

DOCTOR OF PHILOSOPHY

Copyright

by

Kevin D. Corsini

March, 2009

EXAMINING THE RELATIONSHIP BETWEEN RELIGIOUS COPING STRATEGIES,  
ATTACHMENT BELIEFS AND EMOTION REGULATION  
IN A MIXED SAMPLE OF COLLEGE STUDENTS  
ATTENDING AN EVANGELICAL UNIVERSITY IN CENTRAL VIRGINIA

A Dissertation Presented to the  
Faculty of The College of Arts and Sciences  
Liberty University

In Partial Fulfillment of  
The Requirement for the Degree of

Doctor of Philosophy

by

Kevin D. Corsini

March, 2009

EXAMINING THE RELATIONSHIP BETWEEN RELIGIOUS COPING STRATEGIES,  
ATTACHMENT BELIEFS AND EMOTION REGULATION  
IN A MIXED SAMPLE OF COLLEGE STUDENTS  
ATTENDING AN EVANGELICAL UNIVERSITY IN CENTRAL VIRGINIA

A Dissertation for the Degree

Doctor of Philosophy

by

Kevin D. Corsini

Approved by Dissertation Committee:

---

Dr. Gary Sibcy, Chairperson

---

Dr. Fred Milacci, Committee Member

---

Dr. Ron Hawkins, Committee Member

---

Dr. Roger Schultz, Dean  
The College of Arts and Sciences

March, 2009

## ACKNOWLEDGMENT

I would like to thank each of the members of my dissertation committee for their support and encouragement throughout my doctoral program. Specifically, I am eternally indebted to Dr. Ron Hawkins who has been a mentor by providing a daily example of what it means to live with integrity both in the classroom and at home. I am thankful for the friendship of Dr. Fred Milacci, who has gracefully shown me patience throughout my studies and who has consistently called me to a higher standard of academic excellence. Finally, I am grateful for Dr. Gary Sibcy and the countless hours he has dedicated to doing research together these past two years. Throughout our time he has stretched my ability to think critically, challenged me to dig deeper into the literature, and inspired me to continue in my research.

I would also like to express my gratitude to the many people who helped along the way and made this journey possible. Thank you to Maria Hayden, who often served as my surrogate in the office and helped manage my professional and academic life. Thank you Kristi Finch for the hours spent tracking down original sources, double checking references, and triple checking APA formats. Thanks to Hitomi Makino for her help with the endless data entry, and for the assistance trouble shooting SPSS. Thanks to Steve Warren for being a good friend, for offering consistent support in all our work together, and for keeping me accountable to maintain some semblance of a healthy lifestyle. Finally, thanks to my good friend Dr. Scott Hawkins, who hounded me every day to get this project to the finish line, and who encouraged me to remain focused on the goal.

Finally, I must thank my family for their endless love and support throughout our time at Liberty University. Thanks to parents, siblings, in-laws and out-laws for their encouragement

and support. Thanks to my children Virginia, Gracie, and Neo, who kept me sane through their tactics of chaos, and who filled our home with laughter. Finally, I express thanks to God for blessing me with a wife who is, and remains, my best friend. Thank you Gi, for your willingness to risk so much in pursuing this dream together, for sacrificing a more comfortable lifestyle, and for choosing to chase the great adventure of Life.

Corsini, Kevin D. "Examining the Relationship between Religious Coping Strategies, Attachment Beliefs and Emotion Regulation in a Mixed Sample of College Students Attending an Evangelical University in Central Virginia." Unpublished Doctor of Philosophy Dissertation, Liberty University, March, 2009.

## ABSTRACT

Emotion regulation is an essential component of individual development, enabling a person to experience, recognize, express and modulate his emotions. There are a number of factors which influence the development of emotion regulation, including family context, biology, and primary caregiver interaction. Attachment theory provides a theoretical framework for describing these developmental influences and the resulting emotion regulation strategies an individual employs. Primary emotion regulation strategies are developed and utilized when an individual has established a secure attachment with his primary caregiver. When these secure attachments do not develop in the primary caregiver relationship, the resulting insecure attachment relationship leads the individual to develop and rely upon secondary emotion regulation strategies.

While attachment beliefs influence the ways in which a person responds to distress, coping strategies also play a significant role in emotion regulation. In particular, personal faith and religion provide individuals with a range of coping strategies which can be categorized into general positive and negative constructs, based in part on typical outcomes. What determines whether or not an individual will turn to religion in the coping process, and specifically which religious coping strategies will be employed? Attachment theory provides some direction. Research indicates that individual attachment beliefs not only shape perceptions of God as a resource in times of stress, they also influence the ways in which religion may be used to manage emotions. However, the connections between specific religious coping strategies and individual

attachment beliefs are only marginally supported, due to the limited number of studies examining this relationship.

