Magna Cum Laude* 2007
College of the Redwoods-Del Norte, Crescent City, California

## Supervised Clinical Experience

**School-Based Behavioral Health—***Student coordinator for the Rural School District Consortium in charge of managing lower-level practicum students at five schools in two rural school districts* 8/2012-present

Practicum III: 25hrs per week
Supervisor: Elizabeth Hamilton Ph.D.

Duties Include:

- Vertical supervision of Practicum I students
  - Individual and group supervision
  - Didactic trainings
  - Case management
  - Direct observation
  - Supervision of clinical cases, groups, assessments, and report writing
- Comprehensive psychological assessments
- Learning disability evaluations and coordination with individualized treatment plans
- Individual and group therapy
- Classroom psychoeducation

- Crisis intervention and follow-up
- Program development and evaluation
- College and Career Education and Counseling
- Consultation

**Virginia Garcia Memorial Health Clinic—***Mental and behavioral health provider for a federally funded clinic serving under- and uninsured patients in Yamhill County* 9/2011-6/2012

Practicum II: 20hrs per week
Supervisor: Scott Kaper Ph.D.

Duties Include:

- Individual psychotherapy
- Behavioral Health Intervention
- Memory and adult ADHD assessments
- Psycho-diagnostic assessments for Primary Care Practitioners
- Coordination of care with Primary Care Practitioners
- Conducting therapy via an interpreter
- Intake assessments with 5 Axis diagnosis
- SOAP notes in coordination with electronic medical records

**Oregon State University—***Counselor for university undergraduate and graduate students in Corvallis Oregon* 9/2010-6/2011

Practicum I: 16hrs per week
Supervisors: Brett Vicario Ph.D., Carlos Taloyo Ph.D., Shawn Bubany, M.A.

Duties Include:

- Individual short- and long-term psychotherapy
- Narrative progress notes
- Intake assessments
- 5 Axis diagnoses
- Work with diverse ethnic populations
- Video taping and review of clinical skills
- Co-facilitated group therapy

**George Fox University—***Client-centered therapy with prescreened university students in Newberg Oregon* 8/2009-4/2010

Pre-practicum: 5hrs per week
Supervisors: Rachael Kerns, M.A., Mary Peterson, Ph.D.

Duties Include:

- Individual client-centered psychotherapy with university students
- SOAP progress notes

- Completion of weekly ORS and SRS evaluative measures
- Intake reports with 5 axis diagnosis
- Tape review of clinical skills

## Research, Publications, and Presentations

**Publications**

O'Donnell, S., Chang, K., & Miller, K. (2013). Relations among autonomy, attribution style, and happiness in college students. *College Student Journal, 47*(1), 228-234.

**Presentations**

Luna, L., Miller, K., & Van Meter, A. (2012, August). *Measuring shame in mexican-american adolescents: A comparative analysis.* Poster session presented at the American Psychological Association's Annual Convention, Orlando FL.

Brown, L., Miller, K., & Buhrow, W. (2013, April). *Hispanic and african american student engagement at faith-based institutions and non-faith-based institutions.* Accepted for poster session at the Christian Association for Psychological Studies International Conference, Portland OR.

**Dissertation**

Miller, K. S. (2013). *Using NCHA-II Data to Create a Faith-based Reference Group: An Exploratory Benchmark Study* (Unpublished doctoral dissertation). George Fox University, Newberg OR.

## Additional Research Experiences

**Richter Scholar—***Recipient of Richter Scholar's grant for independent student research* 11/2012-present

Duties Include:

- Submission of grant proposal
- Program implementation, data collection, statistical analysis, and submission of results for publication or presentation

**Research Assistant—***Assistant to the Chair of the Research and Evaluation committee of the National Council of Schools and Programs of Professional Psychology (Kathleen Gathercoal, Ph.D.)* 9/2011-12/2012

Duties Include:

- Data collection, organization, coding, and management
- Input on statistical procedures and presentation
- Review and interpretation of findings

