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# Does Faith Ameliorate the Relationship between Sleep and Depression?

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Does Faith Ameliorate the Relationship between Sleep and Depression?

by

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Newberg, Oregon

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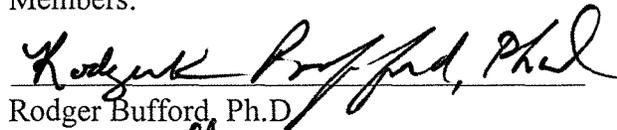
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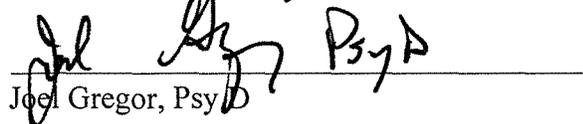


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## Does Faith Ameliorate the Relationship between Sleep and Depression?

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**Abstract**

Depression is one of the most commonly diagnosed disorders in the world. College students are more likely to experience depression than adults. Research has established a correlational relationship between sleep and depression (American Psychiatric Association, 2013; Davidson, 2013; Franzen & Buysse, 2008, Lund, Reider, Whiting, & Prichard, 2010; Tsuno, Besset, & Ritchie, 2005; Van Bommel, 1997) and suggests there is also a causal relationship between faith and lower rates of depressive symptoms (Baker & Cruickshank, 2009; Koenig, 2008a Koenig, 2001; Newport, Agrawal, & Witters, 2010; Reutter & Bigattie, 2014; Rosmarin et al., 2013). However, little research exists exploring how faith may ameliorate the relationship between sleep and depression.

In the present study, students attending four Protestant faith-based universities completed the American College Health Association's (ACHA) National College Health Assessment II (NCHA II) between the fall of 2009 and spring of 2012. A Protestant Faith Variable (FV), Sleep Scale (SS), and Depression Scale (DS) were constructed from the NCHA II data. Multiple regression was used to see if faith ameliorates the relationship between sleep and depression and

bivariate correlations were computed to explore the relationships between faith and sleep and between faith and depression. No significant relationship between faith and sleep was found however students who reported higher faith endorsed fewer depressive symptoms. In addition, faith was found to ameliorate the relationship between sleep and depression in that it decreased the strength of the relationship between sleep and depression. These findings generate further important questions for future research, including an examination of possible behavioral mediators of faith such as social support, contemplative and religious behaviors, and meaning making.

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## **Chapter 1**

### **Introduction**

In the past decade, there has been increased exploration of the impact of faith on mental health (Falb & Pargament, 2014; Weber & Pargament, 2014). One such area of interest has been the impact of faith on depression (Bamonti, Lombardi, Duberstein, King, & Van Orden, 2015; Kioulous & Bergiannaki, 2014). The National Academy of Sciences reported 1 in 13 Americans over the age of 18 have experienced at least one depressive episode (DE) in the past year, and younger individuals are more likely to have experienced a DE (National Research Council, 2011). One factor related to DE is the quality and quantity of sleep (Short, Gradsar, Lack, & Wright, 2013). Findings consistently show that a good night's sleep is imperative for maintaining mental wellbeing. However, little research exists exploring how faith may ameliorate the relationship between sleep and depression. As a result, this study explores whether a college-student's faith ameliorates the relationship of sleep and depression.

#### **Spirituality, Religiosity, and Faith**

Spirituality involves having a sense of purpose and meaning in life. It is a feeling of connection in oneself, the environment, and a higher power, as well as belief in a unifying life force (Braskamp, Trautvetter, & Ward, 2005). In a similar way, Craft & Rockenbach (2011) found that spirituality consists of two themes: connectedness (e.g., spiritual, relational) and explication (e.g., knowing the purpose of existence). In contrast, "religion has been widely understood as denoting (1) a particular system of faith and worship and/or (2) the human

reverential recognition of a higher or unseen power” (Omon, 2013, p.26). Koenig (2008a) defines religion as “A system of beliefs and practices observed by a community, supported by rituals that acknowledge, worship, communicate with, or approach the Sacred, the Divine, God, or Ultimate Truth, Reality, or nirvana” (p.11).

For the purpose of this study, the word “faith” is used and is inclusive of both spirituality and religiosity. Koenig (2008a) states, “...I argue that, to call something spiritual, it must have some connection to religion” (p. 11). “Many surveys report that most US adults identify themselves as both spiritual and religious...[and] several studies indicate substantial overlap in how these constructs are understood” (Omon, 2013, p. 37). Baumsteiger & Chenneville (2015) report “inconsistencies in how these constructs [investigating religiosity and spirituality] are conceptualized and measured” (p. 2344). Therefore, moving forward, the term *faith* will be used to represent both spirituality and religion in this study.

### **Faith and College Students**

The Higher Education Research Institute has a national study that researches the spiritual life of college students in the United States. In the 2007 study, 80% of participating college students reported an interest in spirituality and 81% indicated attending spiritual services frequently or occasionally. The college years are known to be a time of identity development and establishing one’s beliefs and values, and from a spiritual perspective, “includes exploration, questioning, examination, and the construction of one’s personal, individualized faith” (Giordano et al., 2015, p.71). Spiritual searching and growth are normal processes during college years (Parks, 2000; Dalton & Crosby, 2007; Powell, Tisdale, Willingham, Bustrum, & Allan, 2012)

and “research on student learning and development during the college years emphasizes the centrality of faith in the identity development of students” (Dalton & Crosby, 2007, p. 2).

### **Faith and Depression**

Research suggests there is a causal relationship between faith and health. For example, Reutter and Bigattie (2014) found that both religiosity and spirituality were moderators of health and stress. More specifically faith is related with psychological wellbeing, especially for those with depressive symptoms (Baker & Cruickshank, 2009; Newport et al., 2010). In addition, Rosmarin et al. (2013) looked at whether an individual’s belief in God affected treatment outcomes for depression and found patients who had a stronger belief in God had lower symptoms of depression and higher psychological well-being than those who did not report a high belief in God.

Faith can be seen as a method for coping when people become overwhelmed by what life hands them and there is a hope that faith may be used as a preventive measure of depression (Koenig et al., 2001). In a review of literature, Koenig (2008b) found

of 93 observational studies, two thirds found significantly lower rates of depressive disorder or fewer depressive symptoms among the more religious...[and] of 22 longitudinal studies, 15 found that greater religiousness at baseline predicted fewer depression symptoms or faster remission of symptoms at follow up. (p. 285)

### **The Impact of Depression**

Depression is one of the top 10 most diagnosed and treated mental health disorders in the world for both women and men and it is the most frequently observed mental health disorder in the United States. There are over 19 million Americans who struggle with depression in a given

year, suffering from symptoms such as feelings of hopelessness, sleep disturbances, and impairment of function in everyday activities (Lopez et al., 2006). The National Research Council (2011) reported, “1 in 13 Americans had at least one major depressive episode (MDE) during the past year. Those who are younger ... are more likely to experience a MDE” (pp. 34-35). Direct and indirect costs of DE exceed \$30 billion annually and The World Health Organization projects if trends continue, depression will be the second leading contributor to the global burden of disease by the year 2020 (Peveler, Carson, & Rodin, 2002).

