The Role of Religion/Spirituality

in Promoting a Positive Campus Culture

Kevin Fosnacht

Cynthia Broderick

Indiana University Center for Postsecondary Research

The Role of Religion/Spirituality in Promoting a Positive Campus Culture

Abstract

Postsecondary institutions are frequently forced to respond to discriminatory acts, including against religious minorities. Such acts can create the perception of a hostile campus climate for students, which impinges on their learning and development. Campus climate research has traditionally focused on race and sex, but has largely neglected other important aspects of students' identities like religion and spirituality. In this study, we investigated how the religious/spiritual aspects of the campus climate influenced students' perceptions of the overall campus climate using data from a multi-institutional sample of first-year and senior undergraduates. Our multivariate results show that the religious/spiritual dimensions of the campus climate account for a significant proportion of the variance in students' campus climate perceptions.

Keywords: Religion, Spirituality, Campus Climate, Higher Education

The Role of Religion/Spirituality in Promoting a Positive Campus Culture

Introduction

College campuses across the nation are experiencing an increase in incidents of discrimination and violence toward underrepresented populations. While discrimination has occurred against a variety of groups, religious minorities, particularly Jewish and Muslim faith groups, have become particularly vulnerable to these hate crimes as incidents are reported from across the country (Bishop, 2015; Dreid, 2016; Siddiqi, 2016). In light of these events, it is important for scholars and practitioners alike to understand how students experience the religious and spiritual climate of college campuses. Decades of research have demonstrated how a positive campus climate leads to learning gains for students and a hostile or discriminatory campus climate can prevent learning (Mayhew et al., 2016). While much of the existing campus climate research has focused on underrepresented racial/ethnic minorities and/or women in STEM disciplines, few have investigated the role religion and spirituality play in students' perception of the campus climate. This lack of research is surprising due to the important role religion has in the identity development of young adults (Furrow, King, & White, 2004; King, 2003). This study contributes to this understanding by exploring students' perception of the spiritual and religious climate of today's college campuses

Campus climate research in the last twenty years has exposed the divergent experiences of students from different racial, ethnic, gender, and sexual identities (Hurtado & Harper, 2007; Mayhew et al. 2016). These studies focus on "measuring students' attitudes, perceptions, observations, or interactions within the racial environment of their institutions at a particular point in time" (Jayakumar & Museus, 2012, p. 5). The campus climate has become of increasing importance due to the diversification of the college students.

The religious and spiritual experiences of today's students add an additional nuance to the exploration of campus climates. Despite the increasing number of students who identify with no specific religious tradition, college students held high levels of interest and involvement in matters related to spirituality and religious commitment (Higher Education Research Institute [HERI], 2004, 2005). The subject of spirituality and religion holds an important place in the lives of college students and has an important impact on students' well-being (HERI, 2005; Small & Bowman, 2011). Neglecting this aspect of students' identity development and the influence campus climate has on their development runs contrary to the most closely held traditions and assumptions of the student affairs profession (Love & Talbot, 2009).

Literature Review

In recent years, researchers focusing on the role of spirituality and religion among college students has become more common. Scholars have explored the concept of spiritual growth for students (Bowman & Small 2010, 2011, 2012a, 2012b; Cole & Ahmadi, 2010; Paredes-Collins, 2014), along with the influence of institution type (Gonyea & Kuh, 2006; Morris, Smith, & Cejda, 2003; Patten & Rice, 2009; Speers, 2008). More recently, research has emerged on the influence of religion and spirituality on campus climate (Bowman & Smedley, 2013; Mayhew, Bowman, & Rockenbach, 2014; Rockenbach & Mayhew, 2014; Rockenbach, Mayhew, & Bowman, 2015). Yet, Bowman and Smedley (2013) point out that "to date, little research has explored the link between religious affiliation and other important outcomes, such as university satisfaction" (p. 748).

In 2011, the Campus Religious and Spiritual Climate Survey (CRSCS) was launched to "assess dimensions of campus climate pertaining to religious and worldview pluralism" (Rockenbach, Mayhew, & Bowman, 2015). Research using the CRSCS has uncovered several

important facets of influence on campus climate related to spirituality and student satisfaction (Rockenbach & Mayhew, 2014; Rockenbach, Mayhew, & Bowman, 2015). Racial factors were found to influence students' perception of campus climate as related to religious plurality (Rockenbach & Mayhew, 2014). Asian American and African American students viewed the campus climate more negatively than their Caucasian peers; however, due to the correlation between race and religion, it can be difficult to disentangle these factors. Students' satisfaction with campus climate was "generally consistent across worldview subgroups," a surprising finding to the CRSCS research team (Rockenbach & Mayhew, 2014). In a further exploration of the CRSCS data, Rockenbach, Mayhew, and Bowman (2015) found a negative perception of the campus climate for students who identified as atheist relative to the religious majority students. Additionally, they found that students who identified as agnostic, religious majority, and religious minority also identified a similar lack of campus inclusivity for non-religious students (Rockenbach, Mayhew, & Bowman, 2015).

An important concept potentially embedded in students' perception of campus religious/spiritual climate is that of Christian privilege. The influence of Christianity, particularly Protestant Christianity, is deeply seated within the structures of U.S. higher education (Geiger, 2015; Rudolph, 1962). Religion was a primary reason for the founding of the earliest colleges in the United States as many of the Colonial colleges were founded to "uphold orthodox Puritanism" (Geiger, 2015, p. 1). These colleges were charged with the responsibility to educate ministers and the colonial political elite (Geiger, 2015). Although today, only a small portion of college students attended private, religiously affiliated institutions (O'Shaughnessy, 2011), HERI (2005) found that seventy-four percent of college students identified with a form of Christianity, ten percent identified with a non-Christian religion, and seventeen percent identified with no

religion. While Christianity remains the dominant religious demographic among college students, an increasingly proportion of students do not identify with Christianity.