**Research Vertical Teams—***Vertically integrated research teams, which meet bi-weekly under faculty supervision to participate in collaborative research and fulfill dissertation requirements* 1/2010-present

Duties Include:
- Collaboration on research design, statistics, and data collection
- Supplemental research projects for poster presentations
- Completion of doctoral dissertation

## Leadership and Teaching Roles

**Didactic Training—***Developmentally-based therapy techniques for children and adolescents, George Fox University* 10/31/12 & 3/18/2013

Overview:
- Research-based didactic training provided in abbreviated (30min) and full (1.5hrs) forms to graduate students working in short-term, behavioral health settings

**Teaching Assistant—***Human Development*, *Graduate Department of Clinical Psychology, George Fox University* 8/2012-present

Duties:
- Creation of interactive powerpoint presentations
- Exam preparation and grading
- Pre-exam review sessions
- Office hours for individualized assistance with class material
- Management of online resources
- Lecture in professor's absence

**Multi-Cultural Committee—***Administrative Committee Member, Graduate Department of Clinical Psychology, George Fox University* 8/2010-present

Duties:
- Organization of monthly meetings
- Management of committee calendar
- Recording and distributing meeting minutes
- Collaboration with subcommittees
- Organization of special events, including department wide presentations and round table discussions on issues of diversity

**Didactic Training—***Smoking Cessation for Psychologists working in Primary Care Settings, Virginia Garcia Memorial Health Clinic* 2/21/2012

**Didactic Training—***Smoking Cessation for Psychologists working in Primary Care Settings, Virginia Garcia Memorial Health Clinic* 2/21/2012
Overview:
- Research-based didactic training provide to graduate students working in integrated (behavioral health/primary care) settings

**Small Group Supervisor—***Teaching assistant for undergraduate advanced counseling class at George Fox University* 9/2011-12/2011
Supervisor: Kristina Kays Psy.D.

Duties:
- Leading small group discussions
- Training students in clinical skills and providing feedback

## Program Development

8/2012-present

**School-Based Behavioral Health—***Ongoing program development and evaluation through the Rural School District Consortium*

Overview:
- Grant writing for program funding
- Implementation of evidence-based programs including:
  - Healthy Lifestyle Choices (grades 6-8)
  - BAM! Boy's Advocacy and Mentoring (grade 5)
  - Camp-Cope-A-Lot: Computer-assisted treatment for anxious youth
- Consultation and program evaluation

## Memberships and Professional Affiliations

- American Psychological Association, Student Affiliate 2009-Present
- Division 35, Psychology of Women, Student Affiliate 2012-2013
- Association of Psychological Science, Student Affiliate 2010-2011

## Additional Professional Trainings

**APA's Annual Convention—***Orlando FL* 8/2012

Relevant sessions attended:

- Evidence-based treatments for Asperger's Syndrome
- Measuring religion and spirituality among atheists
- Diagnostic considerations and controversies of the DSM V
- Grant writing for graduate students

**Psychodynamic Conceptualization—***Small group case consultation from a psychodynamic perspective, supervised by Kurt Free, Ph.D.* 8/2011-5/2012

Overview:

- Monthly presentation of cases
- Review of transcript or audio recording from sessions
- Conceptualization of diagnosis and treatment

**National Multicultural Conference and Summit—***Seattle WA* 1/2011

## Relevant Work Experience

**Pacific Drug Pharmacy**—*Clerk* 5/2008-8/2008

- Completed HIPPA training
- Gained knowledge of insurance policies and procedures
- Gained basic knowledge of pharmaceutical classes

**Castle Rock Charter School**—*Tutor* 9/2006-6/2007

- Tutored elementary students in reading, phonics, grammar, and writing
- Individual tutoring with a student with learning disabilities

**College of the Redwoods-AVID Program**—*AVID Tutor* 12/2005-6/2007

- Tutored elementary and high school students in various subjects including but not limited to mathematics, English, writing, biology, chemistry, history, and standardized testing preparation.
- Organized and oversaw small study groups
- Managed class in teacher's absence
- Facilitated class for substitute teachers

## References

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