Because depressive symptoms impact people of all ages, a growing area of concern is the quality of mental health in college students, where depression is significantly affecting them behaviorally, mentally, and emotionally (Ekwonve, 2011). Younger individuals who suffer from depressive symptoms are two-to-four times more likely to experience an episode of major depression as adults (Pine, Cohen, Cohen, & Brook, 1999). It is estimated that 15.6% of undergraduates and 13.0% of graduate students experience symptoms associated with depression, with 2% of students reporting suicidal ideation within the past four weeks (Eisenberg, Gollust, Golberstein, & Hefner, 2007). With an estimated 22 million students attending college campuses in 2014, that translates to an estimated 3.4 million students who will experience depressive symptoms annually (Projections of Education Statistics to 2021, 2013).

### **Sleep and Depression**

Lund et al. (2010) discovered an alarming number of college students get insufficient sleep and have irregular sleep-wake patterns, adversely impacting mental health. Sleep disturbances have both direct and indirect (i.e., mood) effects on university students' physical and psychological wellbeing, as well as an influence on academic performance. Davidson (2013)

discussed an “increased recognition of sleep hygiene as an important health concern within college populations” (p. 4). Lamberti (2013) reported 20% of university students struggle with sleeping difficulties, which affect their academic performance, and are not easily overcome. It is important that college-age individuals establish healthy sleeping patterns to develop better overall flexibility for life transitions (Wong et al., 2013). Short et al. (2013) found the quality of sleep was significantly associated with poor outcomes. “Those with poorer sleep quality reported less sleep on school nights, diminished daytime alertness, and more depressed mood” (p. 1031).

The quality of sleep one gets in a given night has been found to be significantly correlated with mental and physical wellbeing (Davidson, 2013). In fact, a large number of people who have been diagnosed with depression suffer from sleep disturbances like hypersomnia and insomnia (Franzen & Buysse, 2008), both of which are symptoms of depressive disorders (American Psychiatric Association [APA], 2013). The National Sleep Foundation reported insomnia is the most commonly published sleep complaint in the United States. Data collected from the National Center for Sleep Disorders Research at the National Institutes of Health shows 30-40% of American adults reported insomnia annually, and 10-15% of these individuals reported chronic insomnia. Another longitudinal study (Breslau, Roth, Rosenthal, & Andreski, 1996) found 8% of 979 young adults that suffered from sleep disturbances had a lifetime prevalence of sleep related issues. Tsuno et al. (2005) noted “both clinical and theoretical research has focused on the relationship between sleep disturbance and depression due to their high rates of co-occurrence, and ... studies of sleep disorders have contributed to our knowledge of the underlying physiology of depressive disorders” (p. 1259). Since the first recognition of depression as a disorder, sleep issues have been primary symptoms.

“Clinical symptoms dating as far back as the ancient Greeks have included disturbed sleep as part of the symptoms of melancholia” (Van Bemmelen, 1997, p. 556).

Nyer et al. (2013) compared students with depressive symptoms and sleep disturbances to students who only struggled with depressive symptoms. Nyer and colleagues concluded “college students with depressive symptoms and with sleep disturbances may experience a greater burden of . . . impairments in functioning, compared to students with depressive symptoms and no sleep disturbances” (p. 878). Berk (2009) noted depression and problems with sleep go hand-in hand, reporting around 80% of those struggling with depressive symptoms also have sleep concerns. “The intimate nexus between sleep and depressive symptoms suggests a critical role for addressing sleep mechanisms in depression, and equally suggests that dysregulation of sleep may be a meaningful clinical marker” (p. 302).

### **Faith as a Moderating Variable**

Because sleep has been found to play a significant role in depressive symptoms and research on faith suggests it is positively correlated with decreased depressive symptoms, this study sought to explore faith’s potential moderating effect on the relationship between sleep and depression in college students. A moderating variable affects the relationship between two other variables, meaning the level or value placed on the moderating variable affects the degree of the impact of the predictor on the criterion variable (Baron & Kenny 1986; Cohen & Cohen, 1983). Moderators are used to analyze different aspects of a formula and a moderator influences the strength of a relationship between the two other variables. Also, in this study the term *ameliorate* is used to suggest the direction of the moderating variable, meaning faith is hypothesized to decrease the relationship between sleep and depression.

**Summary**

Research has established a correlational relationship between sleep and depression (APA, 2013; Davidson, 2013; Franzen & Buysse, 2008, Lund et al., 2010; Tsuno et al., 2005; Van Bommel, 1997) and suggests there is also a causal relationship between faith and lower rates of depressive symptoms (Baker & Cruickshank, 2009; Koenig, 2008b Koenig et al., 2001; Newport et al., 2010; Reutter & Bigattie, 2014; Rosmarin et al., 2013). However, little research exists exploring how faith may ameliorate the relationship between sleep and depression. This study hypothesizes faith has an ameliorating impact on the relationship between sleep and depression.

## **Chapter 2**

### **Methods**

#### **Participants**

Students attending four Protestant faith-based universities completed the American College Health Association's (ACHA) National College Health Assessment II (NCHA II) between the fall of 2009 and spring of 2012. A Protestant faith-based university is defined as one that publically endorses a Protestant religious affiliation, had a published statement regarding the institution's expected lifestyle behavior for students, endorsed religion as an active part of campus life, and offered or required participation in activities that promoted spiritual development. These include activities such as regular religious meetings on campus and required religious courses. In keeping with the ACHA reference group standards, these institutions either surveyed all students or used a random sampling technique.

The sample taken used traditional college-age individuals from the ages of 18-23, with a mean of 22. Student status consisted of undergraduate students. 75.1% were female and 24.9% male. 71.7% identified as White, 4.3% Black, 8% Hispanic or Latino/a, 1.7% Asian or Pacific Islander, 6.3% American Indian, Alaskan Native, or Native Hawaiian, 2.5% Bi-racial or Multiracial, and 1.4% Other (when selecting ethnicity, students are allowed to mark more than one); 3.7% marked more than one of the options. Individuals who endorsed any sort of current alcohol and drug use (NCHA items 8, 10, 13, 14, and 16) were excluded so that those endorsing depressive symptoms were doing so for non-alcohol and drug related reasons (substance exclusionary criteria does not include tobacco consumption). As the sample was already

established with an  $n$  of 2,554 then a test of power was not needed. The overall number of students used in this study was  $n = 2,554$ .

### **Instrument**

**National College Health Assessment-II.** The American College Health Association's NCHA II was developed eight years ago and has been administered to thousands of students at universities and colleges throughout America and Canada (<http://www.acha-nhca.org>, October 25, 2014). The assessment was first implemented in spring of 2000 and since then has been used by over 500 institutions. The most recent edition, the NCHA-II, has been used since 2008 and is administered both in paper and electronic format. The assessment surveys students on a wide array of health perceptions and behaviors, including quality and quantity of sleep, exercise, personal safety, perception of substance use, and mental and physical health. The assessment takes around 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>, October 25, 2014).

