

**EXAMINING THE RELATIONSHIP BETWEEN MINDFULNESS, RELIGIOUS
COPING STRATEGIES, AND EMOTION REGULATION**

By

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ABSTRACT

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This study was conducted to explore the relationship Mindfulness has on Religious Coping and Emotion Regulation. Three hundred fifty seven participants attending an evangelical Christian university were studied using self-report measures of Mindful Awareness, Religious Coping style, and Emotion Regulation. A statistical mediation analysis was used to compare the relationship between these variables. The results indicate that although the relationship between Collaborative Religious Coping and the reappraisal function of Emotion Regulation was slight, Mindfulness mediated this relationship. The results and implications, as well as recommendations for further research, are discussed.

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TABLE OF CONTENTS

Abstract.....	ii
Acknowledgements.....	iii
Contents.....	iv
Chapter One: Introduction	
Introduction	1
Purpose.....	2
Background and Theoretical Considerations.....	3
Coping.....	5
Mindfulness.....	7
Religious Coping, Mindfulness and Collaboration.....	9
Importance and Implications.....	10
Research Questions.....	11
Terms Defined.....	11
Limitations and Assumptions.....	13
Chapter Two: Review of the Literature	
Introduction.....	14
Emotion Regulation.....	14
Emotional Experience.....	15
The Process Model of ER.....	18
Emotion Regulation Development.....	21
Family Context.....	22

Neurobiology.....	23
Early Caregiver Relationships.....	24
Attachment Styles.....	25
Coping.....	26
Coping and Temperament.....	26
Religious Coping.....	28
Religious Coping.....	31
Mindfulness.....	32
Mechanisms of Mindfulness.....	34
Mindfulness Based Stress Reduction.....	35
Mindfulness and Psychodynamic Theory.....	37
Mindfulness and Religion.....	38
Mindfulness and Religious Coping.....	45
This Present Study.....	45
Research Questions and Associated Hypotheses.....	46
Chapter Three: Methodology	
Research questions, hypotheses and methodology.....	47
Participants.....	49
Procedure.....	50
Measures.....	51
Data Analysis.....	53
Chapter Four: Results	
Participants.....	55

Data Preparation.....	57
Research Question One.....	63
Research Question Two.....	64
Research Question Three.....	65
Research Question Four.....	66
Summary.....	67
Chapter Five: Summary, Discussion and Recommendations	
Collaborative Religious Coping and Reappraisal.....	69
Collaborative Religious Coping and Mindfulness.....	72
Mindfulness and Emotion Regulation - Reappraisal.....	73
Mindfulness as a Mediator between Collaborative RC and ER-R...74	
Limitations.....	76
Conclusion.....	76
Implications for the Church.....	77
References.....	79
Appendix A Tables.....	94
Appendix B FFMQ subscale correlations and reliability.....	108
Appendix C Scales.....	112
Appendix D Permissions.....	121

CHAPTER ONE: INTRODUCTION

Emotion Regulation (ER) is a process of influencing one's own emotional experience (Gross, 1998). This process is greatly influenced by the strategies one employs to manage stressful situations, a phenomenon known as coping. Coping strategies are oftentimes influenced by one's development and psychological influences. Religion, for example is cited most often when coping with hardships (Koenig, 1998). However, the mechanisms by which Religious Coping (RC) operates is not well established.

Current research in the field of affect regulation has ignited interest in the subject of Mindfulness. This age old practice of developing present moment awareness in a particular way (Kabat-Zinn, 1997) is proving to have significant treatment effects on an array of emotional disorders, anxiety disorders, attentional problems as well as overall improved psychological well-being. Little is known, however, regarding the manner in which mindfulness may facilitate the acquisition of various forms of coping in general and, more specifically, religious coping (RC) (Pargament, 1997).

Research shows RC has strong links to emotion regulation. The way in which one seeks to engage God as a resource in times of stress is predictive of emotion regulation outcomes (Corsini, 2009). RC strategies can be categorized as positive or negative (Pargament, 1997), depending upon their overall adaptability. Certain strategies (outlined in detail later in this paper), such as collaborative religious coping where one engages God for wisdom and comfort but values personal responsibility, have shown to produce

more positive outcomes than other strategies such as being self-directed where a person chooses not to look for God's help in a situation but seeks to "go it alone". But no research to date has examined the mechanisms that may help explain why collaborative religious coping is positively related to emotion regulation skills. This study seeks to examine the relationship of religious coping, mindfulness, and emotion regulation. More specifically it examines whether mindfulness mediates, or partially mediates, the relationship between collaborative religious coping and emotion regulation.

Purpose

Thus, the purpose of this study is to investigate the relationships between Religious Coping and Emotion Regulation, between Mindfulness and Emotion Regulation, and between Mindfulness and Religious Coping in an effort to explore the potential mediation effect Mindful Awareness has on efforts of Religious Coping to regulate emotion. This study uses a cross sectional, correlational design where a sample of students will be administered self-report measures of Mindful Awareness, Religious Coping and Emotion Regulation beginning in the Spring of 2012. The data will be submitted to path analysis, which examines three key correlations: the correlation of Religious Coping and Mindfulness, Religious Coping and Emotion Regulation, and the correlation between Mindfulness and Emotion Regulation. Finally, once mindfulness is entered into the equation, along with RC and ER, the original correlation between RC and EC will diminish. If it diminishes to near zero, it implies full-mediation and if it diminishes significantly, but not to zero, then it is considered partial-mediation. This study should provide valuable insight into the mediating relationship, if any, Mindfulness

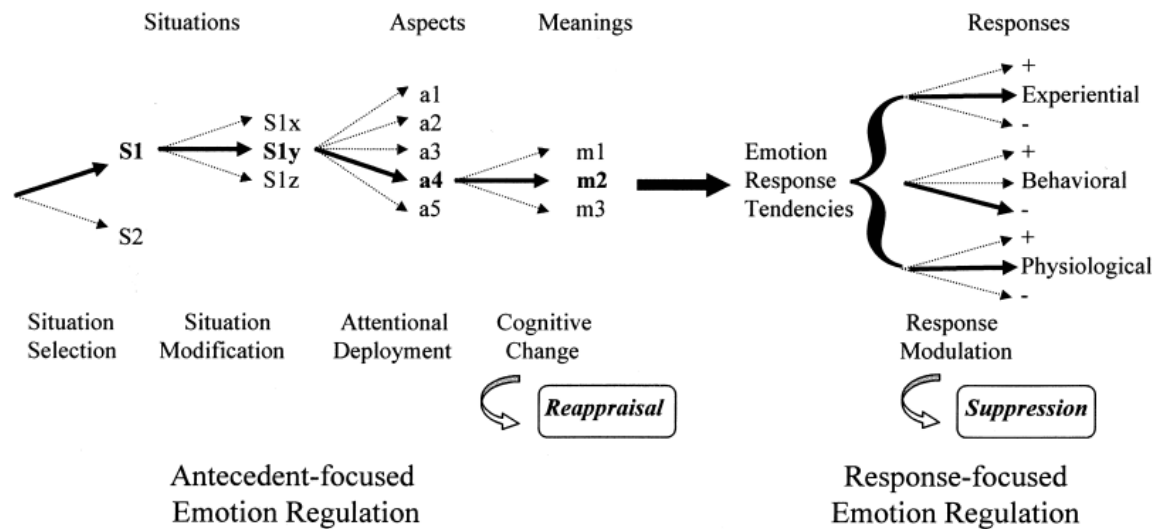
has on Collaborative Religious Coping and Emotion Regulation and could lend to the understanding of how Mindfulness may be a mechanism of action that explains how religious coping enhances emotion regulation. This may aid in the development of religiously informed treatments, to not only encourage clients to increase their collaborative stance toward God when faced with stressful life events, but to also engage in various types of religious practices (e.g., meditation, prayer, etc) that may enhance mindful awareness. This study may also provide evidence that Mindfulness can play an important role in normal developmental processes involved in spiritual growth and transformation and may also help inform clinical interventions for religious clients.

Background and Theoretical Considerations

Emotion Regulation (ER) is the overall system in which one relates to and handles emotion. ER plays a paramount role in healthy social-emotional development and deficits in ER have been linked to a wide array of psychopathology, from mood and anxiety disorders to various personality disorders. (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004; Kring & Sloan, 2010). Every psychological treatment strategy seeks in some way to address the process of ER (Schoe, 2003). It is therefore necessary to understand the elements of Emotion Regulation and how these elements affect overall functioning. Central to this discussion is the subject of Coping and how individual differences in the coping strategies and skills influence emotion regulation.

Emotion Regulation according to Gross (1998) is “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (p.275) . ER can involve the down regulation of

negative emotion or the up regulation of positive emotion. The scope of ER, as described by Gross (1998) consists of four key processes: (1) The situation or context, (2) the specific aspects of that situation, (3) meaning attribution/assignment, and (4) response. Gross further distinguishes these processes by delineating regulation in a systematic way which focuses on the timing of events: Situation Selection, Situation Modification, Attentional Deployment, Cognitive Change and Response Modification (see figure 1).



Emotion Regulation:

Figure 1. *Process Model of Emotion Regulation*. Source: Gross & Thompson (2007). Copyright © (1998) by the American Psychological Association. Reproduced with permission. The official citation that should be used in referencing this material is (Gross, J.J. (1998) The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, Vol 3(3) pp. 271-299). The use of APA information does not imply endorsement by APA.

These regulation processes allow for opportunities to alter the experience of internal and external emotional expression. They can be broadly categorized as antecedent focused, before or during the engagement of emotional experience, and

response focused, referring to the management of the generated emotion once it is experienced such as in the case of suppression. In figure one, Gross' model illustrates that response tendencies dictate the experiential, behavioral, and psychological outcomes of the antecedent processes. Although this model does not encompass every possible aspect of emotion generation/regulation as a whole, it is a fitting model for grounding the focus of this study as it illustrates a context from which to discuss Religious Coping and Mindful Awareness. This study utilizes the Emotion Regulation Questionnaire (ERQ) (Gross, 2002) to measure tendencies of Reappraisal and Suppression as noted in figure one.

Coping

Coping, the behavioral or cognitive processes one employs to manage stressful situations (Lazarus & Folkman, 1984; Moos & Schaefer, 1993) can be unique from person to person depending upon a myriad of factors including, but not limited to culture and developmental influences. Coping as a means of emotion regulation is viewed as the action of regulation. Broadly, coping can be categorized as emotion-focused, relating to the management of internal states, or problem-focused, relating to the utilization of external resources (Lazarus, 1999). Skinner & Zimmer-Gembeck (2009), refers to this process as "action regulation under stress". Coping can be done adaptively, utilizing both internal and external resources such as healthy-perspective taking or problem-solving strategies to deal effectively with difficult situations. In contrast, maladaptive coping utilizes destructive self-soothing strategies such as chronic avoidance, substance use, self-injury, or dissociation in the face of everyday stress. Coping can be both conscious

(engaging in techniques by choice) and unconscious (conditioned response). Coping can also be active (the process of engaging in the situation), or avoidant (seeking to remove the self from the stressor either physically or psychologically) (Skinner & Zimmer-Gembeck, 2009). These coping styles relate to such factors as motivation, outcome, and temperament. This research suggests that personal worldview and culture are major factors in the coping process.

Religious Coping

Religion has been identified as a significant factor in the implementation of coping processes (Pargament, 2007). Pargament (1997), defines Religious Coping (RC) as the use of connecting to the sacred in order to gain support during times of stress. It is conceptualized as the utilization of religious activities such as scripture reading, prayer, pastoral support, church attendance, etc. as a way to manage negative emotional states¹. No doubt, scripture reading, prayer and church attendance is commonplace in society. In the United States, nearly every hospital has a Chaplain on staff and the military provides religious services to its members even when they are deployed. The integration of religion and coping in this country is a cultural norm.

Pargament (1997), also suggests that religious coping is the most common form of coping. This is likely, due to the vast global influence of religion. It is appropriate then, to assess the way in which one utilizes religion as a means of managing stressful events. Research within the past two decades has informed our understanding of how this

¹ Pargament conceptualized religion in the broader, ecumenical sense and does not specify a specific religious sect although the predominance of his research samples consisted of evangelical Christians.

dynamic might work. Pargament, (1997), for instance, has identified three types of religious problem solving in coping: Collaborative, Deferring, and Self Directed.

Collaborative refers to cooperation with God; *deferring*, refers to dismissing the situation into God's hands, and *Self Directed*, involves viewing oneself as the way to address problems (Pargament 2007). Religious Coping then, can be affected by individual differences in one's belief system.

RC, therefore, is a vital part of the overall coping process for religious clients and an important influence on Emotion Regulation. The effectiveness of these sacred internal and external resources, however, may be mediated by other factors. The strategies one employs in the process of coping are important; however, equally important is the psychological state of the one employing these efforts. This study seeks to explore this dynamic more closely.

Mindfulness

Mindfulness, a state of consciousness in which one is able to be aware of present experience with acceptance, is an emerging construct within clinical psychology and counseling and over the past couple decades has become a popular research subject in areas related to depression (Burg & Michalak, 2011; Van Aalderen et al 2011), Bipolar (Manicavasagar, Perich & Parker, 2011), attention (Garland, 2011), anxiety (Williams, McManus, Muse & Williams, 2011), and pain management (Elabd, 2011), to name only a few. Mindfulness is a complex construct, containing a number of subtle dimensions. To help bring clarity, Baer, Smith, Hoptkins, Krietemeyer and Toney, (2006) recently conducted a factor analysis of current empirically supported self-report measures of mindfulness and identified five common factors: Non-Reactivity, Attending, Awareness,

Descriptiveness, and Non-judgement. When a person is able to attend to present moment experience and become aware but not reactive or judgmental of his intrusive thoughts and emotions, he is said to be mindful. This concept is central to this study in that one's ability to be mindful may affect the outcome of one's coping efforts.

Mindfulness has been shown to positively correlate with self-regulation behavior as well as positive emotional states, (Niemiec, Richard, & Brown, 2008), activity in neural regions underlying reappraisal, (Modinos, Ormel & Aleman 2009), resting activity in the amygdala (Way, B.M. et al 2010), and executive functioning, visuo-spatial processing and working memory (Zeidan, Johnson, Diamond, David, & Gookasian 2010). It has also been shown to negatively correlate with, amygdala reactivity (Way, B.M., Lieberman, N.I., & Creswell, J.D. 2010), insomnia symptoms (Ong, J.C., Shapiro, S. L. & Manber R. (2008), stress, (Brisbon & Lowery, 2011) depression, anxiety, medical symptoms, and sensory pain as well as more serious psychological disorders (Grossman, Niemann, Schmidt, & Walach 2004). All of these correlations relate to the regulation of emotional states in either a neurobiological or cognitive fashion.

Mindfulness, therefore, has been positively linked to processes proposed to underlie emotion regulation and negatively correlated to various clinical conditions that display deficits in ER. The link between mindfulness and RC has not been understood. Moreover it may be that Mindfulness mediates the relationship between RC and ER. In other words, mindfulness, the capacity to focus on present moment experience in an accepting way, may be the mechanism of action through which RC operates and or influences the regulation of emotion for the religious client.

Religious Coping, Mindfulness, and Collaboration

For the religious person, the coping process is integrated with one's faith and becomes a unique and deeply personal process. Of the three religious problem solving styles; Collaborative, Deferring and Self-Directed, research suggest that the collaborative style is most effective. Collaborative RC is categorized as the only "positive" religious problem solving style (see figure 2). Collaboration, as it relates to RC is the tendency to view God as not only benevolent but interested in helping with personal problems. The collaborative religious coping person then believes God is responsive and available to him or her. This process of collaboration presumes openness and attentiveness to one's situation.

In his research on God attachment, Corsini, (2009) supports this idea. Corsini found that secure attachment to caregivers and a secure attachment to God were associated with Collaborative Religious Coping. Secure attachment is associated with the belief that one's primary caregiver is receptive and responsive in stressful situations. This attachment style is said to precipitate the development of one's abilities to be both open and explorative and to engage support in times of stress. Secure attachment is also correlated with healthy Emotion Regulation. Siegal, (2010), suggests that the prefrontal regions of the brain, central to emotion regulation and empathy, are developmentally influenced by collaborative, interpersonal engagement, phenomenon known as attunement. Siegal also suggests that outcome measures of secure attachment and mindfulness have "markedly overlapping findings" (Siegal, 2007, p. 26). Schore (1999)

also observes that the emotion regulation regions of the brain, pre-frontal regions, undergo crucial maturation during important maternal attachment periods (middle of the second year). Mindfulness practice has also been shown to affect this region. Recent Mindfulness research shows brain density changes in many of these very regions have occurred after eight weeks of a Mindfulness Based Stress Reduction training (Holzel et al, 2011). These interrelated findings suggest a potential connection between Mindfulness, emotion regulation, and collaborative coping efforts.

The efficacy of integrating observances of faith into the emotion regulation process may therefore be dependent upon attending abilities and an openness to not only accept and tolerate negative emotions but also to explore one's inner struggles (facets of Mindfulness) in collaboration with God. Thus, in order to "work with God" the process of coping requires that one is able to accept, attend to, and explore negative emotions. Thus, the central hypotheses of this study are as follows: (A) collaborative religious coping will be positively and significantly correlated with both emotion regulation and mindfulness; (B) mindfulness will be positively correlated with emotion regulation; and (C), mindfulness will at least partially mediate the relationship between religious coping and emotion regulation.

Importance and Implications

Collaborative religious coping has been linked to a number of positive outcomes, ranging from decreased alcohol abuse post treatment (Huhra, 2007), to better spiritual, psychological and physical health (Bush et al. 1999; Mickley, Pargament, Brant, & Hipp,

1998; & Thompson & Vardaman, 1997). However, very little research has investigated the mechanisms through which religious coping may operate. This study looks to fill this gap by investigating the possibility that mindful awareness helps explain how collaborative religious problem-solving influences healthy emotion regulation. This idea may be significant in that mindfulness is cultivated by various exercises such as meditation (Goldin & Gross, 2010), or simple daily exercises (Hayes & Strosahl, 2004), and may be a significant adjunct to treatment for religious clients who are seeking to more effectively integrate their faith into therapy.

Research Questions

This present study seeks to answer four interrelated questions: 1. Does collaborative religious coping account for variance in Emotion Regulation – Reappraisal (ER-R). 2. Does collaborative RC positively correlate with mindfulness (MND). 3. Does (MND) positively correlate with ER, specifically, re-appraisal. 4. Does (MND) mediate the relationship between collaborative Religious Coping (RC-C) and Reappraisal (ER-R)? In other words, does Mindfulness account for a significant indirect effect of this relationship?

Terms Defined

Mindfulness – Mindfulness, or Mindful Awareness is the ability to focus attention on present moment experience in a non-judgmental way.

Emotion Regulation – ER, as described by Gross (1998), is “the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (275).

Religious Coping – As defined by Pargement (1997), is the process of utilizing sacred things to manage stressful situations.