The purpose of this study was to extend current research in this area by investigating the relationship between religious coping strategies, attachment beliefs, and emotion regulation in a mixed sample of college students attending an evangelical university. Specifically, this study sought to answer the following two research questions. First, does religious coping correlate with adult attachment, God attachment, and emotion regulation? Second, does religious coping account for unique variance in emotion regulation after accounting for variance attributed to God attachment and adult attachment? The study used a cross sectional correlation research design, where college students were administered measures of adult attachment, God attachment, religious coping, and emotion regulation. The first question was addressed using a series of zero-order correlations arranged in a correlation matrix examining the relationships between the subscales of Religious Coping, Attachment, and Emotion Regulation. The second question was addressed using a series of hierarchical multiple regressions which examined whether Religious Coping accounted for unique variance in Emotion Regulation after accounting for Attachment.

The study revealed that Religious Coping was significantly correlated with both Attachment and Emotion Regulation, and these correlations supported the researcher's hypotheses in most instances. Likewise, the multiple regression analyses revealed that Religious Coping did account for unique variance in Emotion Regulation after controlling for God Attachment and Adult Attachment. However there were some unexpected findings where correlations were statistically opposite than those hypothesized. These findings require additional consideration regarding the nature of Religious Coping and Attachment beliefs for the direction of future research.

## TABLE OF CONTENTS

ACKNOWLEDGMENT.....	i
ABSTRACT.....	iii
LIST OF TABLE AND FIGURES.....	viii
CHAPTER ONE: .....	1
THE PROBLEM.....	1
INTRODUCTION .....	1
PURPOSE.....	1
BACKGROUND AND THEORETICAL CONSIDERATIONS .....	2
Influences on the Development of Emotion Regulation.....	2
Attachment Theory.....	3
Religious Coping Strategies .....	10
IMPORTANCE OF THE STUDY AND IMPLICATIONS .....	13
RESEARCH QUESTIONS .....	14
LIMITATIONS and ASSUMPTIONS OF THE STUDY .....	14
TERMS AND DEFINITIONS.....	15
CHAPTER TWO: REVIEW OF THE LITERATURE.....	20
OVERVIEW .....	20
EMOTION REGULATION .....	21
Emotion Regulation Defined.....	22
Emotion Regulation Strategies.....	24
The Development Emotion Regulation.....	25
Family Context’s Influence on Emotion Regulation.....	25
Biological Influences on Emotion Regulation.....	29
Primary Caregivers, Attachment and Emotion Regulation .....	31
ATTACHMENT THEORY.....	32
Attachment in Childhood .....	33
The Attachment Behavioral System.....	34
Internal Working Models .....	36



Primary and Secondary Attachment Strategies .....	37
Categorizing Adult Attachment Beliefs .....	39
Dimensions of Adult Attachment Beliefs .....	41
Attachment and Religion.....	43
Attachment and Religious Conversion .....	45
Attachment and God as Safe Haven .....	47
Attachment and Emotion Regulation .....	47
Primary Emotion Regulation Strategies .....	49
Secondary Emotion Regulation Strategies .....	50
RELIGIOUS COPING STRATEGIES.....	55
Categorizing Religious Coping Strategies .....	55
Attachment Beliefs and Religious Coping.....	59
Attachment and Religious Coping Strategies.....	60
Research Linking Religious Coping and Attachment Beliefs.....	63
THE PRESENT STUDY .....	64
Research Question One and Associated Hypotheses .....	64
Research Question Two and Associated Hypothesis .....	66
CHAPTER THREE: METHODOLOGY .....	68
METHOD .....	68
Participants .....	68
Procedures .....	69
MEASURES .....	70
Background Information and Family History .....	70
Attachment Beliefs .....	70
Experiences in Close Relationships.....	70
Attachment to God Inventory .....	71
Emotion Regulation.....	72
Religious Coping Activities .....	73
DATA ANALYSIS.....	74

CHAPTER FOUR: FINDINGS .....	76
INTRODUCTION .....	76
RESULTS .....	76
Research Question One .....	76
Correlations for Collaborate Religious Coping Strategies .....	77
Correlations for Deferring Religious Coping Strategies .....	79
Correlations for Self Directing Religious Coping Strategies .....	81
Research Question Two .....	83
Variances Associated with Depression.....	83
Variances Associated with Anger.....	86
Variances Associated with Anxiety.....	88
CHAPTER FIVE: SUMMARY FINDINGS, DISCUSSION, AND RECOMMENDATIONS ..	92
SUMMARY OF FINDINGS .....	92
Research Question One .....	92
Religious Coping and Emotion Regulation.....	92
Religious Coping and Attachment Beliefs .....	93
Research Question Two .....	94
LIMITATIONS.....	94
DISCUSSION AND RECOMMENDATIONS.....	96
Unexpected Findings Regarding Good Deeds and Religious Avoidance.....	96
The Influence of Religious Discontent on Depression.....	98
The Influence of Religious Pleading on Anger.....	99
Potential Implications for the Church .....	100
Considerations Regarding Correspondence and Compensation Theories .....	102
CONCLUSION.....	103
REFERENCES .....	106
APPENDIX A.....	126