### **Procedure**

Archival data was selected from a pre-existing data set comprised of the NCHA data from four different faith-based universities. Upon applying the previously noted exclusionary criteria, both descriptive and comparative analyses were completed.

**Protestant Christian Faith Variable.** While there are no questions on the NCHA assessing religion or spirituality, the four universities included in this study added an item or items to assess this domain. However, the four universities did not use the same item or items.

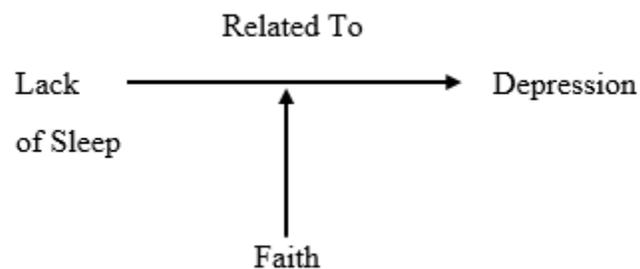
Therefore there was a need to develop a single faith variable (FV), using the available data from the four universities that could serve as a single FV. How this variable was constructed is outlined in Appendix A.

**Sleep Scale.** A sleep scale (SS) was constructed of four items, using questions 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?”; 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?”; 44b “In the past 7 days, how often have you felt tired, dragged out, or sleepy during the day?”; and 44c “In the past 7 days, how often have you gone to bed because you just could not stay awake any longer?” The range of the SS was 4-32 with 4 meaning *no problem with sleep at all* and 32 being *the worst sleep reported*. Variable construction of the sleep scale is outlined in Appendix A.

**Depression Scale.** A depression scale (DS) was constructed of 9 items, using questions 30a “Have you ever felt things were hopeless?”; 30b “Have you ever felt overwhelmed by all you had to do?”; 30c “Have you ever felt exhausted (not from physical activity?)”; 30e “Have you ever felt very sad?”; 30f “Have you ever felt so depressed that it was difficult to function?”; 30j “Have you ever seriously considered suicide?”; 30k “Have you ever attempted suicide?”; 31a6 “Within the past 12 months, have you been diagnosed or treated by a professional for depression?”; and 45b4 “Within the last 12 months, has depression affected your academic performance?” The DS has a range of 0-9 (0 = *no depressive symptoms* and 9 = *yes, with depressive symptoms*). Construction of the depression scale is further outlined in Appendix A.

### Hypotheses and Proposed Analysis

The purpose of this study is to explore whether a college-student's faith ameliorates the relationship between sleep related issues and depressive symptoms (i.e., whether the importance of an individual's faith impacts the connection between quality and quantity of sleep and depressive symptoms). It is hypothesized that faith ameliorates (or weakens) the relationship between sleep and depression. Multiple regression was used to see if faith ameliorates the relationship between sleep and depression (See Figure 1).



*Figure 1.* Multiple regression.

In addition, it was hypothesized that students who endorsed a higher score on the faith variable would report significantly lower levels of sleep concerns and lower depressive symptoms. Bivariate correlations were used to determine the relationship between faith and sleep, and faith and depressive symptoms.

### Chapter 3

#### Results

Three correlations were conducted to look at the relationships between sleep, faith, and depression. One multiple regression was conducted to see whether faith ameliorates the relationship between sleep and depression. The results of the descriptive statistics, correlations, and regressions are reported below. Descriptive statistics are presented in Table 1.

Table 1

*Descriptive Statistics*

	N	Mean	Std. Dev	Range
DS	2515	4.54	2.18	0-9
SS	2534	17.3	5.96	4-32
FV	2554	2.49	.72	1-4

*Note.* DS, Depression Scale; SS, Sleep Scale; FV, Faith Variable

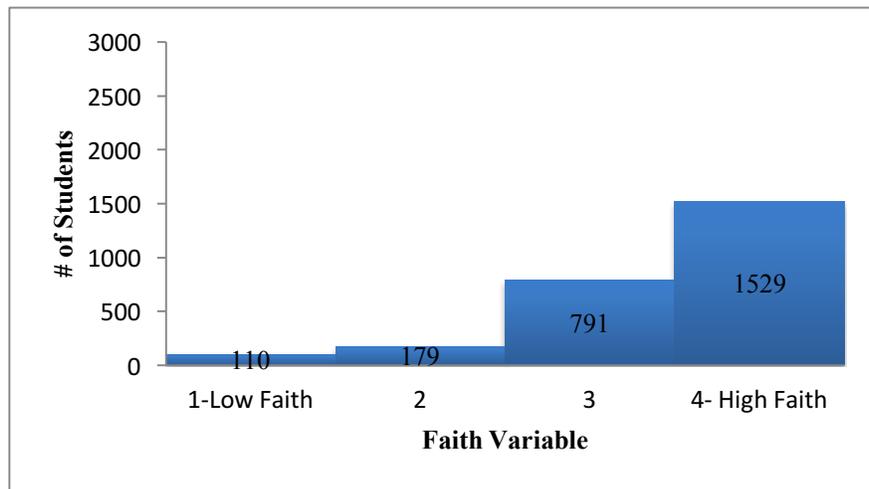
The statistical analysis also showed that all scales were skewed and demonstrated kurtosis (Table 2). The faith variable was the steepest and had the least amount of variance. Figure 2 depicts the skew and kurtosis for the faith variable.

Table 2

*Skew and Kurtosis*

	Skew Stats	Skew Std. Error	Skew	Kurtosis Stats	Kurtosis Std. Error	Kurtosis
<b>DS</b>	.613	.053	11.57	.19	.107	1.79
<b>SS</b>	-.015	.053	.28	-.72	.106	-6.79
<b>FV</b>	-1.39	.053	-26.42	-1.91	.106	-18.08

*Note.* DS, Depression Scale; SS, Sleep Scale; FV, Faith Variable



*Figure 2.* FV frequency distribution.

Regarding the correlations between the three variables, depression was significantly positively correlated with sleep ( $r(2495) = .359, p < .01$ ), and had a negative significant correlation with faith ( $r(2515) = -.096, p < .01$ ). Sleep was not significantly correlated with faith ( $r(2554) = -.022, p < .01$ ). Correlations are presented in Table 3.

Table 3

*Correlations*

	Depression Scale	Sleep Scale	Faith Variable
<b>Depression Scale</b>			
Pearson Correlation	1		
Sig. (2-tailed)			
<b>Sleep Scale</b>			
Pearson Correlation	.359**	1	
Sig. (2-tailed)	<.001		
<b>Faith Variable</b>			
Pearson Correlation	-.096**	-.022	1
Sig. (2-tailed)	<.001	.262	

\*\* Shows clinical significance

Finally, a regression was conducted looking at whether faith had an ameliorating relationship between sleep and depression. Significant results were found in the regression model ( $R^2 = .010$ ,  $F(1, 2495) = 24.31$ ,  $p < .001$ ). Faith significantly predicted depression ( $F(1, 2494) = 197.66$ ,  $p \leq .001$ ) and faith was positively associated with depression ( $\beta = -.098$ ,  $t(2495) = 4.93$ ,  $p < .001$ )  $R^2 = .010$ , meaning the higher level of faith, the lower their depressive symptoms. Sleep added additional significant variance (Adjusted  $R^2 = .136$ ). When faith was included in the regression model, there was a statistically significant reduction in the relationship between sleep and depression (.357 vs .359,  $p < .001$ ). Table 4 and Figure 3 depict the results of the regression model.

