EFFECTIVENESS OF RELIGIOUS COGNITIVE BEHAVIOR THERAPY FOR THE TREATMENT OF CLINICAL DEPRESSION IN RELIGIOUS PEOPLE: A SINGLE-CASE RESEARCH DESIGN ANALYSIS

by

Richard Mark Cozart

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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ABSTRACT

This study used a single-case research design analysis to investigate the efficacy and effectiveness of the Duke University Center for Spirituality, Theology and Health (Duke Center)'s religious cognitive behavior therapy (RCBT) with four deeply religious Christians reporting moderate to severe depression. Literature suggests that religious individuals prefer interventions that reflect their religiosity and experience at least equal recovery rates compared to the use of conventional cognitive behavior therapy (CBT); however, they may not have access to effective religious treatments in customary religious venues, and there is a lack of understanding of why such individuals respond to religious treatments. The four participants received the Duke Center RCBT in a Christian clinical setting from a licensed counselor and were measured for depression, attachment to God, religious coping, and the perceived usefulness of the therapeutic materials. Results indicate that the protocol is transportable to a nonmedical Christian setting, as all participants responded to treatment and three of the four scored within the normal range on the Beck Depression Inventory II at the end of treatment. Attachment to God and religious coping improved in concert with reduced depression, suggesting a correlation between attachment and coping as mediatory features of change. It appears that all participants reported reduced depression due to cognitive and behavioral components of the RCBT material. Further studies may indicate how the Duke therapy may be used in other religious settings and how religion functions as a mechanism of change in treating depression. This study contributes to positive social change by helping clinicians to better understand and treat depression in religious people and expanding the availability of useful treatments for religious people.

Keywords: depression, religious, cognitive behavior therapy, religious coping, God attachment

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American Psychiatric Association (APA)

Attachment to God Inventory (AGI)

Attachment to God Inventory – Anxiety Subscale (AGI-ANX)

Attachment to God Inventory – Avoidance Subscale (AGI-AVO)

Beck Depression Inventory II (BDI-II)

Brief Religious Coping Scale (BRCOPE)

Brief Religious Coping Scale – Positive Religious Coping Subscale (BRCOPE-PRC)

Brief Religious Coping Scale – Negative Religious Coping Subscale (BRCOPE-NRC)

Cognitive Behavior Analysis System of Psychotherapy (CBASP)

Cognitive Behavior Therapy (CBT)

Cognitive Therapy Rating Scale (CTRS)

Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition (*DSM-5*)

Duke University Center for Spirituality, Theology and Health (Duke Center)

Internal Integrative Assessment (IIA)

Jacobson Reliable Change Index (RCI)

Mental Status Exam (MSE)

National Institute of Mental Health (NIMH)

Participant 1 (P1)

Participant 2 (P2)

Participant 3 (P3)

Participant 4 (P4)

Penn Helping Alliance Rating Scale (PHARS)

Posttraumatic Stress Disorder (PTSD)

Random Control Trial (RCT)

Rational Emotive Behavior Therapy (REBT)

Religion and Spirituality (R/S)

Religious Cognitive Behavior Therapy (RCBT)

Single-Case Research Design (SCRD)

CHAPTER ONE: INTRODUCTION

Significance of the Study

Prevalence of Depression

Depression and its associated difficulties pose significant public health problems with broad societal effects. According to the National Institute of Mental Health (NIMH, 2017), depression is one of the most common psychiatric ailments in the United States, and the World Health Organization (2008, 2018) indicates that depression is the leading cause of mental disability throughout the world. In their research focusing on the effects of depression on the chronically ill, Koenig, King, Robins, Pearce, and Yu (2014) indicated that "major depression is a common, painful, physically impairing and financially costly illness with a lifetime prevalence of nearly 15%, the world's second most disabling condition (behind heart disease)" (p. 5).

The most recent edition of the *Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition* (*DSM-5*, American Psychiatric Association [APA], 2013) states that 12-month prevalence rates in the United States for major depressive disorder is approximately 7% with significant differences when age groups are taken into consideration. NIMH (2018) reported that in 2016, about 16 million adults age 18 or older in the United States had at least one major depressive episode in the past year, which amounts to 6.7 % of all U.S. adults. If other depressive disorders, such as persistent depressive disorder, are included, overall prevalence rates for depressive disorders and respective comorbidities are higher. More detailed discussions of the prevalence of depression, the need for useful treatments, and the research literature that substantiates these factors will follow in Chapter Two.

Treatments for Depression

Researchers and mental health professionals have developed several evidence-based treatments that show promise for treating depression (Antony & Barlow, 2012; American Psychological Association, 2017; Barlow, 2014; Gabbard, 2009; Gorman & Nathan, 2015). Among the efficacious treatments is cognitive behavior therapy (CBT), an evidence-based approach that seeks to replace maladaptive thinking and behavior associated with depression with positive, adaptive thoughts and actions (Beck, 2011; Chambless & Ollendick, 2001; Garratt, Ingram, Rand, & Sawalani, 2007).

Research has demonstrated that religious clients desire effective treatments, such as CBT, that recognize and include their religious views (Pargament, Feuille, & Burdzy, 2011; Worthington, 1988; Worthington, Hook, Davis, & McDaniel, 2011). Recent investigations have shown that 77–83% of adults age 55 or older (both religious and nonreligious) with depression and comorbid chronic medical illness prefer to include religion in psychotherapy (Koenig, 2012; Pearce & Koenig, 2013).

In comparing types of CBT, Propst, Ostrom, Watkins, Dean, and Mashburn (1992) found that religious CBT (RCBT) was more efficacious for depression in religious patients than nonreligious CBT. This was the case while using both religious and nonreligious therapists in delivering a religious form of CBT, suggesting that the protocol itself rather than the religiosity of the therapists was a factor of change in the participants. Since CBT and RCBT are proven therapies for depression and religious clients prefer therapies that accommodate their worldview, religiously integrated CBT for depressed people of faith would appear to be a favored evidence-based approach for the treatment of those who demonstrate religious inclinations.

The Duke Center Protocol

Among those who experience depression and other mental disorders are individuals who practice a religious faith while suffering from chronic medical illness. The research team at the Duke University Center for Spirituality, Theology and Health (Duke Center) sought to address the question of whether depression in those who are religiously oriented and chronically ill might find RCBT to be an efficacious treatment (Pearce et al., 2015). In pursuit of a religious integrative approach, Pearce and colleagues developed CBT into RCBT, with religious elements appropriate for Christians, Jews, Muslims, Buddhists, and Hindus. The result was the completion of fully manualized versions of RCBT protocols that recognized common elements of five major religions while respecting the idiosyncratic nature of each of the faiths, such as the use of sacred scripture that corresponds to the spiritual perspective of each belief system (Duke Center, 2014). While recognizing and including the unique attributes of each faith, the core elements of RCBT appear in the entirety of the protocols. These include renewing of the mind; scripture memorization; contemplative prayer; challenging thoughts using one's religious resources; religious practices such as gratitude, altruism, and forgiveness; religious and spiritual resources such as meditation; social support from members of a house of worship; conversations with religious leaders; participation in religious study groups; reading religious literature; watching religious programming; engaging in charity; attending religious services or events sponsored by religious groups; and service involvement in or through a religious community in which the patient seeks out persons to help and support, such as by speaking and praying for people with physical and emotional needs.

Upon the completion of the manualized versions of the protocol (Pearce et al., 2015) and the deployment of the therapy in clinical settings (Duke Center, 2014), the Duke group

undertook a pilot study to examine the efficacy of the treatment (Koenig et al., 2015). They compared the use of CBT and RCBT with religious persons who presented major depression and chronic illness. Participants were randomized into the two types of therapy, CBT (n = 67) and RCBT (n = 65). This initial clinical trial revealed two important findings. The first was that there was no significant difference in the outcome between the two groups. The second was that the overall religiosity interacted with the treatment group, suggesting that RCBT was slightly more efficacious in those who indicated more religiosity. The two types of therapy were virtually equal in the treatment of this population's major depression accompanied by chronic illness and showed some promising results along with support for internal validity concerning the efficacy of RCBT with religious patients (Duke Center, 2014).

Given that the Duke Center protocol was a key element of this study, later sections of this chapter and Chapter Two will examine how effective the Duke treatments were (the overall effect size), the measures used, what percentage of people responded to the treatment, and the number who entered into normal range on the Beck Depression Inventory II (BDI-II) after treatment. In addition, how people were recruited into the Duke study, the limitations of the undertaking, and how the Duke Center project compared to this research will be discussed.

External Validity

An aspect of the Duke Center work that remained unstudied was how the Christian version of the RCBT protocol might fare for those who seek treatment for depression outside a hospital environment, specifically in a Christian clinical setting where people obtain help from what they believe is a Christian approach. The Duke Center's therapeutic method, which includes literature and an online video for counselor training, is offered to the public at no cost, making accessible a rich resource for therapists who seek evidence-based treatments for

depressed religionists (Duke Center, 2014). The Duke Center research team provides a noteworthy service to the broader religious community outside hospital settings.

The matter of the external validity of the Duke Center protocol was an object of consideration in this current study. This question involved whether those seeking help from religious institutions instead of university-based medical facilities would respond equally well as in the Duke study. Religious individuals are prone to depression, and many initially seek help from their church clergy, religious-based counseling centers, and family medical practitioners. Consequently, a limited percentage of this population are exposed to the evidence-based benefits of CBT and RCBT. This situation reflects Barlow's (2011) statement that the public's ability to access recent evidence-based interventions is a major stumbling block to clinicians everywhere. The present study may open the Duke Center protocol to a wider audience beyond the limits of hospital-based clinics to other venues frequented by religious individuals. In this regard, the study contributes to positive social change by helping to deliver evidence-based therapies to religious individuals who may not otherwise have access to such quality treatments.

Construct Validity

In addition, understanding why RCBT works may provide insight into identifying and improving the most valuable aspects of RCBT approaches and therefore increase the protocol's effectiveness for religiously oriented individuals suffering from depression. This is a matter of construct validity, namely, why RCBT is effective and identifying the mechanisms of action and causal pathways in the RCBT method. Possible mechanisms of action include that RCBT may alter a patient's God attachment, and in turn, strengthen religious coping, thereby mitigating depression. Further possibilities include other elements of the protocol, such as therapeutic alliance, prayer and meditation, the Bible, forgiveness, repentance, gratitude, altruism and

generosity, positive and pleasurable experiences, and church and social activities, among others. This list of possible causations reflects the difficulty in identifying the reasons for the reduction of depression in religious individuals and was a central question addressed in the present research. Once again, positive social change may occur by assisting those in the mental health field and churches to better understand and treat depression in religious people.

Single-Case Designs

The Duke Center research involved a randomized pilot study of 132 participants. There are certain strengths of large quantitative random control trials (RCTs) such as those conducted by the Duke Center, but there is also a place for smaller single-case research designs (SCRDs) that focus on a few participants and the complex matters of patient depression and recovery. The value of smaller studies is that they extend the explanations that RCTs may provide concerning matters of external and construct validity. These smaller SCRD studies may involve a network of counseling clinic locations (known as "pods") with the intention of linking data that may equal or exceed studies such as that of the Duke Center (Barlow, Nock, & Hersen, 2009; Kazdin, 2011; Kratochwill & Levin, 2015; McMillan & Morley, 2010; Morley, 1996). For this study, the SCRD construct helped meet research goals, especially given the complexities of religious motivation and change, and provides an initial attempt to transport the Duke protocol. The single-case design of this study will be elaborated upon in Chapter Two and Chapter Three.

Purpose of the Study

This study investigated the effectiveness of the Duke Center's RCBT approach in depressed Christians and endeavored to determine how the protocol functioned as a mechanism of action in participants. Stated in terms of validity, the purpose was to examine the external validity of the protocol in a Christian clinical setting for Christians suffering from depression and

how the construct validity of the treatment may have engendered cognitive hardiness in the treatment of depression in these individuals. The research attempted to ascertain the transportability of the Duke Center's protocol beyond those who are physically ill, looked to identify which components of RCBT produced changes in depressive symptoms, and sought to determine whether these alterations in symptoms were recognized by modifications in clients' views of God image and capacity for spiritual struggle.

Research Questions

Research Question 1

The first research question concerned effectiveness or external validity. How operative might be the RCBT treatment for depressed religious people seeking assistance in a Christian-based setting that is outside of a hospital environment? Did the Duke Center procedure prove effective when applied to those who are not necessarily medically ill and who suffer from depression? Effectiveness was examined based on the expected magnitude of change: a 50% reduction from initial depression scores constituted responders, and initial remission was indicated by depression scores within normal limits (< 10) on the BDI-II (Beck, Ward, Mendleson, Mock, & Erbaugh, 1961).

In the Duke Center experiment, approximately 60% of the participants who received at least five treatment sessions responded to treatment (decreased their BDI score by more than 50%), and nearly one half went into remission by the end of treatment (BDI < 10). These benefits persisted for at least 12 weeks after treatment ended (Koenig et al., 2015). The Duke Center research team followed the intention-to-treat principle, meaning that the results of the experiment were based on the initial treatment assignment, not subsequent participation. By utilizing the intention-to-treat principle, the research team sought to avoid confounding errors of

crossover and dropout, among other potential difficulties. The Duke study write-up indicated that of those randomized, 18 (13.6%) dropped out without receiving a treatment session (CBT, 11; RCBT, 7), and 93 (70.5%) completed 5 to 10 sessions (CBT, 46; RCBT, 47; Koenig et al., 2015). It was hypothesized that the use of the Duke Center RCBT protocol for the present study would prove at least as effective in the reduction of depression as the results indicated it did in the Duke study and that the therapy would demonstrate transportability to Christian clinics and churches given the conditions of this study.

Research Question 2

The next research question was related to construct validity, namely, identifying mechanisms of action that bring about positive change. What factors help explain variation in the x:y correlation hypothesis? This study sought to utilize the Attachment to God Inventory (AGI), the Brief Religious Coping Scale (BRCOPE), and a new measure designed for this study, the Internal Integrative Assessment (IIA). These measures examined the hypothesis that changes in depression may be attributed to specific aspects of the Duke material (IIA), developed attachment security in relation to God (AGI), and enhanced religious coping skills (BRCOPE), all which mediated the relationship between RCBT and improvement in depression scores from pretest to posttest. It was surmised that RCBT would utilize RCBT elements of the protocol, target a depressed individual's attachment beliefs about God, and emphasize the positive use of religious coping skills. In addition, alterations in beliefs and behaviors would covary with changes in the outcome variable, namely, lower BDI-II scores.

In this investigation, inquiries were made into the function of religion as a malleable cognitive and behavioral skill for individuals to struggle and cope with depressogenic challenges based on perceptions of God as a secure base, and questions were posed as to the functionality of

CBT as a trans-operative integrative strategy that utilizes religious assets. It was hypothesized that RCBT would improve scores on attachment to God measures (that is, generate lower scores on attachment avoidance and attachment anxiety) and improve scores on religious coping measures (reveal higher positive coping and lower negative coping). It was also hypothesized that RCBT would access the religious resources and methods of the Duke material in concert with reductions in BDI-II scores. Measures might also specifically identify aspects of the RCBT Duke material that harnessed thought management and positive behaviors as key factors in utilizing religious resources. A more detailed analysis of the nature of the study and the specific research questions and objectives follows in Chapter Three.

Operational Definitions

Depression

In this study, depression was defined by and diagnosed according to APA (2013) guidelines and measured by the 21-item BDI-II (Beck et al., 1961). The *DSM-5* describes depressive disorders as empty, sad, or irritable mood with bodily and cognitive changes that considerably affect a person's ability to function normally (APA, 2013). The inclusion criteria for depression in this present study took into consideration Beck, Steer, and Brown's (1996) BDI-II depression levels (a) cutoff scores for minimal depression where life's ups and downs are considered normal (1–10), (b) mild mood disturbance (11–16), (c) borderline clinical depression (17–20), (d) moderate depression (21–30), (e) severe depression (31–40) and (f) extreme depression (over 40; Wang & Gorenstein, 2013).

Religious Struggle and Coping

Coping strategies are cognitive and behavioral attempts to reduce internal dysregulated states and resolve external stressors that appear to exceed an individual's resources (Gellman &

Turner, 2012; Lazarus & Folkman, 1984; Pargament, 1997). Those who utilize religious coping skills understand God as a regulating feature that intervenes on behalf of the individual to manage internal and external struggles. In this study, religious coping was assessed with the BRCOPE (Pargament et al., 2011). In addition to Pargament et al.'s (2011) conceptualization, Billings and Moos (1981) observed three styles of coping that help identify aspects of struggle known as (a) active-behavioral, (b) active-cognitive, and (c) avoidance.

Attachment to God

Beck (1977, 1987) acknowledged the link between attachment style and depression and other mental disorders (Scher, Segal, & Ingram, 2006). Although Beck (1977, 1987) primarily described depression as maladaptive adult schemas, he saw the significance of understanding the vulnerability to depression that can be developed in early life (Beck, 1977, 1987; Kovacs & Beck, 1978). Scher et al. (2006) commented extensively on Beck's (2006) understanding of depression and how this conceptualization may be linked to attachment. In this regard, Beck recognized the importance of comprehending how attachment correlates with depressogenic schemas. Kaufman (1981), Kirkpatrick (2005), and Reed (1978) built upon the work of Bowlby (1969) in their work on God attachment theory. God attachment is considered the degree to which an individual regards God as a haven of safety, proximally orients to God, utilizes God to sustain exploratory activity, and experiences anxiety when removed from God (Kirkpatrick, 2005). When negative emotional activation takes place, secure attachment to God is indicated by a move toward God for purposes of security and corresponding activation of exploration, curiosity, and behavior activation (Blatt & Luyten, 2009; Luyten & Blatt, 2011, 2013). In this study, God attachment was measured by the AGI (Beck & McDonald, 2004), which was

developed from the work of Kirkpatrick and Shaver (1990) and Brennan, Clark, and Shaver (1998; Kirkpatrick, 2005).

Limitations of the Study

Statistical Power

This study has very low power given there is only four participants. However, the strengths of such an approach to the research questions were discussed earlier in this chapter under Single-Case Designs.

Religion as a Factor for Change

The time window for this study was limited to the proposed ten-week protocol. As such, a measurement of long-term cognitive-behavioral change was not in view. The Duke Center research measured participants at a 12-week follow-up, exceeding the limits of this study.

Prochaska (2013), while building on his research and others' (McConnaughy, DiClemente, Prochaska, & Velicer, 1989; McConnaughy, Prochaska, & Velicer, 1983; Norcross, Krebs, & Prochaska, 2011), developed the transtheoretical model of behavior change, which is described in six stages (precontemplation, contemplation, preparation, action, maintenance, and termination), with the termination stage usually taking place after six months to five years of uninterrupted maintenance. The authors provided evidence-based treatments that optimize the prospects of the development of self-efficacy and positive change in clients at the six levels. They also advanced computer-tailored interventions by which people were assessed according to transtheoretical model of behavior change variables based on their current stage of change. Comparisons of individual progress were made to a normative database, and feedback was generated in the form of principles and processes from peers who were making the most headway. Change theorists such as Prochaska (2013) contributed to this current study by helping

researchers and therapists conceptualize change (such as recovery from depression) as an identifiable, iterative process.

Use of CBT for Those Not Medically Ill

This study utilized the Duke Center protocol, but it is acknowledged that there were slight variations due to the purposes of the present research. Central to the differences were the selected type of counselee and the apparent etiologies of depression. By recruiting depressed clients who were not necessarily medically ill, it was recognized that this preselection may predispose counselees to respond more favorably to the religious content of RCBT, thus providing higher response and remission rates. Christians who are not medically ill may have less difficulty in recovering from depression than those who face entrenched somatic troubles. Those Christians without medical illness may be more vigilant in adhering to RCBT and in following the religious dictates of the protocol and therefore demonstrate superior recovery rates.

Although this may be the case, it was understood that the BDI-II should identify depressed participants regardless of their physical condition. In addition, a higher level of depression was required for entering this study; inclusionary factors are discussed in Chapter Three. This does not, however, eliminate the possibility of faster and more enduring recovery due to the absence of physical illness.

Other *DSM-5* Illnesses

Although ancillary applications of the Duke Center approach to depression were considered, no other *DSM-5* illnesses or symptoms were directly addressed in this study. As with the general population, Christians struggle with many *DSM-5* difficulties, but by focusing on depression, this study addressed one of the more prominent and debilitating mental illnesses among this religious group. Because this study considered the possibility of various confounding

influences from other *DSM-5* illnesses, rule-out measures were in place to screen for potential effects. These rule-outs generally followed the Duke Center's exclusionary measures and are described in Chapter Three.

Consideration of Other Religions and Expressions

The focus of this study was only upon how Christians, rather than those of various religions, responded to RCBT treatment. Although no religions apart from Christianity were in view, the study may provide insights for future applications in other faith-based settings. As noted earlier, the Duke Center protocol affords applications for other major religions.

There is a spectrum of Christian denominational expressions, including Protestant and Catholic churches (Koenig, 1998, 2017). Protestantism and Catholicism are religious systems, especially compared to other major world religions; however, aspects of the theology, worship, and lifestyles of Protestants and Catholics differ. Among Protestants, there is a variety of expressions, such as more traditional congregations (Anglican, Methodists, Presbyterian) and contemporary ones ("seeker" churches such as Willow Creek Community Church located in the Chicago suburb of South Barrington, Illinois). Although the incidence of depression varies depending on religious denomination (Meador et al., 1992), for the purposes of this study, the focus was placed on Christian Protestant Evangelicals, with the term *Evangelical* representing a broad, multidenominational caste of Christians generally regarded as undertaking faith in a serious manner. Evangelicalism is widely recognized as a mainstream expression of Christianity in the United States (Koenig, 2017).

Variations in Therapists and Delivery

This study did not explore whether results would differ if therapists other than masters-level counselors had delivered the protocol. Although such a query may prove profitable in the

future, the Duke Center utilized masters-level counselors that met the purposes of the study there. For this study, an independent licensed professional counselor with several years of familiarity and experience with CBT was trained and deployed to deliver the Duke Center therapy to participants. The Duke Center provided therapy primarily by phone, while in this study, the material was conveyed in person with all counseling being delivered at the same location by the same therapist.

Theoretical Framework

RCBT, the evidence-based treatment utilized in this investigation, is an approach supported by a consensus of scholarship that evidence-based treatments should form the standard for the ethical treatment of clients with the understanding that practitioners use these treatments to the best of their ability. Barlow (2014) cited the medical model highlighted in *Crossing the Quality Chasm: A New Health System for the 21st Century* (Institute of Medicine, 2001) as an important factor leading to the development of the APA Presidential Task Force on Evidence-Based Practice (2006; Castonguay & Beutler, 2006). In this far-reaching document, the American Psychological Association identified "best research evidence" as a major component of evidence-based practice. Barlow (2014) noted that psychology's adoption of evidence-based practices was a tipping point (Gladwell, 2015) that would have far-reaching effects on the mental health field. In multiple articles over several years, Norcross (2002; Norcross, Beutler, & Levant, 2006; Norcross, Hogan, & Koocher, 2008) trumpeted this same theme, noting principles and applications to the practice of therapy. Kline (2013) opined similarly, but ventured further by challenging standard bases of validity, significance, and efficacy. For example, an emerging number of evidence advocates charge that statistical *p*-values alone are inadequate to prove validity. Other factors such as rates of response, remission, relapse, and drop-out should be

taken into consideration (Kline, 2013). This challenge to past and current investigative standards in mental health scholarship were kept in mind in this present study. This study also maintained an openness regarding alternative depression research and therapies that may prove equally effective such as single-case designs.