## LIST OF TABLE AND FIGURES

Figure 1. Bartholomew's model of self and other	46
Figure 2. Categorizing Religious Coping Strategies	61
Figure 3. Research Question One and Hypothesized Correlations	70
Table 1. Demographic Frequencies of the Initial Sample	73
Table 2. Correlations of Religious Coping Subscales with Measures of Emotion Regulation, Adult Attachment, and God Attachment	82
Table 3. Hierarchical Regression predicting the unique variances on Depression	88
Table 4. Hierarchical Regression Analysis Predicting Depression with Attachment and Religious Coping Variables	90
Table 5. Hierarchical Regression predicting the unique variances on Anger	91
Table 6. Hierarchical Regression Analysis Predicting Anger with Attachment and Religious Coping Variables	92
Table 7. Hierarchical Regression predicting the unique variances on Anxiety	94
Table 8. Hierarchical Regression Analysis Predicting Anxiety with Attachment and Religious Coping Variables	95

## CHAPTER ONE:THE PROBLEM

### INTRODUCTION

Emotion regulation is influenced by a variety of interpersonal factors (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004). Research demonstrates that the use of particular coping strategies influences the effectiveness of emotion regulation (Lazarus & Folkman, 1984). More specifically, the work of Pargament (1997) has investigated the role of religious coping skills and their link to emotion regulation. Research also consistently demonstrates that attachment beliefs play a significant role in the way emotions are regulated (Mikulincer, Shaver, & Pereg, 2003). While research has identified a link between attachment beliefs and coping styles in general (Mikulincer, Florian, & Weller, 1993) and religious coping styles in particular (Granqvist, 2005), no studies to date have examined the mediating effects of attachment on the relationship between religious coping and emotion regulation. In other words, does religious coping account for unique variance in emotion regulation even after controlling for the influence of attachment beliefs?

### PURPOSE

The purpose of this study is to investigate the relationship between religious coping styles, attachment beliefs, and emotion regulation in a mixed sample of college students attending an evangelical university. This study uses a correlational design, where a sample of students was administered measures of adult attachment, God attachment, religious coping, and emotion regulation at the beginning of the Fall semester in 2006. This research design should provide a valuable statistical model for better understanding the complex relationship between religious coping, attachment, and emotion regulation.

## BACKGROUND AND THEORETICAL CONSIDERATIONS

In the last two decades, the field of psychology has seen a significant increase in the study and research of human emotionality, specifically the ways in which people express and manage their emotions (Cole, Martin, & Dennis, 2004; Denham, 1998; Eisenberg & Fabes, 1998; Fox, 1994; Garber & Dodge, 1991; Goleman, 1995). This heightened interest is a result of research focusing on the developmental processes that influence the acquisition of emotion regulation in child development. Of particular interest is the ability for children to learn how to effectively regulate emotional responses in socially appropriate and adaptive ways (Denham, Blair, DeMulder, Levitas, Sawyer, Auerbach-Major, & Queenan, 2003; Eisenberg, Spinrad, & Morris, 2002; Halberstadt, Denham, & Dunsmore, 2001; Kopp, 1992; Saarni, 1999). Emotion regulation is defined by Thompson (1994a) and similarly others (Eisenberg and Spinrad, 2004; Eisenberg and Morris, 2002) as the internal and external processes involved in initiating, maintaining, and modulating the occurrence, intensity, and expression of emotions. Emotion regulation is understood as a person's ability to respond in a socially appropriate, adaptive and flexible manner when faced with stressful demands and emotional experiences (Morris, Silk, Steinberg, Aucoin, & Keyes, 2007; Cole, Michel, & Teti, 1994; Eisenberg & Morris, 2002; Walden & Smith, 1997).

### Influences on the Development of Emotion Regulation

There are a number of interpersonal factors which influence the development of emotion regulation, most importantly those related to social and biological functioning. Emotions are recognized as both products and processes of various types of social relationships (Cole et al., 2004; Walden & Smith, 1997). A great deal of research has focused on the family context which appears to play a crucial role in a child's social and emotional development, particularly in the

ways in which a child learns how to manage stress and regulate emotions (Morris, Silk, Steinberg, Myers, & Robinson, 2007; Eisenberg, Cumberland, & Spinrad, 1998; Eisenberg & Valiente, 2004). Current research also links biologically oriented factors such as temperament, neurophysiology, and cognitive development as influencing emotion regulation (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004).

It appears that emotion regulation is a confluence of both biological and relational factors which influence a child's developing capacity to regulate and modulate emotions. For example, Greenspan's (1990) research examines how a child's acquisition of various social emotional milestones is a function of the child's individual differences in motor planning, sensory processing, sensory modulation, and the quality and sensitivity of various types of relational interactions. This research provides strong evidence for the notion that early life relationships have the power to influence the development of the mind. Greenspan, Shanker and Benderly (2006) identify specific types of social-emotional exchanges as the building blocks on which the mind develops in the earliest stages of life. Moreover, their research connects experiences of emotional interactions with the subsequent growth of intellectual capacities. A child's relational interactions not only influence cognitive development, but ultimately the ability to effectively manage and regulate emotions (Goldsmith & Davidson, 2004; Morris, Silk, Steinberg, Myers, & Robinson, 2007).