Christian privilege has not been as extensively researched in the context of higher education, compared to other forms of privilege (Patten & Rice, 2009; Bowman & Smedley, 2013). Defined as, "the conscious and subconscious advantages often afforded to the Christian faith in America's colleges and universities" (Seifert, 2007, p. 11), Christian privilege is engrained in the formal and informal structures of colleges and universities (Seifert, 2007). Examples abound in the physical structures found on many campuses like chapels, cafeteria food options, and academic calendars (Bowman & Smedley, 2013; Seifert, 2007). Yet, not all students identify with and receive benefits from the majority culture. The incongruity between students' faith values and the dominant institutional culture may be alienating to students with minority faith views. However, little research to date has explored the relationship between religion and campus climate. In this study, we seek to contribute to the burgeoning research in this area by investigating the relationships between students' perceptions of the campus climate, their religious views, and perceptions of the religious/spirituality campus climate.

Theoretical Framework

In exploring the relationship between campus climate and religious/spiritual diversity within U.S. higher education the work of Hurtado, Milem, Clayton-Pederson, and Allen (1999) provides a useful conceptual framework for the various factors that shape campus climate. Hurtado and colleagues' (1999) framework is based on a wide array of research on campus racial/ethnic diversity and focuses on "improving the climate for diversity on campuses" (p. 1). The authors state that, "a framework for understanding the various dimensions of the campus climate provides a conceptual handle for understanding an element of the environment that was

once thought too complex to comprehend" (p. 3). The very complexity of factors that shape campus climate is the strength of this framework. Hurtado and colleagues (1999) engage the racial/ethnic diversity on college campuses by exploring four distinct institutional dynamics, these dynamics include: 1) historical legacy, 2) structural diversity, 3) psychological climate, and 4) behavioral dimensions. This framework not only assists campuses in understanding and improving the racial/ethnic diversity on campus, but also provides a useful framework in which to explore the influence of religious/spiritual diversity on perceptions of campus climate. While this conceptual framework was formed from research on racial/ethnic diversity, the applicability for religious minority students is evident. As college campuses in the U.S. become more religiously diverse it is critical that campuses address these issues.

Research Questions

Guided by the aforementioned theory, we investigated the following research questions:

1. To what extent do undergraduate students feel uncomfortable at their postsecondary institutions due to their religious or spiritual beliefs?

2. How do students' perceptions of the campus religious/spiritual climate relate to their overall perception of the campus climate?

Methods

Data

Our data was derived from the 2016 administration of the National Student Survey of Engagement (NSSE). NSSE is a large, multi-institutional student survey focusing on students' participation in educationally beneficial activities and the perception of the campus climate, among other topics. The survey is annually administered to first-year and senior students attending bachelor's-granting institutions throughout North America. We focused our analyses

on respondents that attended 38 U.S. institutions that received a supplemental set of items

focusing on religious/spirituality campus climate that was appended to the end of the core NSSE

instrument. A total of 4,495 first-year and 6,670 senior students responded to the supplemental

item set. The response rate for both the first-year and senior samples was 21%.

The respondents attended a diverse mix of institutions. About 40% of the sample attended

an institution that awarded doctoral degrees, another 40% attended master's-granting institutions,

while the remaining proportion attended baccalaureate colleges. Sixty percent of the respondents

attended public institutions and 10% attended a minority serving institution. About 8% of the

sample attended an institution with an undergraduate enrollment less than 1,000, 45% attended

an institution with an undergraduate enrollment between 1,000 and 4,999 students, 9% attended

institutions with enrollments between 5,000 and 9,999 students, while 38% attended an

institution with an enrollment of 10,000 or more.

Roughly 70% of the respondents were female. Most of the students were enrolled full-

time. About 10% were members of a fraternity or sorority. Roughly two-thirds of the sample was

White, while African Americans and Latina/os each comprised 11% of the sample. About 4% of

the respondents were Asian or a Pacific Islander and 4% were international. The remaining

students were Native American, multi-racial, or of an unknown race. Sixty-two percent of the

sample was Christian, 5% of a non-Christian world faith (e.g., Jewish, Islamic, Hindu,

Humanist), and 21% were unaffiliated with a religion or an atheist. About 11% of the sample

preferred not to provide their religious/spirituality identity.

The primary survey items of interest were derived from the set of items about students'

spirituality experiences appended to the core NSSE instrument, which are detailed in Appendix

A. The bulk of the questions ask students to state their level of agreement with statements

inquiring about respect for individuals of different faiths, comfort with discussing religion and spiritual beliefs, and religious accommodations, and sense of belonging (e.g., "The students at my institution are respectful of people of different religious or spiritual beliefs", "I feel comfortable discussing my religious or spiritual beliefs during class", "I feel like I do not belong at my institution due to my religious or spiritual beliefs"). Additionally, the questions ask about participation in spirituality-based extracurricular activities, frequency of experiencing religious intolerance, and students' religious or spirituality identity. The religious/spiritual identity question included 28 possible response options; therefore, we recoded this variable into four categories: Christian, non-Christian world faith, the unaffiliated, and prefer not to respond. These groupings were inspired by the Pew Research Center's (2015) Religious Landscape Study.