Table 4

*Regression of Depression on Sleep with Faith Controlled (Removed)*

Model	Variables Entered	Variables Removed	Method
1	Faith Variable <sup>b</sup>	-	Enter
2	Sleep Scale <sup>b</sup>	-	Enter

<sup>a</sup>Dependent Variable: Depression Scale<sup>b</sup>All requested variables entered*Model Summary*

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of Est.
1	.091 <sup>a</sup>	.01	.01	2.17
2	.357 <sup>b</sup>	.14	.14	2.02

<sup>a</sup>Predictors: (Constant), Faith Variable<sup>b</sup>Predictors: (Constant), Faith Variable, Sleep*Coefficients*

		B	Std. Error	Beta
1	(Constant)	4.10	.10	
	Faith Variable	.30	.06	.10
2	(Constant)	1.88	.15	
	Faith Variable	-.28	.06	-.09
	Sleep Scale	.13	.01	.36

*Excluded Variables*

	Beta In	T	Sig.
Sleep Scale	.36	19.17	.00

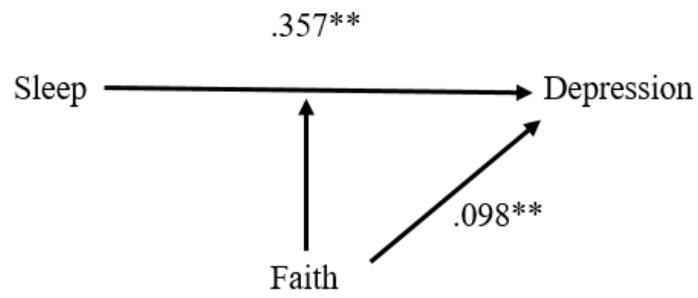


Figure 3. FV regression.

## **Chapter 4**

### **Discussion**

This study reviewed literature regarding the significant negative impact of depression and sleep on college students. Because research suggests faith can be a protective factor for depression this study sought to explore the relationship between faith, sleep, and depression

Three hypotheses were suggested. The first was that among students at faith-based institutions (FBIs), those who endorsed higher faith scores would report significantly lower levels of sleep concerns because faith has been found to be a coping strategy people will use to manage unhelpful behaviors. This hypothesis was not confirmed because there was no relationship between faith and sleep. In the literature review there were no other studies that found a significant relationship between sleep and faith.

The prevalence of sleep concerns in the college student populations has been an ongoing concern in the research literature (Voelker, 2004). Hershner and Chervin (2014, p. 73) state “Daytime sleepiness, sleep deprivation, and irregular sleep schedules are highly prevalent among college students.” On average the traditional college student is 17-25 years old which places them in the late adolescent and early adult stages of development. During these developmental stages, risky behaviors are common, and students have difficulty identifying how these risks negatively impact them (McGuinness & Ahern, 2009). Therefore the results in this study mirror results found in the past. Faith appears not to be significantly related to sleep concerns for college students which means there are other factors driving these sleep issues more than faith.

Some common factors that impact college students' sleep concerns include the impact of technology (Melton, Bigham, Bland, Bird, & Fairman, 2014), social stressors (Voelker, 2004), spending times with friends (Gaultney, 2010), and inadequate sleep hygiene (Hershner & Chervin, 2014).

The second hypothesis was that students at FBIs who endorsed higher faith would report significantly lower depressive symptoms and this was found to be true; students who reported higher faith did, in fact, report fewer depressive symptoms. These results align with past research which looked at the relationship between faith and depression (Baker & Cruickshank, 2009; Koenig, 2008a Koenig et al., 2001; Newport et al., 2010; Rosmarin et al., 2013). Social support, contemplative and religious behaviors, and meaning making are three ways in which faith has been found to be a protective factor in regards to depression (Brausch & Decker, 2014; Koenig et al., 2001; Uebelacker et al, 2013). Another reason why faith may protect one from depression is that the way people make sense of their suffering helps them cope with stress in their lives and this perspective shift can help college students create purpose and meaning in the context of depressive symptoms (Park, 2010).

Finally, it was hypothesized that higher faith would ameliorate the relationship between sleep and depression, weakening the link between sleep and depressive symptoms. This study supported this hypothesis in that faith was found to significantly ameliorate the relationship between sleep and depression, though minimally so. Prior literature highlights the high rates of co-occurrence of sleep concerns and depression among college students (Berk, 2009; Tsuno et al., 2005) and sleep concerns can instigate a new onset of depression and increase episode severity and duration (Franzen & Buysse, 2008).

Based on these results, a college student's faith may be a valuable consideration when working with students who endorse both sleep and depression concerns. For many years faith was not recognized or incorporated as a therapeutic tool to help patients. However, the findings of this study suggest there could be a whole new area of therapeutic interventions to develop which is clinically relevant; such as helping students navigate existential questions to cope with pain. When considering clinical implications, faith may be viewed as a way of being for many college students on protestant, faith-based university campuses rather than a specific method of coping. Nevertheless, the findings of this research suggest that reinforcing religious behaviors such as meditation, attending worship, and prayer may be important treatment interventions. These findings also suggest that when working clinically with college students who are suffering from depression, the therapy might benefit from exploration of existential questions about why people suffer, in an effort to help the student create purpose and meaning in their lives, resulting in a decrease of depressive symptoms.

### **Limitations**

One of the strengths of this study was the large sample size; this is especially important so that there is sufficient power to examine the effects of interactions. The findings of this study must also be considered within the context of its limitations. The main limitation is that the variable developed to measure faith had little variance. The faith variable may have underestimated the importance of faith because there was so little variance in the measure. A more robust faith measure would be beneficial. Although this measure lacked sensitivity, there were still positive results reported; and if a stronger measure were used then the results could be even more significant.

**Areas for Future Research**

Prospective research with more sensitive measures of faith, sleep, and depression is recommended to review these hypotheses. Prospective studies could also explore other outcomes of faith endorsement related to college student mental health. Future research examining evidenced-based interventions for depression in college students have the option of incorporating faith components to current depression treatment models.

**Summary**

In conclusion, the aim of this study was to examine whether faith ameliorated the relationship between sleep and depression symptoms. Sleep had a moderately significant relationship with depression and this relationship was weakened slightly when faith was introduced as a moderating variable in the relationship. Faith also had a significant relationship with depression, suggesting the higher a college student reported their level of faith the lower amount of depressive symptoms reported. These findings generate further important questions for future research, including an examination of possible behavioral mediators of faith such as social support, contemplative and religious behaviors, and meaning making. An examination of existential questions and meaning making could be important clinical additions to the treatment of depressive symptoms in college students. Clinically, these findings suggest that when working with college students presenting with both sleep concerns and depressive symptoms, assessment of the student's faith could be a valuable addition to the treatment strategies designed to target depressed mood and foster further identity development.