Meditation – Meditation is the act of quieting the mind and body in a way that allows for attention to be focused on a particular event in a reflective way.

Emotion Focused Coping – The form of coping where the emotional states of the individual are addressed.

Problem-Focused Coping – The act of changing one’s surrounding or engaging in problem solving to manage stressful situations.

Extrinsic coping – The act of managing stressful events by making cognitive, aware oriented choices. This can be both adaptive or maladaptive in nature.

Intrinsic coping – Subconscious Schemas employed to manage stress. These processes can include such things as, dissociation, or depression, or as simple as involuntary motor discharges such as leg shaking.

Antecedent focused Emotion Regulation processes – Regulation processes which precede the actual experience of the emotion being developed or are in anticipation to an experienced emotion, i.e. reappraisal.

Response focused ER processes – Regulation processes focused on suppressing or modulating a current emotional experience.

Limitations and Assumptions

This study is limited to a sample of Graduate Students enrolled in a Clinical Counseling program at an Evangelical Christian university in Central Virginia during the spring of 2012. The results may not be generalized to students of differing world views and may not be generalized to other college populations. The study utilizes self-report surveys. Although, each has been empirically validated, results depend upon the participation and integrity of the students to answer honestly. Although self-report analysis of trait mindfulness shows promise and is currently the only accepted way to measure this construct, debate is emerging regarding the construct validity of self-reporting on one's own awareness. A social desirability scale has been added to account for some bias in the answers. Self report data on the dependent, independent and mediation variables should be taken into account when considering the results of this study. Additionally, the study utilizes a cross-sectional, correlational design with online graduate students. The average age of the sample is 38. It is not clear how this sample's age, or program of study (counseling) may affect the sample. Because of this the results cannot be generalized to a broader population.

CHAPTER TWO

REVIEW OF THE LITERATURE

In the following section, the relationship between Emotion Regulation, Religious Coping and Mindfulness is discussed. This review will present research suggesting that coping efforts, specifically Collaborative Religious Coping, is effective in the regulation of emotion by promoting reappraisal (a function of Emotion Regulation). Furthermore, this section examines theoretical and empirical links between Mindfulness as it relates to both Religious Coping and Emotion Regulation. More specifically, this review examines the theoretical bases for the hypothesis that Mindfulness mediates the relationship between Collaborative Religious Coping and the Emotion Regulation strategy of Reappraisal.

Emotion Regulation

Emotion Regulation is a key developmental task that is linked to many important biological, psychological and social functions. Its importance as it relates to clinical work and research is widely demonstrated but it is a relatively new subject in psychopathology (Kring, 2010). The early focus of psychology was mainly directed toward models of treatment that involved learned behavior or the healthy management of biological drives. The focus has since switched to managing and regulating emotion as a central theme in treating various forms of psychopathology (Gross, 1998). During the past 30 years, an onslaught of research has emerged to explore the dynamics of emotional development and emotion regulation. The work done in this area of study has shown that the regulation

of emotion is a core process of the broader construct of self-regulation and is linked to the development and treatment of most Axis I and Axis II disorders (Kring, 2010). By understanding the many complex processes involved in the development of ER capacities, specifically through the realm of Religious coping, researchers stand to gain deeper insight into the change processes involved in spiritually oriented strategies for regulating emotion.

Definitions of emotion regulation vary, but only slightly. One of the most accepted definitions is that of Gross (1998). In his view, emotion generation and regulation is a process consisting of the ways in which “one tries to influence which emotions they have, when they have them, and how they experience and express these emotions...” (p 275). Broadly, emotion regulation is a self-regulatory process that helps formulate internal experience (cognition, emotion, appraisal, action potential, physiological, autonomic, etc.) in relation to the external world. The development of emotion regulation processes begin in early life and these processes form the foundation by which adaptive functioning, such as coping, emerges.

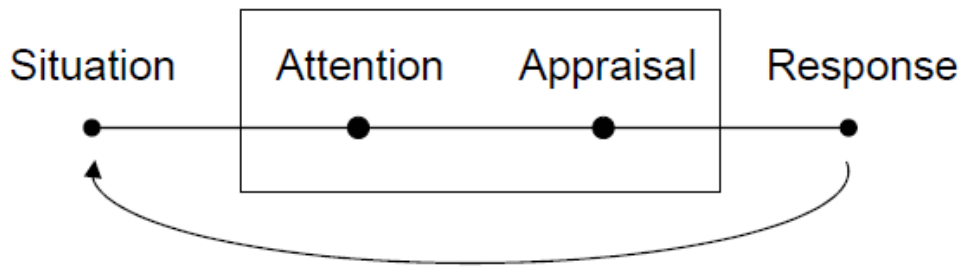
Emotional Experience

Gross and Thompson (2007) note that emotions, although difficult to define, can be understood by how they are experienced and how they relate to everyday life. Emotions have practical, relational value such as readying responses to decision making, enhancing memory, and negotiating interpersonal communication. Emotions can vary in duration and intensity. They can be public or private and negative or positive. An emotional response can be primary, generated by the initial situation, or secondary, relating to one's reaction to feeling a certain way in that same situation. Various

researchers have attempted to model these dynamics to better understand the way in which the emotional experience unfolds. Notably, the work of Gross, (1998) and later Kring (2010), has become widely accepted in the field and their work with modeling the generation and regulation of emotion provides a foundation from which to conceptualize this study.

Building from the work of Gross (1998), Kring (2010) notes that prototypical emotional responses include five events: 1) Triggers, events that bring on the emotion and can be either internal, or external; 2) Attention, where one focuses awareness on aspects of the emotion and/or the triggering event; 3) Appraisal, weighing the event against goals; 4) Response Tendencies, schemas that are derived from previous experience and include procedural patterns of cognitive, emotional, behavioral and physiological responses (Mauss, Levinson, McCarter, Wilhelm & Gross, 2005), and 5) Malleability, which refers to the degree to which an emotion can be interrupted and or regulated.

These features of emotion are common among models of emotional regulation and are outlined in the modal model of emotion (Barrett, Mesquita, Oshsner, & Gross, 2007; Gross, 1998,) See figure 2. This model outlines the basic process of emotional responses where a situation is attended to in a certain way, an appraisal of how the situation relates to goals is made, and a response is generated. This response can reform the situation, bring about a new attentional focus and generate a new iteration of appraisal (referred to as reappraisal) and response and this process will unfold in an ongoing looped pattern.



Emotion:

Figure 2. *Modal Model of Emotion Regulation* showing feedback loop, used with permission. Source: Gross, (2007)

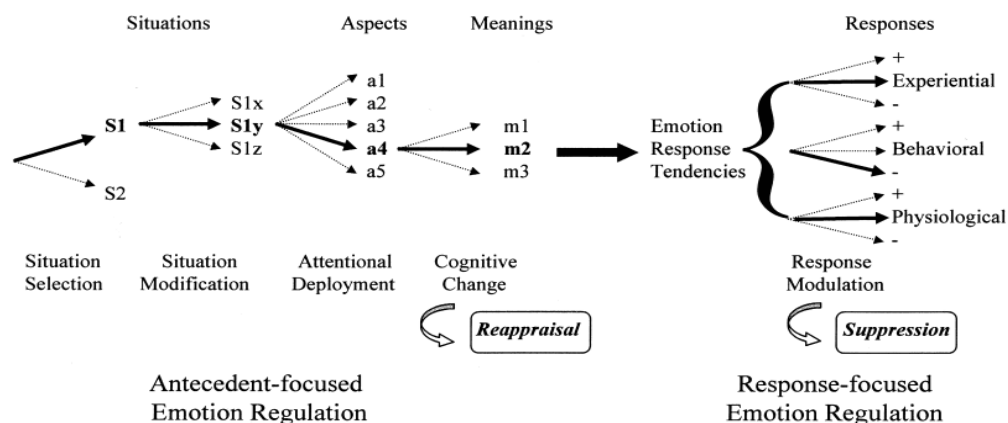
So it is generally viewed that emotions are generated through internal and external triggers which incite appraisals and trigger response tendencies that alter the original situation, which in turn reproduces an ongoing iterative process. Models such as these illustrate the overall dynamic of how emotions might be generated and processed. However what is necessary for this discussion of regulation of these events is a model for understanding the distinct regulatory processes themselves (discussed more fully below). Key to this study is the contention that certain kinds of coping behavior (e.g., Collaborative Religious Coping) involves both the appraisal/reappraisal process as well as the response tendencies. Moreover, it is argued that in order to successfully deploy collaborative religious coping efforts, an individual must be able to attend to the situation and the resulting emotional arousal, hold it in mind in a non-reactive fashion, and then consciously decide to ‘work with God’ to deal with the situation.

Take for example a person who learns his job has been eliminated. This situation obviously captures his attention and specific initial appraisals (based on his past) are

generated (e.g., “I can’t handle this,” or “life is against me”), which can lead to behaviors such as social withdrawal and isolation. In order to engage in Collaborative Religious Coping, this individual must attend to the situation in a mindful, non-reactive way, which then sets the stage for the deployment of collaborative religious coping. This entails a re-appraisal (e.g., “This is not the end-of-the world,” “I can take this problem to God and he will help guide me through this process”), which then opens the door for new responses (e.g., replacing withdrawal and isolation with seeking wise counsel, taking active steps to search for a new job, utilizing support systems, and ongoing prayer). This unfolds into an ongoing iterative process, where the individual continues to collaborate with God, leading to re-appraisals and new responses, which continue to modify the situation (e.g., the person gets interviews, is offered new employment, moves his family, etc.)

The Process Model of ER

Gross (2007) has developed a conceptual model of regulation based upon families of regulative processes which are classified by the time at which a person can intervene in an event (see figure 3).



Emotion Regulation:

Figure 3. *Process Model of Emotion Regulation*, used with permission. Source: Gross, (2007)

In this model, emotion regulation is broadly illustrated as Antecedent focused (reappraisal functions focused on situations, aspects and meanings) and Response focused (suppression functions used in responding to the emotion generated). The antecedent functions include: 1) Situation Selection, the process by which one selects a particular context in which to place themselves. As a form of regulation, one might choose to avoid a crowded restaurant, anticipating how it might make him/her feel in that situation. 2) Situation Modification, this is the process in which a person might adjust the situation he finds himself in. Had he chosen to attend the restaurant, he might sit in a quiet area or only talk with people with whom he feels most comfortable. 3) Attentional Deployment – this is a key function of regulation where a person chooses to attend to negative or positive aspects of the situation. The socially anxious person then selectively attends to people's facial expressions, looking for signs of rejection or disappointment, or 4) Cognitive Change – the final antecedent processes, where he might reappraise the meaning of the event for example, tell himself that other people are not really concerned with how he looks or behaves in a restaurant, or even if they do, it is not catastrophic.

Following the Antecedent events, emotional response tendencies influence the experiential, behavioral and psychological responses. These response tendencies are typically learned processes that are encoded into generalized schemas that have formed over time by factors such as past traumatic events, emotional development, family systems and attachment bonds. Once the new emotion has been generated, response modulation processes are activated, which in turn can trigger any of the previous

processes. Two responses most studied are behavioral suppression and experiential avoidance, both of which have been associated with negative outcomes. The former is an effort to inhibit emotionally driven behavioral expression e.g. avoidance behavior for individuals with social anxiety or verbal aggression for individuals experiencing anger. The latter, experiential avoidance, refers to inhibiting the entire emotion itself from awareness. One study by Marcks and Woods (2005) found that individuals who tend to inhibit their expressive behavior of emotion were more likely to report increased obsessions, anxiety, and depressive symptoms.

This overall process model is not viewed as being carried out distinct of other influences. Rather, it is cyclical in nature where each family of processes is potentially a point of emotion creation or regulation and as each process is engaged to regulate an emotion, other processes may be reactivated at any given point as the emotional experience unfolds. For instance, in the case where an anxious person ends up at the crowded restaurant, he chose to stay in a quiet area but if the anxiety increases to intolerable levels due to rumination, and then he may decide to change the situation by leaving the restaurant (situation selection). This new situation would then be, modified, appraised, and responded to all over again.

The generation and regulation of emotion therefore is a moment by moment event whereby as the situation unfolds, appraisal and modulation processes continually modulate the experience of the emotion itself and the situation. This highlights the continuous reciprocal process of emotion regulation (Gross, 2007) .

Although this is a continual and cyclical process, Thiruchselvan, Blechert, Sheppes, Rydstrom and Gross (2011) have demonstrated that the different elements have

distinct neurobiological features; for example, the authors used a study in which they measured EEG responses of individuals as they engaged in different regulatory process. This study showed that the different emotion regulation processes activate distinct neurobiological and cognitive elements. More specifically, they found that appraisal processes had a distinct EEG profile from attentional processes. They concluded that this implies that these processes are also distinct in time, that when one is engaging in appraisal, one is not necessarily engaging in attention and appraisal simultaneously. This dynamic is consistent with the definition of ER used for this work as it outlines the processes by which a person chooses what emotion one has, when one has it, and how one experiences and expresses that emotion.

It is important to note that this view of emotion regulation illustrates the potential for treatment strategies to focus on key events in the cycle such as Appraisal and Modulation activities. These features are crucial to this study as it is proposed that Collaborative Religious Coping is linked to both reappraisal and modulation activities and that Mindfulness, the ability to attend to present moment experience in an accepting way, is a factor that mediates this process.

ER Development

To better understand the processes involved in emotion regulation, it is important to understand how these processes are formed over time. Research suggests several factors influence the formation of ER processes. This development and subsequent regulation of the emotional experience involve multiple, highly complex, integrated systems. These systems develop early in life and form schemas that ultimately influence how emotion is generated, experienced and managed. These influences include family

context, (Thompson and Meyer, 2007; Gottman, Katz, & Hooven, (1995)), neurobiology (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004) and early caregiver relationships (Bowlby, 1969; Morris, Silk, Steinberg, Myers, & Robinson, 2007). Each of these areas has received extensive research attention because they influence how the individual comes to experience different emotions and how they are coped with.

Family Context

Family context and interpersonal relationships often serve as an emotional development model for growing children (Southam-Gerow & Kendall, 2002; Denham, 2003; Eisenberg & Morris, 2002; Saarni, 1999; Cummings, Keller, & Davies, 2005). Parenting activities, along with family system dynamics influence child emotional development (Diamond & Aspinwall, 2003; Volling, McElwain & Miller, 2002). Children develop both socially and neurobiologically (Segal, 2010) through social interaction and form neurobiologically encoded patterns of emotion regulation. A notable example is illustrated in the work of Gottman, Katz, & Hooven's on Emotion Coaching (1995). This longitudinal study recruited fifty six families measuring the basic emotional philosophy of the parents, as well as emotionally related physiological functioning (Cardiac interbeat interval, Pulse transmission time to the finger, finger pulse amplitude, skin conductance level, general somatic activity) and intelligence. They also observed and coded child parent interaction over a three year period. The goal of the study was to assess the impact of parent meta-emotion on the child's neurobiological and emotional development as well as social development, academic progress and behavior regulation. The results demonstrated that the parent's meta-emotional attitude (beliefs parents held about how emotion should be experienced and expressed) was linked to the

child's physiological emotional regulation process and various other outcomes. Parents who were more open to and aware of their own emotional experience, as well as the child's, tended to raise children who were less sick, made better grades, and had more friends (1995).

Gottman, Katz and Hooven (1995) propose that being open and aware of emotional states and engaging in the coaching of emotional states of children greatly impacts the development of a child's ER. The interconnectedness of these processes allows for parental meta-emotion to affect the overall system of regulation on both intra and interpersonal levels. Many other studies regarding family systems and interpersonal relationships support this idea. Family context is highly influential on ER and thus affects child outcomes on a variety of levels. The social developmental influence of regulation processes has been found to extend to the development of neurobiology as well.

Neurobiology

Recent studies suggest that brain formation in infancy is socially influenced. Siegel (2010), and Shore (2004) both argue that neurobiological development is partially achieved through interpersonal relationships. Key stages of brain development, particularly in the Prefrontal Cortex, Anterior Cingulate Cortex and the Amygdala are significantly impacted by early social experiences. Siegel posits that this neurobiological formation influences genetic expression as well as future social and psychological functioning.

Furthermore, factors such as temperament, cognitive development, and brain development or neurophysiology have all been shown to influence the development of

emotion regulation skills (Calkins, Graziano, & Keane, 2007; DeGangi, Dipietro, Greenspan, & Porges, 1991; Eisenberg & Morris 2002; Goldsmith & Davidson, 2004; Porges, 1996,2001,2003;). Individual differences in nervous system functioning have also been shown to potentially mediate expression and regulatory factors in emotion regulation (Porges, Doussard-Roosevelt, Portales, & Greenspan 1996). Research in the last five decades has greatly influenced current understanding of the development of emotion regulation process. John Bowlby's (1969) watershed work on Attachment Theory has been evidence of this and may be the best explanation as to how these interrelated developmental processes of family context, neurobiology, and parenting may work.

Early Caregiver Relationships

Bowlby (1969, 1982) discovered that primary caregiver relationships, even at the preverbal stage of life, made a significant contribution to the overall self-regulation of a child and that this regulation served as a working model for future events. Bowlby observed that infants neglected of attentive parental care developed predictable emotional and behavioral traits that stemmed from self-regulatory development during the formative stages of life. Ainsworth, (1978) later demonstrated that this working model could be predicted through the participation in the Strange Situation, a parent caregiver interaction where a child is exposed to several anxiety provoking brief separations from the caregiver. How the child responded to these separations was directly linked to previous home observations of parental behavior made by Ainsworth's research team. She proposed that the child had internalized these experiences and that they were encoded into an internal working model used to inform future responses to stress. She believed

that the strange situation activated this working model which could be reliably measured in this structured assessment protocol. Researchers like Siegal (2010) and Schore (2003) believe that these patterns of attachment become neurobiologically encoded into implicit procedural memory and govern emotion regulation strategies. Ainsworth and her colleagues have identified four patterns of Attachment styles.

Attachment Styles

Ainsworth, (1978) identified four patterns of attachment. These will be discussed below. A secure attachment bond is formed by infants through early, sensitive, responsive caregiving that typically allows for the safe and effective expression of emotional needs over time, whereas insecure attachment emerges when the caregiver is unresponsive, rejecting, inconsistent or abusive. In such cases, the child is forced to utilize secondary strategies for managing their distress, which often forms the basis for more maladaptive emotion regulation strategies. These patterns for managing stress in relation to the caregiver form the basis for the child's internal working model of self-regulation and tend to remain relatively stable throughout development. These internal working models have been consistently linked to emotion regulation strategies, with primary, secure attachment being linked to positive, adaptive patterns of emotion regulation and secondary, insecure attachment styles (avoid/dismissing, ambivalent/preoccupied, fearful/insecure) being linked to more negative, maladaptive forms of emotion (Bartholomew, 1990; Bartholomew & Horowitz, 1991; Fredrickson, 2001; Mikulincer, Shaver and Pereg, 2003).