In addition to the spirituality items, we utilized data from the core NSSE instrument. We used data on a variety of student characteristics captured on the survey like age, parental education, educational aspiration, greek-life participation, and major field. We also used two of NSSE's aggregate measures: Quality of Interactions and Supportive Environment. Information on the validity and reliability of these measures is available from NSSE's (n.d.) *Psychometric Portfolio*. Data on students' sex, race/ethnicity, class standing, and enrollment intensity were provided by the respondents' institutions. Characteristics of the respondents' institutions were obtained from the Carnegie Classification of Institutions of Higher Education project (Indiana University Center for Postsecondary Research, n.d.).

Analyses

To answer our first-research question, which inquiries about to what extent do students feel uncomfortable about their spiritual/religious beliefs, we investigated descriptive statistics for

selected items from the spirituality appended item set. This included examining the frequency distributions for the selected items.

Next, we investigated the relationship between students' perception of the religious/spirituality environment and the overall campus climate. We began these analyses by conducting an exploratory factor analysis on the spirituality item set to identify latent constructs related to the spiritual environment. The exploratory factor analysis utilized polychoric correlations due to the ordinal nature of the items (Holgado-Tello, Chacón–Moscoso, Barbero–García, & Vila–Abad, 2010). Two factors were extracted as suggested by an analysis of the scree plot. The factor loadings were rotated using oblimin rotation to allow for the factors to be correlated to each other. The rotated factor loadings are displayed in Table 1. The results were nearly identical for both the first-year and senior samples.

To create the composite variables representing the two latent constructs identified from the factor analysis, respect for beliefs and expression of beliefs, we averaged the items with a rotated factor loading greater than .40. To estimate the reliability of the composite variables, we calculated Cronbach's α coefficient. The reliability of respect for beliefs was .87 for both the first-year and senior samples. The reliability of expression of beliefs was .79 for the first-year sample and .81 for the senior sample. These reliability coefficients all exceeded the generally accepted standards for reliability in social science research.

Table 1

Rotated factor loadings

	First-Year		Senior	
	Respect for beliefs	Expression of beliefs	Respect for beliefs	Expression of beliefs
The students at my institution are respectful of people of different religious or spiritual beliefs	.64	.20	.68	.16
Instructors at my institution are respectful of people of different religious or spiritual beliefs	.98	-.04	.93	-.01
Staff and administrators at my institution are respectful of people of different religious or spiritual beliefs	.93	.00	.97	-.04
I feel comfortable discussing my religious or spiritual beliefs during class	.01	.90	.03	.91
I feel comfortable expressing my religious or spiritual identity on campus	-.01	.95	-.02	.94
Instructors provide accommodations for religious holidays and observances of various religious traditions	.25	.45	.26	.42
I feel like I do not belong at my institution due to my religious or spiritual beliefs *(reverse coded)*	.33	.00	.35	-.04
My learning and development has been positively influenced by the religious or spiritual culture at my campus	-.02	.58	-.04	.61

Next, we examined the bivariate correlations between our dependent variables and the

two religious/spirituality campus climate variables: respect for beliefs and expression of beliefs.

The dependent variables were NSSE's Quality of Interactions and Supportive Environment

composite variables, which we used as proxies for the overall campus climate. After

investigating the bivariate correlations, we created two fixed-effects regression models for each

of the dependent variables. The first model contained a number of control variables like students'

sex, religion, and race. The second model added the two spirituality campus climate variables

identified via the factor analysis. We estimated the two separate models to investigate the change

in variance explained in the dependent variables after adding the spirituality campus climate

variables. We repeated these procedures for the first-year and senior samples independently. We

also utilized institution-specific fixed effects to account for institutional differences. The intra-

class correlation coefficients for the dependent variables ranged from .02 to .09. Finally, we

standardized the dependent variables and the religious/spirituality campus climate variables to

have a mean of 0 and standard deviation of 1.

Limitations

Our data was limited to first-year and seniors attending selected bachelor's-granting

institutions that chose to participate in NSSE. Therefore, our sample may not be generalizable to

the broader undergraduate population and may suffer from self-selection bias at the institution

level. Additionally, our data was generally self-reported by students, which may be prone to

error. Our results should be viewed correlational, not causal, as we lack the ability to

experimentally alter the religious campus climate. Additionally, as an initial inquiry into this

topic, we did not investigate if the relationships vary by non-aggregated religious identities.

Therefore, the results may be different for students with minority faith views.

<div align="center">

Results

</div>

We began our analyses by examining the frequencies of the items from the

religious/spirituality campus climate additional items. Table 2 contains the frequency distribution

for these items. About three out of four students believed that students at their institution were

respectful of people with different religious or spiritual beliefs. Roughly eight in ten students

believed the same about their instructors and staff at their institutions. About 60% of students felt

comfortable expressing their religious or spirituality identity during class; however, the

respondents were slightly more likely to feel comfortable expressing their identity on campus.

Few students disagreed that instructors provided accommodations for religious holidays and

observances. About one in ten students felt like they did not belong due to their religious or

spiritual beliefs. A third of the respondents believed that their learning and development was

positively influenced by the religious or spiritual culture at their campus. About one in four

students reported experiencing religious intolerance at least once in the past year.

