DEPRESSION AND EVANGELICAL CHRISTIAN SPIRITUALITY:

EXPLORING A THEORETICAL MODEL

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ABSTRACT

While religious involvement, particularly intrinsic religiosity or spirituality, has shown a significant inverse relationship with depression, this relationship is complex and multifaceted and several decades of study have yet to reveal a clear pattern. This work is a survey of the current research on the etiology and symptomology of depression and its interaction with spirituality. This work is testing a new model that views the effects of depression on spirituality as a function of an individual's perceived relationship with God. A survey was distributed to a sample of 135 evangelical Christians. Depressed persons made up approximately 16% of the sample. An independent samples t-test demonstrated that depressed persons had significantly lower scores of spirituality than non-depressed persons. Depressed persons were more likely to indicate that they felt unloved by God or angry at God, indicators of relational disruptions similar to patterns seen in interpersonal relationships of those with depression.

DEDICATION

This work has been written Soli Deo Gloria – for the glory of God alone – and for his Church. Particularly, this work is dedicated to the number of Christians I have known who have fought their battle with depression like true soldiers. These men and women will ever continue to fill me with courage and hope. For all these saints – having done all, may you yet stand (Ephesians 6:13).

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LIST OF ABBREVIATIONS

BDI-II, Beck Depression Inventory II

BIDR, Balanced Inventory of Desirable Responding

CDC, Center for Disease Control

DSM-IV, Diagnostic and Statistical Manual of Mental Disorders, 4th Ed.

GED, General Educational Development Test

IM, Impression Management

REQ, Religious Experience Questionnaire

SDE, Self-Deceptive Enhancement

UCLA, University of California at Los Angeles

LIST OF SYMBOLS

β, Beta value from regression analysis

CHAPTER 1

INTRODUCTION

Depression, the most common of the psychological disorders, is on the rise. A World Health Organization study conducted in 2000 predicts that depression will be the second largest cause of disability for all ages and sexes by 2020, accounting for 15% of the total disease burden (Baetz, Bowen, Jones & Koru-Sengul, 2006). A 2010 study by Mackenzie et al. indicated that among college students, depression rates (assessed by the Beck Depression Inventory II) are at an all-time high – 25% for men and 26% for women. The annual UCLA survey of incoming college freshmen conducted in fall 2010 had similar indications: students self-reported their emotional health at an all-time low (Pryor, Hurtado, DeAngelo, Palucki Blake, & Tran, 2010). This presents psychologists with a unique challenge and opportunity – as the burden of depression increases, the call for informed, compassionate care grows ever greater. Clinicians and researchers alike need to rise to meet this challenge with solid, scientifically-based research and evidence-based practice in order to provide treatment for the millions experiencing this complex and debilitating disorder.

Unfortunately, despite decades of research on the subject, questions still abound concerning the nature, causality, and effects of depression in its many forms. Depression is a complex and multifaceted disorder. Counselor and physician John White warned, in 1982, that it "has many faces. It cannot be relieved on the basis of one simple formula, arising as it does by numerous and complex mechanisms, and plummeting sometimes to depths where its victims are

beyond the reach of verbal communication. There are mysteries about it which remain unsolved. No one theoretical framework is adequate to describe it" (White, 1982, p. 18). In spite of thirty years of research since that was written, psychologists have still not developed an all-encompassing theory of depression. To claim, therefore, that one theoretical approach explains all instances of depression, would be a mistake. Instead, one needs to tread lightly and humbly and remain open-minded as one surveys the current literature on depression and its causes.

Depression is certainly not a disorder from which religious persons are exempt. In a survey of ministers in the southeastern United States, respondents estimated that the incidence of depression throughout their congregations was 80-85% (Kramer, et al., 2007), and although religion has been shown to be protective against depression (Koenig, 2007, 2009), one in five persons in the United States will struggle with depression throughout their lifetime, regardless of religion (Nelson et al., 2009). Although a number of studies have found that religiosity does not increase the likelihood of depression (Richards, 1991), a study in Brazil found that a self-claimed evangelical association was associated with a greater frequency of depressive symptoms (Dalgalarrondo, Marín-León, Botega, Barros & De Oliveira, 2008). It is possible that evangelical Christians may even be *more* likely to experience depression than the average person.

This may be the reason that Alexander, in his 1844 work *Thoughts on Religious Experience*, calls for someone to pen "a volume…on the subject of religious melancholy, and such a volume is much needed, but it would be difficult to find a person qualified for the undertaking. We have some books written by pious casuists, and the subject is handled in medical treatises on insanity, but to do it justice, psychological knowledge must be combined with an accurate acquaintance with the experience of Christians" (p. 42). Since 1844, the situation has not been significantly altered. Christians with depression experience it in a way

unique to their religious beliefs, and a solid psychological understanding of this experience has yet to be attained.

There are several reasons this is the case. One is a failure of the psychological community to deal with issues of religion or spirituality. This is evident in an emphasis on scientific reductionism (born out of the Behaviorist perspective); an inattention to spirituality, despite its being a widespread part of the human experience; a dubious view of religious belief; and at times a downright animosity toward the religious perspective. The other side of this is a distrust of the psychological community by the religious community, refusal by religious persons to be open about their experience, and fear of pursuing psychological understanding of religious phenomena. But in most instances, the primary reason psychology lacks a solid understanding of the experience of religious persons that have depression is because such experience is as complex and varied as human experience in general. Psychological studies investigating religious topics have struggled with lack of consensus among terms, measures, and conditions; and even when these are controlled, studies at times at times produce conflicting results.

It is imperative, therefore, to begin this work with a definition of terms and a statement of perspective. For the purpose of this study, several key terms will need to be defined and operationalized:

1. Religiosity.

   Religiosity has been used to indicate everything from church attendance to moral behavior to religious beliefs and feelings. This work will apply a narrower definition of religiosity, which is organized religious participation – behaviors that occur in a traditional religious context (such as a church), with other believers, and are observable and measureable outward behaviors. This would include prayer, the

reading of scriptures, and attending services. Beliefs can be a part of this construct, so long as they are outward verbal affirmations of religious tenets. In this study, religiosity will be measured simply by church attendance.

2. Spirituality

   Spirituality is a broader and looser term than religiosity, used to encompass traditional and non-traditional religious participation and even non-religious concepts such as transcendence. For the present work, spirituality is defined as individual, subjective spiritual experience – in many cases, this refers to the individual's experience during religious events, but it may also refer to non-religious feelings of being connected to God or in tune with creation, regardless of religious participation. This study will operationalize spirituality within a religious context, since it is dealing with a religious population, by measuring it with the Religious Experience Questionnaire.

3. Depression

   Depression can refer to a spectrum of mood disruptions ranging from mild, long-term Dysthymia to intense episodes of Major Depressive Disorder. It can occur as a result of a traumatic life event, as a symptom of another psychological disorder, or with no precipitating circumstances whatsoever. For the purpose of this study, depression will simply be defined as a collection of depressed symptoms, regardless of the cause or intensity. For this reason, the non-capitalized, general "depression" will be used rather than Major Depressive Disorder or another DSM-IV diagnosis (American Psychological Association, 1994). This will be operationalized by participant's score on the Beck Depression Inventory II.

4. Evangelical

The Institute for the Study of American Evangelicals defines evangelicalism as having four specific "hallmarks": "conversionism, the belief that lives need to be changed; activism, the expression of the gospel in effort; biblicism, a particular regard for the Bible; and 'crucicentrism,' a stress on the sacrifice of Christ on the cross" (Eskridge, 2011). Any Christian church that places an emphasis on being "born-again," the gospel of Jesus Christ (his life, death and resurrection), and a special emphasis on the Bible meets the criteria of being "evangelical." This study presupposes that much of conservative Protestant Christianity in the United States falls under this heading, as well as some Catholic and Episcopal churches. This study operationalized this concept fairly simply, by recruiting participants from churches and organizations (Christian schools and campus groups) that were self-proclaimed "evangelicals." Although this may mean that certain participants disagree with this epithet or ideologically disagree with evangelicalism, if they are attending an evangelical church or school, we consider them to be within the evangelical community, albeit a dissenter within that community.

This work is written from the perspective of an evangelical Christian attending an evangelical Christian church; as such, this work presupposes the potential for "non-secular" variables to be factors, that spiritual endeavors are not simply illusions, and that religious involvement, complex as it may be, is not a psychologically dangerous endeavor. Furthermore, this work does not endeavor to explain spiritual phenomenon in terms other than spiritual, attempting to avoid methodological reductionism; and hopes to present the religious community in a respectful and truthful light.