This greater context of the development of self-regulation and emotion regulation processes forms the foundation from which the mechanics of emotional experience and

emotional regulation can be understood. As these processes influence the manifestation of emotional experience, regulation strategies such as reappraisal and suppression illustrated in Gross's model above are then incorporated to manage the ongoing experience of the emotional events (Gross & John 2003).

Coping

If Emotion Regulation is the “how” of relating to one’s emotional world, then perhaps the “what”, is coping. Coping is defined as the activities one utilizes to regulate stressful emotional events. Compas, Connor-Smith, Saltzman, Thomsen and Wadsworth, 2001, defines coping as regulatory efforts that are volitionally and intentionally enacted specifically in response to stress (p 89). Whereas emotion regulation is the overall system of relating to emotion, coping is the techniques employed in this process. For instance, if an individual was anxious about attending a family gathering he might employ situation modification and tell jokes to modify the situation. This would be an example of a volitional and intentional response to stress.

Coping and Temperament

Coping strategies have also been linked to temperament. Kagan (1998), explored the coping efforts of young children and found that certain kids tended to internalize coping efforts while others tended to cope in external ways engaging their environment and others around them in times of stress. This has become a regular part of coping research and is generally seen as an enduring trait of one’s personality (Beutler, Harwood, Kimpara, Verdirame, & Blue 2011). This internalizing externalizing continuum has been incorporated in some measures of personality such as the MMPI 2.

Beutler, Harwood, Kimpara, Verdirame and Blue, (2011) also suggest that these traits can and should be a factor in treatment, suggesting that those who internalize are more likely to be open to insight oriented and interpersonal strategies in therapy. Those who externalize are more likely to work best with skill building and symptom change. Admittedly, all persons can benefit from internal and external oriented therapies but they suggest this intrinsic style could be leveraged for overall treatment to provide for a more client centered approach. In the context of this study, collaborative religious coping discussed more fully below is seen as a balance of both internalizing and externalizing efforts.

Coping and Development

Skinner and Zimmer-Grembeck, (2009) have observed that coping is a regulatory subsystem integrated with other emotion regulation subsystems and that the general mechanisms of coping accumulate developmentally. So then, although certain aspects of coping are temperament related, this systems approach suggests that a person's overall coping efforts continue to form over time within the context of family culture and cultural values. This observation supports the research that shows religion as an important factor in how one approaches coping, as religion is typically imbedded within a broader context of culture in general and family in particular.

Coping strategies have proven to be significant factors in the emotion regulation process (McFarland & Buehler, 1997). The coping strategies one uses to regulate emotion depends upon a number of factors and have been found to be unique and personalized, depending upon the person's internal and external resources as well as the development of personal worldview formed by such things as culture and religion. These

influences extend to the initial perception of the event itself as well as the strategies which are selected based upon perceived resources. This makes coping a very diverse construct that employs one's own context and worldview.

Religious Coping

As discussed above, coping is a vital part of the overall emotion regulation process as it represents a personalized skill-set influenced by personal, social and cultural factors and is virtually the “action” of the regulation process. Thus religion and coping are strongly linked. How a person integrates religion into the coping process typically affects how they perceive a stressor and what coping resources are available to them (Mathany et al 1986; Tix & Fraser 1998). Pargament (1997), suggest that Religious Coping is the use of connecting to the sacred in order to gain support during times of stress. There is significant research to support that RC is not only common (McCrae, 1984), but just as effective as non-religious coping. Some research suggests that religious coping is even more effective than its secular counterpart. (Anisman 2011; Pargament, 1997; Feher & Maly 1999; Vespa, Jacobsen, Sazzafumo, Baducci, 2011; Ysseldyk, Matheson, Neighbors, Jackson, Bowman & Gurin 1983).

Religious Coping Styles

Religious Coping has emerged as an important area of research mainly due to the work of Ken Pargament. Pargament found that not only is religion frequently and effectively used in coping but that it is used stylistically. Pargament observed that religion used in certain ways consistently brought about poor outcomes while other ways were more effective. He notes that religious coping strategies can be broadly categorized as positive and negative (Pargament et al 1998) and that these categories can be further

identified into three overall strategies, each representing ways in which one relates to God as a resource. (see fig. 4).

Positive Religious Coping	
Collaborative Strategies	Spiritual Coping
	Religious Social Support
Negative Religious Coping	
Self-Directing Strategies	Religious Discontent
	Religious Avoidance
Deferring Strategies	Religious Pleading
	Good Deeds

Types of Coping:

Figure 4. Types of religious coping, Source: Pargament, (1998)

Collaborative Religious coping has been observed in instances where a person generally believes that God is benevolent and is a source for wisdom and guidance. This strategy allows for the work of man to be joined with the work of God in a way that is open and receptive but shows a sense of self responsibility. For example, a person who has recently suffered a financial stress due to a job loss may be able to view the incident as part of a bigger plan and seek to be comforted and guided by God through prayer and community support. But this person may also believe he needs to go out and look for a job. This collaborative approach is characterized by spiritual coping and community

support. Spiritual coping may be characterized by such things as prayer and seeking social support is evidenced by church attendance etc. This collaborative style is considered to be positive because it is associated with adaptive emotion regulation and more effective problem solving. Collaborative religious coping has consistently been linked with positive outcomes and is predictive of emotional adjustment (Pargament et al., 1990).

The negative religious coping styles are characterized by two broad strategies: Deferring and Self-Directing. *Deferring* Religious Coping is a strategy in which the person sees God as being solely responsible for problem solving. The person displays a sense of personal helplessness. This person may disengage from problem solving and “give up” in a spiritual way. This approach is characterized by Religious Pleading and Good Deeds where one might beg God for intervention or perform good deeds to somehow convince Him to grant favor. This strategy is generally viewed as a negative form of coping and is consistent with poor outcomes and lower levels of competence. However, Pargament and colleagues acknowledge that deferring strategies may be somewhat helpful in situations where the problem is totally uncontrollable e.g. terminal cancer.

Self-Directing Religious Coping emphasizes personal responsibility. It sees responsibility for problem solving solely on the self. They may sense that God is passive and possibly disinterested. It emphasizes personal freedom. In this strategy, one might not engage the faith community for help or support during a job loss. Self-Directed coping is characterized by religious discontent where a person may be angry at God for his poor circumstance or see the church as useless or even uncaring. This view can

ultimately lead to Religious avoidance where the person dismisses religious activities as unhelpful. This self-directing strategy is somewhat effective in some contexts but overall it has been linked to poor outcomes including depressive symptoms and poorer quality of life (Pargament, Koenig & Perez, 2000).

Religious Coping and the Potential of Meditative Practice

An emerging field combining the areas of religion and clinical practice is that of contemplative science. Tibetan medical approaches have found their way into western medical science by way of the popularization of meditative practices. Research into the efficacy of meditative practices is currently a vastly popular trend among medical schools around the U.S. and virtually every major medical research university has integrated meditative practice into its medical model in some way. Links between medicine, psychology and meditative practice can be found among the pages of current journals in each of these areas and what was once taboo, the idea that “spiritual” practice could affect physical and psychological well-being, is now common discussion around research campuses.²

Vespa, Jacobsen, Spazzafumo, and Baducci, 2011 suggest two important functions are derived from spiritual meditative practice: 1) achieving a state of focus on one’s inner self and 2) the ability to observe one’s own psychic contents. Their idea is not without support. In the past two decades, meditative practice, specifically Mindfulness, the ability to attend to the present moment with acceptance, has received tremendous research attention for its effects on Anxiety, Depression, Attention, PTSD

² The practice of meditation is not to be attributed to Buddhism as examples of meditation can be found among some of the earliest known Hebrew texts dated centuries before Buddhism began.

and many other emotion related disorders (Parker et al., 2002; Holland et al., 1999). It may be that understanding the dynamics of mindfulness as it relates to coping, particularly Religious Coping and emotion regulation will prove helpful in clinical and religious settings.

Mindfulness

For thousands of years, religions have utilized meditation as a form of personal focus, reflection, relaxation and spiritual transcendence. Reflective meditation techniques show up in nearly all mainstream religions. Some in particular focus on the mind's relationship to the body. Buddhist psychology has popularized mindfulness, a technique whereby a person learns to focus on present moment experience (the breath, bodily sensations, sounds etc.) in an open and non-judgmental way. Mindfulness has recently been shown through research to provide significant, positive effects on an array of affective disorders and pain management³. This practice has become an interest to the scientific community due to its medical and psychological effects. Though not a religious event per-se, this practice of gaining awareness of present moment experience proves to be connected to key aspects of the human psyche as well as the development and management of many psychological disorders.

John Kabatt-Zinn, a University of Massachusetts physician, sought to incorporate mindfulness into the treatment of terminal cancer patients and found significant clinical evidence that this mind body practice produces positive results and could be an important

³ Present mindedness and acceptance of one's current condition can be linked to Biblical texts that predate Buddhist practice (Keating, 2006).

addition to treatment for many other conditions (Kabatt-Zinn 1991). Since that time, mindfulness programs have developed around the country, mainly in university medical centers and it has become a popular research focus for treatment of PTSD, Attention, Anxiety and Depressive disorders, stress management, insomnia, addiction etc. Presently there are over two hundred clinical trials involving mindfulness under way according to Clinicaltrials.gov.

Mindfulness Defined

The concept of mindfulness, is simple and yet abstract. Ron Siegel defines Mindfulness as being aware of present experience with acceptance (Siegel 2010). One definition given by long time practitioner and University of Virginia Psychologist Susan Stone is “*present, moment by moment attention on any object without comment, judgment or auto-reaction.*” (S. Stone, Personal Communication, May 12, 2011). On the surface, this concept appears to be simplistic, but in practice the practitioner is actually employing several complex cognitive processes. What is essentially being done during mindful practice is the sustained focus and attention on a present event (i.e. breath) while employing both metacognitive and meta-emotive awareness. At the same time the meditator avoids becoming entangled with intrusive thoughts, urges, sensations and emotions. Moreover the meditator refrains from reactive responses and judgements about the experience.

Needless to say, interest in this subject for clinical treatment has surged in recent years due to the success of mindfulness training for the treatment of a variety of disorders. The effects of mindful practice are measurable and have presented consistent, positive results in treatment, to the extent that 8 week Mindfulness Based Stress

Reduction courses have shown to produce measureable brain density changes in key regions associated with empathy, stress, memory and sense of self (Holzel, 2011). The mechanisms of mindfulness, however, and its specific cognitive and neurobiological functions are not yet clear. For now, they are only understood juxtapose current understandings in cognitive neuroscience. Emerging studies such as the neuroimaging study of Hozel (2011) indicate that mindfulness may have long term effects on neurobiological processes, including increased neuroplasticity (Siegel, 2009), the brain's ability to change in function. A significant amount of clinical trials regarding Mindfulness have been performed in recent years in the areas of Education, Clinical Counseling, Psychology, Neurobiology, PTSD, and Stress, most finding positive, significant effects.

Mechanisms of Mindfulness

Mindful Awareness allows a person the ability to experience present moment awareness in an open and accepting way. This can be contrasted with the entangled thought processes of those suffering from depression, anxiety and chronic pain. This may also be contrasted with experiential avoidance where one seeks to cope with emotions perceived as intolerable by utilizing suppression and avoidance techniques (Hayes, 2005). Mindfulness, on the other hand, potentially develops psychological flexibility where emotional experience is more likely to be accepted and tolerated rather than rejected and avoided.

Shapiro, Carlson, & Freeman, (2006) suggests that mindfulness is "Reperceiving" which consists of three key actions: Intention, Attention, and Attitude. Attention is the focused awareness. Intention is the volitional decision as to where attention will be

focused. Attitude is the accepting and non-judgmental stance that one takes toward the object of attention. Shapiro suggests that this intended focus and attitude give the practitioner a renewed perspective on a stressful situation. This shift, according to Shapiro, is one of perceiving the subject as object. He also notes that the function of perceiving subject as object is a normal developmental process and that that may be enhanced and accelerated by practicing mindfulness (Shapiro, Carlson, Astin & Freedman, 2006).

Mindfulness Based Stress Reduction

Many psychological disorders can be traced to the over or under regulation of emotion. The Mindfulness approach enhances the awareness of and acceptance of these experiences. Centers for Mindful Awareness have developed around the world including many of the major universities and hospitals in the United States such as the University of Massachusetts, UCLA, University of Virginia, and Duke to name a few. These facilities typically operate in cooperation with medical centers to provide research, education and treatment using various programs integrating mindfulness practice.

One particular program, the Mindfulness Based Stress Reduction or MBSR has been the focus of research attention for over a decade (Kabatt-Zinn, 1990). The program consists of eight weeks of intense mindful practice including a variety of means such as mindful eating, meditation, walking, body scans, yoga etc. Participants attend a two and a half hour class per week (organized as a group) and agree to participate in mindful practice for 45 minutes each day for the entire eight week course. In group contexts participants discuss practical aspects of their experience such as thought patterns, interaction with others, conflict, personal insights etc. It is this program in which Harvard

University and Univ. Massachusetts researchers used to evaluate their participants in the before mentioned neuroimaging study.

Mindful awareness cultivates one's natural ability to observe emotional states in an objective way. In contrast to the intrusive and often persuasive thought patterns of the depressive or anxious mind, mindfulness allows one to recognize these thoughts or emotions and "pull away from the story," returning to the present reality. This process is not viewed as a suppressive action but as a stance of tolerance, allowing the thought to exist while the participant returns their attention to present bodily sensations.

Mindfulness can be cultivated in many different ways; however, researchers indicate that meditation may be the most effective technique for accomplishing this.

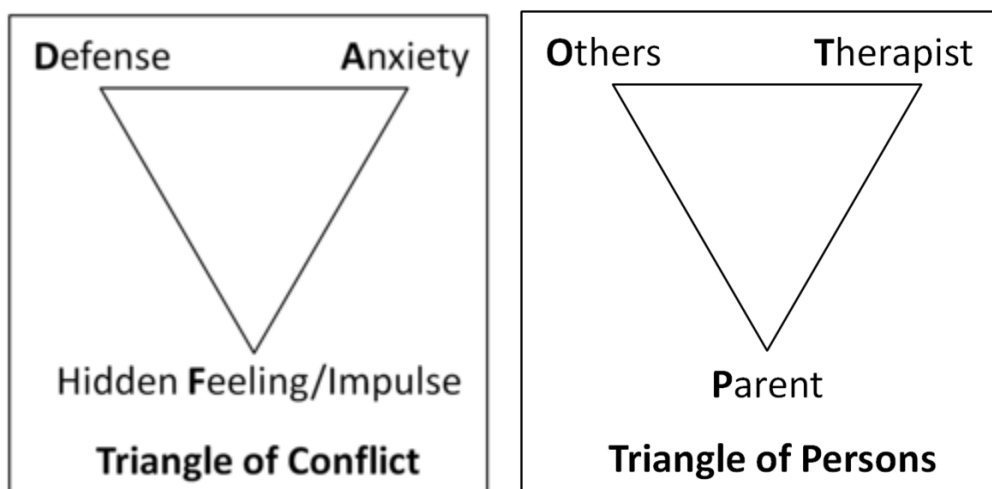
In meditation experiences, one may be coached to lie or sit in a comfortable position and close the eyes. They then focus their attention fully on sensations of the body, usually in a patterned, exploratory way such as the feet, toes, ankles, calves etc. As the attention is focused, participants are told to notice sensations, thoughts, emotions etc. and simply note their presence and return to attending to their bodies (Kabat-Zinn, 1990).

This process introduces participants to the experience of the wondering mind. Many participants indicate a difficulty in quieting their minds at first but the goal in this process is not to engage the distractions or buffet them but to acknowledge them and attend to one's own experience in a non-judgmental way. This meditation is done for extended periods of time; up to one full day in the case of a standard MBSR course. On a daily basis though, this is practiced for 45 minutes at a time but this length is not always necessary to develop and maintain an affective trait level of mindful awareness. A significant amount of participants report increased attention, decreased anxiety, decreased

depression and an overall increase in quality of life (McCown, Reibel, & Micozzi, 2010). The core components of Mindfulness are not fully established but positive outcomes have been documented for over two thousand years through various religious traditions including, centering prayer as recorded in historic Christianity (Keating, 1998) and Buddhism.

Mindfulness and Psychodynamic Theory

One possible explanation could be related to the concept of psychodynamic conflict as illustrated in Milan's two triangles (McCullough, 2003) See fig. 5)). One's natural emotional experiences are in conflict with conditioned maladaptive schemas resulting in defense mechanisms being played out in various adaptive and maladaptive ways. In mindful awareness, these conflicts are present but rather than engage in defense mechanisms, the conflict experience is accepted and viewed in a curious and open way. This theoretically eliminates the need to activate maladaptive defenses and the potential tension between one's experience and one's negative schemas is experienced in a more positive way.



Two Triangles:

Figure 5. Two Triangles of the “universal principle of psychodynamic psychotherapy” This model illustrates how defenses and anxiety block feeling and how this cycle is played out in current relationships including the therapist. Source: Milan, D (public domain), via Wikimedia Commons

In any event, it is well established that mindful awareness affects emotion regulation and may actually be a core component of the process. What is not well known is the relationship between religious coping and mindful awareness or the potential mediating effect Mindful Awareness may have on the relationship between Religious Coping and Emotion Regulation. This present study seeks to explore the mediating relationship of mindfulness on Collaborative Religious Coping (C-RC) and the Reappraisal function of Emotion Regulation (ER-R) (McCullough, 2003).

Mindfulness and Religion

“They strive for the savior of eternity, but their mind is still tossing about in the past and future movements of things, and is still in vain.” Augustine

Religion and Mindfulness could be incompatible from some points of view. One could argue that present mindedness in a non-judgmental way, contradicts the tenants of religion in that religion is viewed as a belief system in which one incorporates laws and judgments of right or wrong based upon a certain theological viewpoint. History, however, shows that some early Christian thinkers found these ideas to be complimentary, and arguably, necessary. The Christian quest for peacefulness in the presence of God has been a part of the historical Christian narrative from the early days of St. Augustine (Highland, 2010). Practices of solitude, quiet and meditation have been

observed by certain sects of Christianity for thousands of years and remains in monasteries to this day. As mindfulness emerges into the modern field of psychotherapy, Christian Counselors are called to explore the merit of this practice and its value and potential threat for the Christian client.

Contemplative, devotional experience likely predates Buddhist tradition. Solitude and quiet moments with God and nature can be seen in the narrative of Old Testament. The book of Joshua admonishes Israel to meditate on God's word day and night (Joshua 1:8). Psalm 4:4 prescribes stillness and inner meditation of the heart. This practice is carried into the New Testament as well. The gospel of Mathew (26:36) depicts Jesus' time at Gethsemane as an extended period of isolated and internal dialog with God in a garden. Peter's meditative experience on the roof of a house where he received the vision of taking the gospel to the gentiles is described as a moment of extended solitude and quiet (Acts 10:9-16). This approach to devotional experience was embraced in the historic Christian Church. Early church leaders, particularly within Catholicism embraced solitude and meditation as a form of transcending the experience of the flesh and the preoccupations of the mind. Christian monasteries exist to this day. Among evangelicals, however, this type of contemplative devotion is only recently emerging through the writings.