Table 2

Religious/spirituality campus climate frequency distributions by class

		First-year %	Senior %
The students at my institution are respectful of people of different religious or spiritual beliefs	Strongly disagree	2	2
	Disagree	5	6
	Neither agree nor disagree	18	20
	Agree	48	47
	Strongly agree	27	25
Instructors at my institution are respectful of people of different religious or spiritual beliefs	Strongly disagree	1	1
	Disagree	2	2
	Neither agree nor disagree	14	15
	Agree	48	47
	Strongly agree	36	35
Staff and administrators at my institution are respectful of people of different religious or spiritual beliefs	Strongly disagree	1	1
	Disagree	2	2
	Neither agree nor disagree	14	17
	Agree	48	47
	Strongly agree	36	33
I feel comfortable discussing my religious or spiritual beliefs during class	Strongly disagree	3	4
	Disagree	9	10
	Neither agree nor disagree	25	27
	Agree	36	33
	Strongly agree	27	25

Table 2 (continued)

		First-year %	Senior %
I feel comfortable expressing my religious or spiritual identity on campus	Strongly disagree	2	3
	Disagree	6	7
	Neither agree nor disagree	21	26
	Agree	41	37
	Strongly agree	30	27
Instructors provide accommodations for religious holidays and observances of various religious traditions	Strongly disagree	2	3
	Disagree	6	7
	Neither agree nor disagree	40	42
	Agree	32	30
	Strongly agree	20	18
I feel like I do not belong at my institution due to my religious or spiritual beliefs	Strongly disagree	44	45
	Disagree	28	27
	Neither agree nor disagree	16	17
	Agree	7	6
	Strongly agree	5	4
My learning and development has been positively influenced by the religious or spiritual culture at my campus	Strongly disagree	7	9
	Disagree	11	11
	Neither agree nor disagree	46	49
	Agree	22	19
	Strongly agree	14	13
During the current school year, how many times have you experienced religious intolerance?	Never	73	76
	1–3 times	18	17
	4–6 times	5	4
	7–9 times	1	1
	10 or more times	3	2

Next, we examined the bi-variate correlation between the respect for beliefs, expression of beliefs, Quality of Interactions, and Supportive Environment composite variables. For first-year students, the correlations between respect for beliefs with Quality of Interactions and

Supportive Environment were .37 and .38, respectively. The correlations between expression of

beliefs and Quality of Interactions and Supportive Environment were .37 and .41, respectively,

for first-year students. Among seniors, the correlations between respect for beliefs with Quality

of Interactions and Supportive Environment were .38 and .37, respectively. The correlations for

expression of beliefs were .37 and .40 for Quality of Interactions and Supportive Environment,

respectively.

After examining the correlation coefficients, we estimated a series of fixed-effects

multiple regressions that predicted our Quality of Interactions and Supportive Environment

measures. Table 3 contains the results for Quality of Interactions. Model 1 contains the estimated

coefficients without controlling for respect for beliefs and expression of beliefs, while the second

model added these variables. Unless otherwise indicated, the results discussed refer to model 2

and control for other factors. The final regression models accounted for about 20% of the

variance in Quality of Interactions for both the first-year and senior samples. As model 1, only

accounted for about 5% of the variance for both samples, the inclusion of the

religious/spirituality campus climate variables improved the predictive power of the regression

model substantially. A standard deviation (SD) change in respect for beliefs was estimated to

produce .22 or .24 of a SD change in quality of interactions for first-year and senior students,

respectively. Religion was not significantly related to Quality of Interactions after controlling for

respect for and expression of beliefs, for first-year students. However, students who preferred not

to state their religious or spiritual identity had slightly poorer quality of interactions than their

Christian peers. On-campus residents reported more positive interactions than their peers who

lived off-campus. However, age was positively correlated with better quality of interactions.

Students who aspired to earn a doctoral or professional degree reported more positive

interactions with other students, faculty, and staff than students who aspired to earn a bachelor's

degree. Students who earned grades lower than As on average reported poorer interactions.

Compared to social science majors, the only significant difference observed was for senior

communications majors, which had more positive interactions on average.

Table 3

Fixed-effect estimates of Quality of Interactions

	First-Year				Senior			
	Model 1		Model 2		Model 1		Model 2	
	Coef.		Coef.		Coef.		Coef.	
Religion (Ref: Christian)								
World faith	-0.09		-0.02		-0.06		0.00	
Unaffiliated	-0.09	*	0.00		-0.11	**	-0.04	
Prefer not to respond	-0.08		0.00		-0.22	***	-0.08	*
Male	0.06		0.04		-0.02		-0.03	
On-campus resident	0.14	***	0.12	**	0.06		0.08	*
Greek-life member	0.02		-0.02		-0.02		-0.01	
Age (10 years)	0.10	*	0.11	**	0.19	***	0.17	***
Race/ethnicity (Ref: White)								
Asian/Pacific Isl.	-0.07		-0.10		0.02		0.00	
Black	-0.07		-0.03		0.05		0.00	
Hispanic/Latina/o	-0.07		-0.09		0.08		0.05	
International	0.02		-0.05		-0.01		-0.11	
Other	-0.12		-0.08		0.06		0.10	
First-generation	0.02		-0.01		0.02		0.00	
Educational aspirations (Ref: Bachelor's)								
Some college	-0.05		0.02		-0.03		-0.02	
Master's	0.01		0.00		0.05		0.05	
Doctoral/professional	0.10	*	0.11	*	0.11	**	0.11	**
Transfer student	0.01		0.00		0.05		0.04	
Grades (Ref: Mostly As)								
Mostly Bs	-0.16	***	-0.12	***	-0.16	***	-0.11	***
Mostly Cs or lower	-0.35	***	-0.27	***	-0.40	***	-0.30	***