This work is a step toward the goal first enunciated by Alexander in 1844, to place the experience of evangelical Christians within the context of modern psychology. It will survey the current state of the literature on depression, its probable causes, and its relationship with spirituality. It will examine the religious literature and traditional evangelical understanding of the relationship between depression and spirituality, with an emphasis on the experience of evangelical Christians. It will then analyze several studies to illustrate the difficulties of understanding the current data and the possible interpretations of the current situation. Finally, it will present original research concerning the depression-spirituality relationship, suggest directions for future research, and argue for an interpretation of the data presented.

CHAPTER 2

LITERATURE REVIEW

Understanding Depression

What is “depression”? The DSM-IV diagnoses the depressive disorders simply by the presence of a cluster of symptoms: depressed mood; markedly diminished interest or pleasure in all, or almost all, activities; significant weight loss or gain; insomnia or hypersomnia; either physical agitation or retardation; fatigue or loss of energy; feelings of worthlessness or excessive or inappropriate guilt; diminished ability to think or concentrate; and finally, recurrent thoughts of death or suicide. A two-week stint of any five out of those nine symptoms garners a diagnosis of a major depressed episode. Is such an approach appropriate for what Styron called “a veritable howling tempest in the brain” (1990, p. 115)? It seems the equivalent of labeling a thunderstorm based on the presence of clouds, rain, and lightning, but with no mention of the high and low pressure systems that led to its development, or the intensity of the wind and rain. Surely there is much more to the picture of depression than simply its symptomology.

Furthermore, Lyton and Blatt (2007) suggest that the DSM-IV emphasis on consensus-chosen cutoffs rather than a research-driven continuum creates arbitrary categories, separating diagnoses that may really have the same underlying etiology and limiting research on comorbidity. Perhaps, in the case of depression, a better approach would be the one currently taken with Autistic Spectrum Disorders, another cluster of psychological disruptions that seem to share an unknown etiology. Considering depression as a continuum rather than diagnoses

belonging to discrete categories would make more sense of the confusing conglomeration of symptoms, which currently include either/or symptoms like hypersomnia/insomnia. Acknowledging that depressive disruptions in the normal pattern may range from short periods of sadness to Major Depressive Disorder may make more sense of the research data, and provide a platform for researchers to begin exploring etiology more thoroughly.

The multifaceted nature of depression makes it difficult to determine its etiology (France, Lysaker & Robinson, 2007), and the wide spectrum of depressive disorders continue to baffle researchers. Does a short period of sadness really share the same cause as full-blown clinical depression, or, on the other hand, are individual differences so great that each person's diagnosis is completely unique? Styron, in his poetic way, suggests that determining the cause of an individual's depression will "likely forever be an impossibility, so complex are the intermingled factors of abnormal chemistry, behavior, and genetics. Plainly, multiple components are involved—perhaps three or four, most probably more, in fathomless permutations" (Styron, 1990, p. 115). Research seems to bear out this phenomenological assertion: numerous surveys of the literature on depression reveal that studies often produce conflicting or at least confounding results (Dew et al., 2008; Spielmans, Bergman & Usitalo, 2011). Is there, then, any hope of determining a probable cause?

The answer to this question lies not in research, but in theory. Much of the current research on the etiology of depression has more truly been researching the effects of treatment, functioning under the assumption that what makes depressed people better must be related to what made them depressed in the first place. This, however, may not be the case – in fact, it is akin to the assumption that an infection is caused by a lack of antibiotics. Without an overarching theory to guide researchers, depression research becomes a study of "what works"

rather than answering causality questions. Although it may be argued that healing depressed persons is more important than determining the cause of depression, understanding the etiology of depression will most certainly contribute to more effective treatments.

So far, several neurological pathways have been shown to be are associated with depressed symptoms (McNeal & Cimbolic, 1986). Studies with antidepressant drugs indicate dopamine, serotonin and norepinephrine as the neurotransmitters most salient in depression; the adrenal-pituitary-hypothalamic axis is most likely involved (Dunlop & Nemeroff, 2007). Furthermore, these pathways may be interactional, creating an even more complex relationship (McNeal & Cimbolic, 1986). Another interesting facet of this relationship is that psychotherapy has been shown to be as effective as medications, not simply in alleviating the symptoms of depression, but in increasing dopamine, norephinephrine and serotonin levels and removing cognitive distortions (McNeal & Cimbolic, 1986; Spielmans, Berman & Usitalo, 2011), although the most effective treatment still remains some combination of the two.

Because of the inter-relatedness of symptoms and the way depressed persons respond similarly to myriad different treatments, the best explanation of depression etiology seems to be one that involves a bio-psycho-social model, incorporating a holistic picture of a human being and the complex interactions between systems (Accortt, Freeman & Allen, 2008). Major Depressive Disorder, like other organically-based disorders such as Schizophrenia and Manic-Depressive Illness, tends to run in families, yet life stress has been shown in numerous studies to predict the emergence of depression (Eberhart, Auerbach, Bigda-Peyton & Abela, 2011). For this reason, many psychologists hold to a diathesis-stress model of understanding depression: although psychosocial factors such as stress or cognitive distortion may lead to the emergence of depression, the underlying diathesis, or predisposition, whether that be genes, personality, or

coping mechanisms, is the primary cause (Gutman & Nemeroff, 2011; Ingram & Luxton, 2005). This model enables researchers to infer the direction of relationships and build hypotheses to test this theory – and, most importantly, it gives one a framework within which to understand depression's complex and interconnected web of symptoms.

Religious Depressive Symptoms

When it comes to symptomology, the myriad depressive symptoms often take a relational bent. As a result of depressed mood or anhedonia, a patient with depression may withdraw from social situations that were originally a source of pleasure. Feelings of guilt or worthlessness also contribute to social withdrawal, as well as loss of energy and hypersomnia. The end result is that persons suffering from deep depression often withdraw almost completely from social relationships, sometimes even shutting out close friends and family, while feeling a deep desire for companionship and overwhelming loneliness (Granek, 2006). This effect is even greater when the person is also suffering from anxiety, making social relationships a source of suffering rather than relief (Granek, 2006). This withdrawal can be both a cause for dysfunctionality and an end result of faulty cognition (Peteet, 2010). Interestingly, this withdrawal is often seen not only on a social front, but a religious one as well.

For persons of religious faith, feeling relationally disconnected often finds itself expressed religiously, in a sense of feeling far from or abandoned by God. This is particularly salient for evangelical Christians for whom their most important relationship is their relationship with God. Peteet writes, in his counseling work *Depression and the Soul*: "depressed individuals tend to withdraw from important sources of support because they feel unloved or judged by others, or burdensome to them. Spiritual and/or religious individuals who become depressed may

feel not only distant from God but punished and judged by him. Pargament has referred to this as 'negative religious coping'" (2010, p. 36).

A number of studies have observed this phenomenon. A study entitled "Christians and Depression" found that those with depression "may communicate… experiencing distance from God," and argued that in light of the relational nature of the disorder, it seems plausible – in fact, as the study found, it was likely – that depression could powerfully affect a depressed person's perceived relationship with God (White et al., 2003). In another study focused on female adolescent spirituality, after examining BDI-II scores and measures of spirituality for 615 adolescents, the authors concluded that while spirituality "experienced in a personal way through a relationship to God" may be protective against developing depression, depression may stem from and/or result in disruptions in relational spirituality, particularly in girls (Desrosiers & Miller, 2007). A study measuring 117 adolescent psychiatric outpatients, the majority of whom were evangelicals, found that depression was most highly related to "feeling abandoned or punished by God" (Dew, Daniel, Armstrong, Goldston & Koenig, 2008, p. 247). An evangelical pastor surveyed in a focus group study reported that, "The phrase I hear [from those with depression] over and over again spiritually is, 'I can't hear God and see God. I don't know how to experience God'" (Kramer et al., 2007, p. 128).