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## Appendix A

### Scale and Variable Development

#### Faith Variable (FV)

A FV was built by combining data received from four FBIs asking a perceived importance of faith question in their ACHA survey.

The first institution ( $n = 574$ ) used a single item, question 75 “Check the box that most nearly expresses your level of Christian commitment.” This question was rated on a 4-point scale (1 = *My relationship with Christ is a very important part of my life* to 4 = *My relationship with Christ is not a part of my life*).

The second institution ( $n = 322$ ) built a FV from four items, including questions 76 “I feel like I belong to God,” 79 “I feel like God appreciates me as His servant,” 85 “I feel like I have worth in the eyes of God,” and 94 “I do not feel close to God.” Each item was rated on a 5-point Likert continuum from 1 = *Strongly Disagree* to 5 = *Strongly Agree*. Questions 76, 79, and 85 were reversed (5 = *strongly agree*). The 5-point scale used at this institution was converted to a 4-point scale by multiplying the mean item score by 0.8.

The third institution ( $n = 1,182$ ) built a FV from questions 67 “My relationship with Jesus Christ impacts my decisions related to what I do with my time, money, body, and relationships,” and 69 “I believe that making a commitment to Jesus Christ is one of the most important things a person can do with his or her life.” Question 67 had a reversed response (5 = *always*) as compared question 69 (5 = *strongly disagree*), therefore question 67 was reverse scored. They used a 5-point scale so convert these to a 4-point scale by multiplying the mean item score by 0.8.

The fourth institution ( $n = 520$ ) built a FV from questions 67 “How often do you attend religious services?”; 68 “How important or unimportant is religious faith in shaping how you live your daily life?”; and 69 “How often do you pray by yourself alone?” and all three were reverse scored. Questions 67 and 69 were combined and the average was multiplied by .5714 because they were on a 7-point scale. Question 68 was multiplied by 0.8 because it was on a 5-point scale. All three were combined and averaged to create a total faith scale for the fourth institution. A final faith scale was developed by combining all 4-point scales from the four faith-based institutions. Scores were reversed so that high scores represented high faith.

### **Sleep Scale**

Question 42 was coded 1-8 (8 = 7 days) and had to be reversed and recoded to match the direction of other questions (43, 44b, and 44c). Question 43 was coded with a range from 1-5 (1 = *no problem at all* and 5 = *a very big problem*) and each coded number in the range was weighted with 1.6 to match the weight of other questions. Question 44b was coded 1-8 (1 = 0 days and 8 = 7 days). Question 44c was coded 1-8 (1 = 0 days and 8 = 7 days).

### **Depression Scale**

Each item of question 30 had a range from 1-5 (1 = *no, never* and 5 = *yes, in the last 12 months*) and was recoded with a range of 0-1 (0 = *no* and 1 = *yes*). Question 31f had a range from 1-6 (1 = *no* and 6 = *yes, other treatment*) and question 45l had a range from 1-6 (1 = *This did not happen to me/not applicable* to 6 = *Significant disruption in thesis, dissertation, research, or practicum work*) and both items were recoded to create a range of 0-1 (0 = *no* and 1 = *yes*).

**Appendix B**  
**Curriculum Vitae**

**EDUCATION**

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**August 2012- Current**

**Graduate Department of Clinical**

**Psychology Psy.D. Candidate**

George Fox University, Newberg, Oregon

APA Accredited

GPA 3.89 on a 4.0 scale

Doctorate expected May 2018

**May 2014**

**Masters of Arts in Clinical Psychology**

George Fox University, Newberg, Oregon

APA Accredited

**July 2011**

**Bachelor of Arts in Psychology Honors**

Lee University, Cleveland, Tennessee

Kairos Scholar

**SUPERVISED CLINICAL EXPERIENCE**

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August 2016-

**Samaritan Lebanon Community Hospital, Lebanon, Oregon**

Current

Pre-Internship: Behavioral Health Consultant

- **Clinical & Supervised Hours:** Intervention: 10; Supervision: 13
- **Licensed Psychologist:** Laura Sisson, Psy.D.
- **Population:** Rural, uninsured, low SES, wide age range served (5 years old and up), high co-occurring disorders.
- Complete initial intake assessments utilizing the bio-psycho-social-spiritual conceptualization and provide initial diagnosis with justification.

- Navigate warm handoffs with medical providers and patients.
- Provide referrals and recommendations to resource patients for comprehensive care.
- Develop treatment plans oriented around physician referral and patient goals.
- Collaborative problem-solving with patient and interprofessional team.
- Monitor symptoms and course of treatment through administration, scoring, and interpretation of screeners (GAD-7, PHQ-9, Moodcheck, Mood Questionnaire, Bi-polar & PTSD screeners).
- Provide evidence based brief interventions from a Focused ACT frame.
- Use electronic medical records on EPIC for documentation and coordination of care.

April 2015-

**Evergreen Clinical, Portland, Oregon**

June 2016

Pre-Internship: Private Practice Student Therapist

- **Clinical & Supervised Hours:** Intervention: 178.25; Supervision: 83
- **Licensed Psychologist:** Brian Goff, Ph.D.
- **Population:** Uninsured, low SES, adults with comorbid diagnoses
- Conducted initial intakes for outpatient uninsured patients in accordance with OAR's guidelines.
- Completed mental health evaluations utilizing the bio-psycho-social-spiritual conceptualization, diagnostic justification, and case conceptualization using Acceptance and Commitment Therapy (ACT) protocols and interventions.
- Collaboratively developed treatment plans focused on patient goals.
- Monitored symptoms and course of treatment through the administration, scoring, and interpretation of outcome questionnaires (OQ-45, AAQ-II, and CFQ-13).
- Conducted case relevant assessments and psychological evaluations for patients.
- Provided individual therapy for adults utilizing evidence-based ACT interventions.
- Provided crisis management for patients who needed emergency intervention and support.
- Completed termination summaries.
- Provided psychotherapy to patients with a wide range of diagnoses including Posttraumatic Stress Disorder, Anxiety, Eating Disorders, Major Depressive Disorder, Bipolar I Disorder, ADHD and Borderline Personality Disorder.
- Handled petty cash, floats, and expenses.

- Continually met administrative expectations of employer.
- Researched and obtained information and documents quickly.
- Completed opening and closing duties of the clinic daily.