Table 3 (continued).

| | First-Year | | Senior | |
| | Model 1 | Model 2 | Model 1 | Model 2 |
	Coef.	Coef.	Coef.	Coef.
Major field (Ref: Social Science)				
Arts & Humanities	0.07	0.11	0.00	0.02
Biological Sciences	0.01	0.04	-0.03	-0.01
Physical Sciences	-0.04	0.01	0.08	0.05
Business	0.05	0.04	0.05	0.03
Communications	0.09	0.10	0.17 *	0.14 *
Education	0.07	0.07	0.05	0.05
Engineering	0.06	0.05	0.00	0.02
Health Professions	0.04	0.05	0.02	-0.03
Social Service Prof.	0.09	0.08	0.12	0.09
All Other	0.19 *	0.15	-0.05	-0.07
Undecided	-0.21	-0.08	-0.37	-0.29
Full-time	-0.13	-0.10	0.08 *	0.06
Respect for beliefs		0.22 ***		0.24 ***
Expression of beliefs		0.23 ***		0.20 ***
Constant	-0.10	-0.17	-0.56 ***	-0.52 ***
R^2	.04	.19	.06	.21

*$p < .05$, **$p < .01$, ***$p < .001$

The results for the models predicting Supportive Environment are presented in Table 4. Like the results for Quality of Interactions, unless otherwise indicated, the results discussed refer to model 2 and control for other factors. The R^2 for model 2 was .22 and .21 for first-year and senior students, respectively. The amount of variance explained increased by about 15 percentage points after including respect for beliefs and expression of beliefs, indicating that the inclusion of these variables greatly improved the predictive power of the model. Both respect for beliefs and expression of beliefs were positively correlated with Supportive Environment. A SD increase in respect for beliefs was correlated with about a fifth of a SD increase in Supportive Environment. A SD change in expression of beliefs was modelled to be associated with a .29 and .27 SD increase in Supportive Environment for first-year and senior students, respectively. For

first-year students, members of a non-Christian world faith perceived a less supportive environment compared to their Christian peers. For seniors, students who choose prefer not to respond reported a less supportive campus environment compared to Christians. Males perceived a less supportive environment than females. Age was negatively correlated with perceptions of the campus environment for both first-year and senior students. After controlling for other factors, Hispanic and Latina/o first-year students perceived a more supportive campus environment than their White, first-year peers. Among seniors, international students reported a more supportive environment than White seniors. Among first-year students, first-generation students perceived a more supportive environment than their peers who had a parent who earned a college degree. Seniors who aspired to earn a doctoral or professional degree perceived a more supportive campus environment compared to seniors aspiring to earn a Bachelor's degree. Among seniors, transfer students were more likely to report a negative campus environment than their peers who did not transfer. Students who earned grades lower than mostly As reported a less supportive campus environment. Compared to social science majors, seniors majoring in engineering perceived a less supportive campus environment. Among first-year students, students majoring in the health professions reported a more supportive campus environment compared to social science majors. Among seniors, students who were enrolled full time perceived a more supportive environment than students attending on a part-time basis. Significant differences were not observed by on-campus residency or greek-life membership for the first-year and senior samples.

Table 4

Fixed-effect estimates of Supportive Environment

	First-Year				Senior			
	Model 1		Model 2		Model 1		Model 2	
	Coef.		Coef.		Coef.		Coef.	
Religion (Ref: Christian)								
World faith	-0.24	**	-0.16	*	-0.06		0.01	
Unaffiliated	-0.10	*	0.01		-0.13	***	-0.05	
Prefer not to respond	-0.11	*	0.00		-0.25	***	-0.09	*
Male	-0.08	*	-0.10	**	-0.08	**	-0.08	**
On-campus resident	0.06		0.04		0.02		0.04	
Greek-life member	0.03		-0.02		0.02		0.03	
Age (10 years)	-0.16	***	-0.14	***	-0.02		-0.03	*
Race/ethnicity (Ref: White)								
Asian/Pacific Isl.	0.08		0.07		0.10		0.07	
Black	0.02		0.05		0.16	**	0.08	
Hispanic/Latina/o	0.14	**	0.12	*	0.08		0.06	
International	0.20	**	0.12		0.25	***	0.13	*
Other	-0.11		-0.08		0.07		0.10	
First-generation	0.10	**	0.06	*	0.01		-0.01	
Educational aspirations (Ref: Bachelor's)								
Some college	-0.19	**	-0.12		-0.07		-0.07	
Master's	0.02		0.00		0.02		0.02	
Doctoral/professional	0.07		0.07		0.08	*	0.09	**
Transfer student	-0.08		-0.08		-0.12	***	-0.12	***
Grades (Ref: Mostly As)								
Mostly Bs	-0.16	***	-0.13	***	-0.12	***	-0.07	**
Mostly Cs or lower	-0.29	***	-0.21	***	-0.23	***	-0.12	*
Major field (Ref: Social Science)								
Arts & Humanities	0.02		0.07		-0.08		-0.05	
Biological Sciences	0.01		0.05		-0.14	*	-0.10	
Physical Sciences	-0.11		-0.04		-0.08		-0.10	
Business	0.09		0.07		-0.04		-0.05	
Communications	0.04		0.06		-0.02		-0.05	
Education	0.03		0.03		-0.10		-0.10	
Engineering	-0.06		-0.06		-0.22	**	-0.18	**
Health Professions	0.13	*	0.14	*	-0.05		-0.09	
Social Service Prof.	0.12		0.12		0.05		0.03	
All Other	0.08		0.03		-0.02		-0.04	
Undecided	-0.18		-0.04		-0.25		-0.22	