Furthermore, Christians may communicate anger with or unforgiveness toward God, also correlated with depressed symptoms (Strelan, Acton & Patrick, 2009). In a study conducted with 437 college students, Exline and colleagues found that anger toward God – both situational and lifetime prevalence – explained unique variance in depressive symptomology in participants (Exline, Park, Smyth & Carey, 2011). This held true even when the analysis accounted for other variables like angry mood, gender and age. Anger toward God has also been linked with poorer

adjustment to catastrophic life events, such as bereavement and cancer. Additionally, predictors of anger at God were the same as those predicting interpersonal anger, including perceiving God as cruel, seeing self as a victim, and attributing negative events as God's doing (Exline, Park, Smyth & Carey, 2011). As a result, the individual feels that his or her relationship with God has been damaged or that his or her trust in God has been broken. This can become a vicious, devastating cycle of misery:

> Depression can impair an individual's capacity to feel, think and act in ways that normally characterize his spirituality. He may lack access to positive emotions such as trust, hope, love or joy. His thinking may be negative, cynical, hopeless, nihilistic, or even psychotic. And he may be unable to initiate or tolerate close relationships. Loss of a valued spiritual life can contribute to further depression and spiritual despair (Peteet, 2010, p. 61).

In the religious arena, there is a plethora of historical literature dealing with depression and the effect it could have on an individual's spiritual experience. While the seventeenth and eighteenth-century Puritans had the most substantial body of literature devoted to the study of what was then called "melancholy," even some more medically focused texts acknowledged the role the disorder could play in spirituality. In the 1691 text *The Anatomy of Melancholy*, Richard Burton quotes an even earlier source as saying that "melancholy often works religious despair" (p. 358). Puritan pastors noted the presence of depression in their congregations and the distinctly religious tone of their parishioner's complaints: "They generally apprehend themselves to be singled out as the marks of God's particular displeasure" (Rogers, 1691, p. 345), and often the presenting complaint was being "damned" or abandoned by God (Lake, 2005). One Puritan pastor endeavored to establish a school of psychology because so many persons were coming to him with religious symptoms of what he deemed was really depression (Jebb, 2001). A number of more modern counseling texts have indicated that spiritual distress is a significant facet of

holistic care and should be addressed in treatment (e.g., Kirwan, 1984; Koenig, 2009; White, 1982), while other popular books have been written on the topic of what is now called "spiritual depression" (Lloyd-Jones, 1965; Piper, 2001). These terms seem to be best understood as cultural idioms of distress, as Christians struggle to communicate their depression to their spiritual leaders.

Unraveling a Complex Relationship

Like any other facet of depression, its relationship to religious variables seems to be incredibly complex; as a result, studies investigating this relationship have found as many confounding and conflicting results as those investigating the nature and etiology of depression. One study, which analyzed data from 70,884 Canadians ages 15+, found that, controlling for demographic, social, and health-related variables, frequent worship attendance was associated with significantly fewer depressive symptoms, but those who perceived themselves as being spiritual/religious or highly valued faith had a higher levels of depressed symptoms! This caused the authors to conclude: "It is evident that spirituality/religion has an important effect on depressive symptoms, but this study underscores the complexity of this relationship. Longitudinal studies are needed to help elucidate mechanisms and the order and direction of effects" (Baetz et al., 2004, p. 818).

The relationship is exceedingly complex. Although prominent psychologists have postulated that religion itself can be a cause of mental illness and neuroticism – Ellis argued that it was irrational (1962), Freud that it was an illusion (1928) – that hypothesis has been largely discarded in recent studies, primarily because these assertions have not been supported by the research evidence (i.e., Hodges, 2002; Pfeifer & Waelty, 1995). A study conducted at the

University of Basel comparing 45 depressed persons with 44 healthy controls found no correlation between neuroticism and religion, and argued that "it is not primarily religion that causes illness, but it is illness that makes the practice of religion difficult. Thus, 71% of the religious patient group consented to the statement: 'my psychological problems make it difficult for me to live my faith in the way I would like to,'" while the healthy group was far more likely to agree that religion could be a cause of psychological illness (Pfeifer & Waelty, 1999, p. 43).

Koenig has speculated that the relationship between spirituality and depression might be moderated by the intensity of the disorder itself – lesser depression may drive persons deeper into the security of spirituality, but as the disorder progresses, causing patient fatigue, or becomes more intense, persons experience a decline in spirituality (2007). Pfeifer and Waelty agree with this, stating that "the primary factor in patients who display religious conflicts and anxieties seems not to be the degree of religious commitment itself but rather their underlying psychopathology" (1999, p. 44). This is especially significant if one's theoretical framework understands depression to be a spectrum rather than separate categories: studies examining this relationship may fail to differentiate between meaningful levels of intensity and thus fail to find significant results.

This has certainly been the case in a number of studies. Although a number of correlational studies have been conducted inversely relating depression to various aspects of religious attendance, commitment, and beliefs, lack of continuity between measures or even between constructs makes consensus difficult (Dew et al., 2008; Nelson et al., 2009). Most studies have focused on religiosity, or a person's religious behaviors and beliefs, but these can vary between religious groups and individuals, and beliefs and behavior are often congruent (see, for example, Farmer, Trapnell & Meston, 2009). Furthermore, in a quantitative study of college

students at a conservative evangelical college, respondents indicated that it was not their beliefs or behavior that changed as a result of depression, but simply their emotional, or affective experience of God (Klukow, 2011).

Nelson et al. postulate that using the construct of spirituality, "a subjective experience that can exist both inside and outside a religious framework," may illuminate this confusing relationship better than religiosity, "organized behaviors intended to put spirituality into practice" (2009, p. 2). In fact, in a study involving male prostate cancer patients, Nelson et al. demonstrated that the relationship between a participant's scores on scales of religiosity and depression was almost completely mediated by scores on a scale of spirituality (2009).

Spirituality is a relatively young concept in the field of Psychology of Religion, but is quickly gaining ground as a promising universal construct (Zinnbauer & Pargament, 2005). Because it is experiential, rather than belief-focused, measures are more universal and therefore more generalizable across demographic groups and between studies. Furthermore, "spirituality" lacks the negative connotations an individual may have with "religion", making it a more neutral and inoffensive term better attuned to research. Unfortunately, some of this inoffensiveness is due in part to its ambiguity; research needs to carefully define the construct being studied and make certain this is a definition the population under scrutiny would agree with. It is for this reason that the current study is focused particularly on evangelical Christian spirituality rather than universal spiritual experience. Finally, recent cultural shifts, including postmodernity and religious pluralism, make value- and tradition-neutral "spirituality" a much more attractive concept in recent years, as evidenced by the abundance of recent books written to address non-traditional spirituality (e.g., McColman, 2008; Miller, 2003; Pardo, 2007; Walsch, 1996).

Spirituality and Evangelicalism

The significance of the construct of spirituality may be most salient in the evangelical Christian community, which considers the individual's subjective experience of God to be a goal of faith endeavors. This emphasis on experience may also make evangelicals an ideal group to focus upon in the study of spirituality and depression – such experiential emphasis may be what places spirituality in the realm of "relationships" (a "relationship with God"), and thus makes it vulnerable to the social breakdown so common in depressed persons (see, for example, the results of a number of studies that seem to indicate that Protestants, evangelicals particularly, consider their connection with God to be a "relationship": i.e., Dalgalarrondo, Marín-León, Botega, Barros & De Oliveira, 2008; Exline, Park, Smyth & Carey, 2011). Furthermore, evangelicals score highly on scales of intrinsic religiosity, a construct involving internal motivation and personal conviction for religious endeavors, and one that has consistently been negatively correlated with depression (e.g., Ji, Perry, & Clarke-Pine, 2011).This juxtaposition makes them not only an intriguing subject for research, but perhaps an ideal population from which to discern the nature of the depression-spirituality relationship.

The aforementioned Puritans, a fervent group of evangelical Christians, had a particularly experiential brand of evangelicalism, and interestingly, also had an extraordinarily high incidence rate of depression, even compared to other Christians of their day (Sena, 1973). Although we cannot infer causality from the co-existence of these two facts, it does make their understanding of the relationship between depression and spirituality of interest, and most importantly, seems to infer that spirituality may indeed be the missing link between religion and depression. In more recent times, the postmodern cultural shift has brought about a resurgence of relational faith and a re-emphasis on spiritual experience, most noticeably among young

Christians, placing spirituality back in the heart of the Christian faith (Jones, 2003; Kimball, 2004; Yaconelli, 2006). This also places it directly in the center of any study of Christians and depression.