Another assumption of this investigation involves the basic ethical principles that are a part of the larger code of ethics established by professional counseling organizations such as the American Psychological Association (2017). The moral principles of autonomy, nonmaleficence, beneficence, justice, and fidelity are ethical bulwarks for the modern therapist and should guide therapy and scholarship. Among these, autonomy is especially relevant to this study, since it represents the importance of recognizing the independence and freedom of clients in regard to their religious beliefs in psychotherapy, regardless of the personal religious convictions of therapists.

Organization of Remaining Chapters

The remaining chapters of this work include Chapter Two, a review of the relevant literature and how it impacted the study. Chapter Three focuses on methods by describing and justifying the research design. Chapter Four explains the results of the data collection and provides an analysis of the findings, while Chapter Five includes a summary, conclusions, and recommendations.

Summary

The prevalence of depression and its associated maladies remains a public health concern. The Duke Center's RCBT for medically ill Christians has proven internal construct validity (efficaciousness), but its external validity (effectiveness), especially in terms of usage outside of a hospital setting, is untested. This research sought to answer the question of the

effectiveness and transportability of the Duke Center protocol to depressed Christians who may not be medically ill. If such an undertaking can be observed as effective, the deployment of this approach for other depressed religious individuals may prove possible. Furthermore, this investigation sought to answer questions of efficaciousness or construct validity, including why such mediation may prove useful in addressing depression. The religious content and delivery of the Duke Center's RCBT, measures of God attachment, religious struggle and coping, and other factors may disclose differential causations in combatting depression among Christians.

CHAPTER TWO: REVIEW OF THE LITERATURE

The usefulness of RCBT for depressed counselees in a Christian clinic or church depends on the demonstrated results of CBT and RCBT in mental health literature. The most recent, reputable, and relevant scholarship that discusses CBT, religion as a component of RCBT, the Duke Center's brand of RCBT, how the Duke Center's RCBT might be employed among Christians who are not necessarily medically ill, and the advantages and shortcomings of SCRDs should be explored.

The Usefulness of CBT

CBT is an integration of the work of Aaron Beck (1977) and Judith Beck (2011) and the rational emotive behavior therapy (REBT) approach developed by Albert Ellis (1962, 1978). As a psychotherapeutic approach, CBT addresses maladaptive actions and cognitive processes through several systematic procedures that reformulate a patient's thinking and belief system to bring about enduring emotional and behavioral change (Beck, 2011). Early on, CBT was defined not so much as a set of intervention strategies, but as a theory of psychopathology and human change that formulated the therapist's approach (Clark, Hollifield, Leahy, & Beck, 2009). CBT addresses a range of related emotional, cognitive, physical, and behavior symptoms which can be classified into five areas of the CBT model: thoughts, feelings, behavioral changes, physical symptoms, and social and environmental factors (Beck, 2011). Since these early conceptualizations, CBT has become a fully operational therapy with numerous branches and evidence of efficacy (APA, 2013; Chambless & Ollendick, 2001; Garratt et al., 2007; Reinecke, Ryan, & DuBois, 1998).

Built upon the foundation of classic CBT are second- and third-wave CBT approaches that explore the utilization of mindfulness, relaxation, self-monitoring, cognitive restructuring,

consideration of context, de-emphasis on control, schemas that are value-directed and principle-driven rather than formulaic, and interpersonal awareness and effectiveness (Hayes, 2004; Kohlenberg, Bolling, Kanter, & Parker, 2002; Leahy, 2004; Öst, 2008). Second- and third-wave approaches are usually longer in duration than typical protocols and are indicated by several components. First, contextual and functional factors are incorporated in the therapeutic enterprise (such as attachment theory). Second, they are frequently utilized to treat more chronic, severe, or persistent disorders. Third, there is less emphasis placed on cognitive and behavioral techniques and more weight on experiential learning and malleability in behavior and thought. Finally, often there is explicit or implicit employment of spiritual traditions. More recently developed are transdiagnostic and unified protocol approaches and crosscutting techniques that seek to distill key principles from CBT treatments that are integrated with advances in research on emotion regulation and neuroscience (Barlow, 2011; Cozolino, 2002; Siegel, 2010). Some widely used evidence-based protocols that utilize second- and third-wave principles are acceptance and commitment therapy (Hayes, 2004; Hayes, Strosahl, & Wilson, 1999), dialectical behavior therapy (Linehan, 1993), mindfulness-based cognitive therapy (Segal, Williams, & Teasdale, 2002), and the cognitive behavior analysis system of psychotherapy (CBASP; McCullough, 2004), among others.

Religion as a Component of CBT

CBT and Religion

There is a general correlation between CBT and expressions of religion when managing difficulties. Albert Ellis (2000) asserted that REBT is harmonious with principal religious viewpoints and can be used effectively with many who have absolute understandings about God and religion. He tracked the early acceptance and utilization of REBT principles and practices

by those of a religious bent, and found that these conjoined perspectives include unconditional self-acceptance, high frustration tolerance, unconditional acceptance of others, and the desire rather than the need for achievement and approval, among other desired mental health means and outcomes). The commonalities between REBT and religious values are significant, differing perhaps only in terms of belief in a higher being and how such a supreme power assists in living. This commonality portends the difficulty in identifying factors of change between CBT and RCBT. Ellis (2000) maintained that REBT fundamentally corresponds with many religious interests and may be used for persons of faith, revealing an overlay of conceptualizations of treatments and cognitive and behavioral forms of intervention. Similarly, CBT (Beck, 2011) coincides in large part with religious worldviews and corresponds with the "A-B-C-D-E" Alderian/Ellisian construct, with the disputation (D) aspect of the approach altered to accommodate and include the intervention mounted by the patient's religious system, which should newly weigh upon distorted beliefs (B).

In addition, second- and third-wave cognitive therapies further this conciliatory notion, and rather than standing at odds, are accommodative and integrative toward religion (Kahl, Winter, Schweiger, & Sipos, 2011). The incorporation of religion with CBT has been a part of a more extensive process in the integration of religion with psychotherapy (McMinn, Jones, Vogel, & Butman, 2011). Much of the integration and accommodation of religion into the therapeutic enterprise has taken place under the conceptual umbrella of CBT (Hathaway & Tan, 2009; Worthington et al., 2011).

The Duke study and others have observed that religious resources are typically downplayed in psychotherapy and that mental health professionals are less religious than the United States population as a whole, adding to the longstanding conflict between religion and

mental health care (Koenig, 2012; Tan, 2013). However, ethical mores obligate mental health professionals to make thoughtful consideration of the religious and/or spiritual interests of clients and how such interests come to influence symptom difficulties (Day-Vines & Holcomb-McCoy, 2013). While mental health policy requires therapists to address clients' matters of religion and belief, many maintain that widespread practice falls short of this standard (Waller, Trepka, Collerton, & Hawkins, 2010). Apart from these debates, the Duke Center and others have proceeded headlong in their integration of RCBT with corresponding religious elements since clients of faith desire such integration and evidentiary studies continue to demonstrate positive results (Koenig et al., 2015).

RCBT and Christianity

There is among some Evangelical Christians a degree of hesitancy to accept counseling, even if the therapy is faith oriented (Entwistle, 2015; Jones & Butman, 2011). This religiously attuned sensitivity sharply dichotomizes psychotherapy and religion, with psychotherapy seen as a worldly endeavor while religion offers divine answers. In some extreme cases, arguments are mounted on both sides of the secular-religious divide that seek to keep psychology and religion separate in order to maintain the purity in each school of thought. However, these positions are generally regarded as unsound in nature (Entwistle, 2015; Johnson, 2010; Jones & Butman, 2011; McMinn, 2014; Worthington, Johnson, Hook, & Aten, 2013). This study does not venture to accommodate extreme views, understanding that the Duke Center's religious protocol was carefully crafted to capture the broadly accepted doctrines of each major belief system. The Duke Center intentionally designed the protocols for each religious expression to minimize idiosyncratic objections. It is likely that participants who volunteered for this present study self-

selected and did not harbor negative preconceived notions concerning Christian therapy offered to Christians.

Concerning the specific use of Christian scripture in counseling, an ongoing debate exists among those who differ in their opinion on the role of sacred writings in mental health concerns (Entwistle, 2015; Johnson, 2010; Jones & Butman, 2011; McMinn, 2014; Worthington et al., 2013). There is a spectrum of positions in the debate, but the arguments generally center on (a) the degree to which counselors should utilize Christian scripture to determine etiologies and conceptualizations of counselee difficulties, (b) the understanding of schools of therapy, and (c) methods of delivery of various counseling strategies. The debates often focus on the method of integrating religious scripture with available psychological tools (not necessarily whether such integration is allowed, as discussed in the preceding paragraph). Once again, this is an ancillary concern that finds accommodation in the Duke Center protocol. The manualized therapies centralize each belief system while seamlessly integrating CBT principles.

Usefulness of RCBT

Some have put forth clinical examples of the application of CBT with scripture and prayer, while outcome studies have established the efficacy of religiously modified CBT (Tan, 2007; Tan & Johnson, 2005). Pargament (2011) provided a comprehensive overview of the integration of religion and spirituality (R/S) with psychotherapy while offering case studies to illustrate how inclusion might take place. He demonstrated the compatibility of R/S with client needs and the positive outcomes that were observed. Worthington and others (2011) meta-analyzed 51 samples from 46 intervention studies and found that patients with spiritual beliefs in spiritually accommodative psychotherapies showed greater improvement that than patients treated with alternative secular psychotherapies. Investigations have shown that religious

moorings significantly reduce the likelihood of individuals to develop major depressive disorder, even in cases where clients' parents had various mental difficulties (Kasen, Wickramaratne, Gameroff, & Weissman, 2012).

In Koenig's (2012) meta-analysis on this topic, religious involvement was shown to be related to less depression, faster recovery from depression (272 of 444 studies; 61%), and a better quality of life (119 of 178, 67%). Similarly, Koenig (2012) and Pearce et al. (2015) found the same to be true for those with chronic medical illness, with one study indicating a 53% to 70% increase in the speed of remission from depression (Koenig, 2012). In addition, religious involvement is related to significantly better immune functioning (14 of 25 studies) and improved endocrine functioning (19 of 30 studies). These investigations have limitations, noted by Koenig, in that they did not control for the possibility that those in religious-based studies may have stronger support systems and other pre-existing variables that may enhance their response to therapy (Koenig, 2012).

Koenig (2012) joined Propst (1988; Propst et al., 1992) in reporting that there are indications that when religious beliefs are blended into psychotherapy, specifically CBT, the result is faster remission of depression than when standard CBT is utilized. Religious clients respond more positively to religious-based CBT than nonreligious therapy. Venturing beyond Propst's studies, Koenig and the Duke Center research team wanted to discover the effects of RCBT versus CBT for depression, to see if RCBT was superior, the same, or worse than CBT in battling depression in religious, chronically ill patients (Koenig et al., 2015). As noted earlier in Chapter One, the Duke Center studied religious clients suffering from major depression and chronic medical illness, utilizing both CBT and RCBT for the randomized groups. Koenig and his colleagues extended the Propst (1988) study by more precisely identifying overall religiosity

as an interactive variable in the chronically ill treatment group, signifying that RCBT was slightly more efficacious in the more religious participants. The findings suggest that although CBT and RCBT are generally similar treatments of major depression for religious participants, efficacy may be affected by client religiosity. This suggests that RCBT is a superior treatment for religious clients suffering from depression and chronic illness.

Religion as a Causative Factor

In addition to the important role that religion plays in recovery and religious integration with CBT, Propst et al. (1992) investigated whether religion or religious therapy may account for a change in clients. They observed that religious patients report significantly lower post-treatment depression when treated with RCBT rather than with CBT with nonreligious content. As indicated earlier, these results took place when both religious and nonreligious therapists in RCBT and CBT groups were utilized, which suggests that the religious content, rather than the therapist or other factors, may have been the mediating factor that determined change in religious individuals. This significant finding may have contributed to the Duke Center team utilizing therapists regardless of their religious leaning as long as they were able to deliver sufficiently and unbiasedly the RCBT protocol.

In summary, most religious people who experience depression and medical illness prefer therapy associated with their religion, and faith-based clients who are depressed respond more favorably to RCBT than to CBT. In addition, Ellis (2000) observed a correlation rather than disagreement between REBT and religion, and although RCBT and CBT may have commonalities, RCBT is distinctly religiously oriented and not a duplication of REBT or CBT. Propst (1988; Propst et al., 1992) and Koenig (2012) observed that an explicit expression of religious content in CBT created results superior to nonreligious CBT for religious clients.

Propst (1988; Propst et al., 1992), Koenig (2012), Beck (Beck, 2011), and Ellis (2000) have investigated the comparative usefulness of RCBT in reducing depressive symptoms in clinical studies. As noted by these authors, it appears that there is support for the use of RCBT with religious clients in medical settings; however, it is important to investigate the effectiveness and transportability of this treatment from university research hospitals to other, more common life contexts, such as nonmedical settings, and what aspects of RCBT act in reducing depression.

The Duke Center's RCBT

Development of the Duke Center's Approach

As discussed above, Koenig's (2012) meta-analysis indicates that religious involvement is related to less depression, faster recovery from depression, and a better quality of life. Koenig et al. (2015) and the Duke Center (2014) found the same to be true for those with chronic medical illness. Religious involvement is also related to significantly better immune functioning and improved endocrine functioning (Koenig, 2012).

Based on these findings, the Duke Center research team sought to manualize a protocol that would incorporate and deploy RCBT for the chronically ill. In 2013, with a grant from the Templeton Foundation, the Duke Center established plans to develop religiously integrated CBT (Pearce et al., 2015). By March 2014, the written portions of the protocol were complete with workbooks and manuals for use with Christians, Jews, Muslims, Hindus, and Buddhists. For the Christian religion, a general manual for the use of the therapy was completed, along with a therapist workbook and a participant workbook. All these materials were made available on the Duke Center website free of charge (Duke Center, 2014).

Once the written portions of the therapies were completed, the team undertook a randomized trial utilizing the materials (Koenig et al., 2015). The findings demonstrated that

both CBT and RCBT were essentially equally effective in the treatment of major depression in patients with a chronic medical illness who were at least somewhat religious. However, the authors indicated that, rather than the religious content of the protocol (RCBT or CBT), it was the religiosity of the participants that made the difference in treatment outcome. The authors explained that in combatting depression, CBT functions as a tool *DSM-5*in managing troubling cognitions, a process that is utilized within the existing spiritual purview of the religious client. This is the reason the effectiveness of each approach was generally the same (Koenig et al., 2015). The researchers concluded that integrating religious clients' beliefs into CBT does not seem to significantly reduce the effectiveness of the therapy, especially in religious clients. A patient's religiosity comes into play more or less regardless of the religious content of the therapeutic materials (Koenig et al., 2015).

Limitations of the Duke Center Study

A limitation of the Duke research was the conceptualization and use of the BDI-II. The study accepted participants with BDI-II scores as low as 10; a score of 9 or below indicates remission (Koenig et al., 2015). But with such a low measured effect, it is questionable whether the intervention did cause a reduction in depression as purported in the study. Depression primarily conceptualized as feelings of sadness (BDI-II, Question 1), getting less satisfaction out of things (BDI-II, Question 4), and/or loss of interest in other people (BDI-II, Question 12). Therefore, it is possible that other questions on the measure could have been answered in such a way as to produce a score of 11–16 (mild mood disturbance), 17–20 (borderline clinical depression), or 21–30 (moderate depression) without positive responses on questions regarding sadness or anhedonia (Koenig et al., 2015). One limitation is the doubt as whether some participants met the criteria for depression and therefore whether they could improve

significantly or meet the standards of remission. Participation in this current study required a BDI-II score of 20 or above (moderate or clinical depression) during a three-week baseline period, with a score of at least 1 on Question 1 as well as on 4 or 12. These criteria are intended to more firmly capture clinical depression as it is currently understood. The change in measuring depression in this current study reflects the Duke team's recommendation that further studies be done that focus on more severe depression and the more religious client, rather than on less severe depression and moderately committed religious participants (Koenig et al., 2015). This present research is, in part, a response to this recommendation.

Another limitation is the difficulty identifying the effective aspects of the Duke material. There are assessments in place for depression and coping, but no measure that queries the usefulness of the various aspects of the Duke protocol. These include managing thoughts, prayer and meditation, the Bible, forgiveness and repentance, gratitude, altruism and generosity, positive and pleasurable experiences, and church and social activities. The Duke research did not inquire which aspects of this protocol were useful in reducing depression. This current study developed and utilized the IIA measure to secure this data.

A final limitation concerns attachment and how a religious person's understanding of God might contribute to managing depression. Although the Duke research was admittedly a pilot study, it appears that an investigation into attachment could have improved the construct validity of the work. The Duke study takes into consideration the importance of religious faith and participants' ability to cope with stressors, but there was no measure in place to observe the way in which individuals conceptualize an attachment to God as a secure base. The addition of an attachment measure highlights the importance of distinguishing the functional difference

between the BRCOPE and the AGI, which is discussed in the Instrumentation section of Chapter Three.

Single-Case Designs

This research used a single-case research design analysis to measure the magnitude of effectiveness of the Duke Center's RCBT protocol on a block of four Christian individuals with depressive symptoms. The objective was to ascertain the clinical significance of RCBT protocol by measuring mood change in participants before, during, and after treatment, and to consider the differential effectiveness of attachment to God, religious struggle, and the Duke material as mediating actions.

Given the limitations of traditional randomized controlled studies, this research incorporated more recent understandings of research design that observe the usefulness of single-case quantitative methods for practice-based evidence (Barlow et al., 2009; Kazdin, 2011; Kratochwill & Levin, 2015; McMillan & Morley, 2010). In the pursuit of both rigorous and relevant data, McMillan and Morley (2010) argued that single-case research is a fitting approach to meet the dual demands of gathering accurate data and providing relevant applications in the real world. Rather than interpreting SCRD negatively, the construct provides "a set of elegant methodological strategies that help rule out plausible alternatives for an observed finding" (McMillan & Morley, 2010, p. 135). However, the design does have its shortcomings; in one meta-analysis Smith concluded that although SCRDs are widely used, the approach is not entirely understood and faces methodological challenges (Smith, 2012).

SCRDs have been applied in many ways in the study of depression, such as McCullough, Lord, Conley, and Martin's (2010) innovative SCRD used to evaluate the efficacy of CBASP treatment for outpatients with early-onset depression. In this investigation, McCullough et al.

studied one patient's acquisition of skills and how those new abilities impacted the change process. The investigative team found that if an early-onset chronically depressed patient masters the learning objectives of CBASP, there is a likelihood that the person will resolve the disorder. Arco (2015)'s similar more recent study investigated one patient presenting with obsessive-compulsive disorder comorbid with major depressive disorder treated with behavior activation. Other SCRDs propose further innovations, such as randomization (Kratochwill & Levin, 2010) and the promotion of the use of empirically supported statements when describing single-case literature (Shadish & Sullivan, 2011).

Mental and physical health research has increasingly witnessed an upsurge in attention paid to the usefulness of intraclinic protocols to broader audiences. Petty and Heimer (2011) argued that, rather than relying on traditional sources of research, clinics should reconceptualize their purposes and conduct their own investigations. Following this debunking of the standard medical model, recent emphases have been placed on the effectiveness or external validity of therapies rather than primarily on the efficacy or internal validity of randomized controlled study designs (Petty & Heimer, 2011). Innovations of the utilization of collection pods or parallel studies that harness SCRDs at diverse locations were managed by various researches who pursued consensus on a wide array of mental health questions (Dattilio, Edwards, & Fishman, 2010; McMillan & Morley, 2010). When carefully administered, these relatively small undertakings were able produce substantive results on par with larger, more traditional efficacy studies. A network of SCRDs at assorted locations serving heterogeneous populations can strengthen conclusions initially identified in studies such as this present one. RCTs may be utilized to establish the internal validity of a treatment, but SCRDs assist in creating external validity or generalizability of the treatment to other settings and groups of people and help to

examine better construct validity and mechanisms of action. If researchers understand the idiosyncratic advantages of SCRDs while keeping an eye to potential weaknesses, such studies can provide innovative, evidence-based research not otherwise achieved with traditional RCTs.

SCRDs may have important applications in understanding the complexities of R/S in the lives and struggles of religious individuals. Research leaders in the field of R/S acknowledge such complexities and call for more innovative approaches that seek to understand the nuances of R/S and their interface with mental health in concert with SCRDs and qualitative research methodologies. Dein, Cook, and Koenig (2012) summarized their assessment of current controversies and directions in religion, spirituality, and mental health:

> Although studies examining religion, spirituality, and mental health generally indicate positive associations, there is a need for more sophisticated methodology, greater discrimination between different cultures and traditions, more focus on situated experiences of individuals belonging to particular traditions, and, in particular, greater integration of theological contributions to this area. We suggest priorities for future research based on these considerations (p. 852).

Summary

CBT and RCBT have been shown to be useful therapeutic systems in treating depression. Although it is not completely understood why religion functions as a causative factor in reducing mental illnesses such as depression, faith-based beliefs in combination with CBT have demonstrated positive results. In utilizing the RCBT manualized protocols at the Duke Center, the Duke research team (2014) showed that RCBT and CBT are equally efficacious in the treatment of the chronically ill who indicate religious leanings. The report states that the religiosity of the patients may have been the key factor in treatment outcome, not whether CBT

or RCBT was utilized. In application to this current research study, it is understood that RCBT is preferred by religious clients, does not appear to impede CBT, and is at least as operative as CBT in religious clients who are medically ill. Traditional RCTs have their place in investigative studies, but SCRDs enhance the research process in significant ways, such as in the determination and explanation of aspects of construct and external validity. SCRDs, although smaller, have the potential of being linked together as pods to produce research synergies not otherwise found in traditional RCTs.

Based on the review of the literature, this study sought to address the question of the effectiveness and transportability of the Duke Center RCBT protocol to depressed Christians who were not medically ill in a Christian clinic or church environment. In addition, this investigation considered questions of efficaciousness, or construct validity, asking why such measures may prove useful in dealing with depression. Assessment measures of religious struggle and God attachment as well as internal integrative measures with the Duke materials may disclose causative interactions between the religious content and delivery of RCBT in reducing depression among Christians. It was hypothesized that the use of the prescribed protocol will prove at least equal in effect in reducing depression as in the Duke study and that there will be a positive correlation between the introduction of RCBT and God attachment, religious coping, and other identified internal factors in the reduction of depression.

CHAPTER THREE: METHODS

The methods undertaken for this study addressed questions of external and internal validity, procedures, and data processing and analysis.