	First-Year			Senior		
	Model 1		Model 2	Model 1		Model 2
	Coef.		Coef.	Coef.		Coef.
Full-time	-0.10		-0.07	0.16	***	0.13 ***
Respect for beliefs			0.19 ***			0.20 ***
Expression of beliefs			0.29 ***			0.27 ***
Constant	0.42	**	0.32 *	0.12		0.13
R^2	.04		.22	.05		.21

*$p < .05$, **$p < .01$, ***$p < .001$*

Discussion

Colleges have been dealing with an increase in discriminatory incidents against minority students, including religious minorities (Bishop, 2015; Dreid, 2016; Siddiqi, 2016). These incidents are troublesome as negative perceptions of the campus climate can hurt students' learning and development (Mayhew et al., 2016). While much of this research has examined the experiences of racial/ethnic minorities and women, considerably less attention has examined the role religion plays how students perceive the campus climate. Consequently, in this study, we examined student perceptions of the religious/spiritual campus climate and investigated how students' perception of the religious/spiritual climate impacts their perception of the overall institutional campus climate.

Using a unique, multi-institutional dataset containing first-year and senior undergraduates at both public and private colleges, we began our analyses by examining the descriptive frequencies for a set of items that examined how students perceived the religious/spiritual aspects of the campus climate. These results indicate that most students believed that students, faculty, and staff at their institution were respectful of their religious/spiritual beliefs and felt comfortable expressing their religious/spiritual beliefs. However, about a quarter of students

reported experiencing intolerance against their religious/spiritual views at least once during the past year.

Next, we investigated the relationship between students' perceptions of the campus climate and the religious/spiritual dimensions of the campus climate. Through a factor analysis, we identified two components of the religious/spirituality campus climate: respect for beliefs and expression of beliefs. After controlling for other factors, we found that these two components account for a substantial proportion of the overall variation in the campus climate. We estimated that a SD change in respect for beliefs would result in about a .20 SD change in Quality of Interactions and Supportive Environment. Similarly, a SD change in expression of beliefs would be expected to increase Quality of Interactions by .20 SDs and Supportive Environment by .27 to .29 SDs.

Typically overlooked in higher education research, our results suggest that religious/spiritual factors are an important component of the overall campus climate. Overall, students who reported higher levels of agreement that their beliefs were respected and they felt comfortable expressing their religious/spiritual beliefs also expressed higher agreement with their campus being a supportive environment and having higher quality of interaction. These initial findings point to the importance of the religious/spiritual climate on today's college campuses.

While finding that the religious/spiritual climate impacts students' perceptions of overall campus climate, we found that particular religious or spiritual identities largely did not have a significant impact on students' perception of campus climate after controlling for other factors. First-year students who were members of a non-Christian, world faith showed a slightly negative perception of the supportive environment as compared to their Christian peers. Additionally,

senior students who preferred not to respond to the religious identity question showed a slightly

significant negative perception of the supportive environment and quality of interaction, our

campus climate proxies, as compared to their Christian peers. As we did not observed large

differences, these results suggest that members of minority faith groups do not necessarily have

negative perceptions of the campus climate. Rather, the experiences of students appear to play a

more important role in determining students' perceptions of the campus climate, in the

religious/spiritual dimensions. These findings indicate that institutions can take actionable steps

to improve the overall campus climate by ensuring that all students feel that their religion and/or

spirituality identity is respected and feel comfortable expressing their spiritual views.

Other factors like race and gender have often been pointed to as having a significant

impact on the overall satisfaction of students with their campus environments (Hurtado &

Harper, 2007), but this study does not comport with these results. Male first-year and senior

students perceived a less supportive environment as compared to their female counterparts when

respect for beliefs and expression of beliefs were included in the model. Race also did not appear

to play a significant role in students' perceptions of a supportive campus environment or quality

of interactions. Only senior international students and first-year Hispanic/Latino students

perceived a less supportive environment than their White peers when the respect for beliefs and

expression of beliefs factors were included in the model. A possible rationale for the lack of

differences by sex and race/ethnicity may be due to our inclusion of religion and the spirituality

campus climate variables. Simply, religious views, sex, and race are correlated and religion has

not been a focus of much of the campus climate literature.

Other factors found to influence students' level of agreement included their enrollment

status, as full-time seniors perceived a more supportive environment than part-time seniors.

Academic achievement also appeared to negatively impact the level of agreement in supportive environment and quality of interactions between students who reported receiving mostly As and those who reported receiving mostly Bs and mostly Cs and lower. These additional findings offer some interesting insights into the experience of students and offer researchers and practitioners additional areas to consider when exploring students' experience of campus climates.

Implications and Future Research

This study found that the religion/spirituality does influence today's college campus climate. Coupled with the increase in incidents of discrimination and violence towards individuals who identify with non-Christian religions and spiritualties, it is imperative that college campuses address the issue of religious pluralism and tolerance. The main implication for practice from the findings is that the negative relationship between minority religions and perceptions of the campus climate can be largely negated by ensuring that faculty, staff, and students respect students' religious views and ensuring that students feel comfortable expressing their religious views. However, our descriptive results suggest about a quarter of students experienced intolerance related to their religious or spiritual views at least once within the past year. This indicates that religious intolerance is not uncommon during college and student affairs professionals should take affirmative steps to increase students' acceptance of their peers with different faith views.