This emphasis on experience and relationship can be negative as well as positive. In some cases, this emphasis may lead to a higher risk of depression. Meador and colleagues found that, among 2,850 adults in a North Carolina community, those with a Pentecostal affiliation – which not only places great emphasis on experience, but also on being healed by faith – were three times more likely to develop depression than their religiously-affiliated counterparts, despite controlling for a number of other possible factors (Meador, Koenig, Hughes & Blazer, 1992). White et al.'s research has demonstrated that the reaction of the Christian community to the depressed individual may play a significant role in the individual's own response (2003).

Despite both the overwhelming amount of data that supports a complex and multifaceted etiology of depression and the long history of Christian scholarship arguing that spiritual distress can be a symptom of depression, modern surveys of the opinions of the general public often indicate that less-informed views continue to persist. A survey in Australia found that nearly 40% of the religious respondents believed that demon possession was a cause of depression (Hartzog & Gow, 2005) and many Christian counselors believe that "depression is etiologically spiritual" (Armentrout, 2004) or that the cause of depression is sin (Adams, 1986). As a result, the reaction of the Christian community to a believer struggling with depression is often less than helpful. Well-known Christian authors and pastors, with varying degrees of subtlety, espouse the mindset that even if the depression is not the person's own fault, at the very least it is their responsibility to fix it through their own willpower (e.g., Piper, 2001; Welch, 2000).

White puts it this way:

> Pastors and religious counselors have their own ways of doing the same thing. The words they use may be different, but they are words that cast the blame on the depressed person, who is described as "lacking in faith," "full of self-pity," "unwilling to rejoice in the Lord," "giving place to the devil," or "needing a kick in the pants." Sometimes the pastor is right. But there are other times when the real problem lies in the pastor's inadequate understanding (White 1982, p. 20).

Peteet expounds on how damaging this can be: "guilt can weigh more heavily on depressed individuals when experienced in religious terms. A conviction that God is judging them harshly can be worsened if their spiritual leaders treat their depression as a lack of faith, or expect them to simply repudiate a problematic behavior" (2010, p. 55). Furthermore, the religious etiological attributions of pastors and other religious leaders can influence how these leaders choose to help the suffering individual (Payne, 2009).

Although the possibility that some depressions originate in the soul cannot be ruled out, and certainly some depressions do stem from guilt over a particular sin, more likely this is a cyclical relationship, originating from a combination of any number of pathways in the brain, body, and soul, and displaying itself in depressed symptoms, which then in turn effect the whole person: body, mind and soul (see Figure 1). This may explain some of the complexity of the religion-depression relationship, particularly if the depressed person is associated with a religious community that harms rather than helps.

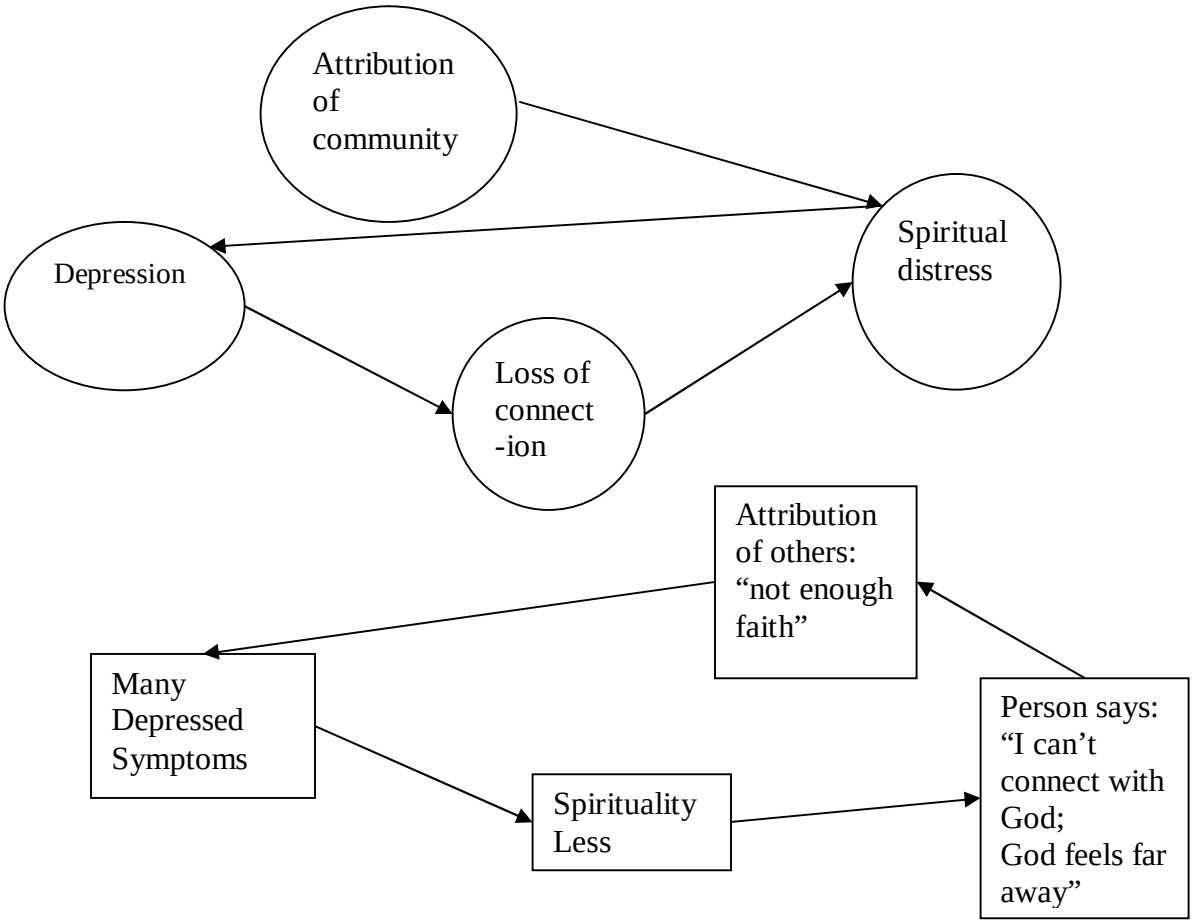

Figure 1

Path Diagram of Relationship of Depression to Spirituality

A New Model

In order to better understand the relationship between depression and spirituality, a new model is needed, one that takes into account the current state of research, the experience of Christians, and the conflicting results of numerous studies.

The theoretical model this work sets forth includes several key components, each backed by psychological research and Christian theory.

1. Depression affects the relationships of those who have depression, through a feeling of social isolation, disconnection, and loneliness, independent of the physical circumstances.
2. Christians, particularly evangelical Christians, believe their connection with God to be a "relationship" and experience it as such. This is best described as "spirituality," although it has elements of religiosity.
3. When evangelical Christians feel depressed, their experience of God is affected similarly to other relationships, regardless of belief or practice.
4. This causes further discouragement and depression, and the attributions of others, if negative, can also feed this cycle.

The Current Study

The current study is seeking to investigate the nature of the depression-spirituality relationship and test the new model propounded above. For the sake of convenience, and controlling for extraneous variables, one particular community, the highly religious community of Chattanooga, Tennessee, will be used for testing this model.

Unfortunately, when dealing with any study of depression, difficulties arise as soon as causality is added to the picture. For one, ethical concerns mean that one cannot simply take non-depressed persons, empty their brains of serotonin, and then measure their sense of connectedness with God. Furthermore, since spirituality encompasses a variety of experiences, individuals may differ on a measure of spirituality simply because of differences in personality, affect, and desire for spirituality. What is needed, therefore, is longer-term self-report data that is prospective, detailed, and collected on a regular basis to minimize error and measure behavior

that occurs only occasionally. Rosenthal and Rosnow (2008) recommend having respondents keep a journal of relevant information.

Journaling has long been a part of the Christian experience, and Christians are often urged to keep a daily journal of prayers and spiritual experiences. Journaling has also been used for a wide range of ages to measure a number of health behaviors, from parenting to adapting after surgery (Furness & Garrud, 2010; Nicholl, 2010). More importantly, they have been successfully utilized to measure mood and behaviors related to depression, without evidencing a significant attrition factor related to depression severity or personality (Hankin, 2010; Hopko & Mullane, 2008).

The journal thus plays the role of the researcher in a laboratory, observing the participant and keeping track of possible causes for their spiritual experience. Participants filling out a journal can give the researcher more in-depth information than could be obtained through a simple survey, and the longer time frame gives the researcher the opportunity to collect data on behaviors and feelings that may not occur on a regular basis. Giving a pre-test of spirituality and depression provides a baseline for each individual, and then the journal allows for the researcher to measure each individual's ebb and flow of spirituality and depressed symptoms.