### *Attachment Theory*

Attachment theory provides a broad theoretical framework for understanding how specific types of relational factors influence the development of emotion regulation. From birth, our biological design is programmed to seek and respond to the emotional signals of others (Bowlby, 1969, 1982). Attachment theory postulates that interaction with caregivers early in life

contributes to the formation of lifelong patterns of relating to others (Mikulincer & Florian, 1998). John Bowlby (1969, 1982) was the first to focus attention on these previously hidden dynamics of the human mind, and to systematically describe the complex functioning of emotional bonding and emotion regulation (Mikulincer & Shaver, 2007). He observed that infants alert their caregivers, letting them know they need attention and care by emoting (e.g., crying, smiling, and following). Bowlby recognized that infants and young children rely on their caregivers for assistance in regulating their emotions. Thus, when distressed, these emotive behaviors are activated in order to obtain both physical proximity to, and comfort from the caregiver. The achievement of this state of regulation is referred to as the safe haven experience (Volling, McElwain, & Miller, 2002).

### *Internal Working Models*

These early life interactions influence the formation of internal working models, which are generalized mental representations of self, others and relationships (Kerns, Abraham, Schlegelmilch, & Morgan, 2007). These internal working models represent two sets of beliefs and expectations about the self and others (Bowlby, 1969/1982; Main, Kaplan, & Cassidy, 1985; Oppenheim & Waters, 1995; Sroufe & Fleeson, 1986). In terms of self, the child develops beliefs and assumptions about self-worth and self-efficacy (e.g. the self asks, “Am I worthy of love and am I capable of getting my emotional needs met in times of distress?”). Regarding others, beliefs and expectations about others (particularly those in close relationship) are formed about their reliability and accessibility, especially during times of need (e.g., the self asks, “Are you trustworthy and can I count on you to help me when I need it?”).

Internal working models guide an individual’s relationships and interaction throughout life, influencing their ability to participate in close relationships and to experience intimacy

(Granqvist, 2005). Moreover, they play an important role in how one learns to manage and cope with strong negative emotions such as anger, anxiety, and sadness as well as positive emotions such as peace and curiosity. An essential construct of attachment theory is that the quality of early relationship experiences with the primary caregiver serves a crucial role in forming these internal working models in how one learns to participate in close relationships and to regulate strong emotional experiences.

### *Attachment Behaviors*

Bowlby's (1969, 1982) theory of attachment suggests that relationships with caregivers influence a child's social and emotional development (Cassidy & Berlin, 1994; Contreras & Kerns, 2000; Sroufe & Waters, 1977). Central to Bowlby's attachment theory is the conceptualization of attachment as a control system. This concept includes four interrelated classes of relational behavior: 1) maintaining appropriate proximity to the attachment figure (set goal), 2) exploring from a secure base, 3) activation of intense anxiety and anger when separated from the attachment figure or in the context of threat (a violation of the set goal), and 4) the provision of a safe haven which resets appropriate proximity and helps the child regain a regulated emotional state (Ainsworth, 1985; Hazan, Campa, & Gur-Yaish, 2006). How the caregiver responds to the infant's signals of distress forms the foundation for how the internal working models of self and others develop. The individual differences in internal working models or attachment beliefs result in part from differences in how the caregiver consistently and sensitively responds to the child's proximity seeking, emotive signals (Ainsworth, Blehar, Waters, & Wall, 1978; De Wolff, & van Ijzendoorn, 1997). Mary Ainsworth (1985) discovered three patterns of attachment behavior in one year old infants and linked them directly to patterns of maternal sensitivity. It was assumed that these patterns of attachment reflected underlying



internal working models which were organized at the behavioral level. As the child matured, these working models would consolidate into a set of relationship beliefs that could be measured through a variety of assessment instruments, including interviews, self report questionnaires, and projective drawings (Main, Kaplan, & Cassidy 1985; Hazan & Shaver, 1987; Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994a). Differences in these attachment beliefs were theorized to influence a variety of important outcomes, including parenting skills, the capacity to participate in intimate relationships, and the ability to manage and regulate emotional experiences (Hazan & Shaver, 1987; van Ijzendoorn & Kroonenberg, 1988; Fonagy, Steele, & Steele, 1991; Bartholomew & Horowitz, 1991).