September 2014- **Chehalem Counseling Center, Newberg, Oregon**

September 2015 Practicum II: Community Mental Health Student Therapist

- **Clinical Hours:** Intervention: 334.5
- **Assessment Hours:** 22.25
- **Supervised Hours:** Supervision: 116
- **Licensed Psychologists:** Holly Hetrick, Psy.D & Justin Westbrook, Ph.D.
- **Population:** Uninsured, low SES, wide age range served (5 years old and up), high comorbidity rates.
- Conducted mental health initial intakes and Mental Health Assessments (MHA) for outpatient uninsured and Oregon Health Plan (OHP) patients in accordance with OAR's and Yamhill County Care Organization (YCCO) guidelines.
- Completed MHAs utilizing the bio-psycho-social-spiritual interview, diagnostic justification, and case conceptualization.
- Developed individual service and support plans (treatment plans) and monitor therapeutic goals and YCCO OHP compliance for authorizations.
- Administered, scored, and interpreted outcome questionnaires (OQ-45) for the purpose of assessment and treatment.
- Conducted case relevant assessments and psychological evaluations for outpatient patients.
- Collaborative case management with collateral providers, schools, social workers, prescribers, and Department of Health Services (DHS) case managers.
- Provided crisis intervention.
- Trained for trauma sensitive care via trauma focused cognitive-behavioral therapy.
- Completed termination reports to close patient files after termination.
- Wrote transfer reports for patient transitions to new psychotherapists.
- Coordinated care with Chehalem Counseling Center's Psychiatric Mental Health Nurse Practitioner (PMHNP).
- Provided individual, group, couples, and family therapy for children, adolescents, and adults utilizing evidence based cognitive-behavioral and systemic interventions.
- Facilitated distress tolerance strategies group therapy for residential adolescent males.

- Provided mindfulness strategies group therapy and positive psychology/strengths based group therapy for residential adolescent females.
- Provided psychotherapy to a wide range of diagnoses including Posttraumatic Stress Disorder, Anxiety, Depression, Adjustment Disorder, ADHD, and comorbidity of diagnoses such as substance abuse and depression.
- Participated in monthly Quality Assurance of all clinical services with content and completeness review.
- Conceptualized and presented patient cases in group supervision.
- Conducted phone interviews to help new patients schedule initial intakes.
- Used electronic health records on Care Cloud for scheduling.
- Worked fluidly as a part of the team process.

August 2013-

**George Fox Behavioral Health Clinic, Newberg, Oregon**

Current

Supplemental Practicum: Psychological Assessment

- **Assessment Hours:** 48; Integrated Reports: 6
- **Licensed Psychologists:** Joel Gregor, Psy.D, Paul Stoltzfus, Psy.D, & Robert Weniger, Psy.D.
- Select and administer full batteries of assessments relative to referral question including learning disabilities, ADHD & autism assessments, personality assessments, neuropsychological assessments.
- Write integrated and comprehensive psychological reports including test results, interpretation, diagnosis, and recommendations.
- Provide feedback sessions to review psychological reports with patients.
- Supplemental research and studies are utilized for further specialized comprehensive writing.

August 2013-

**George Fox Behavioral Health Clinic, Newberg, Oregon**

July 2014

Practicum I: Community Mental Health Office Manager & Practitioner

- **Clinical & Supervised Hours:** Intervention: 242; Supervision: 92
- **Licensed Psychologist:** Joel Gregor, Psy.D.
- **Population:** Uninsured, low SES, wide age range served (5 years old and up)
- Conducted initial intakes for outpatient uninsured patients in accordance with OAR's guidelines.

- Completed mental health evaluations utilizing the bio-psycho-social conceptualization, diagnostic justification, and case conceptualization utilizing solution focused and cognitive-behavioral therapy.
- Collaboratively developed treatment plans focused on patient goals.
- Monitored symptoms and course of treatment through the administration, scoring, and interpretation of the outcome rating scale (ORS) and session rating scale (SRS).
- Conducted case relevant assessments and psychological evaluations for outpatient patients.
- Provided individual, group, couples, and family therapy for children and adults utilizing evidence based cognitive-behavioral and systemic interventions.
- Facilitated parenting strategies group for adults in the surrounding community.
- Co-facilitated chronic pain psychoeducation group for adults in the community.
- Provided crisis management for patients who needed crisis intervention and support.
- Completed termination summaries to close patient files after conclusion of therapy.
- Provided psychotherapy to a wide range of diagnoses including Posttraumatic Stress Disorder, Anxiety, Depression, Substance Abuse, and Narcissistic Personality Disorder.
- Was on a rotational track within the clinic to select and administer full batteries of assessments relative to referral question.
- Wrote comprehensive psychological reports including test results, interpretation, diagnosis, and recommendations when on designated rotational assessment track.
- Developed an eight-week treatment protocol for Behavioral Activation for Depression.
- Presented a 45-minute training on Cognitive Behavioral Therapy to co-workers.
- Managed rotational schedules for coworkers at the Behavioral Health Clinic.
- Transitioned the clinic from paper documentation to the use of electronic medical records.
- Coordinate internal and external communications.
- Managed clinic caseload, phone messages, and scheduling.
- Regular cleaning of office was implemented to keep office in order.
- Managed the George Fox Behavioral Health Clinic finances.
- Completed opening and closing duties of the clinic.
- Use of strong organizational strategies and the ability to work methodically, accurately, and neatly.

- Sorted and distributed incoming mail.
- Prepared reports, presentation, memorandums, and correspondence using word processing programs.
- Answered telephone enquiries, attended to visitors, and assisted coworkers.
- Worked fluidly as a part of the team process.

October 2013- **Community Depression Recovery Program, Newberg, OR**

December 2013 Group Therapy Facilitator

- **Hours:** Intervention: 24; Supervision: 10.
- **Supervisors:** Dr. Tami Rogers, MD & Nathan Haskell, M.A.
- 8-week depression recovery group
- Provided psychoeducation to individuals and families, with a wide age range varying from 6 to 60 years old.
- Practiced behavioral activation interventions and support.

January 2013- **George Fox University, Newberg, OR**

May 2013

Pre-Practicum II: Student Therapist

- **Licensed Psychologist:** Carlos Taloyo, Psy.D.
- **Supervisor:** Jenae Ulrich, M.A.
- **Population:** Undergraduate students
- Provided outpatient individual psychotherapy services to young adult university students.
- Conducted intake interviews.
- Collaboratively prepared treatment plans.
- Utilized patient -centered orientation and interventions.
- Presented case conceptualization of patients through the bio-psycho-social-spiritual frame work.
- Created professional reports and provided diagnoses.
- All sessions were taped, reviewed, and discussed in individual and group supervision.

August 2012-

**George Fox University, Newberg, OR**

December 2012

Pre-Practicum I: Student Therapist

- **Licensed Psychologist:** Carlos Taloyo, Psy.D.
- **Supervisor:** Jenae Ulrich, M.A.
- **Population:** Graduate students
- Provided individual psychotherapy.

- Utilized patient -centered orientation and interventions.
- All sessions were taped, reviewed, and discussed in individual and group supervision.

## RESEARCH EXPERIENCE

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2013-

Current

### Research Vertical Team

- Assist team members in design of various research projects.
- Formal presentations of research projects and results.
- Development of dissertation topic and title.
- **Dissertation:** Does Faith Ameliorate the Effects of Deficient Sleep on Depression?
- Preliminary Proposal Approved May 15, 2015
- Dissertation Defense Approved May 2016
- **Committee Chair:** William Buhrow, Psy.D.
- **Dissertation Committee:** Rodger Bufford, Ph.D. & Joel Gregor, Psy.D.

March 2013-

August 2015

### Data Scoring, Entry, & Analysis

- Administration of multiple neuropsychological assessments as a part of data collection, entry, and analysis for a peer's dissertation.