Research Design

External and Construct Validity

Though not consistently, efficacy studies emphasize internal validity, whereas effectiveness studies examine external validity (Chambless & Peterman, 2004; Moras, 1998). This study focused on the effectiveness of RCBT generalized to depressed Christians and addressed efficacious questions such as why RCBT helped improve depression symptoms and the level of internal and construct validity. As noted earlier in Chapter One, efficacious inquiries included investigating the x:y correlation hypothesis that mediation exists on the part of the RCBT intervention and underlying components thereof, perhaps revealing correlates in the form of images of attachment to God, religious coping, and other therapeutic factors. If the RCBT protocol was responsible for change (internal validity), determining construct validity would uncover what specific aspect of the arrangement was the causal agent, or what may have produced the effect (Kazdin, 2011). This current research utilized a SCRD by observing four individuals undergoing the Duke Center's version of RCBT. The participants were evaluated concerning depression, religious coping, God attachment, and internal features of the therapy material. The objectives of the research included assessing the external validity of the Duke Center's RCBT in a Christian clinical setting with clients who were not medically ill. An investigation into construct validity evaluated the causal pathways and reasons the depression symptoms experienced by the four participants changed when they were exposed to the RCBT protocol.

Selection of Participants

The client selection process involved four individuals who met the inclusion and exclusion criteria. These criteria are listed on the Duke Center website under "Religious CBT Study Design, Research Summary" (Duke Center, 2014) and were modified for this study. All the inclusion and exclusion criteria of the Duke process were followed except as noted below.

As in the Duke Center research, the inclusion criteria for this current study were (a) age 18–85, (b) an indication that R/S is at least somewhat important, (c) a current major depression diagnosis, and (d) a BDI-II score of 10–40. Having a history of depression did not exclude the participant. This current research included BDI-II scores of at least 20–40 during the three-week baseline period, with scores of at least 1 on Questions 1 and either 4 or 12. In the Duke study, subjects were assessed on the BDI-II at the first week, fourth week, eighth week, 10th week (or end of treatment), and the 24th week. This was altered for this present study, for which participants were tested for depression for three consecutive weeks prior to the start of therapy in order to establish a three-week baseline and at each of the ten therapy sessions. The AGI and BRCOPE were administered at the baseline, at the sixth week, and at the 10th week. These instruments are explained below under Procedures and Testing. The Duke protocol required chronic medical illness, which was not a consideration in this current study.

Exclusion criteria included (a) significant cognitive impairment (< 14 on Mental Status Exam [MSE]) or inability to give informed consent; (b) having received psychotherapy in the last two months; (c) a diagnosis of a psychotic disorder, alcohol or substance abuse, or posttraumatic stress disorder (PTSD) within the past year; (d) a history of bipolar disorder (ever); (e) active suicidal thoughts that place the participant at serious risk, such as answering Question 9 on the BDI-II with a score of 2 or higher; (f) a diagnosis of HIV/AIDS, an autoimmune

disease, dementia (moderate or severe), an endocrine disorder likely to affect stress hormone levels; or (g) the inability to communicate in English or travel to the counseling center for 10 sessions.

In keeping with the Duke Center protocol, religious criteria included a client who was prescreened on the initial questionnaire and answered affirmatively to whether R/S was at least somewhat important in daily life (Koenig et al., 2015). In addition, there was an indicator in the Duke Center's first week assessments that measured the degree to which religion was important to the participants. This information was gathered with the Measure of Religiosity and proved to be valuable since the level of religiosity cohered with how well participants responded to the RCBT therapy. The Measure of Religiosity and was utilized in this present study. Furthermore, and as in the Duke Center's assessments, the present research inquired as to the history of the participant. Demographics included gender, race, marital status, education level, living situation, and religious denomination, as well as scores on the BDI-II, BRCOPE, and Charlson Co-Morbidity Index. The Charlson Co-Morbidity Index was not used in this present study since no chronic medical illnesses were in focus. A list of medications was also included. In addition to the standard Duke measures were the AGI assessment and IIA.

Recruitment

In the Duke study, recruitment took place through letters to the general population of outpatients in the Duke Health System in North Carolina and the Glendale Adventist Medical Center in southern California. The researchers also posted and handed out flyers in the medical centers at Duke University, other local university campuses, local mental health clinics, and community groups such as churches and other organizations who may have had contact with persons at risk for depression. In addition, they asked for referrals from physicians and nurses

staffing outpatient primary care clinics. Referrals from hospital physicians and other hospital staff were solicited as well. The researchers advertised locally through print, and when necessary, they screened consecutively admitted patients to the medical-surgical services of the health systems mentioned above.

Recruitment for this present study followed a similar course with the intent to recruit participants for the study unobtrusively and with the client's sole motivation of being treated for depression rather than entering a study. The primary researcher contacted various Christian organizations by email, phone, and word-of-mouth, offering therapy for clients who might qualify for the project. An Initial Assessment Interview Form (see Appendix B) was used to determine whether those interested in participating in the study met the initial inclusionary and exclusionary criteria. If the potential participant did not qualify for the study, the counseling center's normal procedures would be followed, including an offering of therapy at no charge. The following is the sequence flow that took place during the recruitment phase.

1. The potential participant responded to the general inquiries noted above.
2. The potential participant received an Initial Assessment Interview Form and BDI-II.
3. If the individual qualified for the study, the option was offered to enter the study.
4. Three weeks of BDI-II pretherapy baseline assessment took place.
5. Therapy began with the research therapist.

Instrumentation

Measure of Religiosity. In accordance with the Duke Center criteria, all the participants in this present study self-reported their level of religiosity. To determine how deeply religious each participant was, as in the Duke study, an overall religiosity measure was created by summing four areas: the importance of religion, religious attendance and private religious

activity, spiritual experiences, and intrinsic religiosity. To be considered "deeply religious," subjects needed to fulfill three of the four criteria below (Koenig et al., 2014). For purposes of comparison among participants in the current study, the four assessment criteria were given equal weight and averaged for each participant, with a maximum possible score of 100% (see Appendix J). The four parts to the Measure of Religiosity are the following.

1. Overall relationship with God. This section of the Measure of Religiosity asked potential participants answer the question, "How important is your relationship with God in your daily life?" Scoring 45 or higher on this measure qualified a potential participant as "deeply religious."

   ___1. Not important ___ 2. Somewhat important ___ 3. Very important

2. Intrinsic Religiosity Measure (10-item measure with the average Duke score 39.9 of a range 10–50; Hoge, 1972; Koenig et al., 2014). Scoring 45 or higher on this measure qualified a potential participant as "deeply religious." This assessment was slightly modified, replacing "religion" with "God"' or "spirituality." Also, Question 5 was clarified from "My faith sometimes restricts my actions" to "My faith sometimes keeps me from doing wrong things."
3. Daily Spiritual Experiences Scale (16-item scale, average score at Duke was 61, range 16–80; Underwood & Teresi, 2002). Scoring 70 or higher on this part of the Measure of Religiosity qualified a potential participant as "deeply religious."
4. Private Religious Activity (Haley, Koenig, & Bruchett, 2001). The Duke study used two questions from the 5-item Duke University Religiosity Index (Koenig & Büssing, 2010). To be considered "deeply religious," the participant attended religious

services once a week or more and prayed privately and/or read the Bible at least once a day. This present study's Measure of Religiosity used these same two questions.

Beck Depression Inventory II. Following the Duke protocol, this research utilized the BDI-II, a 21-item self-report considered a standard measure for depression in studies of mental illness that is widely used in clinical investigations of depression in primary care (Beck et al., 1961, 1996). Wang and Gorenstein (2013) provided a recent comprehensive review and observed that "the BDI-II is a relevant psychometric instrument, showing high reliability, capacity to discriminate between depressed and non-depressed subjects, and improved concurrent content, and structural validity" (p. 1). Their analysis demonstrated internal consistency at about 0.9, and the retest reliability ranged from 0.73 to 0.96. Furthermore, the criterion-based validity demonstrated good sensitivity and specificity for distinguishing depression. They concluded, "Based on available psychometric evidence, the BDI-II can be viewed as a cost-effective questionnaire for measuring the severity of depression, with broad applicability for research and clinical practice worldwide" (Wang & Gorenstein 2013, p. 1; see Appendix E).

Brief Religious Coping Assessment. As in the Duke study, this research employed the BRCOPE, a 14-item self-report measure of religious coping of significant life stressors (Pargament et al., 2011). First conceptualized from Pargament's (1997) program of theory and research on religious coping, the assessment attempts to understand the role that religion plays in crisis, trauma, and transition. It is the most commonly used measure of religious coping in the research literature. Pargament et al. (2011) summarized the positive and negative coping methods that the scale seeks to measure:

> Positive religious coping methods reflect a secure relationship with a transcendent force, a sense of spiritual connectedness with others, and a benevolent worldview. Negative religious coping methods reflect underlying spiritual tensions and struggles within oneself, with others, and with the divine. (p. 1)

Empirical studies show that the psychometric properties of the measure include construct validity, predictive validity, and incremental validity of the subscales. These results include diverse samples that result in a median alpha score for the positive coping subscale of 0.92 and an alpha median score for the negative coping subscale of 0.81 (Pargament et al., 2011). These were combined to provide high reliability and validity estimates. The first seven items on the test measured positive coping, while the last seven items examined negative coping. The positive subscale was regularly correlated with indications of increased psychological health, while the negative subscale was associated with negative symptomology such as physical pain, anxiety, and depression (Pargament et al., 2011).

One limitation of the BRCOPE is Statement 7, "I focused on religion to stop worrying about problems." The authors of the scale intended that the use of the word *religion* in this statement be understood as positive. However, among Evangelical Christians, religion is generally recognized as a negative conceptualization of faith. Many Evangelicals regard their faith as one of a relationship with God and Christ, rather than an impersonal religious one. When queried about the question on the BRCOPE, the four participants agreed with this negative understanding of the word. As such, corrections were made in scoring the measure (see Appendix J).

Attachment to God Inventory. The Duke study did not use the AGI, but it was employed in this research to better comprehend attachment to God as a factor in a person of faith

managing depression. The AGI (Beck & McDonald, 2004) was built upon Bowlby's 1969 foundational work with children who naturally seek a secure base with caretakers. Also, the AGI was designed utilizing Brennan, Wu, and Loev's (1998) two-dimensional model that sees relationships varying along two continuous dimensions: avoidance of intimacy and anxiety about abandonment. Beck and McDonald used a self-report 28-item measure with 14 items indicating avoidance and 14 reflecting anxiety, with higher scores on either indicating insecure attachment to God. There was reason to believe that the scale demonstrated good internal consistency, with the anxiety subscale showing an alpha of 0.80 and the avoidance subscale confirming an alpha of 0.84 in a sample of 118 college students (Beck & McDonald, 2004).

The difference between the BRCOPE and the AGI lies with the former attempting to measure the general role that religion plays in crisis, trauma, and transition, while the AGI focuses upon perceived connectedness with God manifested in areas concerning intimacy or avoidance. The BRCOPE seeks to ascertain if an individual has positive religious coping strategies through a secure relationship with God, spiritual connectedness with others, and a favorable view of the world, rather than spiritual worries and struggles. The AGI focuses more exclusively on the participant's God perception as a secure base as an object to be avoided. The two measures share common ground in assessing perceptions of God as a benevolent and ready haven in times of distress but diverge in access points beyond perceptions of God. In sum, the AGI attempts to capture a participant's view of God as an available secure base, whereas the BRCOPE takes a more generalized approach of understanding the participant's view of God, religion, and the church to address life's stressors (see Appendix K).

Penn Helping Alliance Rating Scale. The 19-item revised Penn Helping Alliance Rating Scale (PHARS; Luborsky et al., 1996) was used in the Duke project and was employed in this

study to ascertain the participant's alliance with the therapist (19 items) and the therapist's connection with participants (19 items). The scale is one of the most widely used measures of therapeutic alliance in the field (Summers & Barber, 2003), indicating the highest correlation with CBT compared to five other alliance instruments in researched literature (Fenton, Cecero, Nich, Frankforter, & Carroll, 2001). Each item is rated on a 1-to-6 point Likert scale (a score of 1 representing "strongly disagree" to a score of 6 representing "strongly agree," with an overall range of 19 to 114 (see Appendices N and O).

Cognitive Therapy Rating Scale. The 11-item Cognitive Therapy Rating Scale (CTRS) (Young & Beck, 1980) was utilized in this study as an evidence-based means to ascertain the primary researcher's and research therapist's understanding of cognitive therapy (Hatcher, 2010) and served as a measure of orientation and training in understanding the Duke material. The CTRS was used in the training of the Duke therapists, and although the instrument has limitations in interrater reliability, it is considered a reliable measure for evaluating therapist competence in cognitive therapy for depression, interrater reliability, internal consistency, factor structure, and discriminant validity (Vallis, Shaw, & Dobson, 1986). The reviews of the CTRS indicate high homogeneity and the measure's ability to designate a relatively similar assessment of therapists' performance when they follow cognitive therapy protocol validity (Vallis et al., 1986). A minimum score of 40 on the CTRS was required of the Duke therapists; this standard was also set in this present study with the one research therapist (see Appendix H).

Internal Integrative Assessment. At the outset of this study, there were questions as to how participants might integrate their perceptions of God and religious coping with their struggles with depression. The scores on the traditional assessments (BDI-II, AGI, BRCOPE, and PHARS) were useful in measuring depression, attachment, coping, and alliance but offered

limited insight into the internal integration process of any cause and effect initiated by the Duke Center therapeutic material. A prominent question in the Duke research and this present undertaking had to do with the aspects of the Duke material and how they may act upon depression. Beyond the considerations of the traditional measures, there was a potential benefit of asking more direct questions of the participants concerning what internal cognitive processes assisted them in reducing their depression scores. As noted earlier, the Duke program did not ask participants questions about the usefulness of aspects of the therapy.

The IIA was developed by the researcher and involves eight items that focus on the main subject matter of the Duke material. It consists of a Likert ranking for the first seven inquiries (Not at all, Somewhat, Quite a bit, A great deal) and a hierarchical ranking for the last eight items in the inquiry. The items probed participants' views on the usefulness of managing thoughts, prayer and meditation, the Bible, forgiveness and repentance, gratitude, altruism and generosity, positive and pleasurable experiences, and church and social activities. Each statement was prefaced with, "During this counseling program my depression went down, and my happiness improved because of what I learned and practiced about [item]." The hierarchical question was "What part of the session topics and homework helped you the most in reducing your depression and improving your happiness?" Respondents were asked to rate the following list with 1 as the most important factor, 2 as the second most important, and so on until placing a ranking number beside each option (1–8).

_____ Engaging in forgiveness and repentance

_____ Being grateful

_____ Extending kind behaviors and generosity toward others

_____ Involvement in church or social activities

_____ Managing negative thoughts (correcting thinking mistakes)

_____ Practicing personal prayer (and/or meditation)

_____ The use of God's Word, the Bible

_____ Having positive and pleasurable experiences

The items in the IIA were designed to differentiate and compare the key factors of the counseling for the measure's current functioning in the research study and to assess the tool's future utility. Cronbach's alpha was not conducted with the IIA primarily because of the qualitative nature of the assessment. With just nine questions and a sample size of four participants in this SCRD study, the IIA asked for opinions and comparisons about the Duke Center material, which reduced any potential benefit of an alpha analysis (see Appendix M).

The MSE, *DSM-5* Cross-Cutting, BDI-II, AGI, BRCOPE, CTRS, PHARS, and IIA were administered by the primary researcher in collaboration with the study's research therapist and data specialist. Efforts were made to stagger the administration of the measurements when possible to reduce contamination due to administration effects and order of results.

Procedures

Research Therapist

The Duke research team chose to use masters-level counselors as therapists. As stated earlier, the researchers did not require a particular faith orientation of the therapists; neither were they required to be licensed (Koenig et al., 2015). Counselors could be of any religious persuasion but were required to adhere to the prescribed manuals and workbooks. Such an approach coincided with best practices in which counselors recognize the autonomy of clients and the choices the counselee made concerning religion (Corey, Corey, & Callanan, 2011). Although a counselor's faith or lack thereof may be important, it did not appear to impede the

process of counseling (Steen, Engels, & Thweatt, 2006). Wampold (2001) argued that client-specific factors and the therapeutic relationship rather than counseling techniques are primarily the effective components in the therapy process.

To avoid experimenter effects and ensure the highest standards of research, objectivity, and validity, an independent therapist with a current counseling license and familiarity and experience with CBT was utilized for this study. The research therapist possessed professional liability insurance of at least $1,000,000 per claim, $3,000,000 aggregate, and scored at least 40 on the CTRS during the therapist training phase.

Research Therapist Training

As in Duke research, this study's therapist received training in the prescribed protocol before the actual counseling research sessions. Materials for the training were provided by the Duke Center in electronic and printed formats. The following measures were in place to adhere to the highest standards of ethical conduct and academic quality as prescribed by professional counseling organizations and the Institutional Review Board. Every reasonable measure was taken to care for the safety and well-being of the participants.

Training and preparation. The research therapist studied the Duke Center written materials and reviewed the training video. The primary researcher met with the research therapist for about 10 hours of orientation and training to refresh the therapist's understanding of CBT and the RCBT Duke protocol. The primary researcher is in Ph.D. studies (all but dissertation) in a program accredited by the Council for Accreditation of Counseling and Related Educational Programs with Ph.D. classes in CBT. He also had several years of experience in teaching CBT in undergraduate and graduate institutions and in utilizing CBT in counseling situations. Once the initial orientation was completed, the research therapist delivered the 10

face-to-face sessions of therapy to two clients as training cases (20 hours) for a total of 30 hours of instruction. The research therapist was required to score 40 or higher on the CTRS while delivering the therapy in the practice sessions. This was rated by the primary research therapist, who sat in on the entirety of the sessions for the first practice client. After several hours of orientation and counselor training, the counseling therapist scored 52.

Freedom to deviate from the protocol. The research therapist was mindful of the depression levels and suicide ideation of participants and any other signs or probabilities of harm to self or others with points of action in place if warranted as noted below. The therapist was free to deviate from the study if the participants experienced any crisis.

Review and debriefing sessions. The research sessions for the practice and actual participants were audio recorded and reviewed by the primary investigator to verify that the therapist followed the prescribed protocol for each session. In addition, to monitor the participants and the progress of the therapy, the primary researcher and the research therapist communicated after counseling sessions. These meetings ensured adherence to procedures, answered any questions, and provided help with difficult matters. The PHARS was utilized during Weeks 3, 7, and 10. The results indicated on the audio recordings and PHARS instrument were used in the debrief sessions to alert the primary investigator and the therapist of any improvements that could be made in the therapeutic alliance or presentation of the material. These matters are also included in Chapter Four of this document. Any indication of unethical behavior would cause discontinuation of the therapist's services and an offer to the participants of an alternative means to therapy.

Ongoing assessment. For reasons similar to those for debrief sessions just indicated, this research included adjustments to emphases in the Duke Center treatments based on particular

gains or deficiencies reflected in the regular debrief sessions (Gorman & Nathan, 2015). Because of this ongoing practice during the therapy, the assessments proved not only to be tools indicating participants' progress or lack thereof but strategic guides in improving the balance of the therapeutic interventions for each participant. For example, an answer on the AGI could alert the primary researcher and the therapist of a particular topic to be highlighted in the therapy, such as God's trustworthiness during times of trial. Question 21 on the AGI states, "I crave reassurance from God that God loves me." If this question was answered "Agree" or "Agree Strongly," an effort was made to address this matter in session if the Duke therapy included such material. As such, midstream alterations in the delivery of the therapy targeted particular concerns of the participants with the hope of improving outcomes. The assessments indicated the effectiveness of the therapy but also provided an evidence-based means of guiding the remainder of the sessions for each participant. These debrief sessions provided an opportunity for the primary researcher and the research therapist to review assessment scores and contemplate particular emphases and applications of the Duke material that might address newly discovered progress or lack thereof.

Therapist/Counselee Communication

Although the Duke Center primarily delivered counseling by phone, this study provided face-to-face traditional clinical sessions. The counseling was done at the same clinical location for all four participants to avoid any confounding due to the delivery environment, such as demand characteristics as an experimental artifact.

Testing

The participant assessments, BDI-II, BRCOPE, AGI, PHARS, and IIA, were administered in conjunction with the therapy sessions and under the guidance of the primary

researcher. The BDI-II was administered in each of three weeks prior to first sessions; the BDI-II was administered before each session and following the last session; the BRCOPE, AGI, and PHARS were given at prescribed sessions before weekly sessions; and the IIA was given after the final session.

Rather than using the Duke Center's approach (measurements at the first session and at 4, 8, 10 [or end of treatment], and 24 weeks), this research measured depression to establish a baseline and on a weekly basis, which is common in SCRD studies. By conducting measurements weekly before therapy began, the researcher established a baseline condition that improved the possibility that an alteration in characteristics postintervention was likely attributable to the intervention. Another change was how often coping and attachment was measured, which was in Weeks 1, 6, and 10 (or end of treatment). For these two measurements, the approach was a slight alteration from the Duke research but provided sufficient data to meet the objectives of the study. The PHARS assessments took place during Weeks 3, 7, and 10, similar to the Duke scheduling (Weeks 4, 8, 10), with slight alterations to correspond with the present research. Luborsky et al. (1996) regarded the second session as a good time to measure for the PHARS.

Data Specialist

A Ph.D. consultant in counseling research design and statistics was used in this study. He initially surveyed the study proposal, checked for any potential problems in design and data, and followed-up by scrutinizing the final project write-up.

Session Content

The Duke Center's RCBT differed from their non-religious CBT in four ways. Four content additions were woven into the RCBT materials (Duke Center, 2014):

1. Recognition of and orientation to the client's religious scripture.
2. Prayer and meditation to their understanding of God.
3. Theological explanations for suffering that is compatible with their faith.
4. Participation in their community of faith.

The Duke Center protocol was delivered in ten 50-minute sessions over 12 weeks (allowing for two skipped weeks), with each session comprised of the following nine steps:

1. Goals of the session
2. To do before the session begins
3. Materials needed in client workbook
4. Set the agenda
5. Review home practice activities
6. Introduce the topic(s) for that session
7. Exercises to be completed during the session
8. Home practice activities
9. Terminate session

The following were the session titles of the Duke Center's RCBT protocol utilized in this research.

- Session 1: Assessment and Introduction to RCBT
- Session 2: Behavioral Activation and Walking by Faith
- Session 3: Identifying Unhelpful Thoughts: The Battlefield of the Mind
- Session 4: Challenging Unhelpful Thoughts: Bringing All Thoughts Captive
- Session 5: Dealing with Loss
- Session 6: Coping with Spiritual Struggles and Negative Emotions

- Session 7: Gratitude
- Session 8: Altruism and Generosity
- Session 9: Stress-Related and Spiritual Growth
- Session 10: Hope and Relapse Prevention (Duke Center, 2014, p. 2)

Summary of Screening and Assessment Procedures

The following is a general outline of screening, baseline assessment, and in-treatment assessments: During the screening phase, the IIA, MSE, *DSM-5* Level 1 Cross-Cutting Symptom Measure-Adult, and BDI-II were administered to each potential participant. With guidance from the primary researcher, the research therapist completed training and scored 40 or higher on the CTRS. After these initial criteria were met, each participant completed the Informed Consent Form (see Appendix F) and the Demographic Questionnaire (see Appendix I). the BDI-II was repeated each week for three weeks immediately preceding the start of therapy. During treatment, the BDI-II was administered on a weekly basis (BDI-II) to measure depression. Coping was assessed through administration of the BRCOPE and AGI at the first session and Weeks 6 and 10 (or end of treatment). The PHARS assessments measured therapeutic alliance and took place in Weeks 3, 7, and 10. The IIA was administered after the last session.