This method enables the research questions to be addressed more in-depth than alternative methods would allow, perhaps allowing the researcher to determine if evangelical Christians experience a decrease in spirituality when they experience depression. That is to say, how is an evangelical Christian's subjective experience of being connected to God influenced by the presence or absence of depressed symptoms?

The study upon which this work is based is the preliminary research for just such a journaling study. The goal of the study was to first confirm or deny the hypothesized theoretical

model of spirituality and depression by taking a sample of local evangelical Christians and administering a survey. Secondly, it was to assess the current relationship between spirituality and depression in this population, and lastly, to identify persons who would be willing to engage in the process of journaling and also to provide a baseline for those persons. At the end of the study, a post-test will assess whether group means changed or individual scores fluctuated significantly.

It was hypothesized, therefore, that there would be a significant inverse relationship between depression and evangelical Christian spirituality, and that this would affect a significant number of evangelical Christians. It is hypothesized that this relationship is manifest in a sense of disconnection from God, lesser positive experiences of God, and greater negative experiences of God. Furthermore, it is hypothesized that this lesser experience of spirituality is a cause of distress to evangelical Christians. And finally, it was hypothesized that the nature of this relationship would be cyclical, one leading to the other in a cycle. Depression, whatever its etiology, causes evangelical Christians to feel disconnected from God, and feeling disconnected from God causes evangelical Christians to feel more depressed. This last hypothesis will not be tested until later in the research.

CHAPTER 3

METHOD

Participants

Participants were 135 Chattanooga area residents and students from The University of Tennessee in Chattanooga and Covenant College in Lookout Mountain, Georgia. Participants were recruited from psychology classes and area churches. Psychology students were offered extra credit for participating; church members were not offered any incentive. All participants were churchgoers; 50 separate churches, representing at least 11 denominations ranging from Catholic to Presbyterian to Baptist to Seventh-Day Adventist, were reported. These churches spanned Chattanooga, North Georgia, and surrounding areas, casting a wide geographical net that captured persons living on Signal Mountain, downtown Chattanooga, Red Bank, and Ooltewah, Tennessee; and Lookout Mountain, Flintstone, Chickamauga and Dalton, Georgia.

The age range of respondents was 18-84, and the median age was 29.5. The respondents were 71.9% female and 29.1% male; 91.1% Caucasian, 3.7% African American, 2.2% Hispanic/Latino, 1.5% Asian, and 1.5% chose not to respond.

Income categories ranged from below $7,000 annually to over $100,000 annually. The highest percentage of respondents fell in the higher income ranges, with 28.9% reporting a household income over $100,000 annually and 20% reporting an annual household income between $60,000 and $100,000. Eighteen point five percent reported an annual household income of $30,000 - $60,000; 11.9% an annual household income of $15,000 - $30,000; 5.9% an

annual household income of $7,000 - $15,000; and 8.9% an annual household income under $7,000.

Highest level of education attained was also high; only 1 respondent (0.7%) reported no high school diploma and 4.4% reported a doctorate or equivalent. In-between, 8.9% reported a high school diploma or GED; 34.8% reported that they had completed "some" college or technical school; 32.6% had completed college or held a technical school diploma; and 17.8% had a master's degree or equivalent.

Although no statistics are available specific to the Chattanooga-area evangelical community, these percentages are thought to roughly approximate the demographics of that population; with the exception of the low percentage of African American respondents, since African Americans are the U.S. ethnicity with the highest church attendance and there are a significant number of African Americans in Chattanooga (Jones, 2010).

Materials

Participants completed the Beck Depression Inventory II (Beck, Steer & Brown, 1996) and the Religious Experience Questionnaire (Edwards, 1976), along with a demographic page asking for age, gender, socio-economic status, and race. They also completed a measure of social desirability, the Balanced Inventory of Desirable Responding (Paulhus, 1991) to control for social desirability bias.

The Religious Experience Questionnaire asks questions pertaining to an individual's affective, personal experience of God as loving and close. There are 12 Likert-style questions with a 7-point scale ranging from "never" to "always." Sample items include, "My relationship

to God is characterized by close fellowship" and "I experience feelings of anger or resentment toward God."

The Beck Depression Inventory II was chosen because it is one of the national standard measures of depression. Based on their experience in the last two weeks, individuals rate their feelings and behavior on a 0-3 point scale. Sample items include "I have not noticed any change in my sleeping pattern" to "I sleep most of the day/I wake up 1-2 hours early and can't get back to sleep."

The Balanced Inventory of Desirable Responding is a 40-question 7-point Likert scale measuring presentation bias and self-deception enhancement. Sample items include "I never regret my decisions" and "I always declare everything at customs."

The reliability for each of these measures is strong; alphas are .80 (Balanced Inventory of Desirable Responding) and .69 (Beck Depression Inventory II) (Li & Bagger, 2007; Underwood & Teresi, 2002). There is no normative information on the Religious Experience Questionnaire, but construct validity is supported by the fact that significant positive correlations have been found between the REQ and an individual's image of God as loving and benevolent (King & Crowther, 2004).

Procedure

The surveys were administered in a variety of settings. The most common setting was in a small group environment since this was a natural meeting environment for most churches. Church groups took the survey during their regularly scheduled small group meetings at homes and church classrooms. Additionally, some churches opted to take the survey through an online

survey site. The link to this site was distributed through email by pastors and in one case by a Christian school principal.

Surveys were also distributed through the psychology departments at the University of Tennessee in Chattanooga and Covenant College in Lookout Mountain, GA. At Covenant College the surveys were distributed by a work-study student and free coffee was given to participants who completed a survey. At the University of Tennessee Chattanooga, the surveys were offered online and extra credit was given in Psychology 101 classes to those who participated.

At each point of survey distribution and administration, the only constraint for participants was that they attend a Chattanooga-area church. No pre-test was administered nor were participants screened for any previous diagnosis or a particular level of church participation.

Participants signed the informed consent document and completed the survey, which was then returned to the research team either by hand or by mail, and was then kept in a locked office cabinet until all administrations of the survey had been completed. At that point, the responses were entered into a statistical package for analysis.

CHAPTER 4

RESULTS

The Balanced Inventory of Desirable Responding was used to filter for social desirability bias and assess its impact upon the scores of spirituality and depression. The inventory is made up of two scales, the Self-Deceptive Enhancement scale and the Impression Management scale. The highest possible score for each scale is 20. The group mean for the SDE scale was very low, 4.62, with a standard deviation of 2.89. This is lower than norms (Paulhus, 1991). The group mean for the IM scale was high, 12.6 with a standard deviation of 3.28. Norms range from 4.3 to 6.1 for group means (Paulhus, 1991).

The BIDR scores were slightly correlated with scores on the REQ, $r(133) = .222$, $p = .01$, and when parsed into its respective scales and correlated with the REQ, it is clear that most of this correlation is because of the IM scale, $r(133) = .377$, $p < .001$ rather than the SDE scale, $r(133) = .187$, $p = .029$.

Although there are no national averages to compare to, this sample's average score on the REQ was 65.7, with a standard deviation of 9.45. The lowest score was 29, and the high score was 84, which is the highest possible score on the scale. 62.4% of the respondents scored in the top 25% of the scale (a score of 63 or above). Only 2.3% of the respondents scored below a 42, which is the 50% mark.

Out of 135 respondents, 23 scored a 17 or higher on the Beck Depression Inventory II, indicating at least mild depression. This was 17% of the total sample. When differentiated by gender, the prevalence of depression for men was 18.4%, for women, it was 16.5%.

For comparison, CDC statistics indicate that the national prevalence of depression is 9.1%, and data for Tennessee indicate that the regional prevalence of depression is 11.0%, among the highest in the country (it ranks 7th out of all 50 states and Puerto Rico, the highest being Mississippi at 14.8) (Centers for Disease Control and Prevention, 2010).

Multiple regression was utilized to determine what variables predicted scores on the REQ. Both scales of the BIDR proved to be insignificant factors: β = .128, t(133) = 1.416, p = .159 for the SDE scale, and β = .035, t(133) = .393, p = .695 for the IM scale. Gender, too, was not a significant factor, β = .023, t(133) = .291, p = .772. Age was found to be a significant factor, β = .269, t(133) = 3.092, p = .002; with scores on the REQ increasing with age. Controlling for the covariance of spirituality, age was also a significant factor in predicting depression, β = -.205, t(133) = -2.399, p = .018.