The problem of "judgment" and "God's presence"

The debate regarding mindfulness, though, is not about the act of meditation, but regarding the object of the mediation experience. This debate is regarding the appropriateness of a Christian giving oneself over to a present moment, mind-body experience where judgment of that experience is suspended. With regard to Christianity,

one could argue that releasing one's judging process could lead him/her to follow the natural desires of the body, or the "flesh" which may be contrary to his or her worldview. The Christian mind then is to be guarded by a filter that continually asks the question, "What would Jesus do?". The Mindfulness practitioner on the other hand may argue that the process of the mind's continual appraising of thoughts is what is being averted in the mindful state. So then, a sort of standoff between these points of view exists.

An additional argument is that present mindedness relating to the mind and body alone is an incomplete, humanistic, experience (Tan, 2010). Rather, the Christian should always be mindful of the future and the presence of God in order to rightfully interpret the present situation. Because of these perceived conflicts, the integration of clinical treatments using mind body experiences such as MBCT, ACT (Hayes, Strosahl & Wilson, 1999) and DBT (1993) have been resisted by many in the field of Christian Counseling. These methods of treatment, however, are proving to be effective and are gaining in popularity (Siegal & Allison, 2009; Siegel, 2010; Perich, Manicayasagar, Mitchel & Ball, 2011)

Augustine on time and the presence of God

There are two key issues at hand: 1) What should a present moment experience be like for the Christian? How is God experienced "in the moment?", and 2) Is suspending moment by moment judgment of thoughts and sensations, contrary to the Christian's desire to discern "truth".

Augustine struggled with the same questions (Highland, 2005). James Highland, in a comparison of Augustine's *Confessions* and the work of Buddhist mindfulness teacher Tich Nhat Hahn, argues that Augustine's conversion, involved a transformation

to mindful thinking. Highland argues that Augustine's view of time depicts the views of Buddhist present moment awareness and that Augustine's desire to achieve *Securitas* (Composure, freedom from care) relates to present mindedness that is not focused on past failures or future fears. Augustine, says Highland (2005), concluded that time was contingent upon change, and since God does not change, he is not confined to time but is eternal. Time exists only in the present. Its past is no longer and its future is not yet. Therefore when the Christian is not preoccupied by the past and the future, he or she is only then focused on eternal things, which are always present. Evidence of this line of thinking can be found in Augustine's book 11 of *Confessions* "Who shall lay hold upon their mind and hold it still, that it may stand a little while, and a little while glimpse the splendor of eternity which stands for ever" (cited in Highland, p 95, 2005). Highland suggests that Augustine believed that being present minded and accepting God's grace in the moment was key to him overcoming the devastating loss of his friend.

This idea of Augustinian theology relating to mindful practice is also argued by Vandenberghe & Prado, (2009). They suggest that Grace, as a construct of intrapersonal awareness of Christ's acceptance, presence, and active illumination as described by Augustine (p.597) can be useful in mindfulness therapy. For instance, in the case of OCD, a client may wish to recite prayers every time intrusive thoughts arise. A therapist may suggest that in light of God's Grace, God may not expect the client to continue praying but rather to accept God's love and experience that acceptance in the moment. This process of releasing the intrusive thoughts in light of God's acceptance, rather than compulsively praying, may, as Vandenberghe and Prado suggest, be achieved by mindfulness practice where the client learns to not react to the thoughts but let them pass,

reminding herself that her present reality is that she is anchored in God's acceptance . Ultimately, Vandenberghe and Prado posit that Augustine's ideas on present moment awareness and grace closely mirror 20th century application to ancient Asian practice of Mindfulness. They suggest that this link may provide for a bridge between the many Christian clients of today and the ancient practice of accepting present moment experience.

The integration of this present moment mind-body experience, for the Christian, can be viewed as the Christian's connection with what is, rather than what should be or what has been. Using Augustine's logic, being present is as close to eternal things as the human can get since eternity is neither past nor future. Being present with that existence is merely a personal reality that need not be judged. Judging then, is more related to the Christian's focus of attention to the past and future, not the present. If the Christian is fantasizing about what God may be saying or doing then they are not actually in that moment. It may not be the Christian's role to depict the presence of God into a mindful moment but rather to experience it. The Christian experience of relating to his or her own mind and body does not require the loss of discernment of the experience but is a practice of experiencing what Augustine refers to as "present eternity" (Augustin & Pusey, 2008).

The anxious Christian mind

Another argument for the acceptance of mindful practice into the Christian experience is that the human mind is biased toward fearful and anxious perspectives (Bingaman, 2011). Bingaman argues that mindfulness allows for the Christian mind to subvert this bias and more clearly appraise the Christian experience. Bingaman suggests

that neuroscience research, as well as thousands of years of anecdotal evidence, supports the idea that mindful practice is not harmful to rational thought and appraisal but rather allows for it. Bingaman notes a study by Newber and Waldmann (2009), where a brain scan study of a group of nuns who practiced Centering Prayer for 15 years revealed neurological changes compared with other samples. They also noted that the changes were nearly the same as those recorded from Buddhist practitioners, concluding that the benefits of mind body meditation may not have to do with a specific theology.

Some evidence exists, however, that spiritual congruence related to mindfulness techniques does affect the outcome. In a study done through Arizona State University (Rosdahl, 2005), 64 participants with tension headaches were studied using pre and post-test measures of Secretory Immunoglobulin (SIG) A, a marker of immune functioning, and spiritual practices. Groups were randomly assigned to either a Buddhist mindfulness meditation class or an eight 8 week educational class in headache management. Results indicated that within the intervention group, liberal Christians and non-Christians had greater increases in SIGA than conservative Christians. The authors suggest that this is due to a lack of spiritual congruence relating to Buddhist practice and Conservative Christian practice.

So, it appears that mindful practice may be viewed as compatible for some but not others and that this view may affect the outcome of the practice. Some argue for religiously accommodated models (Hathaway & Tan 2009; Symington & Symington, 2010; Tan 2007). Symington argues that mindfulness principles are compatible with a Christian worldview and advocate for a Christian accommodated model, suggesting that the Christian could not only be present with the breath but reflect on the gift of God that

breath represents. They suggest three pillars (presence of mind, acceptance and internal observation.)

Additionally Hayes' (2004) work with Acceptance Commitment Therapy (ACT) would support this idea as ACT is not only a mindfulness based approach but incorporates the integration of client values as part of the therapeutic process. Mindfulness in the ACT model is most related to the emotional experience and attentional deployment in the moment and the client's values are what drive the goals of therapy. This approach illustrates the potential lack of conflict between a Christian client's values and the mindful experience.

The integration of mindful practice and a Christian worldview needs to be investigated further. Literature on this subject is rare and Christian clients and practitioners could benefit from further dialog. Although there is strong evidence of the positive effects of mindfulness on mental health, there are some philosophical and theological issues to explore when integrating this technique with some Christian worldviews.

Regardless of how one views the mind's relationship to time and how the presence of God should be experienced in the present, most would likely agree that the Christian experience as it relates to past trauma and future events should be anchored in present, eternal hope and acceptance. The unfolding of this reality is the goal of all Christians whose present moments are interrupted with hurts from the past and fears of the future.

Mindfulness and Religious Coping

Mindfulness then can be clearly linked to the overall emotion regulation process. The regulation of emotion is greatly influenced by one's ability to maintain objectivity to one's experience and in turn, influence automatic response tendencies which as Gross, (2011) points out, greatly influence the outcome of emotion generation and regulation. However, the processes of Coping in general and religious coping in particular have not been well studied in relation to mindfulness. It may very well be that collaboration with God is not only linked to the reappraisal function in Gross's model of emotion regulation but that this link is mediated by mindful awareness. In other words, the ability to attend to an experience in a non-reactive, non-judgmental fashion may facilitate one's ability to take that experience to God in order to work collaboratively with Him in a problem solving process. This study proposes that this process helps explain how collaborative religious coping is related to emotion regulation.

This Present Study

These studies illustrate the lack of research in the area of RC and Mindfulness, and particularly the lack of understanding of how mindfulness may relate to Collaborative Religious Coping and Emotion Regulation. Mindfulness research has primarily been focused on its effects to treating certain disorders. Little research has been done on how it relates to other constructs such as coping. The purpose of this study is to advance the understanding of how mindfulness relates to Religious Coping and in particular, how it may mediate the relationship between C-RC and ER-R. This study uses a cross sectional, correlational design to measure these relationships using self-report

measures in a sample of graduate students at a Christian University. Students will be administered measures of Mindfulness, Religious Coping, and Emotion Regulation.

Research Questions and Associated Hypotheses

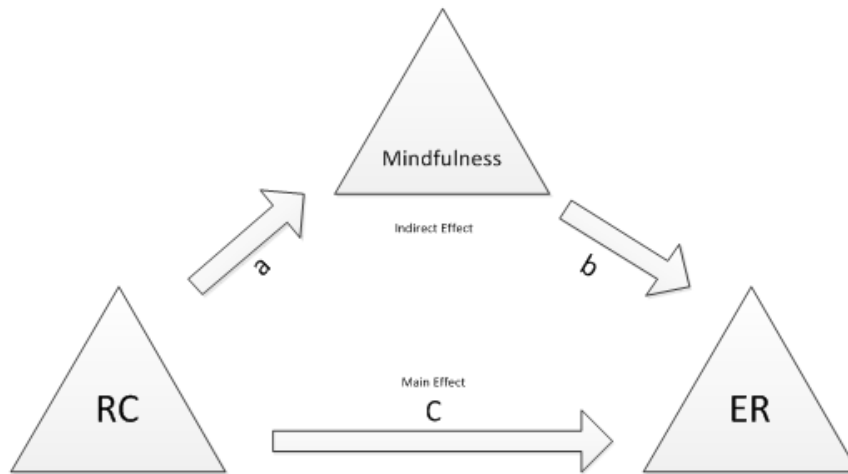
This study has four research questions regarding the relationship between religious coping, mindfulness and emotion regulation. The first question examines whether Collaborative Religious Coping accounts for variance in Reappraisal (ER-R). It is hypothesized that student total scores of RC-C will be positively and significantly correlated with ER-R.

The second question examines whether RC-C accounts for variance in Mindfulness (MND). It is hypothesized that total student scores in RC-C will positively and significantly correlate with total scores in MND.

The third question examines whether mindfulness accounts for variance in ER-R. It is hypothesized that total scores in RC-R will positively and significantly correlate with ER-R.

The fourth question examines the extent to which mindfulness mediates the relationship between Collaborative Religious Coping and Emotional Regulation-Reappraisal. It is hypothesized that Collaborative Religious Coping will demonstrate a significant indirect effect on Emotional Regulation-Reappraisal as mediated through Mindfulness (see fig. 60). In other words, mindfulness is the mechanism through which religious coping

operates.



Mediation

Figure 6. Correlations needed to show the mediating effect of mindfulness as it relates to Collaborative Religious Coping and Emotion Regulation (reappraisal).

CHAPTER THREE

METHODOLOGY

In chapter three, the researcher presents the methodology for examining the mediating effect of mindfulness on the relationship between collaborative religious coping and the reappraisal function emotion regulation.

Research Questions and Associated Hypotheses

This study explores the relationship between religious coping, mindfulness and emotion regulation. Specifically, the researcher will examine the extent that mindfulness

mediates the relationship between religious coping and emotional regulation. The following research questions will guide this study.

Research Question 1

Does Collaborative Religious Coping account for a significant amount of the variance observed in Emotional Regulation-Reappraisal (ER-R) for master's level counseling students?

Hypothesis 1. Collaborative Religious Coping accounts for a significant amount of the variance observed in Reappraisal. The direction of the relationship between Collaborative Religious Coping and Emotional Regulation-Reappraisal will be positive.

Research Question 2

Does Collaborative Religious Coping account for a significant amount of the variance observed in Mindfulness?

Hypothesis 1. Collaborative Religious Coping accounts for a significant amount of the variance observed in Mindfulness. The direction of the relationship between Collaborative Religious Coping and Mindfulness will be positive.

Research Question 3

Does Mindfulness account for a significant amount of the variance observed in Emotional Regulation-Reappraisal?

Hypothesis 3. Mindfulness accounts for a significant amount of the variance observed in Emotional Regulation-Reappraisal. The direction of the relationship between Mindfulness and Reappraisal will be positive.

Research Question 4

Does Mindfulness mediate the relationship between Collaborative Religious Coping and Emotional Regulation-Reappraisal?

Hypothesis 4. Mindfulness mediates the relationship between Collaborative Religious Coping and Emotional Regulation-Reappraisal. Collaborative Religious Coping will demonstrate a significant indirect effect on Emotional Regulation-Reappraisal as mediated through Mindfulness. In other words, mindfulness is the mechanism through which religious coping operates. To demonstrate this, four conditions will be examined (See fig 7 below): The initial variable will correlate with the outcome variable (RC-C will correlate with ER-R), The initial variable will correlate with the mediator variable (RC-C will correlate with MND), The mediator variable will correlate with the outcome variable (MND will correlate with ER-R), and finally, show that the mediator variable mediates the relationship of the initial variable and the outcome variable (the effect of RC-C on ER-R will diminish significantly when controlling for MND).

Participants

Participants in this study were voluntarily recruited from students enrolled in an online graduate counseling program at an evangelical Christian school in Southeastern United States. Specifically, the participants were masters level counseling students enrolled in Counseling 501, Counselor Identity, Ethics, and Counseling 502, Human Development, for the spring semester 2012.

Procedure

This study was proposed to the Liberty University Institutional Review Board in Feb 2012. Students in the selected sections of COUN 501 and COUN 503 were invited to participate in the study using the Blackboard course management system. The researcher posted an announcement on Blackboard (Appendix A). Students received a follow-up email one week after the initial request for participation (Appendix B). Students opting to participate in the study accessed the survey instrument through an internet link provided in the course announcement. Clicking on the link will connect participants to Surveymonkey.com.

Participants who clicked on the Surveymonkey© link were directed to a website. The first page the participants will see is the informed consent. The informed consent informed them of the purpose of the study, the benefits and risks, and the amount of time it would take to complete the study (see Appendix C). Participants were then informed that the completion of the survey could take approximately 15 to 20 minutes.

After reading the informed consent, participants were asked for consent to participate. After clicking the consent, the participants began the survey. The first page contained the instructions for completing the instruments. Once the participant has reviewed the instructions, they continued to the survey items. The instruments included a demographic section, Five Facet Mindfulness Questionnaire (FFMQ), Emotion Regulation Questionnaire (ERQ), select subscales of the Religious Coping Scale (RCOPE), and Marlowe-Crowne Social Desirability Questionnaire (MC-C) short form (Appendix D). While the focus of the present study was the Collaborative Religious

Coping subscale of the ERQ and the Reappraisal subscale of the RCOPE, the researcher included the aforementioned instruments in order to provide for future study.

Once participants completed the survey, they were instructed to press the “Submit” button, which then uploaded the responses into the SurveyMonkey database. Participants were then prompted to submit an email address if interested in participating in a drawing for a 25\$ gift card. Once all data was collected, the researcher downloaded the data from the SurveyMonkey database for statistical analysis.

Measures

These scales were selected for their overall construct validity related to the hypotheses that religious coping, particularly, collaborative religious efforts in problem solving may be mediated by present moment awareness in efforts to regulate emotion. Each of these scales are widely used, current, and specifically related to the constructs of Mindfulness (Baer, 2010), Religious Coping (Pargament, 1997) and Emotion Regulation – Reappraisal (Gross, 1998).

Emotion Regulation – Reappraisal

The Emotion Regulation – Reappraisal subscale (ER-R) of the Emotional Regulation Questionnaire (ERQ) is a 6 item Likert-type scale that is designed to measure tendencies to re-think situations and adapt or to avoid emotional experience or expression by employing controlling or non-expressive strategies (Gross & John, 2003). Research has shown that reappraisal tendencies are linked with more positive emotion, lesser negative emotion, greater positive emotion expression, well-being and greater interpersonal functioning (Gross 1998). The psychometric properties of the ERQ

indicated that it was appropriate for undergraduate students (Gross & John, 2003). Alpha reliabilities for the subscale averaged .79 for reappraisal.

Mindfulness

The Five Facet Mindfulness Questionnaire (Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) is a 39 item 5 point Likert-type scale that measures five facets of mindful awareness; Observe, Describe, Act with Awareness, Non-Judging, and Non-Reactive. Examining the construct of mindfulness, researchers conducting confirmatory factor analysis (CFA) observed these five categories from the collection of current assessments. Each factor correlated well with one another. Internal consistency of the five facets of the FFMQ ranged from .72 to .92. These facets also correlated well with other related constructs, producing the following Pearson product moments: Emotional Intelligence/Describe .60, Openness to Experience/Observe .42, Self-compassion/Nonreact .53, Alexithymia/Describe -.68, Dissociation/Act Aware -.62, Absent-mindedness/Act Aware -.61, Neuroticism/Nonjudge -.55, Thought Suppression/Nonjudge -.56, Experiential Avoidance/Nonjudge (2003).

Collaborative Religious Coping

Collaborative Religious Coping (RC-C) was measured using the Collaborative subscale of the Religious Coping Scale (RCOPE) (Pargament, 2000). The RC-C is a 7 item 4 point Likert-type scale designed to measure the tendency to relate to God in a collaborative way when problem solving during a serious negative life event. The psychometric properties of this scale indicated that it was appropriate for adult populations, including college students and elderly hospitalized adults. Internal

consistency ranged from .61-.94 with only two factors below .80. The Collaborative Religious Coping subscale used in this study showed an alpha of .89.

Social Desirability

Social Desirability will be assessed using the 13 item Marlow-Crowne Social Desirability Scale, Short Version. This scale is designed to rate a respondent's tendency to answer questions in a way that would make his or herself look desirable. This scale was created using 608 undergraduate student participants who had taken the Marlowe-Crowne SDS. The reliability of the MC-C was .76. The validity coefficient of the MC-C with the Marlowe-Crowne Social Desirability Scale was .93.

Data analysis

Data will be analyzed using Statistical Package for the Social Sciences (SPSS). Descriptive statistics will be conducted as well as Pearson's Product moment, linear regression, and path analysis.

The first, second, and third research questions addressed the relationships among the study variables Collaborative Religious Coping, Mindfulness and Emotion Regulation. Correlation and linear regressions will be used to examine the amount of variance observed in relation to other variables.

The fourth research question examined the extent to which mindfulness mediates the effect Collaborative Religious Coping has on the reappraisal function of emotion regulation. Path coefficients will be identified for the data in the mediation model. Path analysis will be used to examine relationships within the mediation model. Using Barron and Kenny's (1986) causal steps approach, each of the three variables will be placed into

a path model to illustrate path coefficients including direct and indirect effect of the initial variable and the mediating variable respectively.