Payment for Services

Although the Duke study treated participants within a clinic environment, the researchers did not require payment for therapy services. The question of payment did not appear to be a factor in maintaining the integrity of the research. On the other hand, the Duke research team did pay subjects for their time in completing the baseline assessment including blood and urine samples, four follow-up assessments, and two follow-up appointments ($15–25 for each

assessment up to $100 total). The payments recognized the extra efforts participants employed in completing the medical procedures and assessment. This current project entailed therapy and assessments but did not require medical procedures. Also, the present therapy took place in a church-sponsored counseling center that did not require payment for services. Because of these factors, participants did not receive compensation nor were they expected to pay for the therapy. However, at the conclusion of the therapy, the four participants each received a commemorative plaque reflecting the content of the RCBT, which stated, "For God has not given us the spirit of fear; but of power and of love, and of a sound mind" (2 Tim. 1:7).

The reports on the Duke research do not specify whether the masters-level therapists were paid for their services. The research therapist used in this study was funded by the researcher, receiving a generally accepted rate for counseling therapy: $100 per week for ongoing general preparations and services and an additional $100 for each counseling session, including ten sessions for the two practice participants. This is further explained in the following section.

Data Processing and Analysis

Questions considered during data processing and analysis were: "Is there a treatment effect, and is the treatment responsible for change?" and "In what way does the treatment produce the effect?" Religious coping and attachment to God results were each compared to depression levels for any differential changes. In addition, the four participants' cases were compared with each other to identify differences and determine any implications of those differences. Results were assessed to test this study's research questions and hypotheses. Further comparisons were made to the Duke Center's main study. Steps to ensure statistical conclusion validity were undertaken and expected safeguards were put in place to minimize

threats to validity, possible confounds, and sources of bias and artifact to render implausible ancillary or extraneous explanations for change (Kazdin, 2011; Warner, 2012).

Chapters Four and Five of this work, along with the Appendices, summarize and evaluate the features of the gathered data and provide the opportunity for direct and comparative analysis. Of consequence are nonstatistical data evaluation methods such as indications of latency, change in level, change in slope, and change in mean across phases, as well as simple slope or trend lines (regression lines). Further and more complex computational covariations of the data were not viewed in this study due to the nature and objectives of the single-case research and the limited number of participants (Kazdin, 2011).

Risk/Benefit Assessment

The potential dangers in this study involved a breach of confidentiality and suicide risk. All hard-copy information was kept at the primary researcher's office in a locked file cabinet to ensure confidentiality. Electronic data were kept in the primary researcher's computer with both username and password protection. The primary researcher's computer was backed up with measures that employed security standards that conformed to the industry best practices for protection of information. The research therapist's confidential information was kept in accordance with the same standards.

Since suicide was a possibility with depressed patients, measures were taken to minimize this risk, including full disclosure through informed consent and a pre-established suicide protection plan. This plan included procedures similar to those outlined in the Duke study that were adapted for this research (Koenig, 2015). Although there are a variety of widely used psychiatric structured diagnostic instruments that prospectively assess emergent suicidal thoughts and behaviors (Sheehan & Giddens, 2015), Question 9 of the BDI-II was considered

adequate for this study. The Duke project allowed participants to continue in the study if they scored 3 ("I would kill myself if I had the chance") on Question 9 of the BDI-II. This present study would have excluded individuals if they selected a response of 2 or above on Question 9, meaning that this study proceeded more cautiously than the Duke Center's if participants were to report suicidal thoughts.

As mentioned above, suicide assessment took place at screening through the use of Question 9 of the BDI-II, which was administered at the baseline and weekly assessments until the end of the treatment. As in the Duke research, the limits to confidentiality included the research therapist attending to the needs of the participant with or without the participant's permission (Koenig, 2015). Concerning suicide prevention, intervention was put into action if (a) the patient marked 2 (I would like to kill myself) or 3 (I would kill myself if I had the chance) on Question 9 on the BDI-II or (b) the subject at any time during assessment interviews or therapy sessions indicated serious or active suicidal thoughts.

The benefit to subjects in this study was that they received evidence-based care for their depression. As noted in Chapter One and Chapter Two, CBT is distinguished as the best therapeutic approach to treating depression. RCBT has been recognized as delivering the same if not superior results for religious patients. Also, participants contributed to the knowledge base as to whether depression may be treated in a Christian clinic or church environment and how RCBT works to reduce depression.

Summary

This SCRD analysis included four participants who met the inclusion and exclusion criteria. The BDI-II was used as the main instrument to measure depression during screening and the therapy sessions. The BRCOPE, AGI, and IIA were utilized to understand if correlations

existed between depression level changes and religious coping, images of God attachment, or other factors associated with the Duke Center materials. The outside therapist received training following the prescribed materials on the Duke website, and a data specialist was utilized for purposes of research integrity. Session content was the Duke Center's RCBT protocol for Christians. Primarily, Question 9 of the BDI-II was used to identify suicide ideation, and procedures were followed to protect the participants. The data from the BDI-II, BRCOPE, AGI, and IIA were compared among the responses of the four clients and with data from other studies such as the Duke Center's.

This research sought to replicate the Duke Center's RCBT approach in addressing Christian depression. As stated, some alterations were made to the Duke Center's approach, such as changing the inclusion criteria from a score of at least 10 on the BDI to 20 to better identify changes due to the use of the intervention. This study also used a licensed research therapist delivering in-person therapy rather than masters-level therapists providing the therapy remotely, primarily by phone. The current study added measures such as the AGI and the IIA in order to study any implications upon God attachment and understand the most useful aspects of the Duke materials. Some of these alterations reflected perceived limitations in the Duke approach and what this research sought to improve upon.

CHAPTER FOUR: RESULTS

Restatement of Purpose

The purpose of this study was to determine the effectiveness of the Duke Center's therapy for depression in a clinical Christian setting. The research sought to investigate its efficaciousness in treating major depressive disorder. Four qualified participants were assessed for depression symptom severity prior to the start of therapy to establish a baseline and then proceeded through 10 sessions of therapy while undergoing prescribed assessments.

As noted in previous chapter, the inclusion criteria for this current study were (a) age 18–85, (b) an indication that R/S was at least somewhat important, (c) a current major depression diagnosis, and (d) a BDI-II scores of 20–40, including during the three-week baseline period, with a score of at least 1 on Questions 1 and on either Question 4 or 12. Exclusion criteria included (1) significant cognitive impairment (<14 on the MSE) or inability to give informed consent, (2) having received psychotherapy in the last two months, (3) a diagnosis of a psychotic disorder, alcohol or substance abuse, or PTSD within the past year, (4) history of bipolar disorder (ever), (5) active suicidal thoughts that place the participant at serious risk, such as answering Question 9 on the BDI-II with a score of 2 or higher, and (6) the inability to communicate in English or travel to the counseling center for 10 sessions.

Referrals came from pastors and church staff members, Christian college professors, and friends and family members of potential participants who heard about the study. Candidates were screened by the primary researcher by telephone, text, or email to determine if they met initial inclusion and exclusion criteria. During the face-to-face clinical interviews, the research therapist and the primary researcher worked collaboratively using the MSE, the *DSM-5* Cross-Cutting Measure, and the BDI-II to rule out potential participants based on exclusionary factors

and measure depression. Figure 4.1 indicates how names of potential participants were acquired and processed.

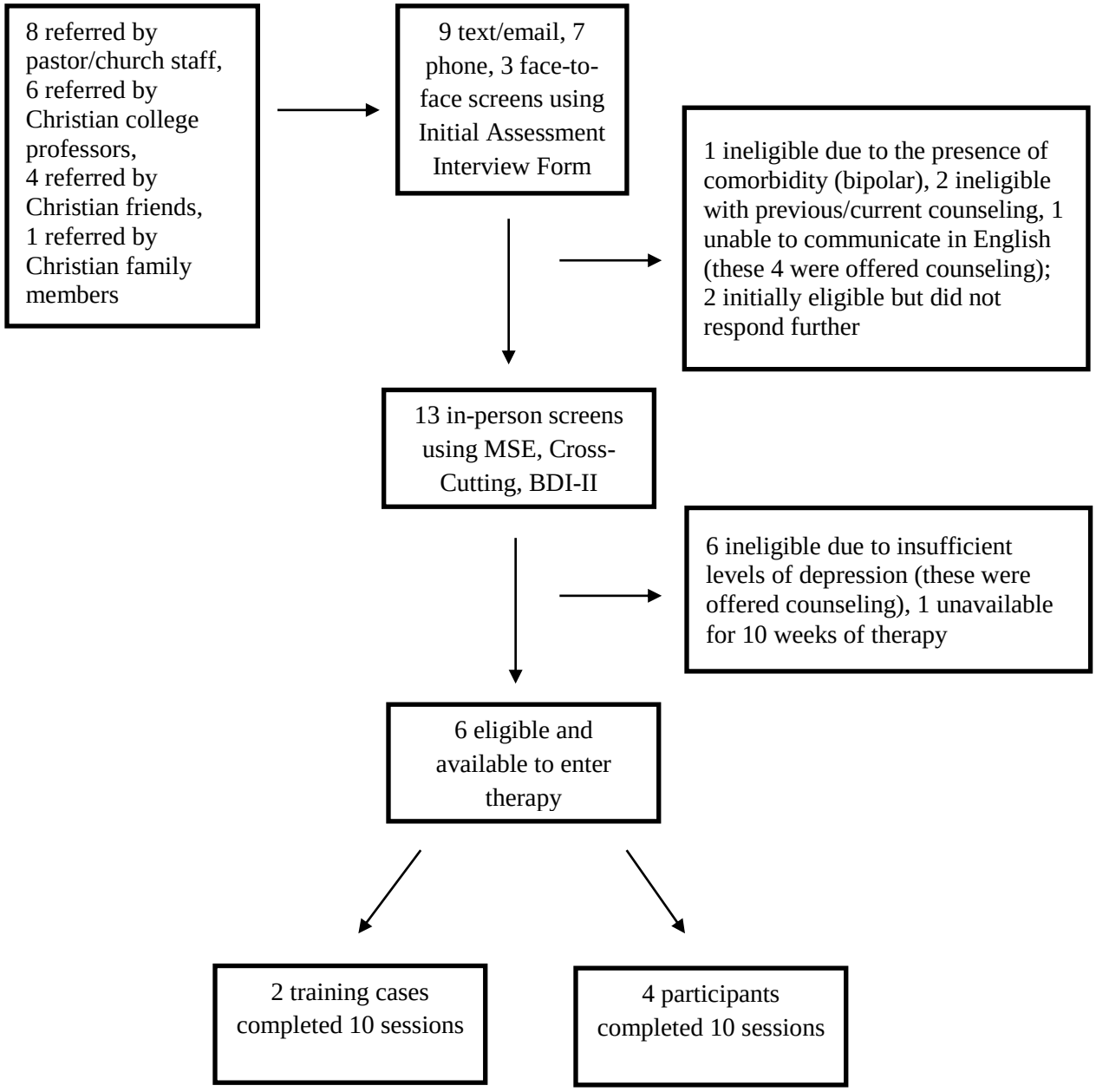

Figure 4.1. Referral and screening profile.

Demographics

As mentioned earlier, in terms of recruitment, this current study followed the general course of the Duke research, with the intent to bring participants into the study unobtrusively, motivated only by the need to obtain treatment for depression. The primary researcher contacted various Christian organizations by text, email, phone, and word-of-mouth and offered therapy for clients who might qualify for the project. The first two individuals who qualified and were willing to enter the study became the two practice cases. The next four who qualified and were willing to participate entered afterward as the individuals whose results make up the data that follow. Participants were chosen on a first-come, first-serve basis and therefore were not chosen from among a group of qualified candidates. There were never more than six qualified potential participants; once the first six were secured, recruitment ended.

Participant 1

Participant 1 (P1) met the inclusionary and exclusionary criteria for this study. She is a 43-year-old female, separated, and employed with an annual income of over $26,000. She is African American and has completed two years of college. The participant lives in a trailer home with her two children, both teenagers, and she has medical insurance. She self-reported that R/S is at least somewhat important and had been important in her life since her mid-20s. Her church preference was nondenominational. The participant reported that she was first diagnosed with depression in 2002 by a qualified medical doctor, psychiatrist, or professional counselor, and at the time of the study was diagnosed with depression by the primary researcher and the research therapist. However, she reported no other psychiatric problems. At the start of the therapy, she had not received counseling services for at least two months and was taking no

psychotropic medications. Throughout the research, the participant's answer on Question 9 of the BDI-II (concerning suicide) never exceeded 1.

Participant 2

Participant 2 (P2) met the inclusionary and exclusionary criteria for this study. He is a 37-year-old male, divorced, and employed with an annual income of over $26,000. His race is Latino, and he holds a bachelor's degree. The participant lives in a house, has no children, and is covered by medical insurance. He self-reported that R/S was at least somewhat important had been so in his life for about eight years, but he indicated no church/denomination preference. The participant was diagnosed with depression in 2015 by a qualified medical doctor, psychiatrist, or professional counselor, and at the time of this study, he was diagnosed with depression by the primary researcher and the research therapist. He reported no other psychiatric problems. At the start of the research therapy he had not received counseling services for at least two months and was taking no psychotropic medications. Throughout the research, the participant's answer on Question 9 of the BDI-II (concerning suicide) never exceeded 1.

Participant 3

Participant 3 (P3) met the inclusionary and exclusionary criteria for this study. She is a 31-year-old female, married but separated, and self-employed with an annual income of under $10,000. Her race is African American and she had completed two years of college. The participant lives in a house and has no children or medical insurance. She self-reported that R/S was at least somewhat important, that R/S had been important in her life since childhood, and that her church preference was nondenominational. The participant was first diagnosed with depression in 2017 by a qualified medical doctor, psychiatrist, or professional counselor, and at the time of the study was diagnosed with depression by the primary researcher and the research

therapist. She reported no other psychiatric problems. At the start of the therapy she had not received counseling services for at least two months and was taking no psychotropic medications. Throughout the research, the participant's answer on Question 9 of the BDI-II (concerning suicide) never exceeded 1.

Participant 4

Participant 4 (P4) met the inclusionary and exclusionary criteria for this study. She is a 64-year-old female, divorced, and employed with an annual income of over $26,000. She is African American and has taken some college courses. The participant lives in a house, and she has medical insurance. She self-reported that R/S was at least somewhat important, that R/S had been important in her life since about age 28, and that her church preference was nondenominational. She was first diagnosed with depression at the screening for this study by the primary researcher and the research therapist but reported no other psychiatric problems. At the beginning of the therapy, she had not received counseling services for at least two months and was taking no psychotropic medications. Throughout the research, the participant's answer on Question 9 of the BDI-II (concerning suicide) never exceeded 1.

Scores

The following figures and tables summarize the assessment scores for the four participants. Listed are data for the Measure of Religiosity, BDI-II, AGI, BRCOPE, IIA, and PHARS.

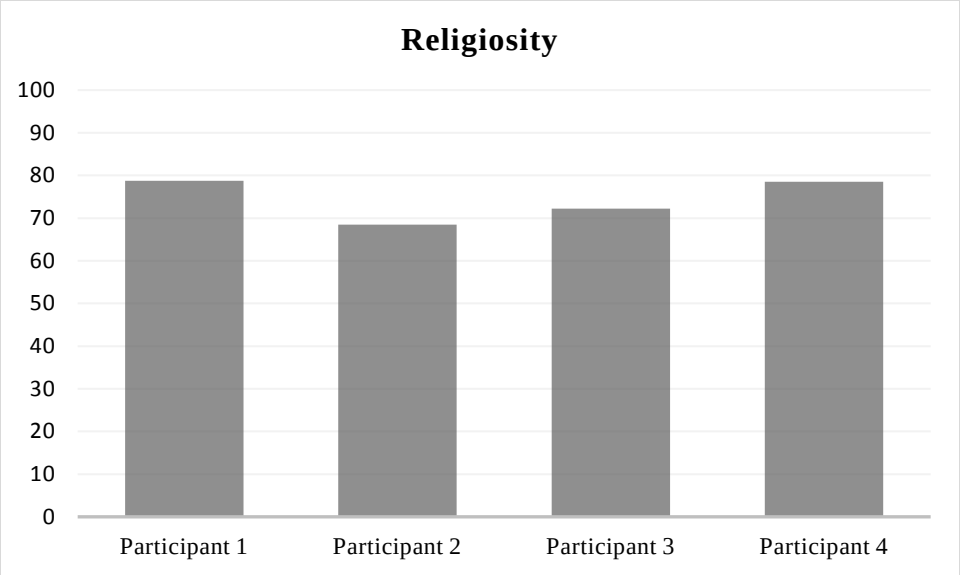

Figure 4.2. Measure of Religiosity.

Participants took the Measure of Religiosity at the outset of therapy. According to the Duke study, to be considered "deeply religious," subjects needed to sufficiently pass three of four sections of this measure (Koenig et al., 2014). Participants not meeting at least three criteria were not considered deeply religious, and those who met three and or more were considered deeply religious. Whereas only a segment of the Duke sample was deeply religious, all four participants in the present study were considered to be so. As indicated in Chapter Three, this study sought to more precisely measure and compare the religiosity of the participants. To do so, the four assessment criteria were given equal weight and averaged for each participant, with a maximum possible score of 100%, providing a percentage indicator of religiosity. Figure 4.2 indicates that the most deeply religious of the participants was P1 (78.75%); second, P4 (78.50%); third, P3 (72.25%); and last, P2 (68.5%).

The deep religiosity of all the individuals may be explained in part by the pool from which recruitment took place. Once the primary researcher disseminated information about the study, potential participants learned about the therapy through various Christian organizations,

pastors, Christian leaders, and other similar church-related contacts. When having problems such as depression, deeply religious people often go first to Christian leaders for help, seeking resources and the spiritual means to alleviate difficulties. This may have been the case in the recruitment for this present study, since the search for participants took place through a network of clergymen and others who often attract the deeply religious into their social exchange. The Duke study recruited from a pool of religious individuals who were hospitalized due to chronic illness, and the primary referrals came through physicians and other hospital staff, rather than pastors and other Christian leaders. Based on this referral network, the process of recruitment for this present study may have preselected those who were very religious.

In order to form a baseline, the BDI-II was administered weekly for three weeks prior to the start of therapy and then prior to each of the 10 sessions. An average baseline score was calculated for each person. Change was calculated by the difference between average pretest score and the final score, which was taken following the last therapy session.

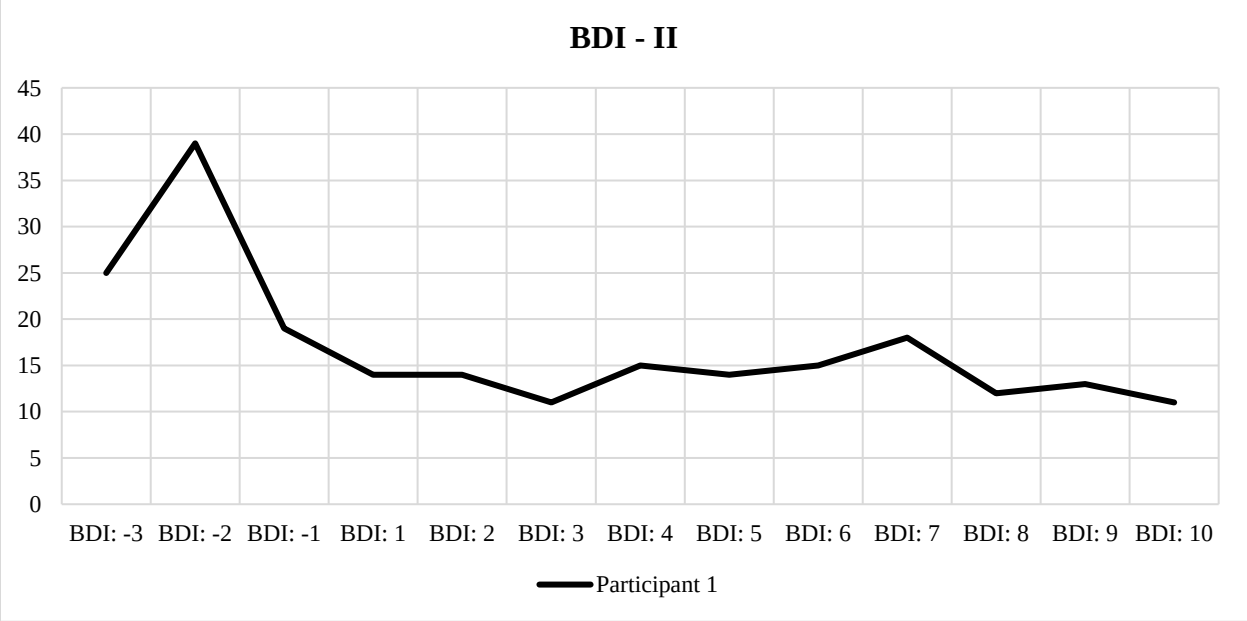

Figure 4.3. BDI-II trajectory of change for Participant 1.

P1's weekly baseline values were 25, 39, and 19, with an average of 28. Although there was a greater reduction of depression from baseline week 2 to week 3 (20 points) than during the entire course of the 10 weeks of therapy, the participant's depression score did move from 19 on the week before therapy to 11 after the 10 weeks of therapy (an eight-point difference), demonstrating a downward trend. As seen by the change from the baseline average, P1 responded to therapy (-60.25%) and missed normal range by one point.

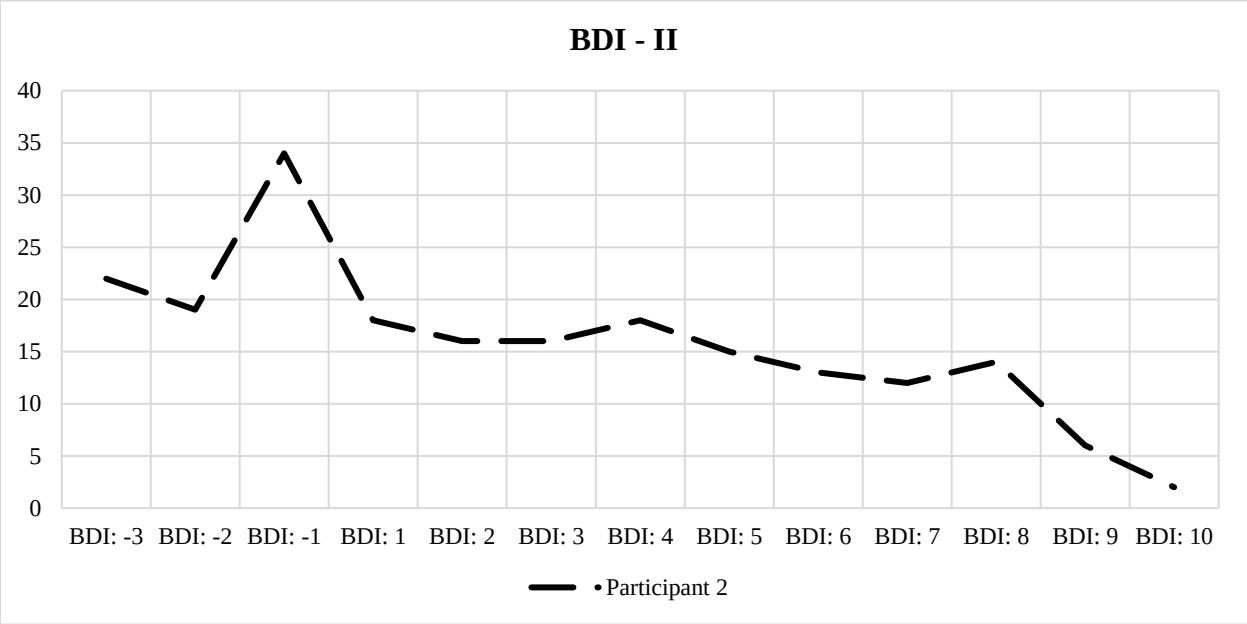

Figure 4.4. BDI-II trajectory of change for Participant 2.