Due to the relative lack of research on the religious/spiritual dimensions of the campus climate, many future research opportunities exist. Most research in this area has aggregated various religions and faith groups together, due to the large numbers of religions and rarity of some faith groups. Yet, it is unclear it these results would persist if the world faiths grouping was disaggregated to specific religions like Judaism and Islam. Another unanswered question is if the

relationship between the religious dimensions of the campus climate and the overall campus climate is mediated or moderated by students' religious identity. A finding from this study deserving more attention is that our results do not comport with previous research on the campus climate for racial/ethnic minorities. Did the inclusion of religious identity and/or the religious campus climate into our regression model change the estimated effects of the coefficients?

Conclusion

Incidents of discrimination, intolerance, and violence towards religious minority students have been reported all across the county. This study explored students' perception of campus climate as related to spiritual and religious identities. We found that while often ignored in the literature about campus climate, spirituality and religion do influence students' perception of campus climate and their overall satisfaction with their college environment. These results show that it is imperative that college administrators understand and address the religious and spiritual elements within their campus climate. Through further research and campus educational engagements, college campuses can move in a positive direction in developing a more tolerant and pluralistic campus that addresses the spiritual and religious developmental needs of all of their students.

References

Bishop, T. (November 20, 2015). Being Muslim on campus: In the wake of terrorism, the burden

of Islamophobia fall especially hard on students. *The Atlantic*. Retrieved from

https://www.theatlantic.com/politics/archive/2015/11/muslim-students-

university/416994/

Bowman, N. A., & Small, J. L. (2010). Do college students who identify with a privileged

religion experience greater spiritual development? Exploring individual and institutional

dynamics. *Research in Higher Education*, *51*, 595-614. doi: 10.1007/s11162.010.9175.2

Bowman, N. A., & Small, J. L. (2012a). Exploring a hidden form of minority status: College

students' religious affiliation and well-being. *Journal of College Student Development*,

53, 491-509. doi: 10.1353/csd.2012.0050

Bowman, N., & Small, J. (2012b). The experiences and spiritual growth of religiously privileged

and religiously marginalized college students. In N. A. Bowman (Ed.) *Spirituality in

College Students' Lives: Translating Research into Practice* (pp. 19-34). New York, NY:

Taylor and Francis.

Bowman, N., & Toms Smedley, C. (2013). The forgotten minority: Examining religious

affiliation and university satisfaction. *Higher Education*, *65*, 745-760. doi:

10.1007/s10734-012-9574-8

Cole, D., & Ahmadi, S. (2010). Reconsidering campus diversity: An examination of Muslim

students' experiences. *Journal of Higher Education*, 81, 121-139.

Dreid, N. (November 10, 2016). Muslim students are reportedly attacked on campuses in wake

of election. *The Chronicle of Higher Education*. Retrieved from

http://www.chronicle.com/blogs/ticker/muslim-students-are-reportedly-attacked-on-

campuses-in-wake-of-election/115475

Furrow, J. L., King, P. E., & White, K. (2004). Religion and positive youth development: Identity, meaning, and prosocial concerns. *Applied Developmental Science*, *8*(1), 17-26.

Geiger, R. (2015). *The History of American Higher Education: Learning and Culture from the Founding to World War II*. Princeton, NJ: Princeton University Press.

Gonyea, R.M., Kuh, G.D. (2006). Independent colleges and student engagement: Do religious affiliation and institution type matter? Retrieved from

http://nsse.indiana.edu/pdf/cic_nsse_report_june_2006.pdf

Higher Education Research Institute. (2005). The spiritual life of college students: A national study of college students' search for meaning and purpose. Los Angeles, CA: University of California, Los Angeles. Retrieved from

http://spirituality.ucla.edu/docs/reports/Spiritual_Life_College_Students_Full_Report.pdf

Holgado–Tello, F. P., Chacón–Moscoso, S., Barbero–García, I., & Vila–Abad, E. (2010). Polychoric versus Pearson correlations in exploratory and confirmatory factor analysis of ordinal variables. *Quality & Quantity*, *44*, 153-166.

Hurtado, S. & Harper, S. (2007). Nine themes in campus racial climates and implications for institutional transformation. *New Directions for Student Services*, 120, 7-24. doi: 10.1002/ss.254

Hurtado, S., Milem, J., Clayton-Pedersen, A., & Allen, W. (1999). Enacting diverse learning environments: Improving the climate for racial/ethnic diversity in higher education. ASHE-ERIC Higher Education Report, 26(8).

Indiana University Center for Postsecondary Research (n.d.). The Carnegie Classification of Institutions of Higher Education, 2015 edition, Bloomington, IN: Author.

Jayakumar, U.M. & Museus, S.D. (2012). Mapping the intersection of campus cultures and

     equitable outcomes among racially diverse student populations. In Samuel. D. Museus &

     Uma M. Jayakumar (Eds.), *Creating Campus Cultures: Fostering Student Success among*

     Racially Diverse Student Populations (pp. 1-27). New York: NY: Routledge.

King, P. E. (2003). Religion and identity: The role of ideological, social, and spiritual contexts.

     Applied Developmental Science, *7*(3), 197-204.