Controlling for the effect of age, scores on the BDI-II were significant in predicting spirituality, β = -.260, t(133) = -3.132, p = .002, with scores on the REQ decreasing by .26 for each change in BDI-II scores. No other factor was found to be significant in the regression analysis, although there was a slightly higher incidence of depression in the lower income and educational brackets.

After determining that the BDI-II scores were significant in predicting scores of spirituality, each individual question on the REQ was entered into a linear regression equation, along with age. The model accounted for 24.3% of the total variance of depression scores, R^2 = .243, F(13, 133) = 2.963 p = .001. The coefficients of this model are summarized in Table 1.

(The actual text of the questions is in Table 2, so this text was not reproduced in Table 1. Instead, the questions are indicated by number.)

The individual questions and their correlations with participant's scores on the BDI-II are shown in Table 2.

An independent samples t-test was conducted to determine if there was a significant difference in mean spirituality scores between individuals who met the criteria for depression (BDI-II score greater than 16) and those who did not. The analysis indicated that the difference was significant, $t(133) = 2.814$, $p = .006$, with those in the depression group scoring, on average, almost 6 points less on the REQ than those in the non-depressed group. The mean spirituality score for the depressed group was 60.6, the mean score for the non-depressed group was 66.6. The two groups also differed significantly on age, $t(132) = 2.267$, $p = .029$. The median age of those in the depressed group was 24, the median age of those in the non-depressed group was 33.

Table 1

Coefficients from the Multiple Regression Analysis Using Individual Questions on the REQ

	Unstandardized Coefficients		Standardized Coefficients	t	Significance
	B	Std. Error	Beta		
(Constant)	32.320	5.234		6.175	.000
Age	-.076	.036	-.182	-2.103	.038
REQ1	-1.186	.775	-.169	-1.531	.128
REQ2	-.193	.713	-.029	-.271	.787
REQ3	-.886	.667	-.127	-1.329	.186
REQ4	.653	.785	.091	.832	.407
REQ5	-.616	.517	-.106	-1.192	.235
REQ6	.298	.737	.045	.405	.686
REQ7	-1.292	.608	-.199	-2.125	.036
REQ8	.163	.809	.022	.202	.840
REQ9	.574	.796	.090	.722	.472
REQ10	.216	.843	.034	.257	.798
REQ11	-1.217	.958	-.187	-1.270	.207
REQ12	-.179	.754	-.026	-.238	.812

Table 2

Correlation of Single Items on the REQ with Beck Depression Scores

	Pearson Correlation	Significance (2-tailed)
1. I experience an awareness of God's love.	-.290	.001
2. I pray privately in places other than church.	-.091	.292
3. I experience feelings of anger or resentment toward God.	-.258	.003
4. I ask God to forgive my sins.	-.092	.290
5. I am afraid that God is going to punish me in some way.	-.249	.004
6. When I have decisions to make in my everyday life, I try to find out what God wants me to do.	-.119	.169
7. I experience the feeling that God is so big and important he doesn't have time for my personal problems.	-.357	.000
8. I feel very close to God in prayer, during public worship, and/or at other important moments in my life.	-.159	.065
9. I experience awareness of God's influence in my daily life.	-.156	.071
10. When I pray to God, I feel like I'm having a conversation with a close friend.	-.184	.033
11. My relationship to God is characterized by close fellowship.	-.196	.023
12. I find myself doubting that God actually exists.	-.271	.001

CHAPTER 5

DISCUSSION

Remarkable Findings

The results of the study were remarkable in several ways. Not only was the relationship between depression and spirituality negative and significant, as hypothesized, but the prevalence of depression in the sample is of special interest. Far from demonstrating that religious involvement on its own decreases the likelihood of depression, the prevalence of depression in the sample was incredibly high. This seems to indicate that either the evangelical religious community in Chattanooga has a much higher prevalence of depression than the national norm, or that such individuals were drawn to participate in the survey because of the subject matter. The method of sampling (sampling both groups and individuals, at numerous institutions and through both paper and internet surveys) seems to rule out the latter option, particularly since it is expected that those with deep depression would be less likely to participate in social and academic endeavors, and thus would be absent from many of the contexts in which the survey was administered. It seems far more likely that evangelicals in Chattanooga, for the reasons postulated in the hypothesized model, have a much higher prevalence of depression than the larger community.

Additionally, finding that gender was not significant was unusual. It has been demonstrated in many studies that gender is a significant factor in depression likelihood (see Accortt, Freeman, & Allen, 2008, for review), yet the current study found it to be a non-

significant factor. Men and women did not differ significantly either in spirituality or in depression scores. Further research is needed to investigate why this is the case.

The group mean for the REQ was high, and this seems to indicate that the sample was of highly spiritual persons. This provides support for the argument that evangelical Christians are a highly experiential branch of Christianity and that spirituality is not a construct that only applies to non-religious persons.

The high group mean for the IM scale on the BIDR was unusual, but not unexpected, especially considering the relationship between the IM scale and the REQ. The items contained on the IM scale are questions of behavior, particularly moral behavior – for example, "I never swear," or, "I always obey laws, even if I am not likely to be caught" – and it is to be expected that highly religious individuals, who would score highly on the REQ, may be able to honestly answer "not at all true" to many of these items. In fact, this would indicate that such persons were merely acting upon their religious convictions.

The study's hypothesis that there would be a significant inverse relationship between depression and spirituality was supported by the research evidence. Furthermore, the depressed and non-depressed groups differed significantly on their mean scores of spirituality, which may indicate that the relationship is not simply linear, but that a significant cutoff for depression exists and is relevant to the depression – spirituality relationship as originally hypothesized. Rather than a simple linear relationship, there may instead be a dropoff in spirituality at a certain level of depression, namely, the cutoff point between mild mood disturbance and mild clinical depression.

Also likely, and supported by the correlations between specific items on the REQ, is that depression is correlated with specific disturbances in spirituality rather than diminished

spirituality overall. While almost all respondents indicated that they "pray privately in places other than church," "ask God to forgive my sins" and "try to figure out what God wants me to do," regardless of depression, those with depression were more likely to indicate that they "are afraid that God is going to punish me in some way," "experience the feeling that God is so big and important he doesn't have time for my personal problems," and "experience feelings of anger or resentment toward God." Furthermore, the higher the depression, the less likely an individual was to agree that they "experience an awareness of God's love," feel like prayer is a conversation with a close friend, or feel that their relationship to God is "characterized by close fellowship."

This seems to agree with previous research that, although the depressed individual may continue trying to connect with God (no change in outward behavior), he or she may feel farther from God (a change in inner feelings) (Klukow, 2011). Such persons were more likely than non-depressed persons to find themselves "doubting that God actually exists." This seems to indicate that either depression leads to a crisis of faith, or crisis of faith leads to depression, or both; the two are clearly interconnected in some way. Furthermore, it indicates that this sense of distance from God or lesser spirituality is a cause of distress for evangelical Christians.

Study Limitations

The lack of racial diversity in the sample was a significant limitation of the study, since race cannot be controlled for when assessing the impact of depression on spirituality. Particularly since African Americans represent a vibrant and highly religious community in the Chattanooga area, active in many evangelical churches, any further research must include more racial diversity within their sample.

The sample also did not reflect the demographics of Chattanooga in that it was nearly 72% female. More male participants may have rounded out the statistics of gender and depression. Although the percentage of women is higher in evangelical churches than it is in the population, 60% would be closer to that percentage than the study's 72% (Murrow, 2005). Future studies should endeavor to include more male participants.

These demographic challenges do not particularly threaten the results of the study, but since the goal of the survey was not only to assess the state of the evangelical community in Chattanooga but to recruit individuals to participate in the longitudinal journaling study, these small gaps may become more significant in later stages of the research project.

Theoretical Conclusions

There are several possible reasons that the evangelical community in the Chattanooga area has a higher prevalence of depression. One is that depressed persons, realizing a need for supportive community, meaning, and hope in their lives, turn to religion to meet this need. Another is that those who are drawn to religious endeavors are also more prone to depression. A third explanation is that church attendance increases the likelihood of depression, particularly because religious teaching often focuses upon sin and guilt and religious communities can be judgmental.