P2's weekly baseline values were 22, 19, and 34, with an average of 25. Although there was a 16-point increase in depression from baseline week 2 to week 3, the reduction in depression after week 1 of therapy fell one point below the week 2 score. Overall, the participant's depression score moved from 34 on the week before therapy to 2 after the 10 weeks of therapy (a 32-point difference), demonstrating a downward trend. As seen by the change from the baseline average, P2 responded to therapy (-92%) and reached normal range.

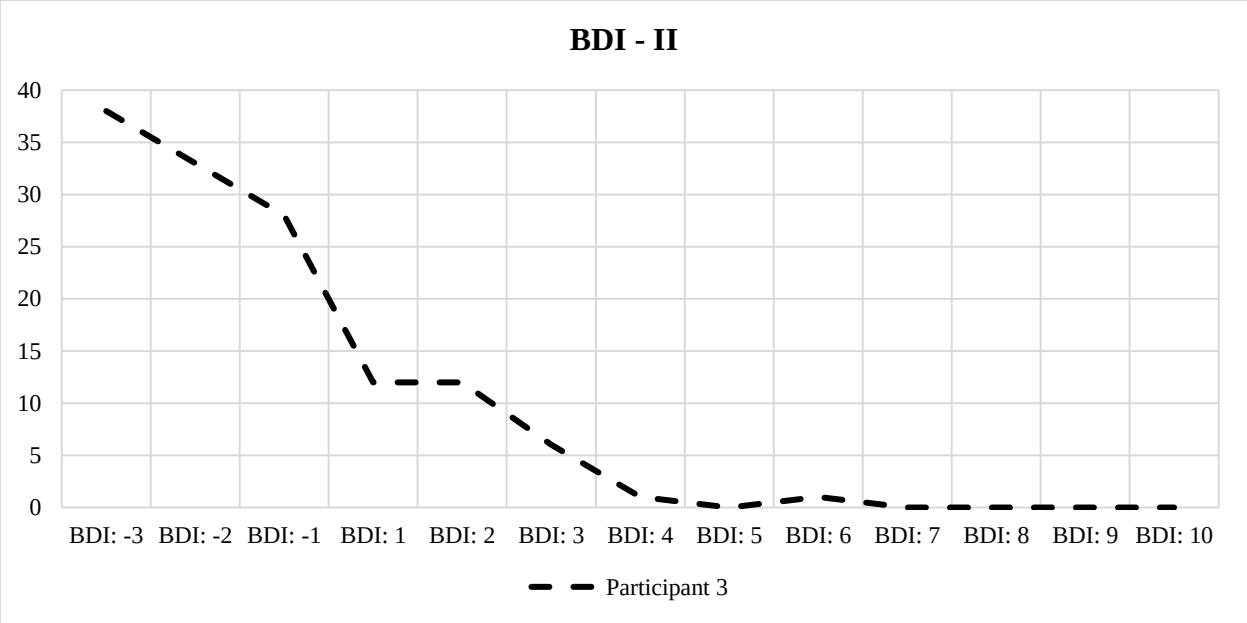

Figure 4.5. BDI-II trajectory of change for Participant 3.

P3's weekly baseline values were 38, 33, and 28, with an average of 33. Although there was a 10-point reduction in depression from baseline week 1 to week 3, depression continued to decrease during the 10 sessions of therapy. Overall, the participant's depression score moved from 28 on the week before therapy to 0 after the 10 weeks of therapy (a 28-point difference), demonstrating a downward trend. As seen by the change from the baseline average, P3 responded to therapy (-100%) and reached normal range.

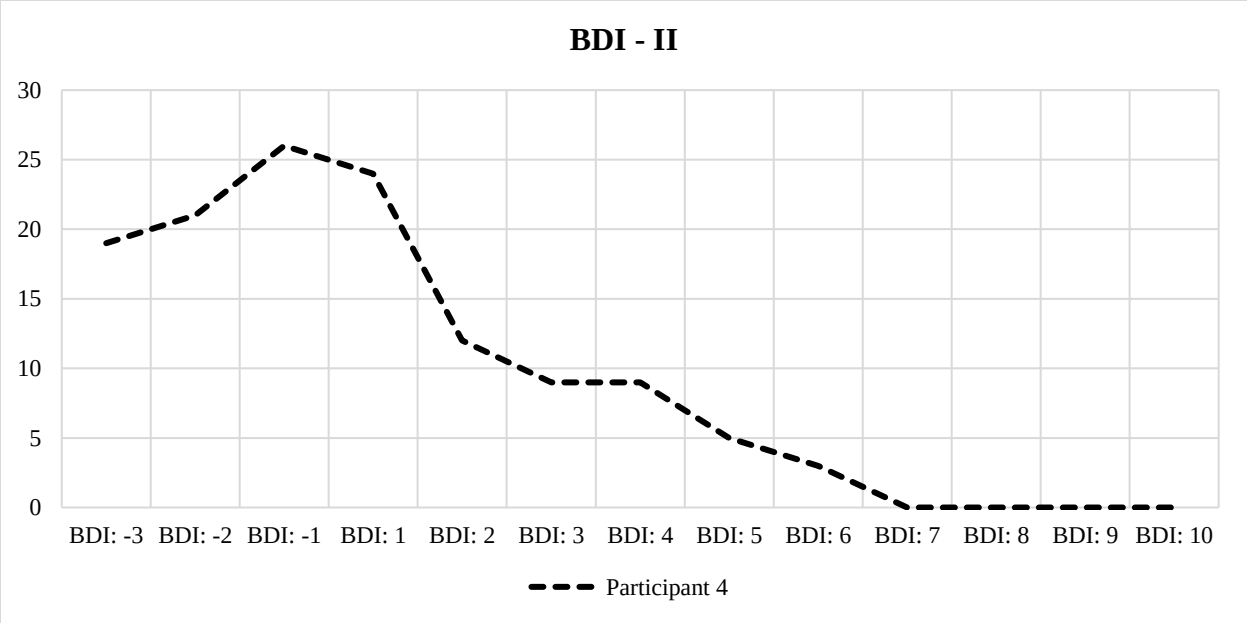

Figure 4.6. BDI-II trajectory of change for Participant 4.

P4's weekly baseline values were 19, 21, and 26, with an average of 22. Overall, the participant's depression score moved from 26 on the week before therapy to 0 after the 10 weeks of therapy (a 26-point difference), demonstrating a downward trend. As seen by the change from the baseline average, P4 responded to therapy (-100%) and reached normal range.

The figures illustrate that although fluctuations took place during the baseline period, all the participants reported decreased depression from baseline to the end of treatment, with all the participants responding to therapy and three entering normal range.

Table 4.1

BDI-II Response and Normal Range Rates

	Reduction in BDI-II Score (%)	Responded to Therapy?	Entered Normal Range?
Participant 1	-60.25	Yes	No
Participant 2	-92.00	Yes	Yes
Participant 3	-100.00	Yes	Yes
Participant 4	-100.00	Yes	Yes

The response and normal range rates of the present research (100% participant response, 75% participant normal range) exceed those of the Duke study, since approximately 60% of the Duke participants who received at least five treatment sessions responded to treatment and nearly 50% entered normal range by the end of treatment.

Table 4.2

BDI-II Paired Samples t-Test

Paired Samples Statistics

Pair	Mean	*N*	*SD*	*SEM*
BDIBaselineAvg	26.9175	4	4.66982	2.33491
BDIEndTreatment	3.2500	4	5.25198	2.62599

Paired Differences

				95% CI				
Pair	Mean	*SD*	*SEM*	*LL*	*UL*	*t*	*df*	Sig. (2-tailed)
BDIBaselineAvg-BDIEndTreatment	23.66750	6.81387	3.40694	12.82510	34.50990	6.947	3	.006

Note. SD = standard deviation; *SEM* = standard error mean; CI = confidence interval; *LL* = lower limit; *UL* = upper limit

Paired samples indicate the mean change in BDI-II scores from baseline to end of treatment. A paired samples *t*-test demonstrates change in the participants that is below the .05 threshold, with a significant reduction in depression ($t(3) = 6.947$, $p = .006$). This indicates significant change concerning the effectiveness of the treatment.

The BDI-II Cohen's $d = 4.763$. The Cohen's *d* calculation would indicate that there are nearly five standard deviations between the pretreatment mean and the posttreatment mean. In general, a Cohen's *d* above 3 is considered to show significant improvement of the whole group from pretreatment to posttreatment. If these findings were expanded to a group of 100 participants, this Cohen's *d* indicates that 78 of the participants would show clinical

improvement over a control treatment, which would indicate a very large effect size. In addition, the Jacobson Reliable Change Index (RCI) calculation for the BDI-II is 4.09 (with reliability set at .9). With an RCI of 4.09, participants must show an improvement score of 4.09 or greater to demonstrate clinically improvement. The data indicate that 100% of participants surpassed the threshold for clinical improvement. In comparing the evidential weight of the *t*-test, Cohen's *d* and other matters of analysis, it is acknowledged that *t*-test is not as important as the effect size and the trend.

Based the trajectory of change in the BDI-II scores in Figures 4.3, 4.4, 4.5, and 4.6, the response and normal range rates in Table 4.1 and the paired samples *t*-test indicating significance of change in Table 4.2, and Cohen's *d* and RCI calculations, the Duke Center religious cognitive behavior therapy (RCBT) can be considered effective in reducing depression with the four participants. These data appear to answer the first research question, whether the Duke Center RCBT is transportable to a nonmedical clinical Christian setting in treating moderate (BDI-II, 21–30) to severe (BDI-II, 31–40) depression in deeply religious individuals, in a positive manner.

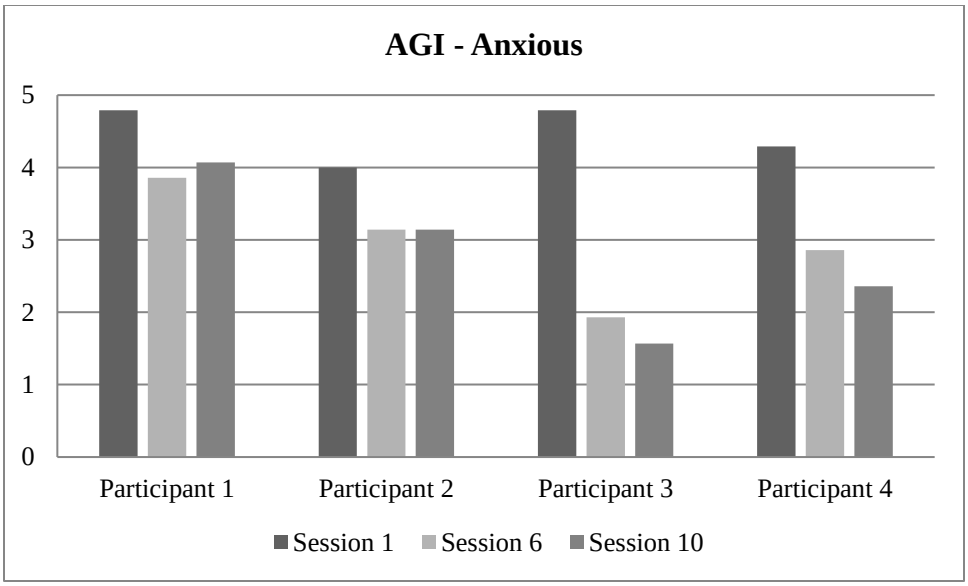

Figure 4.7. AGI-Anxiety Subscale trajectory of change.

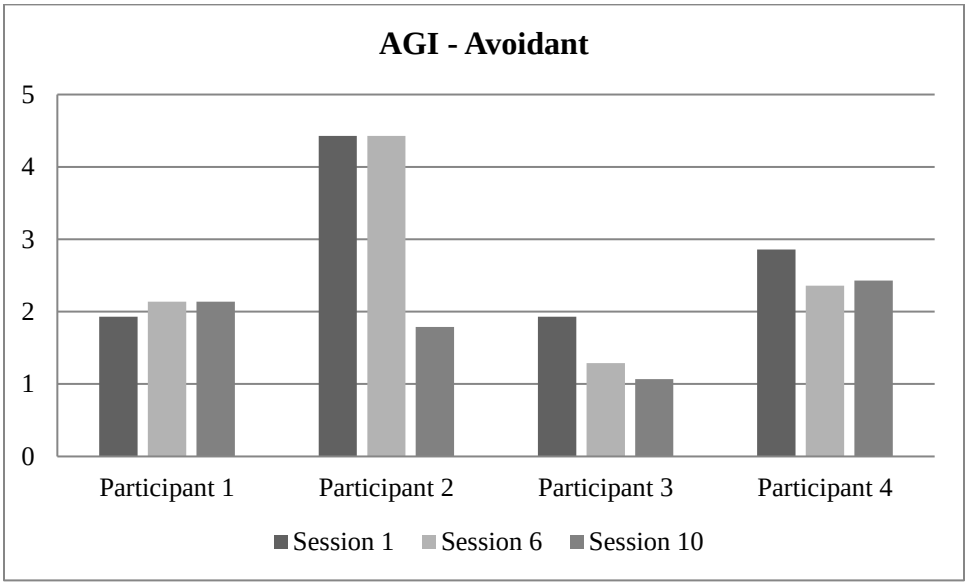

Figure 4.8. AGI-Avoidance Subscale trajectory of change.

The AGI was administered at the start of sessions 1, 6, and 10. Lower scores indicate lower avoidance and anxiety. P1's score on the AGI-Anxiety Subscale (AGI-ANX) fell from session 1 (4.79) to session 6 (3.86) and rose by session 10 (4.07), although this score was not as high as in session 1. P1's score on the AGI-Avoidance Subscale (AGI-AVO) rose from session 1 (1.93) to session 6 (2.14), and remained at the session 6 level through session 10. P2's AGI-

ANX score fell from session 1 (4.0) to session 6 (3.14), and remained at the session 6 level though session 10. P2's AGI-AVO score remained the same from session 1 (4.43) to session 6 (4.43), and fell by session 10 (1.79). P3's AGI-ANX score fell from session 1 (4.79) to session 6 (1.93) and continued to fall through session 10 (1.57). P3's AGI-AVO score fell from session 1 (1.93) to session 6 (1.29) and continued to fall at session 10 (1.07). P4's AGI-ANX score fell from session 1 (4.29) to session 6 (2.86) and continued to fall through session 10 (2.36). P4's AGI-AVO score fell from session 1 (2.86) to session 6 (2.36) and continued to fall at session 10 (2.43). These data indicate a positive trend of lower anxious and avoidant scores for all participants except for P1, whose avoidance rose slightly (1.93 to 2.14).

The literature does not appear to supply theoretical cut-off points, or indications from previous research as to what score would differentiate security from insecurity of attachment to God on the AGI. However, the original article on the measure contained a comparison of scores of a community adult sample to a college sample (Beck & McDonald, 2004). In this present study, the scores of the four participants for the AGI-ANX and AGI-AVO generally fell within the scores of these two studied populations.

Table 4.3

AGI-ANX Paired Samples t-Test

Paired Samples Statistics

Pair	Mean	*N*	*SD*	*SEM*
AGIAnxiousTime1	4.4675	4	0.39076	.19538
AGIAnxiousTime3	2.7850	4	1.06991	.53495

Paired Differences

				95% CI				
Pair	Mean	*SD*	*SEM*	*LL*	*UL*	*t*	*df*	Sig. (2-tailed)
AGIAnxiousTime1-AGIAnxiousTime3	1.68250	1.15875	.57937	-.16132	3.52632	2.904	3	.062

Note. SD = standard deviation; *SEM* = standard error mean; CI = confidence interval; *LL* = lower limit; *UL* = upper limit

Table 4.4

AGI-AVO Paired Samples t-Test

Paired Samples Statistics

Pair	Mean	*N*	*SD*	*SEM*
AGIAvoidantTime1	2.7875	4	1.17950	.58975
AGIAvoidantTime3	1.8575	4	0.58659	.29330

Paired Differences

				95% CI				
Pair	Mean	*SD*	*SEM*	*LL*	*UL*	*t*	*df*	Sig. (2-tailed)
AGIAvoidantTime1-AGIAvoidantTime3	.93000	1.22183	.61091	-1.01420	2.87420	1.522	3	.225

Note. SD = standard deviation; *SEM* = standard error mean; CI = confidence interval; *LL* = lower limit; *UL* = upper limit

The paired samples *t*-test demonstrates change in the participants between session 1 and session 10 that is above the .05 threshold, with a less-than-significant reduction in anxiousness ($t(3) = 2.904$, $p = .062$) and avoidance ($t(3) = 1.522$, $p = .225$). Although a less-than-significant

change took place in anxiousness, the change does approach significance and indicates a positive direction (mean: 4.4675 at Time 1 to 2.7850 at Time 3). In addition, although a less than significant change took place in avoidance, there was improvement indicated by a positive direction (mean: 2.7875 at Time 1 to 1.8575 at Time 3).

The AGI-ANX Cohen's *d* = 2.235. The Cohen's *d* calculation would indicate that there are 2.235 standard deviations between the pretreatment mean and the posttreatment mean. A Cohen's *d* of 2.235 would indicate that 99% of the posttreatment group would score better than the pretreatment group. If these findings were expanded to a group of 100 participants, this Cohen's *d* indicates that 71 of the participants would show clinical improvement over a control treatment, which would indicate a large effect size. The AGI-ANX RCI = .34 (with reliability set at .9). With an RCI of .34, participants must show an improvement score of .34 or greater to have clinically improved. The data indicate that 100% of participants surpassed the threshold for clinical improvement.

The AGI-AVO Cohen's *d* = 0.998. The Cohen's *d* calculation would indicate that there are .998 standard deviations between the pretreatment mean and the posttreatment mean. A Cohen's *d* of 0.998 would indicate that 84% of the posttreatment group would score better than the pretreatment group. If these findings were expanded to a group of 100 participants, this Cohen's *d* indicates that 36 of the participants would show clinical improvement over a control treatment, which would be considered a moderate effect size. The AGI-AVO RCI = 1.03 (with reliability set at .9). With an RCI of 1.03, participants must show an improvement score of 1.03 or greater to have clinically improved. The data indicates that 25% of participants surpassed the threshold for clinical improvement. As acknowledged earlier concerning the comparative

usefulness of the *t*-test and Cohen's *d*, the *t*-test is not as important as the effect size and the trend.

Given the trajectory of change in the AGI scores in Figures 4.7 and 4.8, the paired samples *t*-tests in Tables 4.3 and 4.4, and Cohen's *d* and RCI calculations, there is evidence of possible positive effects on anxiety and, to a lesser degree, avoidance in perceptions of attachment to God. These data appear to provide possible positive effects concerning the second research question, suggesting a correlation (rather than a causation) between RCBT and enhanced attachment and lower depression scores. While there was a measurable and consistent improvement in both of these dimensions, neither achieved the significance threshold of .05. The comments above on Cohen's *d* calculations better contextualize the level of improvement the clients reported to have experienced.

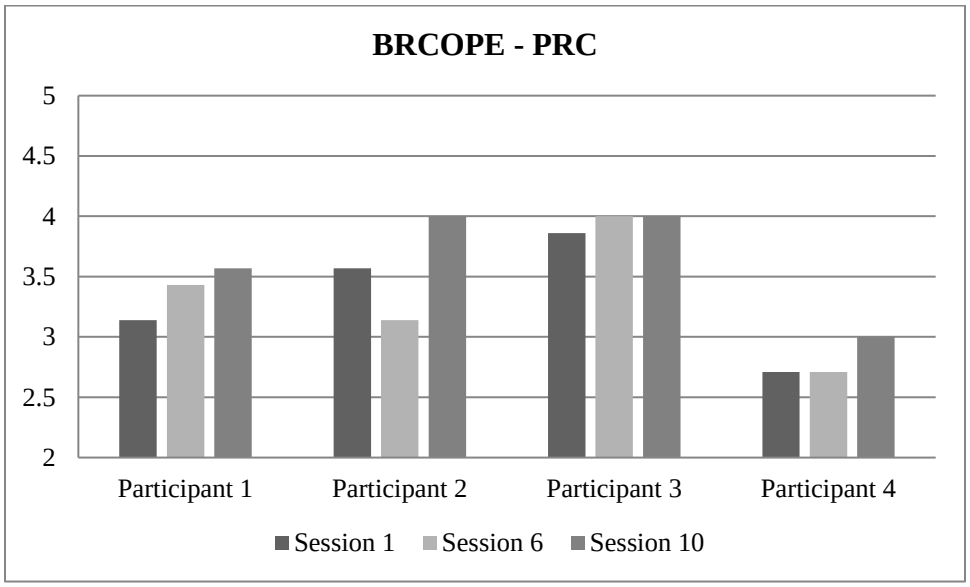

Figure 4.9. BRCOPE-Positive Religious Coping Subscale trajectory of change.

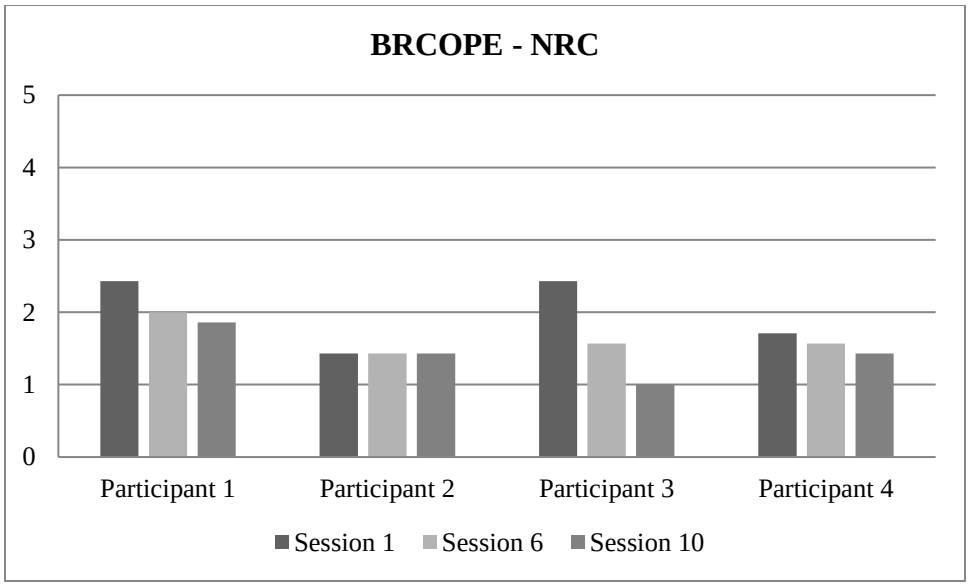

Figure 4.10. BRCOPE-Negative Religious Coping Subscale trajectory of change.