## PUBLICATIONS & PRESENTATIONS

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**Burrell, J. E., Snider, J., Moore, C., Buhrow, W. (2014)** *What is the relationship of attendance of faith based institutions vs. non-faith based institutions on sleep and depression.* Poster presented at the Oregon Psychological Association Conference, Portland, Oregon.

**Burrell, J. E., Kays, D., Moore, C., Buhrow, W. (2016)** *What is the relationship of attendance at faith based institutions vs. non-faith based institutions and perceived use of drugs and alcohol.* Poster presented at the Christian Association of Psychological Studies, Pasadena, California.

**Burrell, J. E. (2017)** *Does faith ameliorate the relationship between sleep and depression?* Poster has been accepted to present at the Christian Association of Psychological Studies, Chicago, Illinois.

## WORK EXPERIENCE

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August 2016-

**George Fox Health & Counseling Center, Newberg, Oregon**

Present

University Counselor

- **Clinical Intervention Hours:** 19; **Group Supervision Hours:** 3
- **Director of Health & Counseling Center:** William Buhrow, Psy.D

- **Population:** Undergraduate university students

August 2016-

**Clinical Foundations Supervisor**

Current

Peer Supervisor

- **Clinical Intervention Hours:** 12; **Group Supervision Hours:** 6
- **Supervisor:** Glenna Andrews, Ph.D
- **Population:** First year clinical psychology graduate students

August 2016-

Current

**Graduate Teaching Assistant**

George Fox University, Graduate Department of Clinical Psychology, Newberg, Oregon

- Graduate Level Course: Supervision & Management I & II
- Collaboratively developed new course material and revised previous years' powerpoints to meet APA competency requirements.
- Meet bi-weekly with professor for additional consultation on course progress.
- Professor: Robert Bufford, Ph.D.

April 2015-

**Cedar Hills Hospital, Portland, Oregon**

August 2016

Group Psychotherapist & Crisis Intervention Counselor

- **Clinical Intervention Hours:** 319
- **Director of Chronic Pain Program:** Doug Altilio, Psy.D.
- **Population:** Low SES, acute care needs, adult age range served (18 years old and up including geriatric), high comorbidity rates, multiple health concerns, in need of medication management.
- Led life skills and process oriented groups in the chemical dependency program.
- Facilitated life skills and psychoeducation oriented chronic pain group psychotherapy.
- Program development of topics for chronic pain groups.
- Developed treatment plans collaboratively with patients.
- Reviewed diagnosis and impact of disorders with patients, formulating solutions to barriers in treatment.
- Addressed discharge needs and wrote discharge summaries.
- Completed risk assessments for suicidal and homicidal ideation.

- Collaboratively worked with patients to develop safety plans before discharge.
- Consultation with doctors, psychiatrists, and nurses on duty to provide holistic care to patients.
- Allocated beds in unit for hospitalization placement.

July 2015-

**Teen Reach Adventure Camp (TRAC)**

August 2015

Camp Counselor & Therapist

- Hood River, Oregon
- Worked with at risk adolescent youth ages 12 to 17.
- Facilitator of group activities such as archery, canoeing, and trust building exercises on the “challenge course.”
- Helped youth foster a sense of responsibility, patience, trust, community, and flexibility.
- Assisted in resolution of relational conflicts between adolescent peers.
- Facilitated discussion with counselors regarding assertiveness, effective communication, taking initiative and leadership development.
- Helped build a sense of community and provide social modeling for working as a team player.

January 2015-

January 2016

**Teaching Assistant**

- George Fox University, Graduate Department of Clinical Psychology, Newberg, Oregon
- Graduate Level Course: Biological Basis of Behavior
- Collaboratively developed new course material and revised previous years’ powerpoints to meet APA standards.
- Updated and transferred class quizzes onto online testing database.
- Developed class webpage for easier communication, testing, and grading.
- Met weekly with professor for additional consultation on webpage development and course progress.
- Professor: Celeste Flachsbart, Psy.D.

August 2014-

May 2016

**Team Leader & Teaching Assistant**

- George Fox University, Graduate Department of Clinical Psychology, Newberg, Oregon
- Community Gathering Team Organizational Leader

- Used problem solving and decision making strategies to collaboratively work with team members to plan monthly community gatherings which were used to facilitate engagement and group support.
- Application of creative, organizational, task- and detail-oriented skills.
- Used interpersonal feedback and validation to provide and support team cohesiveness.
- Designated responsibilities to break down large tasks.
- Scheduled weekly meetings to discuss and brainstorm ideas.
- Met monthly with faculty sponsor to discuss group process and develop assessment screeners to receive feedback from the student body.
- Faculty Sponsor: Mark McMinn, Ph.D., ABPP

July 2013-

**George Fox Behavioral Health Clinic, Newberg, Oregon**

July 2015

Behavioral Health Clinic Office Manager

- Provided additional office management throughout school week.
- Created rotational schedules for coworkers at the Behavioral Health Clinic.
- Transitioned the clinic from paper documentation to the use of electronic medical records.
- Coordinated internal and external communications.
- Managed clinic caseload, phone messages, and scheduling.
- Regular cleaning of office was implemented to keep office in order.
- Managed the George Fox Behavioral Health Clinic finances.
- Maintained opening and closing duties of the clinic.

January 2015-

May 2015

**Teaching Assistant**

- George Fox University, Graduate Department of Clinical Psychology, Newberg, Oregon
- Graduate Level Course: Integrative Psychotherapy
- Developed multiple choice quizzes.
- Graded book and article critiques.
- Reviewed student work for appropriate APA writing standards.
- Scheduled study sessions for review of material before exams.
- Met for 1-on-1 feedback with students concerning grades.
- Professor: Rodger Bufford, Ph.D.

## CERTIFICATIONS

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August 2016	First Aid/ CPR Training (American Heart Association)
June 2015	Institutional Review Board (IRB) Online Training & Certification
June 2015	Personal Nutrition Diploma
May 2015	HIPAA Training
April 2015	Handle with Care: Crisis Intervention & Behavior Management
July 2014	Trauma Focused Cognitive Behavioral Therapy Training
June 2014	National Provider Identifier
May 2011	Crisis Intervention Training Certification

## ACTIVITIES

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### 2014- Current **George Fox University, Newberg, Oregon**

- Clinical Advisory Council Member
- Community Gathering Team Leader and Attendee
- Gender and Sexuality Student Interest Group Member
- Multicultural Committee Participant
- Professional Development Student Interest Group Member
- Spring Banquet Committee Member

### 2012- 2014 **George Fox University, Newberg, Oregon**

- Community Gathering Team Member
- Gender and Sexuality Consultation Committee Member
- Military Student Interest Group Participant
- Multicultural Committee Participant
- Student Council Representative

## LEADERSHIP

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- American Psychology-Law Society (AP-LS) Campus Representative
- George Fox University Clinical Foundations Supervisor (Peer-to-peer)
- George Fox University Peer Supervisor (Two years)
- George Fox University Community Gathering Team Leader
- George Fox University Peer Mentor
- George Fox University Student Council Representative (Two years)
- Leadership Program Student Leader, YMCA

- Oregon Association of Contextual Science Student Representative of Oregon
- Portland Women's Leadership Conference Participant
- Student Body President & Volunteer Girls State Delegate (Secondary School)
- Young Women's Leadership Development with Oregon Psychological Association's President (2015), Mary Peterson, Ph.D, ABPP

## COMMUNITY SERVICE INVOLVEMENT

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### 2012- Current **Oregon Community Service**

- Community Garden Volunteer
- Gardening and landscaping for a local child abuse intervention center
- George Fox University Serve Day Participant
- Hope Unlimited TRAC Summer Camp Counselor
- Martin Luther King Day of Service Volunteer
- Tigard & Newberg Public Library Volunteer
- Volunteer for People's Organization of Community Acupuncture (POCA) and serve at local clinics in need of help.
- Volunteer for local psychology workshops.