CHAPTER FOUR:

RESULTS

This study examines the relationships between Religious Coping, Mindfulness, and Emotion Regulation. The problem being addressed is: Does Mindfulness mediate the relationship between Collaborative Religious Coping and Emotion Regulation? Survey data from 356 graduate students was collected measuring each of the key variables using empirically validated instruments. In this chapter, the researcher presents the findings of this study using the methodology presented in chapter three. A description of the study participants and the process of data preparation will be explained.

Participants

Survey data was collected from 357 participants. Surveys were examined for missing items. All surveys were completed due to the forced answer feature used in SurveyMonkey©. It was found that one participant answered “no” to the informed consent form but completed the study. This survey was deleted from the set. After removing this survey, there were 356 usable student surveys.

Participant Demographics

The number of female participants (85.4%; $n = 304$) was greater than the number of male participants (14.6%; $n = 52$). The majority of participants were White (59.8%; $n = 213$) and approximately one-third were African American (31.7%; $n = 113$). There were an equal numbers of Latino and Asian participants (2.5%; $n = 9$). The remaining participants reported as Other (3.4%; $n = 12$). The average age of the participants was

38.5 (SD = 10.9; n = 352). See Table 4.1, Table 4.2, and Table 4.3 for participant demographics.

Table 4.1 *Participant Gender*

Gender	Frequency	Percent
Female	304	85.4
Male	52	14.6
Total	356	100

Table 4.2 *Participant Race or Ethnicity*

Race/Ethnicity	Frequency	Percent
African American	113	31.7
Caucasian	213	59.8
Latino	9	2.5
Asian	9	2.5
Other	12	3.4
Total	356	100

Table 4.3 *Participant Age*

Range	Frequency	Percent
21-25	55	15.45
26-30	38	10.67
31-35	59	16.57
36-40	53	14.89
41-45	51	14.33
46-50	31	8.71
51-55	43	12.08
56-60	17	4.78
61-65	8	2.25
40+	1	.28
Total	356	100.00

In addition to gender, race, and age, participants were also asked to report their denominational affiliation and meditation practices. Over one-third of the participants were Non-Denominational (37.4%; n = 133), one-third were Baptist (31.2%; n = 111). The remaining participants were Charismatic (10.4%; n = 37), Methodist (7%; n = 25),

Catholic (5.9%; n = 21), Assembly of God (2.8% n = 10), Lutheran (2% n = 7), or N/A (.8% n = 3). Three participants selected multiple denominations (.9% n = 3).

Over half of the participants did not participate regularly in formal meditation (55.6%, n = 198) and less than half participated in regular meditation (44.4%; n = 158). Of those participants who practiced regular meditation, the majority reported that they practiced contemplative prayer (34.7%) as their form of meditation. The remaining participants practiced yoga (4.3%; n = 15), mindfulness (2.6%; n = 9) and other practices (4.5%; n = 16). See Appendix A.1, Appendix A.2, and Appendix A.3 for the additional participant demographics.

Data Preparation

Data preparation and subsequent analysis were conducted using IBM SPSS version 20. Prior to analysis re-coding on two variables was necessary due to their output structure when loading the SurveyMonkey© file into SPSS. Gender (item 3) was originally coded as multicolumn Male/Female data resulting in a “1” answer for either. The female data was re-coded to “2”. The second recoding was done for item 10, Denomination. This item produced nine data entries in SPSS with a “1” entered in the denomination selected by the participant. A single column was selected and the numbers 1-9 were entered depending upon the participants’ selection of denomination (Baptist, Catholic, Non-denominational, Assembly of God, Presbyterian, Lutheran, Methodist, Other, Charismatic, or N/A).

Item-Level Analysis

Prior to analysis, 24 items were reverse coded. Descriptive statistics (Standard Deviation, Mean, Minimum and Maximum ranges) for all items were conducted (See Appendix A Tables 4-6). All responses fell within the minimum and maximum ranges for the scales. The standardized residual for each item was calculated to determine the presence of univariate outliers. Examination of standardized Z scores for each item revealed four values greater than 3.29 or less than -3.29, indicating univariate outliers (Tabachnick & Fidell, 2007). These four surveys were removed from the study. Univariate normality was evaluated through visual inspection of histograms and evaluation of skewness and kurtosis. Inspection of histograms suggested approximate normal distributions. Skewness and kurtosis values for all items were within acceptable limits ($< .01$) (Tabachnick & Fidell, 2007). After removing surveys with univariate outliers, there were 352 usable student surveys.

Inter-Item Correlations

There were three scales used to answer the research questions of this study. Three scales measured each of the constructs of this study: Mindfulness, Collaborative Religious Coping, and Emotion Regulation-Reappraisal. A fourth scale, the Marlow Crown Social Desirability Scale was used to measure the participants' tendency to answer questions in a socially desirable way. Before beginning the statistical analyses, the researcher examined the psychometric properties of each of the three study scales. Specifically, Pearson product moment correlations were used to examine the item-correlations, internal consistency, and item-total statistics for the scales used in the study.

Emotion Regulation.

Emotion Regulation was measured using the items from the Emotion Regulation Questionnaire (Gross & John, 2003). The ERQ (See Appendix C) is a ten item scale designed to measure two sub-factors of emotion regulation, Reappraisal (ER-R) and Suppression (ER-S). For this study, the researcher only examined the reappraisal factor of emotion regulation rather than the combined construct. The results of the correlation analysis indicated that the items of the ER-R Subscale were not correlated with the items from the ER-S Subscale (See Appendix A Table A.5). This finding supported the use of the ER-R subscale rather than the full ERQ.

Emotion Regulation-Reappraisal.

The researcher measured Emotion Regulation-Reappraisal using the Emotion Regulation Reappraisal Subscale (ER-R). The ER-R (See Appendix C) is a six-item instrument designed to measure the participants' ability to reappraise situations in an effort to down-regulate negative emotional states. The results of the correlation analysis indicated that all items of the ER-R were correlated with each other, with correlations from .24 to .66 (See Appendix A.5) and item-total correlations from .53 to .73 (See Appendix A.4). Cronbach's alpha for the ER-R was .83 (See Table B.3).

Mindfulness.

The researcher used the Five Facet Mindfulness Questionnaire (FFMQ) to measure participant's mindful awareness. The FFMQ (See Appendix B) is a 39 item scale measuring five facets of mindfulness: Observing, Describing, Acting with Awareness, Nonjudging, and Nonreactivity. Analyses were conducted to assess the correlation among scale items, inter-item reliability, factor analysis, and scale reliabilities.

Subscales. Inter-item correlation indicated that all items of the five subscales of the FFMQ were correlated with each other (See Appendix C) and demonstrated adequate internal consistency (See Appendix A). Chronbach's Alpha for the scales ranged from .77 - .89 (See Appendix B).

Mindfulness Scale.

Table B7 *Correlation of the Mindfulness Subscales*

	Observe	Describe	Actaware	Nonreact	Nonjudge
Observe	--				
Describe	.234	--			
Actaware	.035	.404	--		
Nonreact	.259	.456	.437	--	
Nonjudge	-.006	.314	.390	.400	--

Note: All **bold** correlations are significant at the 0.01 level (2-tailed).

Collaborative Religious Coping.

The researcher measured Collaborative Religious Coping using the Collaborative Religious Coping Subscale (See Appendix C). The RC-C is an eight item scale used to measure the tendency one has to actively engage God in times of stress. Seven items of this sub-scale were used. Inter-item correlation shows all items correlate with ranges from .16 to .64 (See Appendix A.12) and item-total from .16 to .64 (See Appendix A.13). Cronbach's alpha for the RC-C was .81 (See Table A.15).

Table A.12 *Correlation of Items of the Collaborative Religious Coping Sub-Scale*

	RC-C1	RC-C2	RC-C3	RC-C4	RC-C5	RC-C6	RC-C7
RC-C1	--						
RC-C2	0.33	--					
RC-C3	0.23	0.50	--				
RC-C4	0.46	0.21	0.16	--			
RC-C5	0.49	0.30	0.28	0.51	--		
RC-C5	0.51	0.35	0.25	0.48	0.64	--	
RC-C6	0.38	0.54	0.40	0.31	0.45	0.41	--

Note: **All** correlations are significant at the 0.01 level (2-tailed)

Table A.13 *Reliability and Item Total Statistics for the Collaborative Religious Coping Subscale*

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
RC-C1	0.57	0.78
RC-C2	0.53	0.79
RC-C3	0.41	0.81
RC-C4	0.50	0.80
RC-C5	0.64	0.77
RC-C6	0.64	0.77
RC-C7	0.59	0.78

Table A.14 *Reliability Statistics for Study Scales*

Variable	Cronbach's Alpha	Number of items
ER-R	0.82	6
MND	0.90	39
RC-C	0.81	7

Note. RC-C = Religious Coping – Collaboration Sub-scale, MND = Five Factor Mindfulness Questionnaire, ER-R = Emotion Regulation–Reappraisal Sub-scale

Factor Analyses

Factor analysis was conducted to examine the factor loading of the scale items and to confirm the validity of the scales. Because much of behavioral science research results in correlation among scales, Maximum-Likelihood extraction with Direct Oblimin rotation was used for all factor analyses (Tabachnick & Fidell, 2007). To determine the number of factors to retain, the results of the factor analyses were evaluated against the following criteria: (a) Horn's (1965) parallel analysis; (b) Kaiser's (1958) eigenvalue criterion; (c) total score variance; (d) Cattell's (1966) scree requirement; (e) number and strength of factor loadings; (f) internal consistency of resultant factors; and (h) theoretical considerations and interpretability. Items with low factor loading ($< .40$) or low item-total correlation were assessed for removal (Garcon, 2011a, 2011b). Once the number of factors to extract and the

items to retain was determined, the internal consistency of the identified factors was examined. The total variance and factor matrices are presented in Appendix E.

Sum Totals of Study Scales.

For this study, the participants' sum total of the items within each scale was used to compute the total scale score. Using the compute variable function in SPSS, The researcher calculated the sum of the items within each study scale. Because the study scales contained different numbers of items, the sums were standardized. This standardized variable was computed for each study scale by multiplying the sum of the study scale by 100 and then dividing the product by the number of items in the scale.

To examining the relationship among the study scales, Pearson product moment correlations were computed among the scales and subscales. The results indicate that all correlations were statistically significant ($p < .05$) with the exception of Reappraisal and Suppression. This result is expected as these two factors are intended to be orthogonal constructions within the ERQ. Correlations among the scales ranged from $-.105$ to $.335$ (See Table A.15). Descriptive statistics for the standardized sum of each study scale suggest that there is sufficient variability in the individual scores of all scales to detect an effect (see Table A.4).

Table A.15 Descriptive Statistics of Scale Sum Totals

	N	Minimum	Maximum	M	SD
RC-C	352	7	28	23.00	3.95
MND	352	88	178	137.00	16.71
ER-R	352	7	42	32.00	6.52
ER-S	352	4	25	11.00	4.68

Note. RC-C = Religious Coping – Collaboration sub-scale, MND = Five Factor Mindfulness Questionnaire, ER-R = Emotion Regulation – Reappraisal sub-scale, ER-S = Emotion Regulation-Suppression sub-scale

Table A.16 Correlation of Scales

	RC-C	MND	ER-R	ER-S
RC-C	--			
MND	.286**	--		
ER-R	.126*	.335**	--	
ER-S	-.105*	-.274**	0.01	--

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

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

Results of Analyses by Research Question

In this section, the results of the analyses by research question are examined. The study scales for these analyses include the Five Factor Mindfulness Questionnaire (MND), Religious Coping Collaborative Sub-Scale (RC-C), and Emotion Regulation-Reappraisal subscale (ER-R). IBM SPSS version 20 was used for all analyses.

Research Question 1

The first research question asks: Does Collaborative Religious Coping account for a significant amount of the variance observed in Emotion Regulation-Reappraisal for master's level counseling students? To determine the relationship between Collaborative Religious Coping and Emotion Regulation-Reappraisal, a simple linear regression analysis was conducted, with Collaborative Religious Coping as the independent variable and Emotion Regulation-Reappraisal as the dependent variable (see table B5). There was a positive correlation shown between Collaborative Religious Coping and Emotion Regulation-Reappraisal ($\beta = .126$ $p. < 0.05$). Collaborative Religious Coping accounts for 1.6% of the variance observed in Emotion Regulation Reappraisal.

Table A.17 *Correlation of Collaborative Religious Coping and Emotional Regulation Reappraisal*

Model	RC-C	ER-R
-------	------	------

RC-C	1	--
ER-R	.126*	1

* $p < .05$ (2-tailed).

Summary of Results

There was a significant, positive relationship between Collaborative Religious Coping and Emotional Regulation – Reappraisal. Although the amount of variance was rather low (1.6%), it does provide support for the first research question. Thus, the null hypothesis was rejected.

Research Question 2

This question asks: Does Collaborative Religious Coping account for a significant amount of the variance observed in Mindfulness for master's level counseling students? A simple linear regression analysis was conducted with Collaborative Religious Coping and Mindfulness (see table B6). There was a significant, positive correlation shown between Collaborative Religious Coping and Mindfulness ($\beta = .286$ $p < .001$). Collaborative Religious Coping accounted for 8.2% of the variability observed in Mindfulness.

Table A.18 *Correlation of Collaborative Religious Coping and Mindfulness*

Model	RC-C	MND
RC-C	1	--
MND	.286**	1

* $p < .001$ (2-tailed).

Summary of Results

There was a significant, positive relationship between Collaborative Religious Coping and Mindfulness. This provides support for the second research question. Thus the null hypothesis was rejected.

Research Question 3

This question asks: Does Mindfulness account for a significant amount of the variance observed in Emotion Regulation-Reappraisal for master's level counseling students? A simple linear regression analysis was conducted with Mindfulness and Emotion Regulation-Reappraisal. A positive correlation was found between Mindfulness and Emotion Regulation-Reappraisal ($\beta = .335$ $p < .001$). Mindfulness accounts for 11.2% of the variance observed in Emotion Regulation-Reappraisal.

Table A.19 *Correlation of Mindfulness and Reappraisal*

	Mindfulness	Reappraisal
Mindfulness	1	.335**
Reappraisal	.335**	1

** $p < .001$ (2-tailed).

Summary of Results

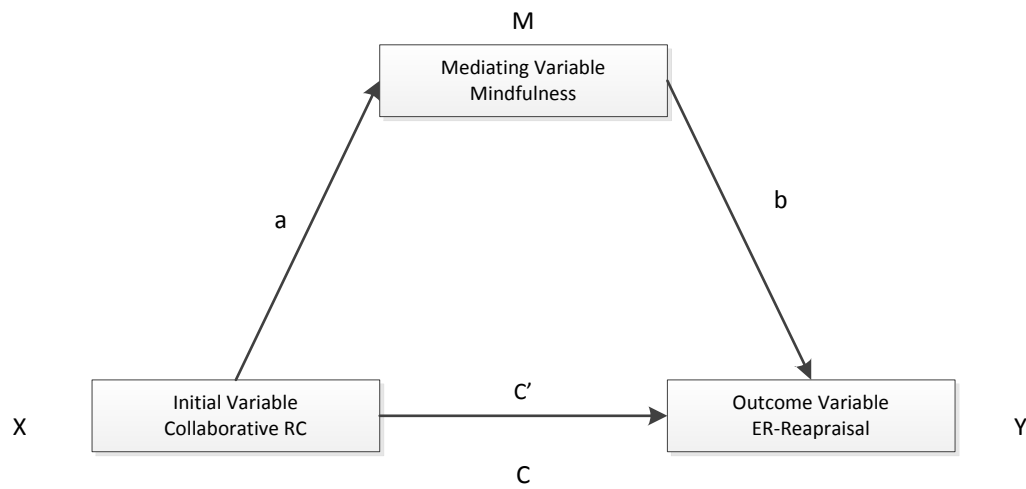
The results supported the hypothesis for the third research question. There was a significant, positive relationship between Mindfulness and Emotional Regulation-Reappraisal. Thus the null hypothesis was rejected (See Table A.20).

Table A.20 *Coefficients of Regression Equations*

	Dependent Variable	Independent Variables	β	t	p
1	ER-R	(Constant)		5.218	.000
		MND	.335	6.641	.000
1	RC-C	(Constant)		22.201	.000
		MND	.286	5.582	.000
1	RC-C	(Constant)		13.697	.000
		ER-R	.126	2.373	.018

Research Question 4

This Question asks: Does Mindfulness mediate the relationship between Collaborative Religious Coping and Emotional Regulation-Reappraisal.? To answer this question the researcher followed Barron & Kinney's (1986) method of accounting for mediation (Figure 1).



Statistical Mediation:

Figure 7. Mediation model showing the requirements for statistical mediation. The Arrows represent the required correlational relationship necessary to support statistical mediation. Source: Adapted from *Barron and Kinney, (1986)*

Using this approach, the researcher first conducted three correlation analyses to prove positive correlations among the variables as required by Barron & Kinney's model. Path I was significantly and positively correlated ($\beta = .126$ $p \leq 0.05$). Path (a) was significantly and positively correlated ($\beta = .268$ $p \leq 0.01$). Path (b) was positively and significantly correlated ($r = .325$ $p \leq 0.01$).

Next, a simultaneous regression was calculated using the outcome variable (RC-R) as the DV and using (MND) and (RC-C) as the two Ivs (See fig. 2). Results show a significant, positive relationship between MND and ER-R ($\beta = .325$ $p \leq 0.01$) and no significant correlation relationship between RC-C and ER-R 4 ($\beta = .033$ $p .532$) path (c'). Consequently, the indirect effect was calculated by using the product of path a (.268) and b (.325) (Baron and Kenney, (2007)). The result was .087.

Summary

Once Reappraisal was simultaneously regressed onto both Collaborative Religious Coping and Mindfulness, the relationship between Religious Coping and Emotion Regulation-Reappraisal changed from $\beta .126$, sig, .05 to $\beta .033$ $p .532$. This supported the hypothesis that Mindfulness mediates the relationship between CRC and ERR; thus, the null hypothesis was rejected.