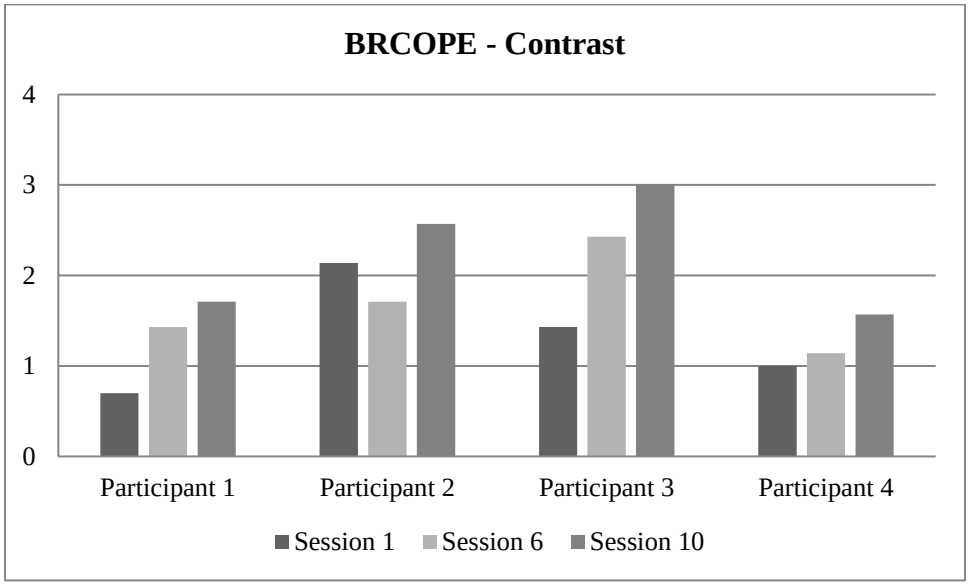

Figure 4.11. BRCOPE contrast.

The BRCOPE took place at the start of sessions 1, 6, and 10. Improvement is indicated by higher BRCOPE-Positive Religious Coping Subscale (BRCOPE-PRC) scores and lower BRCOPE-Negative Religious Coping Subscale (BRCOPE-NRC) scores. P1's BRCOPE-PRC increased from session 1 (3.14) to session 6 (3.43) and through session 10 (3.57). P1's BRCOPE-NRC declined from session 1 (2.43) to session 6 (2.0) and through session 10 (1.86).

P2's BRCOPE-PRC decreased from session 1 (3.57) to session 6 (3.14) but increased by session 10 (4.0), exceeding the session 1 level. P2's BRCOPE-NRC remained the same from session 1 (1.43) to session 6 (1.43) and through session 10 (1.43). P3's BRCOPE-PRC increased from session 1 (3.86) to session 6 (4.0) and then remained the same through session 10 (4.0). P3's BRCOPE-NRC declined from session 1 (2.43) to session 6 (1.57), and through session 10 (1.0). P4's BRCOPE-PRC remained the same from session 1 (2.70) to session 6 (2.70) and increased through session 10 (3.0). P4's RCOPE-NRC score declined from session 1 (1.71) to session 6 (1.57) and through session 10 (1.43). These scores indicate an overall positive trend of increased positive coping and decreased negative coping, with the exception of P2, whose BRCOPE-NRC scores remained the same from session 1 through session 10 (1.43). When positive and negative coping scores are combined and contrasted, all four participants indicate a clear trajectory of positive change (Figure 4.8).

Table 4.5

BRCOPE-PRC Paired Samples t-Test

Paired Samples Statistics

Pair	Mean	*N*	*SD*	*SEM*
RCOPEPRC1	3.3200	4	0.50286	.25143
RCOPEPRC3	3.6425	4	0.47388	.23694

Paired Differences

				95% CI				
Pair	Mean	*SD*	*SEM*	*LL*	*UL*	*t*	*df*	Sig. (2-tailed)
RCOPEPRC1-RCOPEPRC3	-.32250	0.13841	.06921	-.54275	-.10225	-4.660	3	.019

Note. SD = standard deviation; *SEM* = standard error mean; CI = confidence interval; *LL* = lower limit; *UL* = upper limit

Table 4.6

BRCOPE-NRC Paired Samples t-Test

Paired Samples Statistics

Pair	Mean	*N*	*SD*	*SEM*
RCOPENRC1	2.0000	4	0.50951	.25475
RCOPENRC3	1.4300	4	0.35109	.17555

Paired Differences

				95% CI				
Pair	Mean	*SD*	*SEM*	*LL*	*UL*	*t*	*df*	Sig. (2-tailed)
RCOPENRC1-RCOPENRC3	.57000	0.61876	.30938	-.41459	1.55459	1.842	3	.163

Note. SD = standard deviation; *SEM* = standard error mean; CI = confidence interval; *LL* = lower limit; *UL* = upper limit

The paired samples *t*-test demonstrates change in the participants from Time 1 to Time 3 (sessions 1 and 10) that is below the .05 threshold for BRCOPE-PRC and above the threshold for BRCOPE-NRC, indicating a significant change in positive coping and a less-than-significant change in negative coping, ($t(3) = 4.660$, $p = .019$) and ($t(3) = 1.842$, $p = .163$), respectively. Although these data show a significant change in positive coping and a less-than-significant change in negative coping, both the BRCOPE-PRC and BRCOPE-NRC scores moved in a positive direction (BRCOPE-PRC mean: 3.3200 at Time 1 to 3.6425 at Time 3; BRCOPE-NRC mean: 2.0 at Time 1 to 1.43 at Time 3). In addition, both the BRCOPE-PRC and the BRCOPE-NRC scores show somewhat low variability (*SD*: BRCOPE-PRC .50286 to .47388; BRCOPE-NRC .50951 to .35109). In addition, the BRCOPE-NRC scores started off quite low (2.0), perhaps due to the high religiosity of the participants and the possibility that they entered therapy with existing positive coping skills and an absence of negative coping thoughts and behaviors.

The BRCOPE-PRC Cohen's *d* = -0.66. The BRCOPE-PRC calculation would indicate that there are only 0.66 standard deviations between the pretreatment mean and the posttreatment mean. A Cohen's *d* of 0.66 would indicate that 66% of the posttreatment group would score better than the pretreatment group. If these findings were expanded to a group of 100 participants, this Cohen's *d* indicates that 20 of the participants would show clinical improvement. This would indicate a relatively small effect size. The BRCOPE-PRC calculation RCI = .44 (with reliability set at .9). With a BRCOPE-PRC RCI of .44, participants must show an improvement score of .44 or greater to have clinically improved. The data indicate that none of the participants surpassed the threshold for clinical improvement.

The BRCOPE-NRC Cohen's *d* = 1.303. The BRCOPE-NRC calculation would indicate that there are only 1.303 standard deviations between the pretreatment mean and the posttreatment mean. A Cohen's *d* of .66 would indicate that 82% of the posttreatment group would score better than the pretreatment group. If these findings were expanded to a group of 100 participants, this Cohen's *d* indicates that 47 of the participants would show clinical improvement. This would indicate a moderate effect size. The BRCOPE-NRC RCI = .45 (with reliability set at .9). With a BRCOPE-NRC RCI of .45, participants must show an improvement score of .45 or greater to have clinically improved. The data indicates that 50% of participants surpassed the threshold for clinical improvement. Once again concerning the comparative usefulness of the *t*-test and Cohen's *d*, the *t*-test is not as important as the effect size and the trend.

Given the trajectory of change in the BRCOPE scores in Figures 4.9 and 4.10, the BRCOPE contrast in 4.10, the paired samples *t*-test in Tables 4.5 and 4.6, and Cohen's *d* and RCI calculations, the data indicate significance of change for positive religious coping but not

for negative coping. However, there was an overall positive trajectory of change for all the participants. These data appear to answer the second research question, with scores suggesting correlation (rather than causation) in the relationship between positive coping (but not negative coping) in the BRCOPE scores and reduced depression.

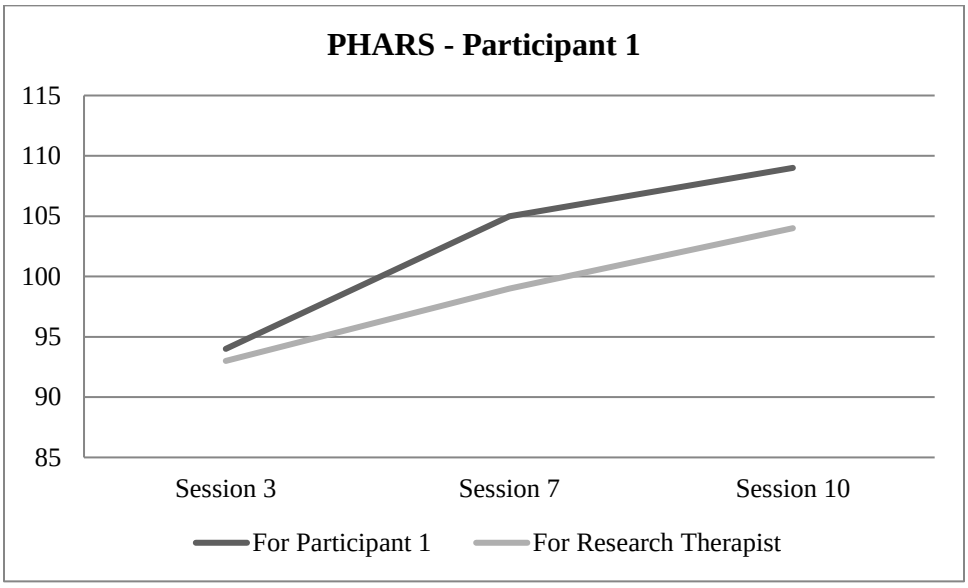

Figure 4.12. PHARS Participant 1.

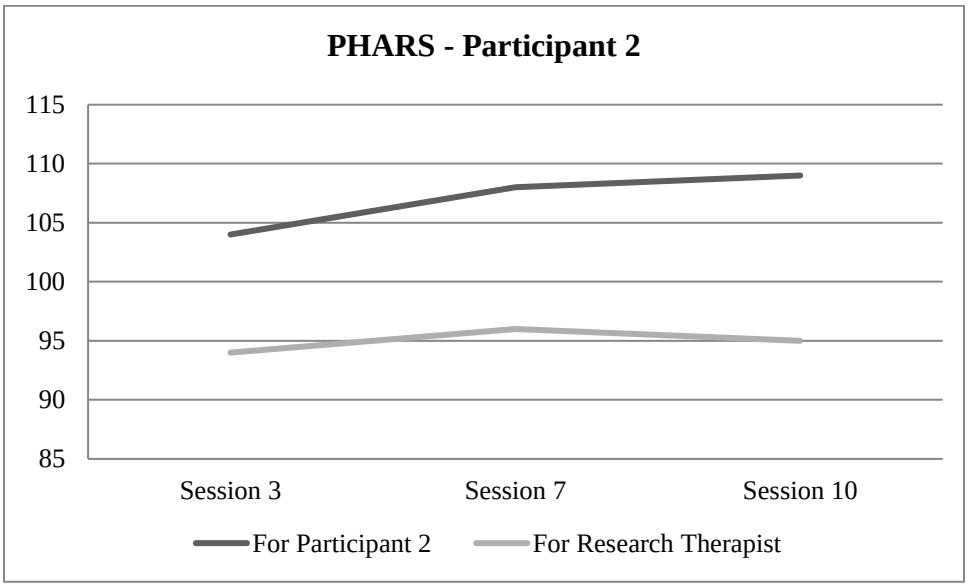

Figure 4.13. PHARS Participant 2.

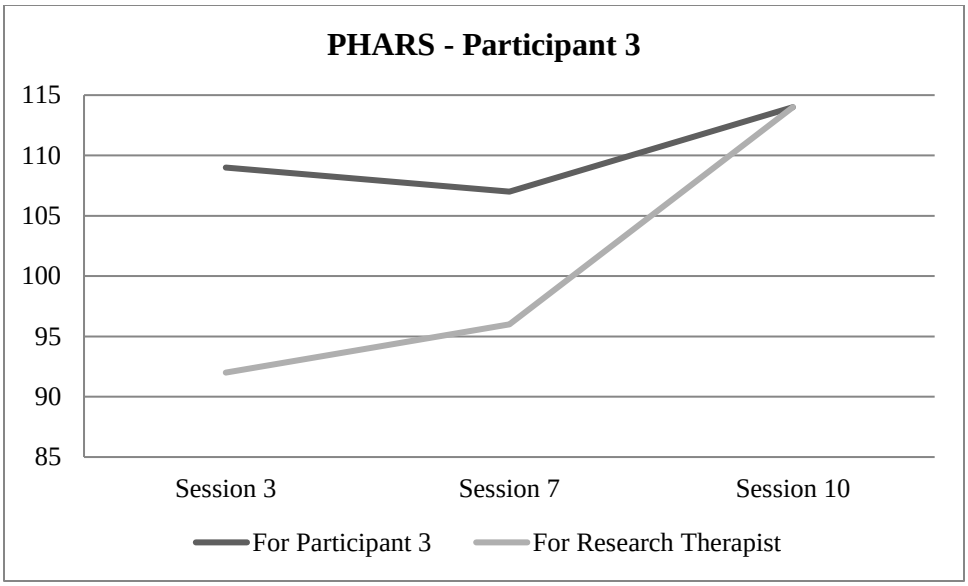

Figure 4.14. PHARS Participant 3.

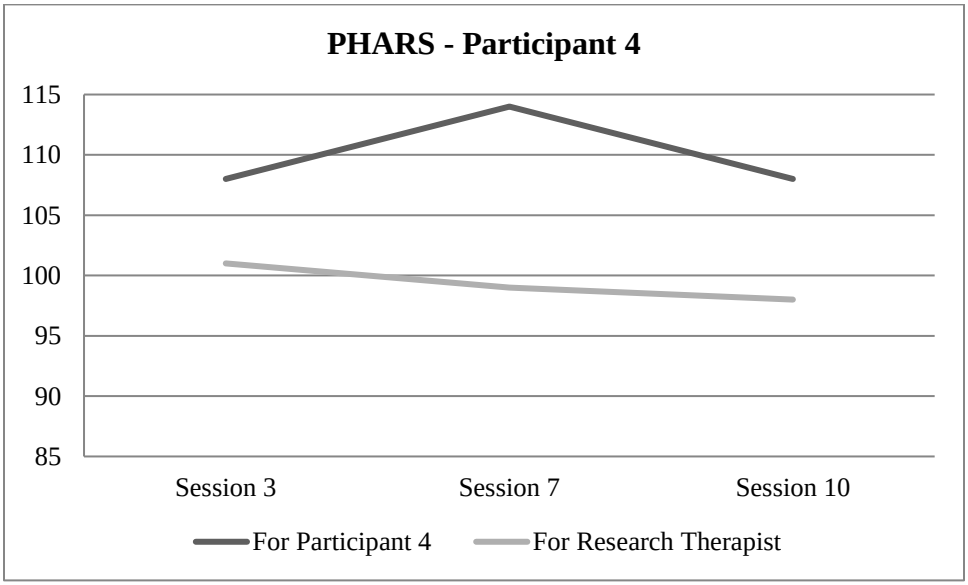

Figure 4.15. PHARS Participant 4.

At the start of sessions 3, 7, and 10, the PHARS assessment was administered. Improvement is indicated by increased scores. With the possibility of 114 points, the research therapist's rating of alliance with P1 improved from session 3 (94) to session 7 (105) and through session 10 (109). P1's rating of alliance with the research therapist improved from session 3 (93) to session 7 (99) and through session 10 (104). The research therapist's rating with P2 improved

from session 3 (104) to session 7 (108) and through session 10 (109). P2's scoring with the research therapist improved from session 3 (94) to session 7 (96) and decreased by one point at session 10 (95). The research therapist's scores for alliance with P3 reportedly decreased two points from session 3 (109) to session 7 (107) but exceeded sessions 3 and 4 scores at session 10 (114). P3's rating with the research therapist improved from session 3 (92) to session 7 (96) and through session 10 (114). The research therapist's connection with P4 improved from session 3 (108) to session 7 (114) and decreased back to the session 3 level by session 10 (108). P4's rating of alliance with the research therapist decreased from session 3 (101) to session 7 (99) and decreased by one additional point from session 7 to session 10 (98). These scores indicate improvement in the alliance between three of the participants and the therapist and a slight reduction in alliance in the fourth participant.

Table 4.7

PHARS Research Therapist for Participants Paired Samples t-Test

Paired Samples Statistics

Pair	Mean	*N*	*SD*	*SEM*
PHARSRTFP1	103.7500	4	6.84957	3.42479
PHARSRTFP3	110.0000	4	2.70801	1.35401

Paired Differences

				95% CI				
Pair	Mean	*SD*	*SEM*	*LL*	*UL*	*t*	*df*	Sig. (2-tailed)
PHARSRTFP1-PHARSRTFP3	-6.25000	6.29153	3.14576	-16.26123	3.76123	-1.987	3	.141

Note. *SD* = standard deviation; *SEM* = standard error mean; CI = confidence interval; *LL* = lower limit; *UL* = upper limit

Table 4.8

PHARS Participants for Research Therapist Paired Samples t-Test

Paired Samples Statistics

Pair	Mean	*N*	*SD*	*SEM*
PHARSPFRT1	95.0000	4	4.08248	2.04124
PHARSPFRT3	102.7500	4	8.38153	4.19076

Paired Differences

				95% CI				
Pair	Mean	*SD*	*SEM*	*LL*	*UL*	*t*	*df*	Sig. (2-tailed)
PHARSPFRT1-PHARSPFR13	-7.75000	11.17661	5.58831	-25.53448	10.03448	-1.387	3	.260

Note. SD = standard deviation; *SEM* = standard error mean; CI = confidence interval; *LL* = lower limit; *UL* = upper limit

The paired samples *t*-tests demonstrate change in the participants from Time 1 to Time 3 (sessions 1 and 10) that is above the .05 threshold, showing no significant change in therapeutic alliance from the research therapist's perspective ($t(3) = 1.987$, $p = .141$) or the participants' perspective ($t(3) = 1.387$, $p = .260$). Although these data show no significant change in therapeutic alliance during therapy, both the scores from both perspectives indicate movement in a positive direction (PHARS Research Therapist for the Participant mean: 103.75 at Time 1 to 110.0 at Time 3; PHARS Participant for the Research Therapist mean: 95.0 at Time 1 to 102.75 at Time 3).

Given the trajectory of change in the PHARS scores in Figures 4.9, 4.10, 4.11, and 4.12 and the paired samples *t*-test indicating change in Tables 4.7 and 4.8, the data do not indicate significant change, but there is evidence of a positive trajectory of alliance both on the part of the research therapist and the participants. The PHARS scores indicate an overall sustained alliance between the research therapist and the participants, contributing to lower depression scores and

providing evidence for the effectiveness of the Duke Center RCBT in a nonmedical, clinical Christian setting. Lack of significant change in alliance may be due to the ceiling effect; namely, the scores were relatively high from the beginning. The ceiling effect may include the excellent training, experience, and alliance skills that the research therapist demonstrated from the onset of the therapy. From the primary researcher's point of view and his review of the audio recordings of the sessions, these skills were extraordinarily and consistently demonstrated from session 1 throughout the therapy, and therefore may have inhibited significant improvement in alliance. Finally, given the trending of the mean from Time 1 to Time 3, a larger sample would almost certainly indicate significance.

Table 4.9

IIA – Therapy Subject Matter Individual Scores

	Managing Thoughts	Prayer and Meditation	The Bible	Gratitude	Positive and Pleasurable Experiences	Forgiveness and Repentance	Altruism and Generosity	Church and Social Activities
P1	11.5	9.5	8.0	7.0	5.0	9.5	4.5	3.5
P2	8.0	9.5	8.0	8.0	7.0	5.0	6.5	6.5
P3	11.5	9.5	10.5	7.5	8.0	8.5	6.5	5.0
P4	10.0	10.0	10.5	7.5	9.0	5.5	6.0	4.5
Total	41.0	38.5	37.0	30.0	29.0	28.5	23.5	19.5

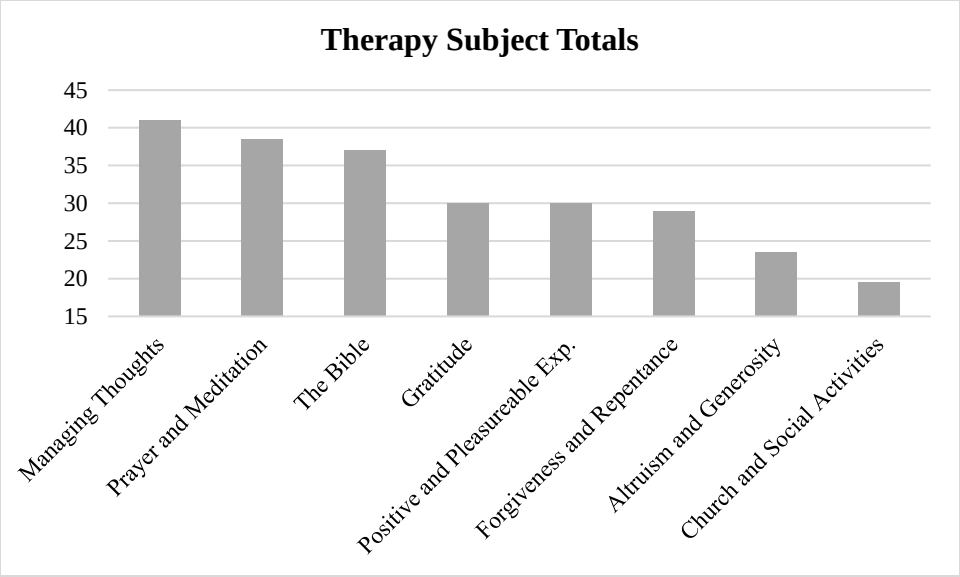

Figure 4.16. IIA therapy subject totals.

The IIA was administered after the last session of therapy and speaks to the utilitarian value of the Duke Center RCBT. The participants were asked to rate and compare the helpfulness of the eight core aspects of the Duke material. Higher scores indicate a higher value placed on the subject matter. The IIA was primarily qualitative in nature. In terms of individual scores, P1 reported managing thoughts as most helpful, followed by a tie between prayer and meditation and forgiveness and repentance, then the Bible, gratitude, positive and pleasurable experiences, altruism and generosity, and church and social activities. P2 reported prayer and meditation as most helpful; followed by a tie between managing thoughts, the Bible, and gratitude; then positive and pleasurable experiences; a tie between altruism and generosity and church and social activities; and forgiveness and repentance. P3 reported managing thoughts as most helpful, followed by the Bible, prayer and meditation, forgiveness and repentance, positive and pleasurable experiences, gratitude, altruism and generosity, and church and social activities. P4 reported the Bible as most helpful, followed by a tie between managing thoughts and prayer and meditation, positive and pleasurable experiences, gratitude, altruism and generosity,

forgiveness and repentance, and church and social activities. Therapy subject matter totals are displayed in Figure 4.16.