#### *Adult Attachment Beliefs*

Beginning with the work of Hazan and Shaver (1987) and others (Bartholomew, 1990; Collins & Read, 1990; Brennan, Clark, and Shaver, 1998), Bowlby's (1969) and Ainsworth's (1985) work on attachment in parent-child relationships was extended into adult romantic relationships. More specifically, their research found that the internal working models which regulate adult relationships are analogous to the attachment beliefs Ainsworth (1985) discovered in children. Four basic styles of attachment were identified based on the two dimensions of beliefs about self and other; one secure and three insecure styles of attachment. Secure attachment develops when an attachment figures respond quickly and sensitively to signals of distress, and the individual develops positive beliefs about both himself and others. The individual believes that *others*, namely attachment figures, are accessible, reliable and trustworthy during times of need, and they believe that the *self* is worthy and capable of getting needs met (Schottenbauer, Dougan, Rodriguez, Arnkoff, Glass, & Lasalle, 2006). This in turn cultivates a sense of competence when dealing with emotionally stressful situations (Ainsworth

et al., 1978). The secure attachment promotes a positive attitude, a positive sense of self worth, and a belief that the world, in general, is safe and predictable (Kerns, Abraham, Schlegelmilch, & Morgan, 2007).

In contrast, insecure attachment beliefs form when attachment figures do not provide consistent and sensitive responses to signals of distress. *Anxious preoccupied* attachment beliefs form when the caregiver's response to the child's emotive signals is inconsistent and unpredictable (Wallin, 2007). This amplifies feelings of insecurity, and the child develops an overly positive view of *others* and a negative of *self*. These preoccupied individuals are characterized by a pronounced longing for relationship combined with a fear of abandonment (Allen, Morre, Kuperminc, & Bell, 1998). Individuals with preoccupied attachment beliefs utilize a *hyper-activating strategy*, where emotional experiences are exaggerated in order to seek and maintain proximity with others (Wallin, 2007).

Conversely, individuals with *anxious avoidant* attachment beliefs experienced caregivers who either consistently rejected their childhood bids for emotional and physical contact (Wallin, 2007), or were overly controlling and intrusive in their parenting (Sroufe, 1996). These avoidant individuals view themselves in an overly positive light and others more negatively, and they rely on *minimizing* or *deactivating strategies* to suppress the sense of emotional need (Wallin, 2007). These individuals may develop a general mistrust of others' ability to effectively respond to their emotional needs, and are often characterized by emotional withdrawal and exaggerated self-reliance (Mikulincer & Florian, 1998).

*Anxious fearful* attachment beliefs are thought to be a result of parents who either overwhelm and frighten the child or parents who were themselves overly frightened or dissociated while interacting with the child (Wallin, 2007). The fearful child faces the

irresolvable paradox: the attachment figure, the source of security and safe haven, is also the source of alarm. This experience leads to a negative view of both self and others, and may result in actions that reflect both preoccupied and avoidant strategies of relational behavior and emotion regulation (Main & Solomon, 1986).

### *Attachment and Religion*

Kirkpatrick's research (1992, 1994; Kirkpatrick & Shaver, 1990) extends the attachment framework to also include religious experience. The basis for this theory is that the God of many religious traditions corresponds to the persona of a secure attachment figure. Kirkpatrick and Shaver (1990) found that God can serve as a safe haven in times of distress for religious individuals. In Christian traditions, individuals believe that God is available to guide, comfort and protect when danger or uncertainty arises (Belavich & Pargament, 2002). In this manner God serves as a safe haven and a secure base from which an individual can explore. Kirkpatrick (1994) notes that the God-believer relationship is a one-way caregiver relationship quite similar to the parent-infant relationship. Just as the parent provides protection and safety for the infant, so God is viewed as a source of comfort and safety for the believer. Kirkpatrick and Shaver (1992) used this theoretical framework to identify and categorize God attachment beliefs, paralleling those of romantic attachment. Recently, measures of God attachment have been developed and evaluated (Rowatt & Kirkpatrick, 2002). The current research suggests these instruments measure a similar two-factor structure of attachment beliefs (Self-God) as identified in romantic attachment measures (Self-Others).

### *Attachment Beliefs and Emotion Regulation*

As noted above there are many factors that contribute to the development of emotion regulation, however few have had such influence on the literature as attachment theory

(Mikulincer, Shaver, & Pereg, 2003). Bowlby's (1969/1982) theory of attachment posits that infants use emotional signals in order to maintain proximity with caregivers and thus meet basic physical, emotional, and psychological needs. When signals of distress are quickly, consistently, and sensitively responded to, secure attachment beliefs are formed and the securely attached child is able to use contact with his primary caregiver to regulate emotions (Mikulincer et al., 2003; Simpson, Rholes, & Nelligan, 1992; Sroufe & Waters, 1977). Securely attached children learn, through interactions with caregivers, adaptive strategies for managing negative emotions and challenges, which they can apply to new situations even in the absence of their primary caregiver (Contreras & Kerns, 2000). These primary attachment patterns are conceptualized as indexing capacities and strategies for emotion regulation (Mikulincer, Shaver, & Pereg, 2003).