Table A.21 *Coefficients of Regression Equation for Mediation Model*

	Dependent Variable	Independent Variables	β	t	p
1	ER-R	(Constant)		4.558	.000
		RC-C	.033	.625	.532
		MND	.325	6.179	.000
1	RC-C	(Constant)		22.201	.000
		MND	.286	5.582	.000

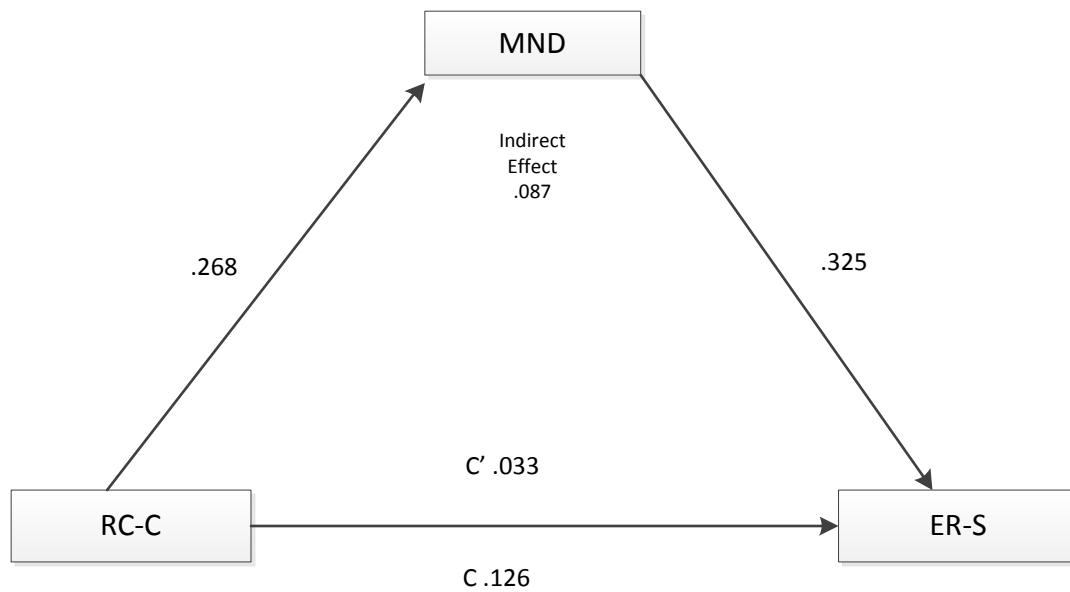
**Mindfulness as a mediating variable:**

Figure 8: *Path view of Mediation model showing results from the studied sample*

CHAPTER FIVE: SUMMARY OF FINDING, DISCUSSION AND RECOMMENDATIONS

SUMMARY OF FINDINGS

This study sought to examine the relationship between Collaborative Religious Coping, Emotional Regulation – Reappraisal, and Mindfulness. Research questions one through three involved the correlations among each of these variables and were necessary in order to answer research question four: Does Mindfulness mediate the relationship between Collaborative Religious Coping and Emotion Regulation – Reappraisal? This study found that there was a significant, positive relationship between Collaborative Religious Coping and both Emotion Regulation – Reappraisal and Mindfulness. This result provides support for research questions one and two. This study also found that Mindfulness positively and significantly correlates with Emotion Regulation – Reappraisal, providing support for research question three. Regarding the fourth question: Does Mindfulness Mediate Collaborative Religious Coping and Emotion Regulation – Reappraisal? – this study used Barron and Kenny’s method to evaluate this relationship. The results indicated that Mindfulness does mediate the relationship between Collaborative Religious Coping and Emotion Regulation – Reappraisal. These findings are discussed below. Recommendations for further research are discussed (See table 1)

Collaborative Religious Coping and Reappraisal

The first research question hypothesized that Collaborative Religious Coping would positively correlate with the regulation of emotion through reappraising strategies. As expected, this coping strategy did positively correlate with Reappraisal. However, the

magnitude of the relationship was relatively low, as RC-C accounted for only 1.6% of the variance in Reappraisal. Although this correlation was significant, the relationship was weaker than expected. This result may be due to at least three possible factors.

Construct Validity

The construct of Collaborative Religious Coping may not have been adequately measured in this sample. Theoretically, one would expect that collaborating with God would have a significant influence on reappraisal strategies of Emotion Regulation. Collaboration during stressful events assumes that one is able to objectively evaluate one's circumstances in a way that does not produce avoidance but rather openness to engaging with resources. One would think that this condition would be more greatly associated with reappraisal efforts as one would have to view the circumstance as being solvable and that one has resources to cope with the event. It may be that the seven items measuring this construct (RC-C) did not adequately measure the dynamics of collaboration well enough to result in a stronger correlation with Reappraisal. Further research may seek to more strongly represent this construct by measuring collaboration in a more robust way, either by developing a more expanded bank of items for measuring RC-C or by using developing interview-based strategies that may more adequately capture the meaning of collaborative religious coping

Emotional Regulation vs. Negative Emotion

Another possible explanation for the rather weak relationship between Collaborative Religious Coping and reappraisal is that this study assumed that emotion regulation strategies, such as reappraisal and suppression were conceptually equivalent to negative emotions like depression, anxiety and anger. In other words the assumption was

that if collaborative religious coping correlated strongly to negative emotions- as it did in Corsini 2009, then it would surely correlate with the emotion regulation strategies such as reappraisal. This is clearly a shortcoming of this study. It could be argued that the suppression strategy, rather than the reappraisal strategy is more closely linked to negative emotions such as depression, anxiety and anger. Research has demonstrated that negative emotion is linked to patterns of psychopathology such as anxiety disorders and mood disorders. Moreover, it could be argued that collaborative religious coping might be more strongly associated with suppression than reappraisal. However a post hoc analysis using the data collected in this study, yielded only a small but significant correlation between religious coping and suppression ($r = -.105$ $p < .05$). Thus it appears that collaborative religious coping has a relatively small but significant association with emotion regulation strategies. This is supported by other studies (Vredevel, 2009). Future research needs to more closely examine this rather complex connection between religious coping, emotion regulations strategies and negative emotions by examining these variables together.

Collaboration vs. Other Religious Coping efforts.

The third possible explanation for accounting for the relatively weak relationship between Collaborative Religious Coping and Reappraisal is that it may be that other Religious Coping strategies may be more associated with emotion regulation strategies such as reprisal and suppression. Studies have shown that Religious Strategies of Coping are linked to the management of negative emotion such as depression (Koenig et al., 1998). However, no research has been done that links these religious coping strategies to the emotion regulation strategies of reappraisal and suppression. One possible candidate

might be Benevolent Religious Reappraisal, which is redefining the stressor through religious lenses as potentially a kind act of God that is beneficial to one's character development. This redefining process seems to be conceptually similar to the processes that are involved in the emotion regulation strategies of reappraisal (Pargament, Koenig & Perez, 2000). Future studies may explore how these different coping strategies might relate to emotion regulation strategies in general and both positive and negative emotions in particular.

Collaborative Religious Coping and Mindfulness

The second question examined the relationship between Collaborative Religious Coping and Mindfulness. Regression analysis revealed that Collaborative Religious Coping significantly accounts for variance in Mindfulness. This supports the researcher's hypothesis that the ability to collaboratively cope utilizing one's faith is linked to mindful awareness. This also suggests that Collaborative Religious Coping may be related to being able to hold the present moment in mind in a non-reactive way. For example, in the case of a distressing situation, such as the loss of income from a job loss, one's ability to view God as an open resource and be willing to engage Him, is associated with how one is able to view the present moment and not be reactive or flooded with this negative experience. So then, when one is collaborating with God, one may also be mindful.

This may imply that religious people who are mindful are more open to relating to God in a collaborative way when dealing with stressful situations. Theoretically then, mindfulness may enhance the effectiveness of spiritual disciplines. Take for example, fasting. This discipline is generally viewed as an effort to focus more intently on God's

presence by abstaining from eating for a period of time (Willard, 1998). This experience may be disrupted by intrusive thoughts about hunger. If hunger is experienced in a way that preoccupies the individual, the focus of this experience is then misdirected and the presence of God may not be realized. A mindful individual, however, may be more likely to accept the experience of hunger and focus more on God in prayer or meditation. It might also be the case that the practice of spiritual disciplines may enhance mindfulness skills. Future research studies should more fully explore the relationships between mindfulness to spiritual disciplines.

Mindfulness and Emotion Regulation – Reappraisal

The third research question examined the relationship between Mindfulness and Emotion Regulation, specifically, Reappraisal. Regression analysis revealed that Mindfulness significantly accounts for variance in Reappraisal. This supports the researcher's hypothesis that those students scoring high in mindfulness would be more likely to regulate emotion using reappraisal. This result was expected. Reappraisal is viewed as the ability for one to reevaluate a situation in order to down regulate negative emotional experience. Theoretically, the ability to reappraise a situation assumes the ability to hold the situation in mind objectively in order to explore alternative ways of evaluating it. Mindfulness allows for disentanglement from automatic thoughts and emotions. So then, if one was not mindful, he or she would more likely be enmeshed with the emotional experience and less likely to be able to reappraise it.

What was not examined in this study was the relationship of Mindfulness and other emotion regulation strategies such as suppression. A post hoc analysis revealed that

mindfulness significantly and negatively correlated with Suppression ($r = -.274$ $p \leq 0.01$).

Suppression is the tendency for one to subdue the expression of emotional experience.

This result would add further support to the idea that mindfulness enhances the acceptance of emotional experience.

So then, the relationship of Mindfulness with Emotion Regulation would suggest that teaching mindfulness strategies would potentially enhance reappraisal efforts and decrease suppression efforts. What was not examined in this study was how specific facets of Mindfulness relate to emotion regulation. Future studies may examine these constructs to better understand how these specific facets may relate to emotion regulation as well as the causal relationships between the facets of Mindfulness and Reappraisal and Suppression.

The implications of these findings support what is happening in the field of Emotion Regulation research as various studies show that emotion regulation strategies relate to mindfulness (Kring, 2010). These results also support the notion that mindfulness may be an effective stand-alone treatment for the development of coping skills and emotion regulation strategies.

Mindfulness as a Mediator between Collaborative RC and ER-R

The fourth question examined the potential mediating effect of Mindfulness on the relationship between Collaborative Religious Coping and Reappraisal. It was hypothesized that Mindfulness would mediate this relationship. To examine this hypothesis, Barron and Kenny's (1986) mediation method was used. Initially, the direct path coefficient from Collaborative Religious Coping to Reappraisal was found to be

significant ($\beta I = .126$ $p \leq .05$). After accounting for the mediating variable (Mindfulness), this path was no longer significant ($\beta (c') = .033$ $p = .532$). A series of regressions demonstrate that Collaborative Religious Coping offered no significant influence on Reappraisal once the effect of Mindfulness was accounted for. In other words, Mindfulness fully mediates this relationship in this sample.

These results may help explain how Collaborative Religious Coping works in acquiring Reappraisal skills. These results provide evidence that when one is collaborating with God in order to manage stressful events, they are essentially being mindful in the process. Future studies may provide further explanation as to how this process might work. For example, an additive intervention study may be helpful. This proposed study would have three groups: 1) Religious Coping only group 2), a Mindfulness only group and 3) Mindfulness with Religious Coping group. This proposed study would randomly assign participants to one of these three groups. The groups would then be subject to eight weeks of manual based intervention and pre and post tests on relevant outcome variables such as validated measures of both negative and positive emotions, Mindfulness, Religious Coping and Reappraisal and Suppression. Measures may be administered throughout the course of the study in order to detect possible mediation effects. The key questions assessed would be 1) Is there a differential effect for religious coping and mindfulness when compared head to head; 2) Does the combination of mindfulness and religious coping provide benefit over and above the two standalone treatments? This study could potentially provide evidence in better understanding these complex variables and give insight into potential causal relationships.

Limitations

There were several limitations to this study. First, this study is a cross sectional design. The data represents a single snapshot of self-report information to analyze the relationship between specific variables. Consequently, there are limitations to any causal inference. Secondly, this study was limited to a population of graduate students attending a predominately Christian Evangelical university. The results may not be generalized to other populations, including other college samples. Future research could include populations of other age ranges, worldviews, and educational backgrounds.

This study does not account for possible life events or factors influencing the participation of this study utilizing computer and internet technologies. It is possible that this sample, representing entry level graduate students, may be experiencing abnormal stress due to recently beginning a graduate program. The results of this study are limited to the honesty and self-awareness of the participants. Although, self-report survey is the only currently validated method of measuring mindful awareness, there is some debate regarding the construct validity of self-reporting on one's own awareness. Future studies should explore other ways to measure this construct.

Conclusion

This study extended current research on the relationship between Collaborative Religious Coping, Mindfulness, and Emotion Regulation. The researcher found that in this sample of online graduate counseling students, Collaborative Religious Coping was weakly but significantly related to the Reappraisal strategy of Emotion Regulation and

Mindfulness. Moreover the results indicated that Mindfulness correlates with the emotion regulation strategy of Reappraisal. Finally, this study found that Mindfulness mediates the relationship between Collaborative Religious Coping and the Reappraisal strategy of Emotion Regulation.

The findings of this study may inform various psychological, clinical, and faith based counseling practices. Since emotion regulation is such an integrative construct, insight into how faith-based clients can manage this process is valuable across many areas including inpatient, outpatient, Church-based, and community-based settings. The outcome of this study provides data with potentially valuable implications across these settings. For example, this study supports research in the field of religious coping that provides additional understanding to the processes involved in Emotion Regulation. This study also provides insight into how Mindfulness may relate to faith based coping.

Implications for the Church

The idea that the relationship between Collaborative Religious Coping and Reappraisal may be fully mediated by Mindfulness is significant to the Church on a couple levels. In the Christian Counseling setting, where clients may seek unsuccessfully to integrate important aspects of their faith to manage stressful events, mindfulness based treatments may provide effective treatment directly related to the regulation of emotion, but may also prove to enhance their use of religious coping efforts.

With regard to the importance of this finding to the overall personal development of the Christian, this finding provides a potential avenue to explore one's own faith in a present moment, non-reactive way. Theoretically, if mindfulness mediates the

relationship of some Religious Coping strategies to regulate emotion, as this study suggests, then it may be possible that present mindedness may enhance everyday activities relating to faith such as private worship, Bible reading and prayer. Distraction and preoccupation are commonly noted as hindrances to these important practices. Moreover, many Christians report that intrusive thoughts such as worry or guilt negatively affect their personal devotional experience. Cultivating a present moment, non-reactive mindset may enhance the effectiveness of these activities.

Table 1

<i>Recommendations for further Research</i>	
Religious Coping and Emotion Regulation	Provide for a more robust measure of Collaborative Religious Coping against this mediation model Examine other Religious Coping strategies and their relationship to Mindfulness and Emotion Regulation
Religious Coping and Mindfulness	Examine the relationship between Mindfulness and Spiritual Disciplines
Mindfulness and Emotion Regulation	Examine the various facets of Mindfulness against Reappraisal and Suppression strategies
Mediation of Mindfulness on the relationship of Religious Coping and Emotion Regulation	Perform an additive intervention study where interventions of Mindfulness alone, Religious Coping alone and Mindfulness combined with Religious Coping are tested pre and post treatment.
Mindfulness	Provide for other report measures of mindfulness such as neuro feedback or observational analyses.

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Appendix A Tables

Table A.1 Participant Denominational Affiliation

Denomination	Frequency	Percent
Baptist	111	31.2%
Catholic	21	5.9
Non-Denominational	133	37.4
Assembly of God	10	2.8
Presbyterian	6	1.7
Lutheran	7	2
Methodist	25	7
Other (Charismatic)	37	10.4
N/A	3	.8
Outlier (multiple answer)	3	.9
Total	356	100

Table A.2 Participant Participation in Meditation

Meditation	Frequency	Percent
Yes	158	44.4
No	198	55.6
Total	356	100

Table A.3 Participant Meditation Practices

Meditation	Frequency	Percent
Contemplative Prayer	158	34.7
Yoga	15	4.3
Mindfulness	9	2.6
Other	16	4.5
Total	356	100

Table A.4 Reliability and Item Total Statistics for ER-R

	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
ER-R1	0.53	0.81
ER-R2	0.55	0.81
ER-R3	0.44	0.83
ER-R4	0.72	0.77
ER-R5	0.63	0.72
ER-R6	0.73	0.72

Table A.5 *Correlation of Items in the Full Emotion Regulation Questionnaire*

	ER-R1	ER-R2	ER-R3	ER-R4	ER-R5	ER-R6	ER-S1	ER-S2	ER-S3	ER-S4
ER-R1	--									
ER-R2	0.66	--								
ER-R3	0.25	0.17	--							
ER-R4	0.41	0.38	0.44	--						
ER-R5	0.28	0.36	0.38	0.73	--					
ER-R6	0.38	0.48	0.48	0.70	0.64	--				
ER-S1	0.02	0.08	0.01	0.09	0.07	0.05	--			
ER-S2	-0.16	-0.13	-0.19	-0.17	-0.17	-0.20	0.25	--		
ER-S3	0.05	0.10	-0.08	0.04	0.03	0.01	0.54	0.30	--	
ER-S4	0.08	0.15	0.00	0.05	0.05	0.13	0.51	0.27	0.59	--

Note: All **bold** correlations are significant at the 0.05 level (2-tailed).

Table A.6 *Correlation of Items of the Collaborative Religious Coping Sub-Scale*

	RC-C1	RC-C2	RC-C3	RC-C4	RC-C5	RC-C6	RC-C7
RC-C1	--						
RC-C2	0.33	--					
RC-C3	0.23	0.50	--				
RC-C4	0.46	0.21**	0.16	--			
RC-C5	0.49	0.30	0.28	0.51	--		
RC-C5	0.51	0.35	0.25	0.48	0.64	--	
RC-C6	0.38	0.54	0.40	0.31	0.45	0.41	--

Note: **All** correlations are significant at the 0.05 level (2-tailed)

Table A.7 *Correlation of the Mindfulness Subscales*

	Observe	Describe	Aaware	Nonreact	Nonjudge
Observe	--				
Describe	.234	--			
Aaware	.035	.404	--		
Nonreact	.259	.456	.437	--	
Nonjudge	-.006	.314	.390	.400	--

Note: All **bold** correlations are significant at the 0.05 level (2-tailed).