The three topics rated as highest appear to cluster around RCBT's applied cognitive management (managing thoughts), religious methods and behaviors of managing thoughts (prayer and meditation), and the content by which to manage thoughts (the Bible). The final five rankings (gratitude, positive and pleasurable experiences, forgiveness and repentance, altruism and generosity, and church and social activities) may be seen as ways to apply positive behavioral management to perceptions of life (gratitude), pleasurable experiences (positive and pleasurable experiences), reconciling conflict and guilt with God and others (forgiveness and repentance), doing good for those less fortunate (altruism and generosity), and engagement with fellow religiously oriented individuals and friends (church and social activities). The average of the first three rankings taken as a collective (38.83%) surpasses the average of the five final rankings (26.4%) by 32.01%, suggesting that superior importance is placed upon the first three topics. These three topics were more internal and cognitive in nature than the more interpersonal and behavioral topics and assignments.

Of interest is the lowest ranking, church and social activities. This topic's low ranking is corroborated by other studies that indicate that church attendance does not decrease the risk of major depressive disorder (Miller et al., 2014). Related to this observation is the distinction that is to be maintained between church attendance and R/S. The perceived usefulness of thought management through RCBT and related aspects of R/S stands opposite of church and social activities in the minds of the participants. In sum, the first three topics focus more on the applied cognitive aspects of RCBT, and the final five have more to do with positive alterations of behavior. The results of this current study suggest the importance that highly religious

Christians place upon the content of RCBT protocol. This may provide insight for future uses of the RCBT with depressed Christians.

However, the results should not be interpreted as a devaluation of the critical and at times prominent role that behavior activation plays in counseling the depressed. This study appears to indicate a relatively superior usefulness of cognitive management skills for this population rather than a repudiation of the helpfulness of behavior activation. Jacobson et al.'s (1996) classic CBT analysis study discusses how components of CBT affect improvements in depression. Jacobson et al. highlight how behavioral activation can lead to powerful cognitive improvements and how behavior change appears as the primary source of effect rather than cognitive change. Such a study cautions against misinterpreting improvements in depression due to improvements in cognition over behavior activation.

Table 4.10

Correlations Across Instruments at Time 1 (or Baseline Average)

	BDI Baseline Avg	AGI Anxious Time1	AGI Avoidant Time1	RCOPE PRC1	RCOPE NRC1	PHARS RTFP1	PHARS PFRT1
BDIBaselineAvg							
Pearson correlation	1.000	.726	-.567	.805	.765	.034	-.828
Sig. (2-tailed)		.274	.433	.195	.235	.966	.172
AGIAnxiousTime1							
Pearson correlation	.726	1.000	-.965*	.182	.997**	-.289	-.462
Sig. (2-tailed)	.274		.035	.818	.003	.711	.538
AGIAvoidantTime1							
Pearson correlation	-.567	-.965*	1.000	.032	-.940	.189	.213
Sig. (2-tailed)	.433	.035		.968	.060	.811	.787
RCOPEPRC1							
Pearson correlation	.805	.182	.032	1.000	.246	.199	-.839
Sig. (2-tailed)	.195	.818	.968		.754	.801	.161
RCOPENRC1							
Pearson correlation	.765	.997**	-.940	.246	1.000	-.316	-.532
Sig. (2-tailed)	.235	.003	.060	.754		.684	.468
PHARSRTFP1							
Pearson correlation	.034	-.289	.189	.199	-.316	1.000	.346
Sig. (2-tailed)	.966	.711	.811	.801	.684		.654
PHARSPFRT1							
Pearson correlation	-.828	-.462	.213	-.839	-.532	.346	1.000
Sig. (2-tailed)	.172	.538	.787	.161	.468	.654	

Note. $N = 4$.

*Correlation is significant at the 0.05 level (2-tailed).**Correlation is significant at the 0.01 level (2-tailed).

Table 4.11

Correlations Across Instruments at Time 3 (or End of Treatment)

	BDI End Treatment	AGI Anxious Time3	AGI Avoidant Time3	RCOPE PRC3	RCOPE NRC3	PHARS RTFP3	PHARS PFRT3
BDIEndTreatment							
Pearson correlation	1.000	.881	.322	-.011	.855	-.305	-.013
Sig. (2-tailed)		.119	.678	.989	.145	.695	.987
AGIAnxiousTime3							
Pearson correlation	.881	.100	.559	-.084	.954*	-.650	-.476
Sig. (2-tailed)	.119		.441	.916	.046	.350	.524
AGIAvoidantTime3							
Pearson correlation	.322	.559	1.000	-.832	.745	-.096	-.726
Sig. (2-tailed)	.678	.441		.168	.255	.054	.274
RCOPEPRC3							
Pearson correlation	-.011	-.084	-.832	1.000	-.370	.631	.354
Sig. (2-tailed)	.989	.916	.168		.630	.369	.646
RCOPENRC3							
Pearson correlation	.855	.954*	.745	-.370	1.000	-.754	-.487
Sig. (2-tailed)	.145	.046	.255	.630		.246	.513
PHARSRTFP3							
Pearson correlation	-.305	-.654	-.946	.631	-.754	1.000	.896
Sig. (2-tailed)	.695	.354	.054	.369	.246		.104
PHARSPFRT3							
Pearson correlation	-.013	-.476	-.726	.354	-.487	.896	1.000
Sig. (2-tailed)	.987	.524	.274	.646	.513	.104	

Note. $N = 4$.

*Correlation is significant at the 0.05 level (2-tailed).

Correlations were conducted to ascertain possible connections between scores from the research assessments. There does not appear noteworthy data that would indicate correlations between changes observed among the various measures. However, the Pearson correlations above do indicate that treatment is enduring in a variety of unrelated ways. There are discrete changes with each instrument but not uniform change with all instruments.

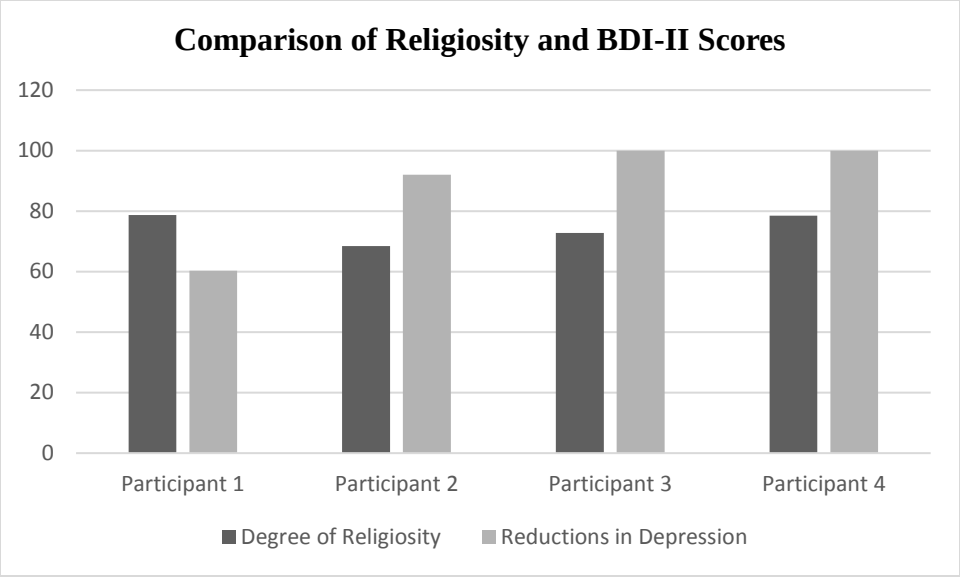

Figure 4.17. Comparison of religiosity and BDI-II scores.

In terms of correlations between degree of religiosity scores and reduction in BDI-II depression scores, P1 had the highest religiosity and the lowest reduction in depression, P2 had the lowest religiosity and the second lowest reduction in depression, P3 had the second lowest religiosity and tied for the highest reduction in depression, and P4 had the second highest religiosity and tied for first in reduction of depression. Because all of the participants were considered deeply religious, all responded to therapy, and all but one entered the normal range with this one missing normal range by one point, it does not appear that there is enough consistent variation between religiosity and depression to draw correlations between measures. Perhaps, as suggested in Duke study, a larger sample might further define comparisons between degrees of religiosity and reductions in depression.

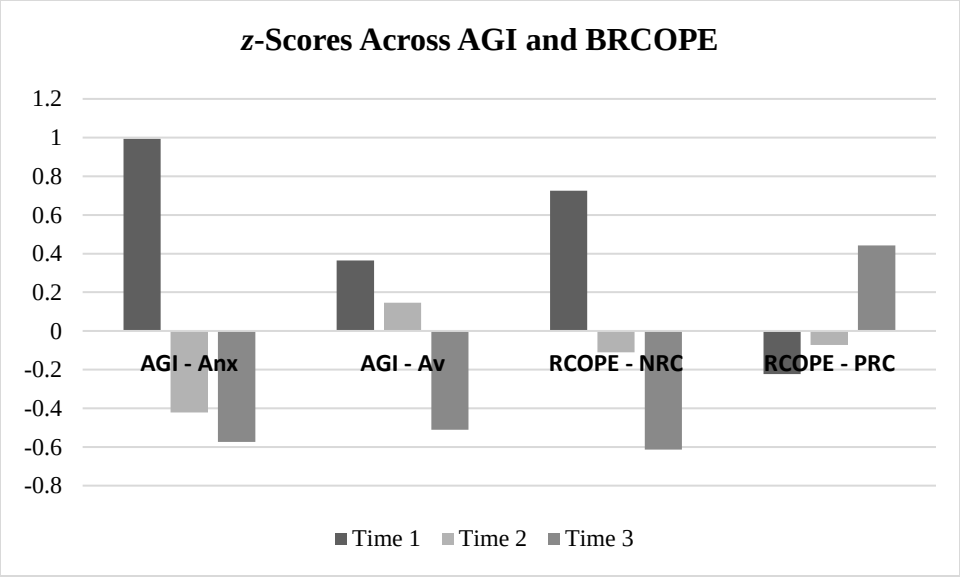

Figure 4.18. z-scores across AGI and BRCOPE.

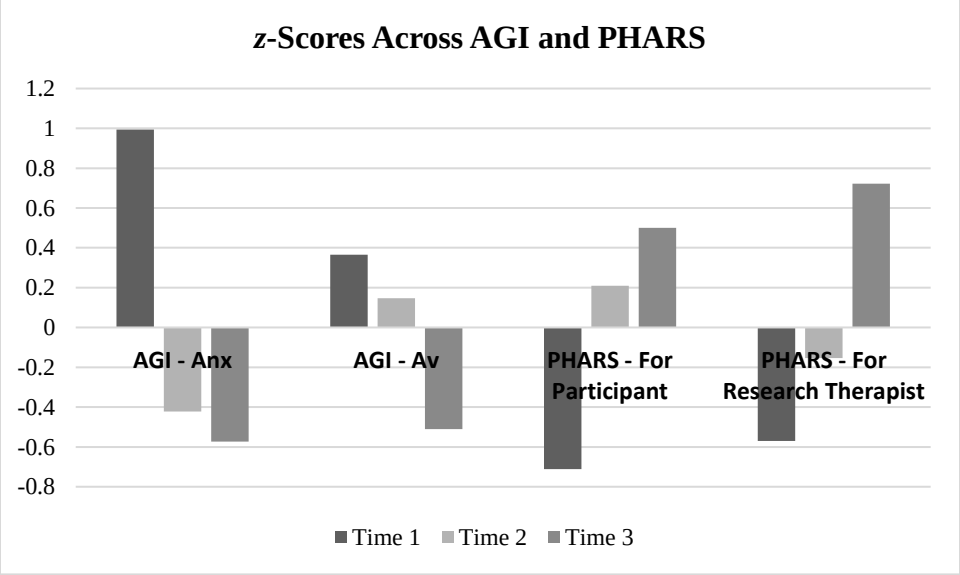

Figure 4.19. z-scores across AGI and PHARS.

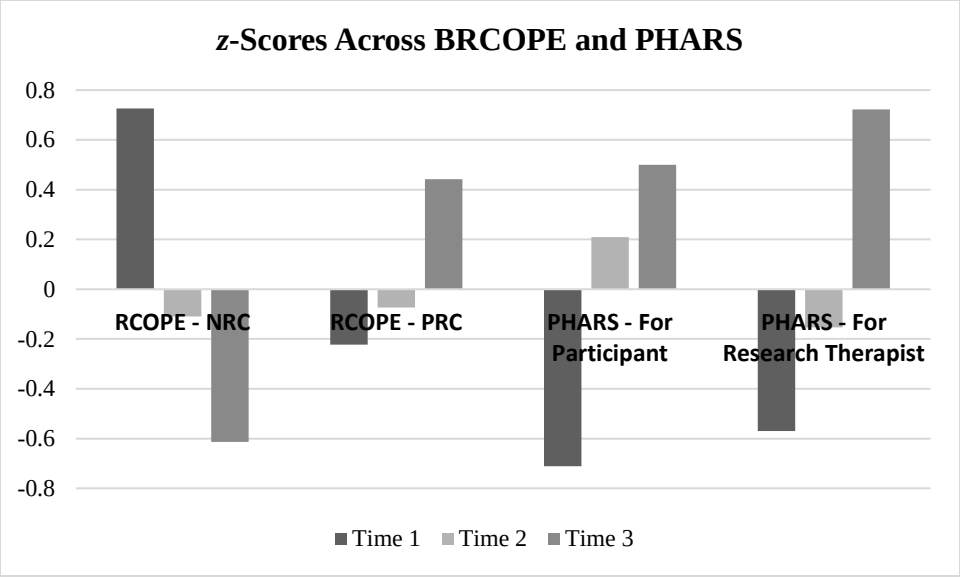

Figure 4.20. *z*-scores across BRCOPE and PHARS.

Using *z*-scores, researchers can make direct comparisons across instruments, paralleling measures that may have diverse scoring techniques. By normalizing measures to directly compare scores, the *z*-score tables demonstrate similar trending, reinforcing the correlation observations that, although the measures trend in the same general direction, they do so discretely and uniquely. No *z*-scores include the BDI-II results because of the weekly frequency of the BDI-II test. The trend of the BDI-II would not be comparable to the other measures that were taken just three times.

Research Question 1 Analysis

The first research question concerned effectiveness, seeking to determine the operative usefulness of the RCBT treatment for depressed religious people seeking assistance in a Christian setting. The question would be examined based on the expected 50% reduction from initial depression scores determining responders, with remission defined by depression data within normal limits on the BDI-II (< 10). It was hypothesized that the use of the Duke Center's therapy in the present research would prove at least as effective as the results showed it did in the

Duke study for the religious chronically ill and that the therapy would demonstrate transportability to Christian clinics and churches.

The current results (100% response, 75% normal range, with the fourth participant missing normal range by one point) exceed those of the Duke study, in which 53.2% of the participants who received at least five sessions responded to treatment, and 44.7% entered normal range. In addition, in the current study, the degree of change in the BDI-II scores across the board were significant. As noted earlier, this indicates significant change concerning the effectiveness of the treatment. These data demonstrate the effectiveness and transportability of the Duke Center RCBT to a Christian clinical setting for deeply religious Christians experiencing borderline to moderate clinical depression.

Research Question 2 Analysis

The second research question was related to construct validity, concerning possible mechanisms of action for positive change in depression scores. This study utilized the AGI and the BRCOPE in order to examine whether changes in attachment security in relation to God and enhanced religious coping skills mediate the relationship between RCBT and changes in depression scores. It was hypothesized that RCBT would improve scores on the attachment to God measure and improve results on religious coping measure and that these changes would be demonstrated by reduced BDI-II scores. The Duke study utilized the BRCOPE but not the AGI, and in using the BRCOPE, the Duke authors, apparently to date, have not specifically reflected upon any results from the use of the BRCOPE in their study (Pearce et al., 2015).

In this current study, the AGI scores did not indicate significant reduction in anxiousness and avoidance in regard to perceptions of attachment to God. However, both anxiousness and avoidance trended in a positive direction, with anxiousness trending more positively than

avoidance. These data do not appear to answer the second research question in an affirmative fashion in regard to attachment. Although the participants reported lower anxiousness and avoidance scores, they did not indicate significant change, and there is no observable correlation between positive changes in attachment and improved depression scores.

The BRCOPE indicates significance of change for positive religious coping, but this was not the case for negative coping. However, in regard to positive and negative coping, there was an overall trajectory of improvement for all the participants. There appears to be a correlation between positive coping (but not negative coping) in the BRCOPE scores and reduced depression.

The IIA results contribute to an understanding of the parts of the Duke material that were perceived as most useful to the participants. In reference to the second research question, the applied cognitive topics appeared to contribute the most to the reduction in depression scores, followed by those that were more behavioral in nature.

The *z*-score tables demonstrate positive trending across measures, reinforcing the correlation observations in the BRCOPE and the overall trends in the AGI and PHARS. Comparing the trends in the measures reveals the idiosyncratic nature of their changes. The *z*-score tables show that the trends were not mere duplications of scores from other measures.

Additional Findings

Adherence and the PHARS were also considered in the examination of the effectiveness and efficacy of the Duke protocol.

Adherence

It was pointed out in the Duke study that those of high religiosity were more likely to adhere to treatment (attend at least five sessions), as indicated by the adherence rate of 65.9% for

those of low religiosity and 85.7% for those with high religiosity (Pearce et al., 2015). In this current study, adherence was 100%, with all four participants attending all ten sessions. In contrast, a 50% reduction from initial depression scores constituted in the Duke study, 13.6% of participants received no therapy, and 29.5% did not complete 5–10 sessions, which may reflect the requirement of chronic medical illness and the somewhat impersonal method of therapy delivery in the Duke study and the deep religiosity of the participants in this current study. Those of high religiosity appear to demonstrate a greater dedication to the therapeutic enterprise, especially when the therapy reflects their faith values. In addition, this study started with participants with higher levels of depression who almost immediately experienced significant improvement, which may have further motivated them to continue pursuing treatment. Finally, strong alliance (see PHARS below) and the face-to-face delivery of the therapy may have been contributing adherence factors. Overall, high adherence in the present study most likely positively impacted the effectiveness and efficacy of treatment (research questions 1 and 2).

PHARS

The PHARS scores do not indicate significant change, but there is evidence of an overall positive trajectory of alliance both on the part of the research therapist and the participants (even given the minor exceptions in P4's scores). Lack of significant change in alliance may be due to the skills the research therapist demonstrated from the onset of therapy. As indicated earlier, given the trending of the mean from Time 1 to Time 3, with a larger sample, these changes almost certainly would reach significance. Strong alliance correlated with lower depression scores and the effectiveness and efficacy of treatment (research questions 1 and 2).

Summary

The depression scores on the BDI-II improved significantly during the therapy, with all the participants achieving response levels, three of the four reaching normal range for depression, and one participant missing normal range by one point. The significant change in the BDI-II data addresses the first research question, indicating that the Duke Center RCBT is transportable to clinical Christian settings for moderate to severe depression in deeply religious Christians.

The AGI did not show significant reduction in anxiousness and avoidance in perceptions of attachment to God as a secure base, but there was an indication of overall improvement in the scores. Although the BRCOPE indicates an overall trajectory of improvement for all the participants, there was significance of change only for positive religious coping, not for negative coping. For the second research question, it appears that improved positive coping played a significant role in reducing depression.

The IIA points to the perceptions of the participants that applied cognitive skills that incorporate prayer, meditation, and the Bible were most useful to them, followed by Christian behaviors. Scores from the IIA may indicate the preferred and perhaps most efficacious aspects of the Duke Center's RCBT that led to reduced depression scores.

Adherence was excellent among the participants and likely contributed to the effectiveness and efficacy of the treatment. The PHARS scores indicate that therapeutic alliance was maintained and no doubt played a positive role in the therapy.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Findings

Research Question 1

In terms of the first research question and the effectiveness of the Duke Center's therapy, this study appears to show that the Center's RCBT was delivered within the parameters of the original study. The alliance between the licensed research therapist and the deeply religious participants grew throughout therapy, almost without exception, with 100% participant adherence throughout the ten sessions of therapy. Scores on the measures indicate a significant reduction of participants' moderate and severe depression and improvement regarding attachment to God and religious coping. Three of four participants reported that managing negative thinking was the most important part of the Duke therapy, while the fourth ranked it second. When the Duke therapy subject matter was clustered by topic, the participants placed a higher value on cognitive management than on behavioral activities. They utilized prayer and meditation as the central internal means of implementing cognitive management, along with using the Bible as the primary content by which maladaptive thinking was disputed and positive thinking enhanced. Other aspects of the material were deemed valuable, but less so.

Research Question 2

Concerning the second research question and efficacy, although it cannot be concluded with absolute certainty, it appears that the critical factor that led to improvement in mood was the participants' strategic understanding of negative thought management within the sphere of available Christian resources. Rather than RCBT thought management standing as a separate resource to reduce depression, it appeared to function as an underlying and central integrative means to draw upon the various spiritual reserves made available to participants. The repeated

and often-taught A-B-C-D-E Alderian/Ellisian construct in the Duke material appears to have become a basic metacognitive tool to combat depression by means of a Christian worldview and resources. Evidence for this conclusion was made clear by the participants' responses on the hierarchical IIA, where they reported that thought management was the critical element among the central components of the protocol. These results did not indicate that participants had eliminated other behavioral factors such as prayer and scripture but that the metacognitive aspect RCBT was the most useful integrative means of incorporating and applying Christian resources to the presenting problem. Possible etiologic avenues that depict how the A-B-C-D-E aspect of RCBT intervention might interact with the subject matter of the Duke material and attachment and coping is summarized in Figure 5.1.

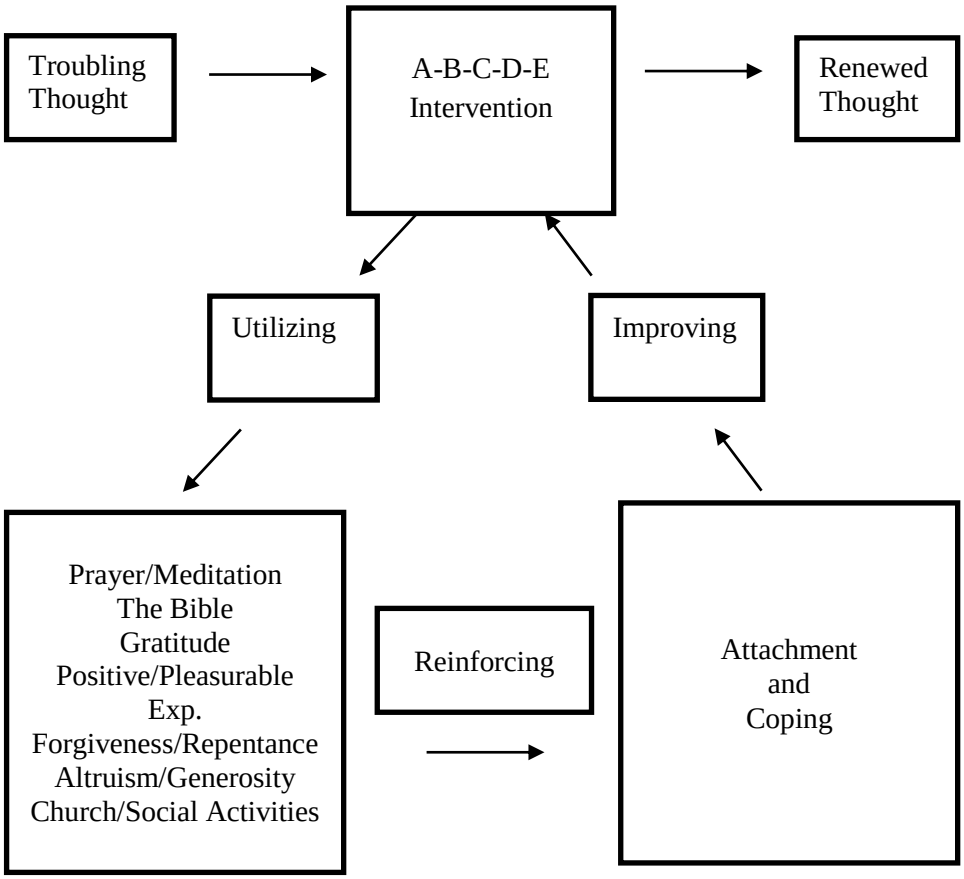

Figure 5.1. RCBT causal pathways.