In contrast, when early care giving does not provide a secure-base through reliable and effective emotion regulation, individuals sustain developmental deficits which negatively influence their ongoing ability to effectively regulate emotions (Diamond, Hicks, & Otter-Henderson, 2006). Cassidy and Berlin (1994) noted that children with insecure attachment beliefs are not characterized by the open expressions and adaptive emotion regulation found in secure attachment relationships. Instead, these individuals lack the functional tools necessary to cope effectively with emotionally charged events, impairing social functioning and increasing feelings of distress (Schottenbauer et al., 2006). Specifically, individuals with anxious attachment beliefs are characterized by heightened and sustained negative emotionality, which may lead to a pronounced longing for relationships combined with a chronic fear of abandonment (Allen et al., 1998). These individuals frequently react to stressful situations with an escalation of emotions, cognitive exaggerations, less adaptive coping styles, which exacerbate strong negative emotions (Diamond, Hicks, & Otter-Henderson, 2006). These emotion regulation

patterns are frequently employed for proximity seeking and proximity maintenance with an attachment figure; however, they frequently backfire as the attachment figure may become overwhelmed and abandon the individual, creating a self-fulfilling prophecy (Ainsworth, 1985; Sroufe, 1985; Cassidy & Berlin, 1994).

Those with avoidant attachment beliefs tend to suppress or dismiss emotions (especially negative affect) and avoid emotionally charged events altogether (Allen et al., 1998; Ainsworth, 1985; Sroufe, 1985; Cassidy & Berlin, 1994). These individuals may have difficulty trusting others' availability and trustworthiness in times of need, and they are often characterized by emotional withdrawal and intimacy avoidance (Mikulincer & Florian, 1998). Individuals with avoidant attachment patterns exhibit less support-seeking behavior in times of distress (Collins & Feeney 2000; Simpson et al., 1992), and provide less support to partners when they experience distress (Feeney & Collins, 2001).

### *Religious Coping Strategies*

While attachment beliefs directly influence a person's ability to regulate emotions, coping strategies also play a significant role in emotion regulation (Boden & Baumeister, 1997; McFarland & Buehler, 1997). The most widely held views of stress and coping emphasize both the subjective evaluation of external stressors and the assessment of the individual's capacity to cope using perceived resources (Matheny, Aycock, Pugh, Curlette, & Canella, 1986). According to these views, individuals experience the consequences of stress when the perceived demands of a situation exceed the perceived resources for coping (McCarthy, Lambert, & Moller, 2006). An individual's religious beliefs are of particular interest, as they influence how individuals evaluate stressors and assess their perceived resources for coping (Pargament, 1997).

### *Religious Coping Strategies and Emotion Regulation*

Pargament (1997) investigated the role of religious coping strategies and their link to emotion regulation. When faced with stressful life events, studies repeatedly demonstrate that most Americans turn to religion for comfort and support (Schottenbauer et al., 2006). Hathaway and Pargament (1992) note that religion provides a range of coping strategies which draw on social, cognitive, spiritual and behavioral aspects of a person's faith. Research identifies three basic styles of religious coping: self-directed, deferring, and collaborative (Pargament, Kennell, Hathaway, Grevengeod, Newman, & Jones, 1988). A *self-directing style* reflects the belief that God has little direct influence in the lives of individuals; therefore it is the individual's responsibility to solve problems for themselves. Conversely, the *deferring style* emphasizes the choice to wait for God to directly intervene in human affairs to provide a solution to the presenting problem. The *collaborative coping style* involves a decision to share responsibility with God for solving the problem. Pargament (1997) posits that these religious coping strategies can be categorized into general positive and negative constructs, based in part on typical outcomes (Pargament, Smith, Koenig, & Perez, 1998). The Collaborative coping strategy is the only approach to religious coping which consistently displays a positive relationship with emotional adjustment measures. The self-directive and deferring styles are generally negatively correlated with emotional adjustment measures, except in certain situations where events may be entirely beyond the control of an individual (Belavich & Pargament, 2002). For example, Friedel (1995) found that emergency health care workers benefitted from a deferring strategy of religious coping when they believed they had no control over the death of a patient. However in most situations a collaborative coping strategy is most effective for emotion regulation (Pargament et al., 1998).

### *Attachment Beliefs and Religious Coping Strategies*

In religions where God is personified, the patterns established early in life for relating to primary caretakers not only shape perceptions of God, but also influence the methods used to appraise and manage emotions (Pargament, 1997). Kirkpatrick (1999) found that some believers' relationships with God bear striking resemblance to the infant-caregiver dynamic, meeting the defining criteria for attachment relationships according to Ainsworth (1985) and Bowlby (1969, 1988). The most well documented attachment behavior in the context of religion is the use of God as a safe haven in emotionally stressful situations (Hood, Spilka, Hunsberger, & Gorsuch, 1996; Johnson & Spilka, 1991; O'Brien, 1982). Significant negative life events are likely to activate the attachment system, and God may be conceptualized as a secure base utilized for emotion regulation. Studies have identified a relationship between attachment beliefs and specific religious behaviors (Kirkpatrick, 1999; Belavich & Pargament, 2002; Schottenbauer et al., 2006). For example, Belavich and Pargament (2002) found that when a loved one underwent surgery, individuals with secure attachment were more likely to pray to God for strength and guidance and to look to other church members for emotional support than their insecure counterparts. The way that people attach themselves to God and others may help explain why individuals choose particular religious coping strategies and reject others.