Table A8 *Item Descriptive Statistics for Emotion Regulation Questionnaire*

	N	Minimum	Maximum	Mean	Std. Deviation
ER-R1	352	1	7	5.44	1.58
ER-R2	352	1	7	5.25	1.62
ER-R3	352	1	7	5.26	1.58
ER-R4	352	1	7	5.47	1.34
ER-R5	352	1	7	5.29	1.38
ER-R6	352	1	7	5.33	1.42
ER-S1	352	1	7	3.56	1.70
ER-S2	352	1	7	1.91	1.20
ER-S3	352	1	7	2.95	1.70
ER-S4	352	1	7	3.21	1.56

Table A.9 *Collaborative Religious Coping Subscale*

	N	Minimum	Maximum	Mean	Std. Deviation
RC1	352	1	4	3.03	0.85
RC2	352	1	4	3.10	0.80
RC3	352	1	4	2.87	0.93
RC4	352	1	4	3.17	0.90
RC5	352	1	4	3.35	0.81
RC6	352	1	4	3.45	0.76
RC7	352	1	4	3.56	0.71

Table A10 *Five Factor Mindfulness Questionnaire*

	N	Minimum	Maximum	Mean	Std. Deviation
FFM1	352	1	5	2.64	1.04
FFM2	352	1	5	3.88	0.87
FFM3	352	1	5	2.73	1.03
FFM4	352	1	5	3.23	0.79
FFM5	352	1	5	3.18	1.00
FFM6	352	1	5	3.02	1.13
FFM7	352	1	5	3.96	0.80
FFM8	352	2	5	3.83	0.86
FFM9	352	1	5	3.43	0.78
FFM10	352	1	5	2.82	0.88
FFM11	352	1	5	3.18	1.12
FFM12	352	1	5	3.84	0.87
FFM13	352	1	5	3.47	0.95
FFM14	352	1	5	2.21	0.95
FFM15	352	1	5	3.39	0.98
FFM16	352	1	5	3.82	0.85

FFM17	352	1	5	3.12	1.03
FFM18	352	1	5	3.76	0.93
FFM19	352	1	5	3.61	0.90
FFM20	352	1	5	3.43	1.03
FFM21	352	1	5	3.65	0.86
FFM22	352	1	5	3.91	0.79
FFM23	352	1	5	3.75	0.92
FFM24	352	1	5	2.99	0.97
FFM25	352	1	5	2.67	0.92
FFM26	352	1	5	4.02	0.85
FFM27	352	1	5	3.80	0.93
FFM28	352	1	5	3.70	0.83
FFM29	352	1	5	3.25	0.90
FFM30	352	1	5	2.33	0.91
FFM31	352	1	5	3.60	1.04
FFM32	352	1	5	3.77	0.93
FFM33	352	1	5	3.06	0.89
FFM34	352	1	5	3.56	0.92
FFM35	352	1	5	2.40	1.02
FFM36	352	2	5	3.90	0.81
FFM37	352	1	5	3.67	0.92
FFM38	352	1	5	3.61	0.91
FFM39	352	1	5	2.51	1.06

Table A.11 *Reliability and Item Total Statistics for the Five Factor Mindfulness Questionnaire*

	Corrected Item-Total Correlation	Cronbach's Alpha If Item Deleted
MND1_OBS	0.11	0.90
MND2_DES	0.53	0.90
MND3_Nonj	0.41	0.90
MND4_Nonr	0.36	0.90
MND5_Aw	0.46	0.90
MND6_OBS	0.13	0.91
MND7_DES	0.53	0.90
MND8_ActA	0.46	0.90
MND9_Nonr	0.50	0.90
MND10_Nonj	0.45	0.90
MND11_OBS	0.16	0.90
MND12_DES	0.56	0.90
MND13_ActA	0.45	0.90
MND14_Nonj	0.57	0.90
MND15_OBS	0.22	0.90

MND16 DES	0.60	0.90
MND17 Nonj	0.15	0.90
MND18 ActA	0.60	0.90
MND19 Nonr	0.56	0.90
MND20 OBS	0.15	0.90
MND21 Nonr	0.51	0.90
MND22 DES	0.50	0.90
MND23 ActA	0.55	0.90
MND24 Nonr	0.35	0.90
MND25 Nonj	0.48	0.90
MND26 OBS	0.29	0.90
MND27 DES	0.56	0.90
MND28 ActA	0.52	0.90
MND29 Nonr	0.44	0.90
MND30 Nonj	0.60	0.90
MND31 OBS	0.31	0.90
MND32 DES	0.35	0.90
MND33 Nonr	0.39	0.90
MND34 ActA	0.37	0.90
MND35 Nonj	0.42	0.90
MND36 OBS	0.47	0.90
MND37 DES	0.54	0.90
MND38 ActA	0.53	0.90
MND39 Nonj	0.45	0.90

Table A.12 *Correlation of Items of the Collaborative Religious Coping Sub-Scale*

	RC-C1	RC-C2	RC-C3	RC-C4	RC-C5	RC-C6	RC-C7
RC-C1	--						
RC-C2	0.33	--					
RC-C3	0.23	0.50	--				
RC-C4	0.46	0.21	0.16	--			
RC-C5	0.49	0.30	0.28	0.51	--		
RC-C5	0.51	0.35	0.25	0.48	0.64	--	
RC-C6	0.38	0.54	0.40	0.31	0.45	0.41	--

Table A.13 *Reliability and Item Total Statistics for the Collaborative Religious Coping Subscale*

	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
RC-C1	0.57	0.78
RC-C2	0.53	0.79
RC-C3	0.41	0.81
RC-C4	0.50	0.80
RC-C5	0.64	0.77
RC-C6	0.64	0.77
RC-C7	0.59	0.78

Table A.14 *Reliability Statistics for Study Scales*

Variable	Cronbach's Alpha	Number of items
ER-R	0.82	6
MND	0.90	39
RC-C	0.81	7

Note. RC-C = Religious Coping – Collaboration Sub-scale, MND = Five Factor Mindfulness Questionnaire, ER-R = Emotion Regulation–Reappraisal Sub-scale

Table A.15 *Descriptive Statistics of Scale Sum Totals*

	N	Minimum	Maximum	M	SD
RC-C	352	7	28	23.00	3.95
MND	352	88	178	137.00	16.71
ER-R	352	7	42	32.00	6.52
ER-S	352	4	25	11.00	4.68

Note. RC-C = Religious Coping – Collaboration sub-scale, MND = Five Factor Mindfulness Questionnaire, ER-R = Emotion Regulation – Reappraisal sub-scale, ER-S = Emotion Regulation-Suppression sub-scale

Table A.16 *Correlation of Scales*

	RC-C	MND	ER-R	ER-S
RC-C	--			
MND	.286**	--		
ER-R	.126*	.335**	--	
ER-S	-.105*	-.274**	0.01	--

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

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

Table A.17 *Correlation of Collaborative Religious Coping and Emotional Regulation Reappraisal*

Model	RC-C	ER-R
RC-C	1	--
ER-R	.126*	1

* $p < .05$ (2-tailed).

Table A.18 *Correlation of Collaborative Religious Coping and Mindfulness*

Model	RC-C	MND
RC-C	1	--
MND	.286**	1

* $p < .001$ (2-tailed).

Table A.19 *Correlation of Mindfulness and Reappraisal*

	Mindfulness	Reappraisal
Mindfulness	1	.335**
Reappraisal	.335**	1

** $p < .001$ (2-tailed).

Table A.21 *Coefficients of Regression Equation for Mediation Model*

	Dependent Variable	Independent Variables	β	t	p
1	ER-R	(Constant)		4.558	.000
		RC-C	.033	.625	.532
		MND	.325	6.179	.000
1	RC-C	(Constant)		22.201	.000
		MND	.286	5.582	.000

Table A.22. *Factor Matrix for Emotional Regulation-Reappraisal Scale*

	Factor
	1
ER-R4	.869
ER-R6	.822
ER-R5	.788
ER-R2	.517
ER-R3	.516
ER-R1	.482

Extraction Method: Maximum Likelihood. A. 1 factor extracted. 5 iterations required.

Table A.23. *Factor Matrix for Religious Coping Scale*

	Factor
	1
RC-C5	.771
RC-C6	.763
RC-C1	.658
RC-C4	.609
RC-C7	.608
RC-C2	.512
RC-C3	.415

Extraction Method: Maximum Likelihood. A. 1 factor extracted. 4 iterations required.

Table A.24. *Structure Matrix for Emotional Regulation-Reappraisal Scale*

	Factor	Factor
	1	2
ER-R4	.997	.426
ER-R6	.664	.415
ER-R5	.442	.895
ER-R2	.409	.800
ER-R3	.530	.794
ER-R1	.208	.520

Extraction Method: Maximum Likelihood. A. 1 factor extracted. 5 iterations required.

Table A.25. *Factor Matrix for Collaborative Religious Coping Scale*

	Factor	Factor
	1	2
RC-C5	.736	.319
RC-C6	.730	.272
RC-C1	.663	-.202
RC-C4	.655	-.521
RC-C7	.630	.173
RC-C2	.567	.309
RC-C3	.489	-.339

Extraction Method: Maximum Likelihood. A. 1 factor extracted. 4 iterations required.

Table A.26 *Correlation of Factors of FFMQ Scale*

Factor	1	2	3	4
1	--			
2	.414	--		
3	.402	.303	--	
4	.098	.278	.030	--

Table A.27 *Correlation of Factors of Emotional Regulation-Reappraisal*

Factor	1	2
1	--	
2	.491	--

Table A.28 *Correlation of Factors of Factor Matrix for Collaborative Religious Coping Scale*

Factor	1	2
1	--	
2	-.535	--

Table A.29. *Pattern Matrix for Five Facet Mindfulness Questionnaire*

	Factor			
	1	2	3	4
M-AA2	0.85	-0.11	-0.05	-0.08
M-AA3	0.85	-0.02	-0.08	-0.17
M-AA1	0.75	0.01	-0.05	-0.10
M-AA8	0.70	0.00	0.03	0.03
M-AA6	0.69	0.04	-0.01	0.03
M-AA4	0.68	0.08	0.16	-0.11
M-AA5	0.59	0.10	0.05	0.05
M-AA7	0.52	-0.06	0.07	0.03
M-NR2	0.36	0.07	0.20	0.13
M-NR3	0.27	0.21	0.14	0.25
M-NR4	0.24	0.23	0.13	0.17
M-NR5	0.23	0.09	0.08	0.16
M-DES1	-0.04	0.79	0.01	-0.03
M-DES4	0.06	0.78	0.13	-0.17
M-DES3	0.11	0.76	0.08	-0.25
M-DES7	-0.20	0.72	-0.08	0.11
M-DES2	0.04	0.71	0.00	0.00
M-DES8	0.04	0.70	-0.07	0.13
M-DES6	0.03	0.68	0.08	0.03
M-DES5	0.21	0.51	0.02	-0.05
M-NR1	0.15	0.16	0.14	0.07
M-NJ5	-0.04	0.03	0.78	-0.01
M-NJ6	0.07	0.06	0.72	0.11
M-NJ8	0.02	-0.04	0.71	0.03
M-NJ7	-0.03	0.02	0.67	0.01
M-NJ4	-0.13	-0.15	0.65	-0.12
M-NJ2	0.03	0.06	0.63	-0.04
M-NJ1	0.07	0.01	0.62	-0.10
M-NJ3	0.15	0.08	0.62	0.01
M-NR6	0.10	0.18	0.23	0.18
M-NR7	0.13	0.07	0.22	0.22
M-OBS4	-0.14	-0.01	0.07	0.73
M-OBS1	-0.03	-0.12	-0.06	0.64
M-OBS5	-0.11	0.02	0.00	0.56
M-OBS2	0.09	-0.19	-0.02	0.55
M-OBS3	-0.01	0.04	-0.12	0.53
M-OBS7	-0.02	0.13	0.06	0.48
M-OBS6	0.00	0.18	-0.01	0.43
M-OBS8	0.25	0.31	-0.12	0.31

Extraction Method: Maximum Likelihood. Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 7 iterations.

Table A.30. *Structure Matrix for Five Facet Mindfulness Questionnaire*

	Factor			
	1	2	3	4
M-AA3	.789	.259	.248	-.099
M-AA2	.777	.206	.253	-.029
M-AA4	.763	.380	.453	-.016
M-AA1	.728	.281	.253	-.023
M-AA8	.713	.307	.309	.098
M-AA6	.704	.328	.280	.107
M-AA5	.655	.371	.314	.138
M-AA7	.521	.186	.256	.065
M-NR2	.475	.312	.363	.187
M-NR3	.439	.439	.323	.344
M-NR5	.312	.250	.199	.205
M-DES4	.414	.793	.381	.056
M-DES1	.290	.772	.235	.187
M-DES3	.431	.759	.349	-.029
M-DES8	.315	.732	.161	.330
M-DES2	.329	.724	.228	.200
M-DES6	.340	.717	.295	.219
M-DES7	.079	.647	.064	.289
M-DES5	.424	.592	.258	.117
M-OBS8	.364	.463	.087	.419
M-NR4	.400	.412	.301	.260
M-NR6	.281	.337	.330	.244
M-NR1	.282	.288	.254	.138
M-NJ6	.398	.338	.771	.150
M-NJ5	.286	.249	.770	.021
M-NJ8	.291	.196	.706	.048
M-NJ3	.437	.336	.704	.071
M-NJ7	.250	.214	.665	.035
M-NJ2	.302	.248	.656	-.002
M-NJ1	.312	.197	.647	-.074
M-NJ4	.058	-.038	.547	-.150
M-NR7	.265	.250	.301	.257
M-OBS4	-.048	.159	.029	.720
M-OBS1	-.047	.023	-.094	.596
M-OBS5	-.046	.126	-.023	.551
M-OBS3	.010	.151	-.093	.540
M-OBS7	.105	.270	.107	.511
M-OBS2	.052	-.009	-.028	.503
M-OBS6	.109	.291	.054	.476

Extraction Method: Maximum Likelihood. Rotation Method: Oblimin with Kaiser Normalization.

Rotation converged in 7 iterations.

Table A.31. *Pattern Matrix for Five Facet Mindfulness Questionnaire*

	Factor				
	1	2	3	4	5
M-AA3	.879	-.034	-.057	-.141	-.068
M-AA1	.811	-.002	-.023	-.060	-.018
M-AA2	.734	-.102	-.016	-.054	-.179
M-AA4	.567	.088	.187	-.091	-.164
M-NR2	.344	.078	.221	.143	-.013
M-NR5	.232	.100	.097	.169	.019
M-DES1	-.033	.786	.001	-.032	-.017
M-DES4	.051	.773	.125	-.168	-.027
M-DES3	.108	.756	.084	-.249	-.019
M-DES7	-.119	.714	-.088	.112	.089
M-DES2	.048	.703	-.006	.003	-.010
M-DES8	.043	.699	-.070	.137	-.007
M-DES6	-.034	.675	.071	.018	-.087
M-DES5	.054	.517	.014	-.058	-.207
M-NR4	.159	.238	.149	.170	-.080
M-NR1	.098	.168	.151	.075	-.061
M-NJ5	.022	.025	.774	-.002	.058
M-NJ6	.021	.059	.715	.099	-.081
M-NJ8	-.018	-.038	.704	.031	-.056
M-NJ7	-.091	.015	.657	.000	-.096
M-NJ4	-.065	-.156	.639	-.114	.068
M-NJ1	.128	.008	.634	-.090	.074
M-NJ2	.007	.054	.625	-.040	-.039
M-NJ3	.080	.084	.617	.010	-.103
M-NR6	.031	.186	.239	.176	-.068
M-NR7	.095	.079	.239	.223	-.017
M-OBS4	-.119	-.009	.060	.731	.024
M-OBS1	-.114	-.121	-.073	.625	-.106
M-OBS5	-.047	.013	-.001	.563	.075
M-OBS2	.091	-.190	-.011	.559	.007
M-OBS3	.035	.040	-.113	.542	.053
M-OBS7	-.056	.125	.058	.472	-.054
M-OBS6	-.006	.176	-.011	.427	-.009
M-OBS8	.237	.308	-.104	.326	-.034
M-NR3	.155	.227	.159	.253	-.124
M-AA7	-.134	-.064	.016	-.032	-.896
M-AA8	.136	-.006	-.009	-.010	-.803
M-AA5	.114	.107	.027	.017	-.639
M-AA6	.277	.047	-.011	.010	-.549

Extraction Method: Maximum Likelihood. Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 8 iterations.

Table A.32. *Structure Matrix for Five Facet Mindfulness Questionnaire*

	Factor				
	1	2	3	4	5
M-AA3	.870	.250	.247	-.080	-.456
M-AA1	.807	.275	.254	.001	-.399
M-AA2	.775	.202	.256	-.014	-.494
M-AA4	.735	.377	.455	-.006	-.519
M-NR2	.464	.313	.369	.197	-.286
M-NR5	.304	.254	.204	.215	-.169
M-DES4	.374	.792	.381	.054	-.322
M-DES1	.259	.771	.233	.182	-.247
M-DES3	.401	.758	.349	-.030	-.317
M-DES8	.286	.733	.162	.331	-.237
M-DES2	.306	.722	.227	.200	-.254
M-DES6	.279	.717	.293	.209	-.307
M-DES7	.076	.647	.064	.289	-.059
M-DES5	.343	.591	.254	.104	-.396
M-OBS8	.355	.463	.090	.428	-.239
M-NR3	.370	.440	.326	.341	-.341
M-NR4	.347	.413	.305	.258	-.293
M-NR6	.225	.340	.332	.241	-.231
M-NR1	.245	.289	.256	.137	-.215
M-NJ5	.263	.249	.771	.024	-.205
M-NJ6	.331	.337	.768	.143	-.344
M-NJ8	.235	.195	.705	.043	-.261
M-NJ3	.369	.335	.702	.065	-.364
M-NJ7	.182	.212	.661	.023	-.265
M-NJ2	.253	.248	.655	-.005	-.255
M-NJ1	.302	.199	.653	-.066	-.185
M-NJ4	.052	-.038	.545	-.149	-.045
M-NR7	.229	.253	.307	.260	-.181
M-OBS4	-.059	.159	.029	.719	.009
M-OBS1	-.084	.021	-.097	.590	-.038
M-OBS5	-.037	.127	-.021	.557	.051
M-OBS3	.027	.151	-.090	.549	.017
M-OBS2	.057	-.010	-.025	.513	-.017
M-OBS7	.071	.269	.107	.507	-.121
M-OBS6	.091	.290	.055	.475	-.091
M-AA8	.520	.291	.290	.061	-.863
M-AA7	.281	.166	.234	.010	-.813
M-AA5	.474	.362	.301	.106	-.738
M-AA6	.557	.320	.271	.086	-.695

Extraction Method: Maximum Likelihood. Rotation Method: Oblimin with Kaiser Normalization.
Rotation converged in 8 iterations.

Table A.33. *Factor Matrix for Non-Reacting Subscale of the FFMQ*

Factor		Factor		Factor		Factor		Factor	
Item	1	Item	1	Item	1	Item	1	Item	1
OBS4	.775	DES4	.808	AA3	.783	NJ6	.787	NR4	.669
OBS5	.608	DES3	.780	AA2	.761	NJ5	.777	NR3	.653
OBS1	.589	DES1	.776	AA4	.753	NJ3	.702	NR6	.644
OBS2	.528	DES2	.734	AA8	.741	NJ8	.699	NR7	.573
OBS7	.522	DES6	.711	AA1	.725	NJ2	.665	NR2	.572
OBS3	.515	DES8	.711	AA6	.716	NJ7	.659	NR1	.534
OBS6	.468	DES5	.609	AA5	.665	NJ1	.641	NR5	.410
OBS8	.340	DES7	.606	AA7	.560	NJ4	.536		

Extraction Method: Maximum Likelihood.

Table A.34. *Factor Matrix for Observe Subscale of the FFMQ*

Factor		
	1	2
M-OBS4	.760	.054
M-OBS1	.637	-.349
M-OBS5	.601	.119
M-OBS2	.546	-.220
M-OBS7	.517	.172
M-OBS3	.513	-.008
M-OBS6	.471	.335
M-OBS8	.339	.208

Extraction Method: Maximum Likelihood. 2 factors extracted. 9 iterations required.