The theoretical model upon which this study is built argues that elements of all three of these explanations may be factors at work in this multi-dimensional relationship. First, depressed persons may feel the need for the social support and life meaning that religious involvement can provide; yet they may still feel "distance" from God as a result of their depression. Additionally, the unique culture of the evangelical church, like its ideological ancestors the Puritans, may be so

focused upon individual guilt and train its adherents to practice self-examination and introspection in such a way that these beliefs and practices become a source of stress, drawing out the individual's underlying diathesis and causing him or her to use spiritual idioms of distress in expressing his or her depression. In most cases, however, it seems that community and meaning in life provide a buffer for an individual undergoing life stress, and studies have demonstrated that, even controlling for life stress, the rate of depression in some churches is still higher than in the greater community (Meador, Koenig, Hughes & Blazer, 1992). Lastly, this leaves us with the possibility that depression and spirituality share a link – possibly in brain chemistry, possibly in personality, or any number of hypothetical mediators – that not only draws people into spiritual practice, but makes them vulnerable to depression. No connection has yet been found between Serotonin 5-HT_{1A} receptors and spirituality (Borg, Andrée, Soderstrom & Farde, 2003; Karlsson, Hirvonen, Salminen, & Hietala, 2011), but the investigation of other pathways has yet to be undertaken. This missing link may be a focus for future research – particularly in the journaling study to follow this one.

The hypothesized theory was supported in several points by the research data. Firstly, the high spirituality scores of the participants indicate that Christianity is an experiential religion, and that evangelical Christians agree strongly with relationship-oriented statements about their connections with God. This would support the argument that, for evangelical Christians, their connection with God follows similar relational patterns as other significant relationships, and may therefore be vulnerable to depression's characteristic feelings of isolation, loneliness, and abandonment. Additionally, the fact that questions pertaining to behavior (prayer, confession of sin, and obedience in daily life) were not significantly related to depressed symptoms seems to indicate that the root of the relationship between depression and spirituality lies not in behavior,

but in personal spirituality, or subjective spiritual experience. This was powerfully borne out by the correlation between questions pertaining to spiritual feelings (feeling loved by God, feeling close to God, feeling as if God is too big for one's problems) and depressed symptoms. Finally, belief seems to be a factor in this relationship, as those with higher depressed symptoms were more likely to doubt even the existence of God.

These three items (behavior, feelings, and beliefs) are the focus of the next step of the research journey, a journaling study involving depressed and non-depressed persons, to examine whether the rest of the theoretical model is applicable to the real-life, day-to-day experience of evangelical Christians. This survey research has laid a foundation for that study, as well as future research in this field.

CHAPTER 6

CONCLUSION

A survey of the current literature on depression reveals that a new paradigm is needed to understand how this widespread disorder is related to spirituality and why it affects religious persons in such a profound way. Previous research has shed little light on the subject, occasionally because of flaws in the research design (lack of continuity between constructs and measures, failing to control for confounding variables), but also in part because this relationship seems to go beyond simple correlation, possibly co-varying with several other variables and occasionally showing evidence of mediation (Koenig, 2007; Koenig, 2009). The relationship is further complicated by the lack of knowledge about the nature of depression, its causes and symptoms; and by lack of knowledge about spirituality, its definition, and its many expressions. Research is needed to fill these gaps, particularly because depression is growing worldwide and quickly becoming a primary focus of helping professions beyond the mental health community (Baetz, Bowen, Jones & Koru-Sengul, 2006).

The current study was conducted to examine just such a model, particularly in relation to evangelical Christians (a highly spiritual branch of the Christian religion). Based on research evidence indicating that spirituality, more than religious beliefs or behaviors, is affected by depression; and that depression, furthermore, often affects an individual's relationships and sense of relational connectedness, a model was developed that interpreted the relationship between evangelical Christian spirituality and depression in terms of relational closeness to God. Since

depression has been demonstrated to precipitate feelings of relational disconnection, it was further hypothesized that depression preceded this sense of disconnectedness, and the relationship continued in a cyclical manner.

The first hypothesis was tested through a survey of evangelical churchgoers in the Chattanooga, Tennessee area. The results strongly indicated not only a significant negative relationship between spirituality and depression, but that respondents who scored highly on a scale of depression also were more likely to indicate that they felt unloved by God, had feelings of anger or resentment toward God, were afraid of being punished by God, and felt as if God didn't have time for their personal problems. Nevertheless, these respondents were just as likely to say that they participated in religious behaviors (prayer, asking for forgiveness, and trying to discern God's plan for their lives) as non-depressed persons. These findings indicate that, despite having no change in religious behavior, depressed persons have a change in spirituality, which they understand in a relational context. The second hypothesis will be tested through a journaling study using a sample of this study's participants. This study lays the groundwork for both conducting that study and interpreting its results.

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APPENDIX A

INFORMED CONSENT DOCUMENT

Dear Participant:

We are conducting a study on the experience of Christians involving depression. The research is being conducted in conjunction with The University of Tennessee at Chattanooga, and has been approved by the University Institutional Review Board. We would appreciate your participation and are asking you to complete a survey.

In this survey we are asking for *your* thoughts, feelings and experiences, not those of your pastor or any other person. There are no right or wrong answers, only accurate ones. We want to know what you have honestly experienced so that we may create a true-to-life picture of the experience of average Christians. We think this is important for pastors and other Christian leaders to understand how to better help those with depression, and also for Christian laypeople like you to understand how depression can affect many areas of a Christian's life.

The survey questions deal with feelings and experiences that may be unpleasant. If at any point the questions make you feel uncomfortable, you are welcome to withdraw from the study, even half-way through the survey. In addition, if you feel that you need to talk to anyone about any issues raised by this survey please contact any of the resources listed at the bottom of this letter.

If you do choose to participate, please complete the survey according to the directions provided, answering each question honestly and thoroughly. Participation is completely voluntary, and all responses are anonymous and confidential. You will not be adversely affected in any way if you choose not to participate.

Once you have signed this informed consent, you may begin and finish the survey at any time. When you are finished, present your copy to the researcher and feel free to leave. There is no time limit, so take as long as you need to answer the questions fully.

You may get a copy of the finalized results and any reports once the data is analyzed. If you wish this information, please contact the research team at Katheryn-Klukow@mocs.utc.edu.

Thank you for your time and consideration in this matter. We appreciate your partnership with us as we seek to better understand this delicate and complex issue.

Sincerely,

Katheryn Klukow
Dr. Ralph Hood

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact Dr. Bart Weathington, Chair of the Human Subjects Committee, Institutional Review Board at 423-425-4289. Additional contact information is available at www.utc.edu/irb.

For assistance in dealing with depression, we urge you to contact your pastor, consider the resources available in Chattanooga at Hope Counseling Centers: http://www.psy.edu/counseling or 423-266-4574, or to utilize the UTC Counseling Center: 423-425-4438 or http://www.utc.edu/Administration/CounselingAndCareerPlanning/.

I have read and understood my rights as a participant. I understand that my answers will be kept confidential and that I may withdraw from the study at any time.

_____ _____

Signature Date

APPENDIX B

MEASURES

Below are listed a number of descriptive statements concerning religious experience. We would like you to use these statements to describe your religious experience as accurately as possible. That is, we would like you to indicate how true of your religious experience these various statements are. There are no right or wrong answers—we want to know how *you personally* have experienced God in your past and present.	Never	Almost never	Sometimes but infrequently	Occasionally	Often	Almost all the time	Always
1. I experience an awareness of God's love.	1	2	3	4	5	6	7
2. I pray privately in places other than church.	1	2	3	4	5	6	7
3. I experience feelings of anger or resentment toward God.	1	2	3	4	5	6	7
4. I ask God to forgive my sins.	1	2	3	4	5	6	7
5. I am afraid that God is going to punish me in some way.	1	2	3	4	5	6	7
6. When I have decisions to make in my everyday life, I try to find out what God wants me to do.	1	2	3	4	5	6	7
7. I experience the feeling that God is so big and important he doesn't have time for my personal problems.	1	2	3	4	5	6	7
8. I feel very close to God in prayer, during public worship, and/or at other important moments in my life.	1	2	3	4	5	6	7
9. I experience awareness of God's influence in my daily life.	1	2	3	4	5	6	7
10. When I pray to God, I feel like I'm having a conversation with a close friend.	1	2	3	4	5	6	7
11. My relationship to God is characterized by close fellowship.	1	2	3	4	5	6	7
12. I find myself doubting that God actually exists.	1	2	3	4	5	6	7