Attachment beliefs not only shape perceptions of God as a resource in times of stress, they also influence the particular religious coping strategies utilized to manage emotions (Granqvist, 2005). Belavich and Pargament (2002) found that perceived attachment to God may be linked to individual differences in religious coping strategies. While this research focused on perceived attachment to God, more recent studies have found that romantic attachment beliefs are related to choice of religious coping behaviors (Granqvist, 2005; Schottenbauer, et al.,

2006). In these cross sectional studies of adults, it was found that perceptions of the caregiver not only shaped perceptions of God, but also influenced the methods used to appraise and cope with stress using established religious resources (Pargament, 1997; Belavich & Pargament, 2002; Granqvist, 2005). During a crisis, God may be sought out and kept in proximity through prayer and thus be perceived as providing a safe haven. This is reminiscent of an attachment figure providing a secure base for exploring the environment. Studies have identified a relationship between secure attachment beliefs and better-perceived relationship with God (Granqvist & Hagekull, 2000; Kirkpatrick, 1998; Kirkpatrick & Shaver, 1992). Many make use of religious faith and religious resources in a particular way to help them cope, and some patterns of religious coping are associated with better functioning than others (Pargament, 1997). Therefore attachment beliefs predict the religious coping strategies employed in stressful circumstances, and whether or not they are likely to lead to a positive outcome.

#### IMPORTANCE OF THE STUDY AND IMPLICATIONS

There is a great deal of research examining the influence of attachment beliefs on the development of emotion regulation (Bowlby, 1969, 1982; Mikulincer et al., 1998, 1999, 2002). Initial studies have indicated that attachment beliefs also influence the way individuals both view and relate to God (Beck & McDonald, 2004) and how religion in general is used to cope with difficult life circumstances (Pargament, 1997). While research has identified a link between attachment beliefs and coping styles in general (Mikulincer, Florian, & Weller, 1993) and religious coping styles in particular (Granqvist, 2005), no studies to date have examined the mediating effects of attachment on the relationship between religious coping and emotion regulation. These studies underscore the need for further investigation regarding the relationship between attachment beliefs and strategies for religious coping and emotion regulation. Very little



research exists in this area, and the few studies which have been conducted thus far have just begun to reveal the dynamics between attachment and religious coping. Schottenbauer et al. (2006) point out the need for additional studies which focus on participants with more religious backgrounds.

The chief aim of this study is to extend current research in this area by investigating the relationship between religious coping strategies, attachment beliefs, and emotion regulation in a mixed sample of college students attending an evangelical university. Specifically, this study seeks to address whether religious coping offers unique influence on emotion regulation, or whether it is merely a function of attachment. This study uses a cross sectional research design, where college students were administered measures of Adult Attachment<sup>1</sup>, God Attachment, religious coping, and emotion regulation.

### RESEARCH QUESTIONS

This study seeks to answer the following two research questions. First, does Religious Coping correlate with Adult Attachment, God Attachment, and Emotion Regulation? Second, does Religious Coping account for unique variance in Emotion Regulation after accounting for variance attributed to God Attachment and Adult Attachment?

### LIMITATIONS and ASSUMPTIONS OF THE STUDY

This study was limited to a sample group of students who were enrolled in and pursuing an undergraduate degree at a private evangelical university in central Virginia during the fall of 2006. The findings may not be generalized to institutions that do not share a similar world view, and do not reflect the greater college population in the United States. Additionally, two distinct groups of students were recruited from two different departments at this evangelical university.

---

<sup>1</sup> For the purposes of this study, Adult Attachment reflects the attachment relationships formed by an adult with other adults, particularly in romantic relationships. The more technical term for this is Romantic Attachment, which is measured using the Experiences in Close Relationships inventory employed in the current study.

Before collapsing the two groups into one, statistical tests were run to ensure that the two groups were not significantly different on relevant factors. In addition, steps were taken to control for Simpson's paradox.

The instruments for this study are all of a self report nature, and therefore rely on the honesty and integrity of the sample responses. No social desirability measures were used to control for defensive responding. Reliance on self-report instruments for the measurement of both dependent and independent variables may raise concerns regarding the validity of causal conclusions, and must be considered when reviewing the results of the study. Additionally, the research method for this study uses a cross sectional correlational design, where measures were taken only at the beginning of the semester providing results at only one point in time. A longitudinal study would have been preferable, as the measures and results would have provided information about the continuity or discontinuity of behavior and beliefs over time.

#### TERMS AND DEFINITIONS

**Adult Attachment:** For the purposes of this study, Adult Attachment reflects the attachment relationships formed by an adult with other adults, particularly in romantic relationships.

The more technical term for this is Romantic Attachment, but for the purposes of this study the more generic term Adult Attachment is used throughout.