There appears to be a correlation (rather than causation) between RCBT functioning as an underlying strategy in applying Christian understandings to depression, and positive attachment to God and coping. The participants were deeply religious and arguably already viewed God as a safe haven and were cognizant of their religion as a means of coping, but they lacked the ability to effectively address thoughts that led to depression. It may be that RCBT accomplished what the participants' previously deeply religious understandings of God, coping, scripture, church, pleasurable experiences, and spiritual disciplines such as forgiveness, prayer, and altruism could not sufficiently address. RCBT, delivered within a robust therapeutic alliance, may have provided new insight and means to utilize the Christian resources about God and coping, scripture, and prayer and meditation, along with a newly found efficacy and motivation to apply these means sufficiently to presenting difficulties.

Two participants ranked management of thoughts as most important among the cognitive and behavioral means in the RCBT protocol, a third participant placed prayer and meditation as most important, and the fourth ranked the Bible as the top choice. However, it may be argued that although thought management was considered second in importance for two participants, thought management may have remained a primary means of reducing depression. If the A-B-C-D-E construct is considered, these two participants may have disputed ("D") negative thoughts through prayer and meditation (P2) and the Bible (P4) to combat deleterious thinking. Prayer and meditation was placed second in the overall hierarchy of useful means, but it is often through prayer and meditation that religionist individuals speak back to God and themselves newly found disputations about negative thinking and newly discovered affirmations about God as a secure base and means of coping. The Bible was placed third in the overall hierarchy, but in the therapy materials, participants were taught to use the Bible as an intervention when engaged in thinking

mistakes. Furthermore, when participants may have questioned the usefulness of altruism and generosity or resisted social events and pleasurable activities, they were encouraged to be mindful of the A-B-C-D-E schema, dispute the negative thinking, and engage in behavior that would reduce their depression. RCBT thought management seemed to harness and bring to use the Christian resources that would otherwise remain ineffective. Many of the other Duke topics, utilized through RCBT thought management, could be similarly explained. However, the top resources, thought management, prayer and meditation, and the Bible, maintained a relatively high place in the participants' struggles with depression. Based on the perceptions of the participants, there appears to be a seamless association and interchangeability in the application of the top three topics within the participants' utilization of the A-B-C-D-E conceptualization.

A similar use of RCBT may have been made concerning attachment to God and coping. Session 6 of the Duke material called for engaging with participants concerning thoughts of being abandoned by God. The means of resisting thoughts of abandonment involved, among others strategies, disputation by means of the Bible. This may have resulted in improved attachment scores. Concerning the BRCOPE, the participants' ability to dispute thoughts of negative coping and affirm thoughts of positive coping appears to follow analogous reasoning.

Questions might be asked concerning the incremental session-by-session rollout of the Duke subject matter and any perceptible corresponding implications on the results on the measures. For example, when altruism was covered in the Duke material (Session 8), could there have been improvement on the following assessments concerning depression, attachment, or coping based on the altruism material? There does not seem to be any specific correlations since, although all the participants improved, they did not seem to experience progress in step with a particular subject of study presented during a given session. Differences in slope of

recovery might be based on each participant's apprehension and application of RCBT, rather than when a particular topic was discussed in session. However, a similar question might address which session was most impactful. There does not appear to be a uniform improvement in depression scores that would unquestionably point to particular sessions, although it seems that after Session 1 there was a drop in BDI-II scores among the participants (Figures 4.3, 4.4, 4.5, 4.6). If Session 1 was the most critical session, it would reinforce the idea that thought management was most important, since the concept was introduced and explained in the first minutes of the first session and then expanded upon throughout the course of therapy. Sessions 2–10 may be understood as an expansion and application of Session 1, with Session 1 demonstrating the most impact.

Conclusions

This study used a SCRD to investigate the effectiveness and efficacy of the Duke Center's RCBT with four deeply religious Christians reporting moderate to severe depression. Literature suggests that depressed Christians prefer and respond to religious intervention; however, this population may not have adequate access to effective religious treatments in their churches and Christian clinics. In this study, the participants met inclusionary and exclusionary criteria and received the 10-session Duke Center RCBT in a Christian clinical setting from a licensed professional counselor. Results indicate that the RCBT protocol is transportable to a nonmedical Christian setting such as a church, with all participants responding to treatment and three of the four treated to levels required for remission.

In regard to efficacy, all participants reported reduced depression in response to the use of the A-B-C-D-E aspects of the Duke material, indicating a correlation between management of negative thoughts and recovery. Gratitude, positive and pleasurable experiences, forgiveness and

repentance, altruism and generosity, and church and social activities were indicated as relatively important, but the primary means of lower depression scores appears to be RCBT thought management and associated methods and content found in prayer, meditation, and the Bible.

Results of the attachment to God and religious negative coping measures did not show overall significant change in attachment or the reduction of negative coping, but there was an indication of significant change in positive coping and overall improvement in the attachment and coping scores. This may have been the case since the participants entered the study deeply religious and may have already had an understanding of attachment and coping. It appears that the primary means of improvement in mood was the use of the A-B-C-D-E schema with ancillary positive associations observed in attachment and coping scores.

Implications for Practice

In response to the first research question, it appears that the Duke RCBT materials can be utilized in a nonmedical, Christian clinical environment, as was demonstrated in this current study. Transportability is not only feasible but promising in addressing moderate to severe depression in deeply religious Christian clients. It is conceivable that Christian churches can use the Duke material, undertake the services of a similarly trained licensed therapist, and experience comparable outcomes. In response to the second question, RCBT may be used as a common factor that strategically underlies and integrates other traditional religious resources. RCBT appears to enhance and render effective traditional Christian tools that may otherwise be proven less than adequate. As noted earlier, positive social change may occur by assisting those in the mental health field and churches to better understand and treat depression in religious people.

Limitations and Recommendations

Limitations

The research could have been improved if potential participants would have been screened through a clinical interview using an external rater rather than by the primary researcher and the research therapist. Such a method would have provided a blind means of screening potential participants and would have reduced any influence the researcher and therapist might have had on the process of evaluating potential candidates.

As stated earlier in this work, this study had very low statistical power given that there were only four participants. However, it was explained that the research questions could be adequately addressed with a SCRD.

The utilization of RCBT for depression among Christians differs from the Duke Center's treatment of depression for the medically ill. By recruiting depressed clients who were not necessarily medically ill, it is recognized that this preselection may have predisposed counselees to respond more favorably to the religious content of RCBT, thus providing higher response and normal-range depression rates. In addition, it is important that future practitioners of the Duke material carefully craft the manuals for those who are not medically ill, since some of the verbiage focuses on medical illness, such as in Session 5 (Loss) and Session 9 (Stress).

All the participants in this study were deeply religious evangelical Christians, and as such, the study did not investigate those who are less religious, as was the case in the Duke study. However, this deep religiosity may more accurately reflect the spiritual condition of those in a Christian clinical setting rather than in a hospital, the setting for the Duke research. The participants in this current study, recruited through evangelical Christian networks, may reflect the pool of individuals that frequent evangelical Christian clinics and churches.

The Duke Center research measured participants at a 12-week follow-up, but this exceeds the limits of this present study, and as such, this research window was confined to the 10 sessions of therapy.

Recommendations for Further Research

This study did not address other *DSM-5* illnesses but may provide insights into how other pathologies may be treated, especially maladies similar to depression and associated comorbidities that occur in Christian clinical settings, such as anxiety disorders.

Since there is a wide variety of Christian expressions, it would be important to take into consideration any idiosyncratic religious situations. The differences between Catholicism, the Orthodox Church, and Protestantism, as well as the myriad of denominations within Protestantism, should be considered. There are also various Christian views of depression and the means for addressing mental illness. Future studies might address the applicability of the Duke material in these Christian populations. If a particular Christian expression takes the Bible or prayer and meditation less seriously, the replication of the positive results of this study may prove questionable. For example, some Catholics believe the church and clergy is as important as or of more consequence than the Bible. In such situations, religious scripture may not function as an adequate intervention.

This research does not explore what would take place if the therapy was delivered by therapists other than licensed professionals or if the therapy was delivered over the Internet or by phone (as in the case of the Duke study). An open question remains as to whether laymen in churches might use the material in seeking to help fellow parishioners struggling with depression and what type of counselor training might be required.

In addition, in this present study, participants ranked components of the Duke material after the treatment was over. However, in the future, it might be useful to rate components on a weekly basis to garner a more accurate understanding of the usefulness of the parts of the material and how they weigh upon depression. However, this may be difficult since the incremental rollout of the information during therapy may not allow participants to compare the subject matter.

Consideration might be given to the impact of the research on common approaches to Christian discipleship and the depressed. RCBT might address many problems among deeply religious Christians that appear intractable, such as why expected Christian behaviors and disciplines may not help those battling depression. In the absence of Christian thought management, urgings to incorporate prayer and meditation and the Bible may prove ineffective and perhaps frustrating to a dedicated believer who may incorporate all the expected Christian expressions with few positive results. RCBT and associated metacognitive skills that incorporate Christian resources may be the missing element that would allow the practice of these Christian expressions to become effective in reducing depression.

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APPENDIX A: Institutional Review Board Approval

April 4, 2018

Richard M. Cozart
IRB Approval 3108.040418: Effectiveness of Religious CBT for the Treatment of Clinical Depression in Religious People: A Multiple Baseline Design Analysis

Dear Richard M. Cozart,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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APPENDIX B: Initial Assessment Interview Form

Please provide the following information as an initial assessment of your appropriateness for participation in the study. This information will be kept confidential, unless ethical guidelines present a limit to confidentiality, such as in the case of reported suicidal or homicidal ideation. If you do not understand any question, please leave it blank and contact the researcher.

Name: _____

Date of Birth: _____ / _____ / _____ Age: _____

Phone: _____ May I call you? (Y / N) May I text you? (Y / N)

Email: _____ May I email you? (Y / N)

1. Is religion/spirituality at least somewhat important in your daily life? (Y / N)

2. Have you been diagnosed with depression from a qualified medical doctor, psychiatrist, or professional counselor at some time in your life? (Y / N)

If yes, please specify when this first took place: _____

3. Have you ever been diagnosed with any psychiatric problems besides depression, or are you currently experiencing any psychiatric problems besides depression? (Y / N)

If yes, please specify: _____

4. Are you currently receiving psychiatric, psychotherapy, and/or professional counseling services? (Y / N)

If yes, when was your last therapy session? _____

5. Are you currently experiencing thoughts of suicide or homicide? (Y / N)

6. Over the next 2–3 months, are you able to participate in ten weeks of therapy? There is no cost involved. (Y / N)

7. Are you willing to complete initial assessments that will help establish whether you qualify for this study? Together these assessments should take no more than 30 minutes. Once the therapy begins other assessments will follow. (Y / N)

8. If you do not qualify for this study and the counseling that accompanies it, would you like to speak to the researcher about the possibility of receiving counseling (at no charge)? (Y / N)

There is no monetary compensation for participation in this study. Please direct any questions about this interview form to the researcher: phone, [redacted]; or email, [redacted]

APPENDIX C: Mental Status Exam

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APPENDIX D: DSM-5 Self-Rated Level 1 Cross-Cutting Measure—Adult

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APPENDIX E: Beck Depression Inventory II

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APPENDIX F: Counseling Participant Consent Form

This letter will be used to inform potential counseling participants in the study and how to take initial steps to participate.

The Liberty University Institutional Review Board has approved this document for use from 4/4/2018 to 4/3/2019 Protocol # 3108.040418

CONSENT FORM

EFFECTIVENESS OF RELIGIOUS CBT FOR THE TREATMENT OF CLINICAL DEPRESSION IN RELIGIOUS PEOPLE: A MULTIPLE BASELINE DESIGN ANALYSIS

Richard M. Cozart
Liberty University
Department of Behavioral Sciences

You are invited to be in a research study on treating depression. The research involves participating in ten sessions of Christian-based cognitive behavior therapy at The Brook Church Counseling Center. The therapist is a trained, licensed professional counselor and the therapy was developed by the Center for Spirituality, Theology, and Health at Duke University. Please read this form and ask any questions you may have before agreeing to participate in the study. You were selected as a participant because you acknowledged the following:

1. Age 18–85

2. Religion/spirituality are at least somewhat important in your daily life.

3. Current Beck Depression Inventory II scores of 20–40.

4. You do not have (a) significant cognitive impairment (<14 on Mental Status Exam) or an inability to give informed consent; (b) you have not received psychotherapy in the last two months; (c) you have not met the criteria on the *Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition* (*DSM-5*) Cross-Cutting Symptom Measure for a psychotic disorder, alcohol or substance abuse, or PTSD within the past year; (d) you do not have a history of bipolar disorder (ever); (e) have not had active suicidal thoughts that placed you at serious risk (during assessment); or (f) an inability to communicate in English or travel to the counseling center for ten sessions.

Richard M. Cozart, a Ph.D. student in the School of Behavioral Sciences at Liberty University, is conducting this study.

Background Information: The purpose of this study is to investigate the impact of a Christian counseling approach on depression in relation to attachment to God and religious coping strategies.

Procedures: If you agree to be in this study, you agree to do the following:

1. Complete the Demographic Questionnaire, which should take less than 20 minutes.

2. Complete measurements prior to the first counseling session, then weekly (until the end of treatment). These measurements are the *DSM-5* Cross-Cutting Symptom Measure, Beck Depression Inventory II, the Attachment to God Inventory, the Brief RCOPE (religious coping), the Internal Integrative Assessment, and the Penn Helping Alliance Rating Scale. Each time you take these assessments, it should take you no longer than 20 minutes. These assessments will take place in addition to the 50- minute counseling sessions.

3. Attend ten 50-minute sessions of therapy over twelve weeks at The Brook Church Counseling Center with a Texas Licensed Professional Counselor. Each session will be audio-recorded to ensure treatment quality. For the counseling sessions, you will be given a participant manual that follows the subject matter of the therapy and that asks you to complete homework assignments for each session (no more than 30 minutes each week).

Risks and Benefits of Participation in this Study:

1. This project involves minimal risk, meaning participating in it involves no more risk than that experienced in daily life. However, in some cases patients who are working through depression experience uncomfortable feelings. If at any time during this process you experience significant discomfort, please contact the researcher or another mental health professional.

2. There are potential benefits to participation in this research. The underlying basis for the session content is cognitive behavior therapy, which is a safe and effective protocol that is used throughout the world in the treatment of depression. For people of religious faith, the session content has been customized to appeal to their religious interests and how that may weigh on their experience of depression.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality:

1. There are limits of confidentiality. A report of suicidal or homicidal ideation does not qualify as confidential information and will be conveyed to appropriate referral sources.

2. The information collected will be kept in the researcher's secure database and locked in the researcher's private office. To protect the privacy of participants, each participant will be assigned a pseudonym. As per federal guidelines, data must be retained for three years upon completion of the study.

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3. The records of this study will be kept private. In any type of report that might be published, the researcher will not include any information that will make it possible to identify a subject.

4. The researcher may share the data collected for use in future research studies or with other researchers. If the data is shared, any information that could identify you will be removed before it is disseminated.

Voluntary Nature of the Study and Termination: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships. If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Contacts and Questions: The researcher conducting this study is Richard M. Cozart. You may ask any questions you have now.

If you have questions later, you are encouraged to contact him at [redacted] or [redacted]. You may also contact the researcher's faculty advisor, Dr. Gary Sibcy at [redacted].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher or his faculty advisor, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Green Hall 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

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Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to [audio-record] me as part of my participation in this study.

_____

Printed Name of Participant

_____

Signature of Participant Date

_____

Printed Name of Investigator

_____

Signature of Investigator Date

APPENDIX G: Therapist Participant Consent Form

This letter will be used to inform a potential therapist participant in the study and how to take initial steps to participate.

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CONSENT FORM

EFFECTIVENESS OF RELIGIOUS CBT FOR THE TREATMENT OF CLINICAL DEPRESSION IN RELIGIOUS PEOPLE: A MULTIPLE BASELINE DESIGN ANALYSIS

Richard M. Cozart
Liberty University
Department of Behavioral Sciences

You are invited to be in a research study on treating depression as a research therapist. The research involves treating each of four participants with Christian-based cognitive-behavior therapy at The Brook Church Counseling Center in Tomball, Texas. The therapy was developed by the Center for Spirituality, Theology, and Health at Duke University. Please read this form and ask any questions you may have before agreeing to participate in the study. You were selected as a research therapist and participant because you acknowledged the following:

1. You are a licensed professional counselor in the State of Texas and able and willing to adhere to the standards of professionalism and ethics prescribed by the state and professional counseling associations.

2. You possess professional liability insurance for at least $1,000,000 per claim; $3,000,000aggregate.

3. You have familiarity and experience in Cognitive Behavior Therapy.

Richard M. Cozart, a Ph.D. student in the School of Behavioral Sciences at Liberty University, is conducting this study.

Background Information: The purpose of this study is to investigate the impact of a Christian counseling approach on depression in relation to attachment to God and religious coping strategies.

Procedures: If you choose to be in this study, you agree to do the following:

1. You are asked to carefully study the Duke Center materials and meet with the primary researcher for about 30 hours of orientation and training.

2. You are to be mindful of the depression levels and suicide ideation of participants, and any other signs or probabilities of harm to self or others (with points of action in place if warranted). The therapist is free to deviate from the study if the participants experience any crisis.

3. Conduct 10 audio-recorded religious cognitive behavior therapy sessions for each of the four participants (30 sessions total). Each session will be approximately 50 minutes in length.

4. Communicate with the primary researcher after every counseling session for purposes of debriefing. Each debriefing should last about 15 minutes.

5. Complete the Cognitive Therapy Rating Scale (CTRS), which should take about 10 minutes, and score at least 40 prior to beginning therapy sessions with the participants. The CTRS is used to assess competency in delivering cognitive therapy.

6. Complete the Penn Helping Alliance Rating Scale during Weeks 2, 6 and 10 of therapy. The results indicated on the PHARS instrument will be used in the debrief sessions to alert the research therapist and the therapist of any improvements that can be made in the delivery of the protocol. Each of these assessments should take no longer than 10 minutes to complete each time they are undertaken.

Risks and Benefits of Participation in this Study: This project involves minimal risk, meaning participating in it as a research therapist involves no more risk than in non-research-related therapy. However, serving clients with depression involves a risk of self-harm. If at any time during this process you feel that there exists a risk to the participants that you are unable to manage, please contact the researcher or another mental health professional.

There are potential benefits to participation in this research. The underlying basis for the session content is Cognitive Behavior Therapy, which is a safe and effective protocol that is used throughout the world in the treatment of depression. For people of religious faith, the session content has been customized to appeal to your religious interests and how that may weigh on their experience of depression. Benefits to the research therapist include learning an effective therapy for depressed religionists.

It is the intent of this study to adhere to the highest standards of ethical and academic conduct as prescribed by professional counseling organizations and to take every reasonable measure to care for the safety and well-being of the participants, including the research therapist. You are expected to adhere to these professional standards. Any indication of unethical behavior will cause discontinuation of the therapist's services and an offer to the participants of an alternative means to therapy.

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Compensation: You will be paid $100 per week during the orientation and training phase and $100 an hour for each therapy session.

Confidentiality:

1. There are limits of confidentiality. A report of suicidal or homicidal ideation does not qualify as confidential information and will be conveyed to appropriate referral sources.

2. The information collected will be kept in the primary researcher's secure database and locked in the researcher's private office. To protect the privacy of participants (including the research therapist), each participant will be assigned a pseudonym. As per federal guidelines, data must be retained for three years upon completion of the study.

3. The records of this study will be kept private. In any report that might be published, the researcher will not include any information that will make it possible to identify a subject.

4. The researcher may share the data collected for use in future research studies or with other researchers. If the data is shared, any information that could identify you will be removed before it is disseminated.

Voluntary Nature of the Study and Termination: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships. If you choose to withdraw from the study, please contact the primary researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Contacts and Questions: The researcher conducting this study is Richard M. Cozart. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at [redacted] or [redacted] You may also contact the researcher's faculty advisor, Dr. Gary Sibcy at [redacted].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher or his faculty advisor, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Green Hall 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

The Liberty University Institutional Review Board has approved this document for use from 4/4/2018 to 4/3/2019 Protocol # 3108.040418

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to [audio-record] me as part of my participation in this study.

_____

Printed Name of Participant

_____

Signature of Participant Date

_____

Printed Name of Investigator

_____

Signature of Investigator Date

APPENDIX H: Cognitive Therapy Rating Scale

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APPENDIX I: Demographic Questionnaire

Today's Date: _____

Name: _____
(First) (Middle Initial) (Last)

Address: _____
(PO Box or Street) (City) (State) (Zip)

Telephone: _____ Email: _____

Date of Birth: _____/_____/_____ Age: _____ Gender: M____ F____

Marital Status: Single / Living with Partner / Married / Separated / Divorced / Widowed

Place of Employment: _____

Income Level: $0-$10,000 / $11,000-$15,000 / $16,000-$19,000 / $20,000-$25,000 / $26,000 & above (Annual Funds in US Dollars)

Race: African American / Asian / Latino / Native American / White / Other _____

Highest High School Education Level: Freshman / Sophomore / Junior / Senior /

Bachelor's degree / Master's degree / Doctoral degree

Living Situation: House / Apartment / Other: _____

Medical Insurance Coverage: Yes ____ No ____

Outpatient Therapist: _____ Phone: _____

In Case of Emergency Contact: _____

Emergency Contact Phone: _____ Relationship: _____

How long has religion/spirituality been important in your daily life? _____

What is your church/denominational affiliation? _____

List of Medications: _____

_____

_____

APPENDIX J: Measure of Religiosity

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APPENDIX K: Attachment to God Inventory

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APPENDIX L: Brief RCOPE

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APPENDIX M: Internal Integrative Assessment

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APPENDIX N: The Helping Alliance Questionnaire, Patient Version

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APPENDIX O: The Helping Alliance Questionnaire, Therapist Version

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