## AWARDS & HONORS

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- Bradley Central Academic Letter and Bars Recipient
- Cleveland's Teen Board Presentee, Knoxville, Tennessee
- Kairos Scholars Honors Program Member
- Lee University Dean's List with Honors
- Lee University Summer Honors Participant
- Psi Chi Honor Society
- Psychology Cross-Cultural Participant (Austria, Germany, Switzerland)
- Ratterman-Shell Scholarship Recipient
- Tennessee Scholar
- Tennessee HOPE Scholarship Recipient

## PROFESSIONAL AFFILIATIONS

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2015-current	Collaborative Family Healthcare Association (CFHA)
2014-current	Oregon Chapter of ACBS (OACBS)
2014- current	Association of Contextual Behavioral Science (ACBS)
2013-current	The American Scientific Affiliation (ASA)
2013- current	Christian Women in Science (CWIS)

2012-current	Oregon Psychological Association (OPA)
2012- current	Christian Association of Psychological Studies (CAPS)
2012-2014	American Psychology-Law Society (AP-LS)
2010- current	American Psychological Association (APA)
2010- current	Psi Chi International Honor Society in Psychology

## PROFESSIONAL TRAINING & WORKSHOPS

April 2016	Focused Acceptance & Commitment Therapy (FACT) Workshop. (Portland, Oregon). Kirk Strosahl, Ph.D. & Patricia Robinson, Ph.D.
March 2016	Harnessing the Power of the Therapeutic Relationship Using Acceptance & Commitment Therapy (ACT) and Functional Analytic Psychotherapy (FAP). (Portland, Oregon). Joanne Steinwachs, LCSW.
March 2016	Christian Association of Psychological Studies (CAPS). (Los Angeles, California).
January-	Mindful Self Compassion for Psychotherapists and Other Caregivers.
March 2016	(Portland, Oregon). Ruth Leibowitz, Ph.D.
December 2015	Doing ACT with Children and Families. (ACBS webinar). Sacha Rombouts, Ph.D.
October 2015	Let's Talk About Sex: Sex and Sexuality with Clinical Application. (George Fox University, Graduate Department of Clinical Psychology). Joy Mauldin, Psy.D.
October 2015	Group Therapy Summit West. (Corvallis, Oregon).
July 2015	Learning the DSM-5. Cathy Moonshine, Ph.D., MAC, CADC III. (McMinnville, Oregon).
May 2015	Connection Matters. Oregon Psychological Association Conference (OPA). (Eugene, Oregon).
April 2015	Christian Association of Psychological Studies (CAPS) International Conference (Denver, Colorado).
March 2015	Spiritual Formation and Psychotherapy. Barrett McRay, Psy.D. (George Fox University, Graduate Department of Clinical Psychology).

- March 2015            Implementing Collaborative Documentation. Bill Schmelter, Ph.D. & Delmar Stone, LMSW (McMinnville, Oregon).
- February 2015        Credentialing, Banking, the Internship Crisis and other Challenges for Graduate Students in Psychology. Morgan Sammons, Ph.D., ABPP. (George Fox University, Graduate Department of Clinical Psychology).
- January 2015         ACT with Compassion: Acceptance and Commitment Therapy. Jason Lumoa, Ph.D. (Seattle, Washington).
- October 2014         Understanding and Treating ADHD. Erika Doty, Psy.D. (George Fox University, Graduate Department of Clinical Psychology).
- October 2014         Learning Disabilities and the DSM-5. Tabitha Becker, Psy.D. (George Fox University, Graduate Department of Clinical Psychology).
- September 2014      Working with Acceptance, Mindfulness, and Values in Chronic Pain: Advanced Clinical Skills for the Complex Chronic Pain Patient. Kevin E. Vowles, Ph.D. (Portland, Oregon).
- September 2014      Facetime in an Age of Technological Attachment. Doreen Dodgen-Magee, Psy.D. (George Fox University, Graduate Department of Clinical Psychology).
- August 2014          Trauma-Focused Cognitive-Behavioral Therapy. Medical University of South Carolina Web-Based Training.
- August 2013-         Weekly one hour didactic trainings focused on parenting strategies,
- August 2014          cultural diversity awareness, power differentials, assessment training, and supervision skill development. Joel Gregor, Psy.D (George Fox Behavioral Health Clinic).
- April 2014            Oregon Psychological Association Conference (OPA). (Portland, Oregon).
- April 2014            Building Your Skills In Acceptance and Commitment Therapy. Robyn Walser, Ph.D. (Portland, Oregon).
- March 2014            Healing Old Wounds: Working with Trauma. Elsbeth Martindale, Psy.D. (Portland, Oregon).
- February 2014        Acceptance and Commitment Therapy Founders' Boot Camp. Steven Hayes, Ph.D., Kirk Strosahl, Ph.D., Kelly Wilson, Ph.D. (Reno, NV).
- January 2014         The DSM-V. Jeri Turgesen, Psy.D. & Dr. Mary Peterson, Ph.D., ABPP (George Fox University, Graduate Department of Clinical Psychology).

- September 2013      Integrated Primary Care. Brian Sandoval, Psy.D. & Juliette Cutts, Psy.D (George Fox University).
- June 2013            The Person of the Therapist: How Spiritual Practice Weaves the Therapeutic Encounter. Brooke Kuhnhausen, Ph.D. (George Fox University, Graduate Department of Clinical Psychology).
- April 2013            Christian Association of Psychological Studies (CAPS) International Conference. (Portland, Oregon).
- March 2013            American Psychology-Law Society Conference. (Portland, Oregon Marriott Hotel).
- March 2013            Toward a New View of Intergenerational Trauma: Developing skills to work with Native American Indian Population. Eduardo Duran, Ph.D. (Portland Community College).
- January 2013          African American History, Culture, and Addictions & Mental Health Treatment. Marcus Sharpe, Psy.D. & Dannette Haynes, LCSW. (George Fox University, Graduate Department of Clinical Psychology).
- November 2012        Sexual Identity. Erica Tan, Psy.D. (George Fox University, Graduate Department of Clinical Psychology).
- October 2012          Treating Gender Variant Clients: Christian Integration. Erica Tan, Psy.D. (George Fox University, Graduate Department of Clinical Psychology).

## REFERENCES

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