Table A.35. *Factor Matrix for Act with Awareness Subscale of the FFMQ*

Factor		
	1	2
M-AA3	.815	-.379
M-AA8	.780	.405
M-AA2	.748	-.207
M-AA1	.742	-.372
M-AA4	.732	-.126
M-AA6	.706	.222
M-AA5	.670	.326
M-AA7	.596	.529

Extraction Method: Maximum Likelihood. 2 factors extracted. 4 iterations required.

APPENDIX B

Correlation Statistics for the Five Subscales of the Five Factor Mindfulness Questionnaire

Table D.1. *Correlation of Items of the Observe Subscale*

	OBS1	OBS2	OBS3	OBS4	OBS5	OBS6	OBS7	OBS8
OBS1	--							
OBS2	0.43	--						
OBS3	0.34	0.27	--					
OBS4	0.47	0.38	0.40	--				
OBS5	0.31	0.38	0.27	0.47	--			
OBS6	0.18	0.20	0.20	0.38	0.36	--		
OBS7	0.28	0.21	0.22	0.43	0.34	0.26	--	
OBS8	0.16	0.11	0.33	0.22	0.15	0.26	0.27	--

Note: All correlations are significant at the 0.05 level (2-tailed).

Table D.2. *Correlation of Items of the Describe Subscale*

	DSC1	DSC2	DSC3	DSC4	DSC5	DSC6	DSC7	DSC8
DSC1	--							
DSC2	0.58	--						
DSC3	0.57	0.56	--					
DSC4	0.58	0.61	0.75	--				
DSC5	0.47	0.44	0.51	0.50	--			
DSC6	0.60	0.47	0.50	0.55	0.44	--		
DSC7	0.55	0.49	0.40	0.40	0.27	0.50	--	
DSC8	0.56	0.53	0.50	0.53	0.45	0.57	0.51	--

Note: All correlations are significant at the 0.05 level (2-tailed).

Table D.3. *Correlation of Items of the Non-Judging Subscale*

	N-JG1	N-JG2	N-JG3	N-JG4	N-JG5	N-JG6	N-JG7	N-JG8
N-JG1	--							
N-JG2	0.51	--						
N-JG3	0.37	0.45	--					
N-JG4	0.33	0.32	0.33	--				
N-JG5	0.49	0.56	0.55	0.49	--			
N-JG6	0.46	0.51	0.62	0.37	0.62	--		
N-JG7	0.42	0.36	0.47	0.39	0.47	0.54	--	
N-JG8	0.54	0.46	0.47	0.41	0.49	0.51	0.54	--

Note: All correlations are significant at the 0.05 level (2-tailed).

Table D.4. *Correlation of Items of the Act Aware Subscale*

	AA1	AA2	AA3	AA4	AA5	AA6	AA7	AA8
AA1	--							
AA2	0.61	--						
AA3	0.76	0.69	--					
AA4	0.59	0.59	0.63	--				
AA5	0.36	0.45	0.42	0.49	--			
AA6	0.45	0.52	0.46	0.53	0.55	--		
AA7	0.26	0.32	0.30	0.32	0.57	0.53	--	
AA8	0.43	0.48	0.49	0.52	0.65	0.64	0.69	--

Note: All correlations are significant at the 0.05 level (2-tailed).

Table D.5. *Correlation of Items of the Non-Reaction Subscale*

	N-R1	N-R2	N-R3	N-R4	N-R5	N-R6	N-R7
N-R1	--						
N-R2	0.34	--					
N-R3	0.33	0.42	--				
N-R4	0.40	0.40	0.48	--			
N-R5	0.13	0.21	0.32	0.27	--		
N-R6	0.39	0.32	0.38	0.38	0.28	--	
N-R7	0.24	0.31	0.32	0.35	0.27	0.50	--

Note: All correlations are significant at the 0.05 level (2-tailed).

Reliability Statistics for the Five Subscales of the Five Factor Mindfulness

Questionnaire

Table B4 *Reliability Statistics for Mindfulness Subscales*

Variable	Cronbach's Alpha	Number of items
OBS	0.77	8
DSC	0.89	8
N-JG	0.87	8
AA	0.89	8
N-R	0.78	7

Note. OBS = Religious Coping – Collaboration Sub-scale, = Five Factor Mindfulness Questionnaire, ER-R = Emotion Regulation–Reappraisal Sub-scale

Table B.2. *Reliability and Item Total Statistics for Observe Subscale*

	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
OBS1	0.51	0.74
OBS2	0.45	0.75
OBS3	0.46	0.75
OBS4	0.65	0.72
OBS5	0.52	0.74
OBS6	0.41	0.76
OBS7	0.45	0.75
OBS8	0.33	0.77

Table B.2. *Reliability and Item Total Statistics for Describe Subscale*

	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
OBS1	0.74	0.87
OBS2	0.69	0.88
OBS3	0.71	0.88
OBS4	0.74	0.87
OBS5	0.56	0.89
OBS6	0.68	0.88
OBS7	0.58	0.89
OBS8	0.69	0.88

Table B.2. *Reliability and Item Total Statistics for Non-Judge Subscale*

	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
N-JG1	0.60	0.86
N-JG2	0.61	0.86
N-JG3	0.63	0.86
N-JG4	0.50	0.87
N-JG5	0.72	0.85
N-JG6	0.71	0.85
N-JG7	0.62	0.86
N-JG8	0.67	0.85

Table B.2. *Reliability and Item Total Statistics for Act Aware Subscale*

	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
AA1	0.65	0.88
AA2	0.70	0.88
AA3	0.71	0.87
AA4	0.69	0.88
AA5	0.65	0.88
AA6	0.69	0.88
AA7	0.54	0.89
AA8	0.74	0.87

Table B.2. *Reliability and Item Total Statistics for Non-React Subscale*

	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
N-R1	0.45	0.76
N-R2	0.49	0.75
N-R3	0.57	0.73
N-R4	0.57	0.73
N-R5	0.36	0.78
N-R6	0.57	0.73
N-R7	0.50	0.75

Appendix C Scales

Informed Consent

Risks and Benefits of being in the study:

This study has several risks but the risks are minimal and are no greater than a participant would encounter in everyday life. It is possible that participating in this study could bring awareness to uncomfortable or negative emotions. If this is the case, and you find that these emotions have become unmanageable, it may be advantageous to seek the advice of a professional counselor. The questions do not pertain to specifics of traumatic events, abuse, suicidality or memories but are general in nature.

Compensation:

Although there is no compensation for participating in this study, participants will be invited to take part in a raffle where four email addresses will be randomly selected to receive a \$25 dollar gift certificate. Research of this kind may bring important knowledge to the field of Christian counseling as well as greater understanding of spiritual growth. Your participation allows for current research in this area and advances the understanding of how the Christian experience can be understood in relation to emerging psychological theory.

Confidentiality:

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records. The information gathered in this study will not identify the participant in any way outside of general demographic data such as age and ethnicity. Questionnaires will be identified only by code number in order to protect your privacy and confidentiality. This anonymous data will be stored in a computer file with access only through a password. This password will be shared only among the raters and the advisors in this study. All hard copy forms will be stored in a locked file.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or the professor of your course. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Mark Myers. If you have any questions, you are encouraged to contact him at the Center for Counseling and Family Studies (434) 592-3909 or email him at mjmyers@liberty.edu. The faculty sponsor for this study is Dr. Gary Sibcy. You may contact him at the Center for Counseling and Family Studies, Liberty University (434) 592-4049 or by email at gsibcy@liberty.edu

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 1582, Lynchburg, VA 24502 or email at fgarzon@liberty.edu

Statement of Consent:

I have read the above information. If having asked questions, I have received answers. I consent to participate in the study.

I agree

I do not agree

Select one:

Biographical

Age:

Gender:

Ethnicity: African American Caucasian Latino Asian Other

Years of college education:

Do you regularly participate in a formal meditation practice? (yes no)

If yes, which kind? (Yoga, Mindfulness, Contemplative Prayer, other)

If applicable, how many times, on average, per week do you meditate?

If applicable, how long have you been actively practicing meditation (in terms of months)?

Which denomination or church would you say most fits yours?

1. Baptist
2. Catholic
3. Non-Denominational
4. Assembly of God
5. Presbyterian
6. Lutheran
7. Methodist
8. Other (charismatic)
9. N/A

Have you ever been diagnosed as having a mood disorder such as depression or anxiety?
(yes no)

Emotion Regulation Questionnaire (ERQ)

The Emotion Regulation Questionnaire is designed to assess individual differences in the habitual use of two emotion regulation strategies: cognitive reappraisal and expressive suppression.

Citation

Gross, J.J., & John, O.P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. Journal of Personality and Social Psychology, 85, (2) 348-362. Used with permission.

Instructions and Items

We would like to ask you some questions about your emotional life, in particular, how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel like inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please answer using the following scale:

1-----2-----3-----4-----5-----6-----
-----7

strongly neutral strongly

disagree agree

1. ____ When I want to feel more *positive* emotion (such as joy or amusement), I *change what I'm thinking about*.
2. ____ I keep my emotions to myself.
3. ____ When I want to feel less *negative* emotion (such as sadness or anger), I *change what I'm thinking about*.
4. ____ When I am feeling *positive* emotions, I am careful not to express them.
5. ____ When I'm faced with a stressful situation, I make myself *think about it* in a way that helps me stay calm.
6. ____ I control my emotions by *not expressing them*.

7. ____ When I want to feel more *positive* emotion, I *change the way I'm thinking* about the situation.
8. ____ I control my emotions by *changing the way I think* about the situation I'm in.
9. ____ When I am feeling *negative* emotions, I make sure not to express them.
10. ____ When I want to feel less *negative* emotion, I *change the way I'm thinking* about the situation.

Note

Do not change item order, as items 1 and 3 at the beginning of the questionnaire define the terms “positive emotion” and “negative emotion”.

Scoring (no reversals)

Reappraisal Items: 1, 3, 5, 7, 8, 10; Suppression Items: 2, 4, 6, 9.

Five Facet Mindfulness Questionnaire

Description:

This instrument is based on a factor analytic study of five independently developed mindfulness questionnaires. The analysis yielded five factors that appear to represent elements of mindfulness as it is currently conceptualized. The five facets are observing, describing, acting with awareness, non-judging of inner experience, and non-reactivity to inner experience. More information is available in:

Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
Never or very rarely true	Rarely true	Sometimes true	Often true	Very often or always true

_____ 1. When I'm walking, I deliberately notice the sensations of my body moving.

_____ 2. I'm good at finding words to describe my feelings.

_____ 3. I criticize myself for having irrational or inappropriate emotions.

_____ 4. I perceive my feelings and emotions without having to react to them.

_____ 5. When I do things, my mind wanders off and I'm easily distracted.

_____ 6. When I take a shower or bath, I stay alert to the sensations of water on my body.

_____ 7. I can easily put my beliefs, opinions, and expectations into words.

_____ 8. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.

_____ 9. I watch my feelings without getting lost in them.

_____ 10. I tell myself I shouldn't be feeling the way I'm feeling.

_____ 11. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.

- _____ 12. It's hard for me to find the words to describe what I'm thinking.
- _____ 13. I am easily distracted.
- _____ 14. I believe some of my thoughts are abnormal or bad and I shouldn't think that way.
- _____ 15. I pay attention to sensations, such as the wind in my hair or sun on my face.
- _____ 16. I have trouble thinking of the right words to express how I feel about things
- _____ 17. I make judgments about whether my thoughts are good or bad.
- _____ 18. I find it difficult to stay focused on what's happening in the present.
- _____ 19. When I have distressing thoughts or images, I "step back" and am aware of the thought or image without getting taken over by it.
- _____ 20. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.
- _____ 21. In difficult situations, I can pause without immediately reacting.
- _____ 22. When I have a sensation in my body, it's difficult for me to describe it because I can't find the right words.
- _____ 23. It seems I am "running on automatic" without much awareness of what I'm doing.
- _____ 24. When I have distressing thoughts or images, I feel calm soon after.
- _____ 25. I tell myself that I shouldn't be thinking the way I'm thinking.
- _____ 26. I notice the smells and aromas of things.
- _____ 27. Even when I'm feeling terribly upset, I can find a way to put it into words.
- _____ 28. I rush through activities without being really attentive to them.
- _____ 29. When I have distressing thoughts or images I am able just to notice them without reacting.

- _____ 30. I think some of my emotions are bad or inappropriate and I shouldn't feel them.
- _____ 31. I notice visual elements in art or nature, such as colors, shapes, textures, or patterns of light and shadow.
- _____ 32. My natural tendency is to put my experiences into words.
- _____ 33. When I have distressing thoughts or images, I just notice them and let them go.
- _____ 34. I do jobs or tasks automatically without being aware of what I'm doing.
- _____ 35. When I have distressing thoughts or images, I judge myself as good or bad, depending what the thought/image is about.
- _____ 36. I pay attention to how my emotions affect my thoughts and behavior.
- _____ 37. I can usually describe how I feel at the moment in considerable detail.
- _____ 38. I find myself doing things without paying attention.
- _____ 39. I disapprove of myself when I have irrational ideas.

Scoring Information:

Observe items: 1, 6, 11, 15, 20, 26, 31, 36

Describe items: 2, 7, 12R, 16R, 22R, 27, 32, 37

Act with Awareness items: 5R, 8R, 13R, 18R, 23R, 28R, 34R, 38R

Nonjudge items: 3R, 10R, 14R, 17R, 25R, 30R, 35R, 39R

Nonreact items: 4, 9, 19, 21, 24, 29, 33

Reference:

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, (1) 27-45. Used with permission.

Religious Coping Collaborative Subscale

The following items deal with ways you coped with the negative event in your life. There are many ways to try to deal with problems. These items ask what you did to cope with this negative event. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you did what the item says. *How much or how frequently*. Don't answer on the basis of what worked or not-just whether or not you did it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. Circle the answer that best applies to you.

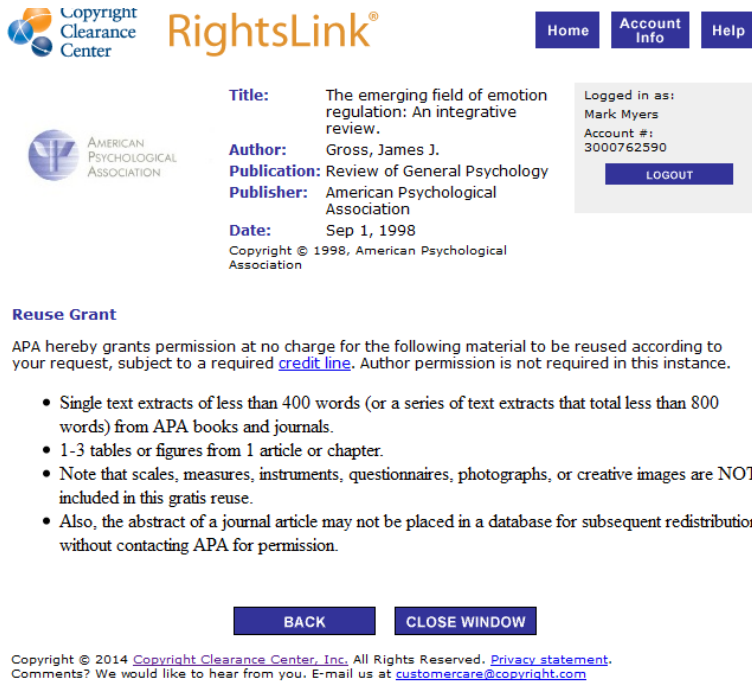
1 – Not at all	0
2 – Somewhat	1
3 – Quite a bit	2
4 – A great deal	3

1. Worked together with God to relieve my worries.
2. Felt that God was working right along with me.
3. Depended on my own strength without support from God.
4. Tried to make sense of the situation without relying on God.
5. Looked to God for strength, support and guidance.
6. Made decisions about what to do without God's help.
7. Worked together with God as partners.

Reference: Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (December 01, 1998). Patterns of Positive and Negative Religious Coping with Major Life Stressors. *Journal for the Scientific Study of Religion*, 37, 4, 710-724. Used with permission.

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1. Images of the Process model of Emotion Regulation



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Author: Gross, James J.
Publication: Review of General Psychology
Publisher: American Psychological Association
Date: Sep 1, 1998
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From: james.jg.gross@gmail.com [<mailto:james.jg.gross@gmail.com>] On Behalf Of James Gross

Sent: Monday, February 24, 2014 7:05 PM

To: Myers, Mark Joseph (Center for Counseling and Family Studies)

Subject: Re: copyright permission for dissertation

You're welcome to use these images with appropriate citation for this purpose.

Best,

James

On Mon, Feb 24, 2014 at 3:58 PM, Myers, Mark Joseph (Center for Counseling and Family Studies) <mjmyers@liberty.edu> wrote:

> Dr. Gross,

>> If you don't mind, I'd like to use the images of your process model in

> my dissertation. They are located on pages 4,17 and 18 of the attached doc.

>> Thanks for much for your consideration.

>> Mark Myers

--

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Stanford Psychophysiology Laboratory

<http://spl.stanford.edu>

2. Five Factor Mindfulness Questionnaire



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Title: Using Self-Report Assessment Methods to Explore Facets of Mindfulness:

Author: Ruth A. Baer, Gregory T. Smith, Jaclyn Hopkins, Jennifer Krietemeyer, Leslie Toney

Publication: Assessment

Publisher: SAGE Publications

Date: 03/01/2006

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3. Religious Coping Scale

Journal for the scientific study of religion

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Number of charts/graphs/tables/figures	1
Title or numeric reference of the portion(s)	I am using a subscale of the RCOPE in my dissertation and need to be able to reprint the subscale in my appendices
Title of the article or chapter the portion is from	Patterns of Positive and Negative Religious Coping with Major Life Stressors
Editor of portion(s)	N/A
Author of portion(s)	Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L.
Volume of serial or monograph	N/A
Issue, if republishing an article from a serial	37 (4)
Page range of portion	710-724
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Author/Editor	Mark J. Myers
The standard identifier	00000A
Title	Examining the Relationship between Mindfulness, Religious Coping Strategies, and Emotion Regulation

4. Emotion Regulation Questionnaire

You'd be welcome to use the ERQ for this purpose.

Best, James

On Sat, Jul 26, 2014 at 1:03 PM, Myers, Mark Joseph (Center for Counseling and Family Studies) <mjmyers@liberty.edu> wrote:

> Hello Dr. Gross,

>> I understand you hold the copyright to the ERQ. I was wondering if you

> would grant me permission to use a copy of it in my published dissertation?

>> I've attached my dissertation in case you have questions. The ERQ is

> used in the study as well as listed in the appendices.

>> Thanks,

>> Mark

>> Mark Myers Ph.D.

> Chair, Center for Counseling and Family Studies

> Liberty University

>James J. Gross, Ph.D.

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