Below are a number of descriptive statements concerning personality and life experiences. We would like you to use these statements to describe your life as accurately as possible. That is, we would like you to indicate how true of yourself these various statements are. There are no right or wrong answers—only accurate and inaccurate ones.	Not true			Somewhat true			Very true
1. My first impressions of people usually turn out to be right.	1	2	3	4	5	6	7
2. It would be hard for me to break any of my bad habits.	1	2	3	4	5	6	7
3. I don't care to know what other people really think of me.	1	2	3	4	5	6	7
4. I have not always been honest with myself.	1	2	3	4	5	6	7
5. I always know why I like things.	1	2	3	4	5	6	7
6. When my emotions are aroused, it biases my thinking.	1	2	3	4	5	6	7
7. Once I've made up my mind, other people can seldom change my opinion.	1	2	3	4	5	6	7
8. I am not a safe driver when I exceed the speed limit.	1	2	3	4	5	6	7

9. I am fully in control of my own fate.	1	2	3	4	5	6	7
10. It's hard for me to shut off a disturbing thought.	1	2	3	4	5	6	7
11. I never regret my decisions.	1	2	3	4	5	6	7
12. I sometimes lose out on things because I can't make up my mind soon enough.	1	2	3	4	5	6	7
13. The reason I vote is because my vote can make a difference.	1	2	3	4	5	6	7
14. My parents were not always fair when they punished me.	1	2	3	4	5	6	7
15. I am a completely rational person.	1	2	3	4	5	6	7
16. I rarely appreciate criticism.	1	2	3	4	5	6	7
17. I am very confident of my judgments.	1	2	3	4	5	6	7
18. I have sometimes doubted my ability as a lover.	1	2	3	4	5	6	7
19. It's all right with me if some people happen to dislike me.	1	2	3	4	5	6	7
20. I don't always know the reasons why I do the things I do.	1	2	3	4	5	6	7
21. I sometimes tell lies if I have to.	1	2	3	4	5	6	7
22. I never cover up my mistakes.	1	2	3	4	5	6	7
23. There have been occasions when I have taken advantage of someone.	1	2	3	4	5	6	7
24. I never swear.	1	2	3	4	5	6	7
25. I sometimes try to get even rather than forgive and forget.	1	2	3	4	5	6	7
26. I always obey laws, even if I'm unlikely to get caught.	1	2	3	4	5	6	7
27. I have said something bad about a friend behind his or her back.	1	2	3	4	5	6	7
28. When I hear people talking privately, I avoid listening.	1	2	3	4	5	6	7
29. I have received too much change from a salesperson without telling him or her.	1	2	3	4	5	6	7
30. I always declare everything at customs.	1	2	3	4	5	6	7
31. When I was young I sometimes stole things.	1	2	3	4	5	6	7
32. I have never dropped litter on the street.	1	2	3	4	5	6	7
33. I sometimes drive faster than the speed limit.	1	2	3	4	5	6	7
34. I never read sexy books or magazines.	1	2	3	4	5	6	7
35. I have done things that I don't tell other people about.	1	2	3	4	5	6	7
36. I never take things that don't belong to me.	1	2	3	4	5	6	7
37. I have taken sick-leave from work or school even though I wasn't really sick.	1	2	3	4	5	6	7
38. I have never damaged a library book or store merchandise without reporting it.	1	2	3	4	5	6	7
39. I have some pretty awful habits.	1	2	3	4	5	6	7
40. I don't gossip about other people's business.	1	2	3	4	5	6	7

The following section on the next page asks about your thoughts and feelings. Please turn to the next page and answer these questions as accurately as possible, based on how you have felt (on average) for the last two weeks. There are 21 questions. Under each question, circle the description that most closely matches your thoughts and feelings.

1. In the past two weeks
0 I do not feel sad.
1 I feel sad much of the time.
2 I am sad all the time.
3 I am so sad or unhappy that I can't stand it.

2. In the past two weeks
0 I am not discouraged about my future.
1 I feel more discouraged about my future than I used to be.
2 I do not expect things to work out for me.
3 I feel my future is hopeless and will only get worse.

3. In the past two weeks
0 I do not feel like a failure.
1 I have failed more than I should have.
2 As I look back, I see a lot of failures.
3 I feel I am a total failure as a person.

4. In the past two weeks
0 I get as much pleasure as I ever did from things I enjoy.
1 I don't enjoy things as much as I used to.
2 I get very little pleasure from the things I used to enjoy.
3 I can't get any pleasure from the things I used to enjoy.

5. In the past two weeks
0 I don't feel particularly guilty.
1 I feel guilty over many things I have done or should have done.
2 I feel guilty most of the time.
3 I feel guilty all of the time.

6. In the past two weeks
0 I don't feel like I'm being punished.
1 I feel I may be punished.
2 I expect to be punished.
3 I feel I am being punished.

7. In the past two weeks
0 I feel the same about myself as ever.
1 I have lost confidence in myself.
2 I am disappointed in myself.
3 I dislike myself.

8. In the past two weeks
0 I don't criticize or blame myself more than usual.
1 I am more critical of myself than I used to be.
2 I criticize myself for all of my faults.
3 I blame myself for everything bad that happens.

9. In the past two weeks
0 I don't have any thoughts of killing myself.
1 I have thoughts of killing myself but I would not carry them out.
2 I would like to kill myself.
3 I would kill myself if I had the chance.

10. In the past two weeks
0 I don't cry any more than I used to.
1 I cry more than I used to.
2 I cry over every little thing.
3 I feel like crying, but I can't.

11. In the past two weeks
0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. In the past two weeks
0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. In the past two weeks
0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. In the past two weeks
0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. In the past two weeks
0 I have as much energy as ever.
1 I have less energy as I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

6. In the past two weeks
0 I have not experienced any change in my sleeping pattern.

1a I sleep somewhat more than usual
1b I sleep somewhat less than usual

2a I sleep a lot more than usual.
2b I sleep a lot less than usual.

3a I sleep most of the day.
3b I wake up 1-2 hours early and can't get back to sleep.

17. In the past two weeks
0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. In the past two weeks
0 I have not experienced any changes in appetite.

1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.

2a My appetite is much less than before.
2b My appetite is much greater than usual.

3a I have no appetite at all.
3b I crave food all the time.

19. In the past two weeks
0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. In the past two weeks
0 I am no more tired or fatigued than usual.
1 I get tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. In the past two weeks
0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

Tell us a little about yourself. These questions are used for descriptive purposes only and will not be revealed to anyone outside the research team.

What is your gender?
q Male **q** Female

How old are you? _____

What church do you attend? _____

What ethnicity are you?
q Caucasian
q African American
q Asian/Pacific Islander
q Hispanic/Latin American
q Other/Prefer not to answer

What is your average annual household income?
q Under $7,000
q $7,000 - $15,000
q $15,000-30,000
q $30,000-$60,000
q $60,000-$100,000
q Over $100,000

What is your highest level of education attained?
q Grade school/no high school diploma
q High school graduate or GED
q Some college or technical school
q College/technical school diploma
q Master's degree or equivalent
q Doctorate degree or equivalent

Have you ever been diagnosed with a psychological disorder?
(Examples include Major Depression, Manic-Depressive or Bipolar Disorder, Schizophrenia, Social Anxiety Disorder, Obsessive-Compulsive Disorder.)
q Yes **q** No

We are looking for participants who are willing to share their thoughts more in-depth. Would you be willing to be contacted regarding your answers to this survey? If so, please write your name and phone number below:

_____ (_____)_____
Name Phone Number

VITA

Katheryn Klukow was born in Philadelphia, PA, to James and Claudia Klukow. She is the oldest of six children, two younger sisters and three younger brothers. She was homeschooled throughout grade school and attended Covenant College in Lookout Mountain, GA, where she received a Bachelor of Arts in Psychology in May 2010, graduating Summa Cum Laude. While at Covenant College, Katheryn began reading the works of the Puritans and became intrigued by their writings on depression. Further investigation of the subject led her to write several term papers and ultimately to complete her Senior Integration Project on the subject. In August of 2010, Katheryn accepted a graduate assistantship at the University of Tennessee at Chattanooga in the Psychology department, where she continued her investigation under the supervision of Ralph Hood. She graduated with a Master of Science in Psychology in May 2012. Currently, she is enrolled at Reformed Theological Seminary pursuing her Master of Divinity degree. She intends to continue her education by pursuing a Ph.D. degree in Health Psychology. Katheryn is engaged to be married to Daniel Kelley in July 2012 and resides in Chattanooga, TN where she is a project manager at McKee Foods, Inc.