Love, P. & Talbot, D. (2009). Defining spiritual development: A missing consideration for

     student affairs. *NASPA Journal*, *46*, 614-628. doi: 10.2202/1949-6605.5035

Mayhew, M. J., Bowman, N., & Rockenbach, A. B. (2014). Silencing whom?: Linking campus

     climates for religious, spiritual, and worldview diversity to student worldviews. *The*

     Journal Of Higher Education, 85, 219-242.

Morris, J. M., Smith, A. B., & Cejda, B. D. (2003). Spiritual Integration as a predictor of

     persistence at Christian institutions of higher education. *Christian Higher Education, 2*,

     341-351. doi: 10.1080/15363750390246105

National Survey of Student Engagement. (n.d.). *NSSE's Commitment to Data Quality*. Retrieved

     from http://nsse.indiana.edu/html/psychometric_portfolio.cfm

O'Shaughnessy, L. (September, 2011). 20 surprising higher education facts. *U.S. News and*

     World Report. Retrieved on 3/3/16 from http://www.usnews.com/education/blogs/the-

     college-solution/2011/09/06/20-surprising-higher-education-facts

Paredes-Collins, K. (2014). Campus climate for diversity as a predictor of spiritual development

     at Christian colleges. *Religion & Education*, 41, 171-193.

     doi:10.1080/15507394.2013.86420

Patten, T. A., & Rice, N. D. (2009). Religious minorities and persistence at a systemic

      religiously affiliated university. *Christian Higher Education, 8*(1), 42-53. doi:

      10.1080/15363750802349323

Pew Research Center. (2015). *America's Changing Religious Landscape*. Retrieved from

      http://www.pewforum.org/2015/05/12/americas-changing-religious-landscape/.

Rockenbach, A. B., & Mayhew, M. J. (2014). The campus spiritual climate: Predictors of

      satisfaction among students with diverse worldviews. *Journal of College Student

      Development*, *55*, 41-62. doi: 10.1353/csd.2014.0002

Rockenbach, A. N., Mayhew, M. J., & Bowman, N. A. (2015). Perceptions of the campus

      climate for nonreligious students. *Journal of College Student Development*, *56*, 181-186.

      doi:10.1353/csd.2015.0021

Rudolph, F. (1962). *The American College and University: A History*. Athens, GA: The

      University of Georgia Press.

Seifert, T. (2007). Understanding Christian privilege: Managing the tensions of spiritual

      plurality. *About Campus, 12*(2), 10-17.

Siddiqi, I. (April 7, 2016). Here are 6 incidents of Islamophobia on campus in the last week.

      Mondoweiss. Retrieved from http://mondoweiss.net/2016/04/here-are-6-incidents-of-

      islamophobia-on-campus-in-the-last-week/

Small, J. & Bowman, N. (2011). Religious commitment, skeptism, and struggle among U.S.

      college students: The impact of majority/minority religious affiliation and institutional

      type. *Journal for the Scientific Study of Religion*, *50,* 154-174. doi: 10.1111/j.1468-

      5906.2010.01557x

Speers, S. (2008). The secular thesis revisited: Religious life on the secular college campus

today. *Journal of College and Character, 10,* 1-11. doi: 10.2202/1940-1639.1056

Appendix A

Items in the religious/spirituality campus climate set

Introductory text: We want to know religious and spirituality climate of your institution. By *"religious or spiritual beliefs"*, we mean both formal and informal religious beliefs and the lack of spiritual beliefs (atheism).

1. Please indicate your agreement with the following statements:
    Response options: 5=Strongly agree, 4=Agree, 3=Neither agree nor disagree, 2=Disagree, 1=Strongly disagree
    a. The students at my institution are respectful of people of different religious or spiritual beliefs.
    b. Instructors at my institution are respectful of people of different religious or spiritual beliefs.
    c. Staff and administrators at my institution are respectful of people of different religious or spiritual beliefs.
    d. I feel comfortable discussing my religious or spiritual beliefs during class.
    e. I feel comfortable expressing my religious or spiritual identity on campus.
    f. Instructors provide accommodations for religious holidays and observances of various religious traditions.
    g. I feel like I do not belong at my institution due to my religious or spiritual beliefs.
    h. My learning and development has been positively influenced by the religious or spiritual culture at my campus.

2. During the current school year, about how often have you participated in religious or spirituality-based extracurricular activities?
    Response options: 4=Very Often, 3=Often, 2=Sometimes, 1=Never

3. During the current school year, how many times have you experienced religious intolerance?
    Response options: 0=Never, 2=1-3 times, 5=4-6 times, 8=7-9 times, 12=10 or more times

4. What is your current religious or spirituality identity?
    Response options:
    1 = Agnostic
    2 = Atheist
    3 = Baptist
    4 = Buddhist
    5 = Episcopalian/Anglican
    6 = Hindu
    7 = Humanist (Unitarian/Universalist)
    8 = Islamic/Muslim
    9 = Jehovah's Witness
    10 = Jewish

11 = LDS (Mormon)
12 = Lutheran
13 = Methodist
14 = Native American Religion
15 = Nondenominational evangelical
16 = Nondenominational non-evangelical
17 = Orthodox Christian (Eastern, Greek, Russian)
18 = Pagan
19 = Pentecostal Christian (Assemblies of God, Church of God)
20 = Presbyterian
21 = Roman Catholic
22 = Seventh Day Adventist
23 = United Church of Christ
24 = Non-affiliated (religion/spirituality not important)
25 = Non-affiliated (religion/spirituality important)
26 = Other Christian religion
27 = Other non-Christian religion
28 = Prefer not to respond