**Attachment Theory:** Postulates how early life interaction with caregivers early contributes to the formation of lifelong patterns of relating to others and strategies for emotion regulation.

**Avoidant Attachment:** Insecure attachment belief characterized by an overly positive view of self and an unrealistically negative view of others. These individuals report higher levels of attachment avoidance and lower levels of attachment anxiety. They often develop a general mistrust of others' ability to effectively respond to their emotional needs, and are

characterized by emotional withdrawal and exaggerated self-reliance. Avoidant Attachment is sometime also termed Dismissing Attachment.

**Collaborative Religious Coping:** Involves a decision to share responsibility with God for solving problems.

**Deactivation Strategy:** Secondary attachment strategy demonstrated when the attachment system is shut down and attempts at proximity seeking are abandoned altogether.

**Deferring Religious Coping:** Emphasizes the choice to wait for God to directly intervene in human affairs to provide a solution to the presenting problem.

**Emotion Regulation:** The internal and external processes involved in initiating, maintaining, and modulating the occurrence, intensity, and expression of emotions. Emotion regulation is understood as a person's ability to respond in a socially appropriate, adaptive and flexible manner when faced with stressful demands and emotional experiences.

**Fearful Attachment:** Insecure attachment beliefs characterized by both a negative view of self and a negative view of others. This attachment belief is thought to be a result of parents who either overwhelm or frighten the child, or parents who were themselves overly frightened or dissociated while interacting with the child.

**God Attachment:** When God is viewed by an individual as a relational being, God may serve as a safe haven and secure base from which an individual may explore. As such, the individual develops an attachment relationship with the God figure paralleling those of romantic relationships.

**Good Deeds:** A Deferring strategy for Religious Coping where an individual seeks to focus attention on living a better life in order to please God and earn His approval. By choosing

to live what they believe is a good life, these individuals hope that God will look favorably upon them and respond by removing stress and worldly problems

**Hyper Activating Strategy:** A secondary attachment strategy demonstrated when emotional experiences are exaggerated in order to seek and maintain proximity with others, most commonly by individuals with anxious preoccupied attachment beliefs.

**Internal Working Models:** Generalized mental representations regarding the efficacy of self and others to meet basic needs. In terms of self, the child develops beliefs and assumptions about self-worth and self-efficacy (e.g. the self asks, “Am I worthy of love and am I capable of getting my emotional needs met in times of distress?”). Regarding others, beliefs and expectations about others (particularly those in close relationship) are formed about their reliability and accessibility, especially during times of need (e.g., the self asks, “Are you trustworthy and can I count on you to help me when I need it?”).

**Preoccupied Attachment:** Insecure attachment belief characterized by an overly positive view of others and an unrealistically negative of the self. The individuals report higher levels of attachment anxiety and lower levels of attachment avoidance. Preoccupied individuals are characterized by a pronounced longing for relationship combined with a fear of abandonment. Also termed Anxious Ambivalent.

**Proximity Seeking Behavior:** The primary strategy of the attachment system, where an individual uses emotive signals (crying, crawling, expressions of anger) to plead for support from an attachment figure.

**R<sup>2</sup>:** Represents the proportion of variability in a dependant variable that is accounted for by an independent variable or a group of independent variables within a regression equation, providing a measure of how well future outcomes are likely to be predicted by the model.

**R<sup>2</sup> Change:** The change in the R<sup>2</sup> value that is produced by adding or deleting an independent variable in the regression equation. The change in R<sup>2</sup> is calculated by obtaining the difference between r values. An *f-test* is used to determine if the change in r<sup>2</sup> is statistically significant.

**Religious Coping Strategies:** Individual coping strategies which draw on social, cognitive, spiritual and behavioral aspects of an individual's faith.

**Religious Avoidance:** A Self Directing strategy of Religious Coping where an individual uses religious activities (praying, reading the Bible, attending services) to divert attention away from distressing events, but not necessarily to address the distress themselves.

**Religious Discontent Coping:** A Self Directing strategy of Religious Coping which measures an individual's expression of anger and distancing directed towards God and other believers. God is not conceived as a viable resource, and religious discontent moves the individual away from God and other believers in order to avoid continued disappointment and hurt.

**Religious Pleading:** A Deferring strategy for Religious Coping involving petitions for God to miraculously intervene and bargaining with God for desired outcomes. Individuals who rely on this strategy do not believe they are capable of handling distressing events on their own, and they resort to begging and bargaining in an attempt to convince God to provide for their needs.

**Religious Social Support Religious Coping:** A Collaborative strategy of Religious Coping in which the individual looks to relationships with other believers, such as clergy and other church members, for care and support.

**Safe Haven:** When an attachment figure responds to proximity seeking behavior and facilitates comfort and the alleviation of distress.

Secure Attachment: Develops when an attachment figures respond quickly and sensitively to signals of distress, and the individual develops positive beliefs about both himself and others

Secure Base: The goal of attachment from which exploration can occur

Self Directed Religious Coping: Reflects the belief that God has little direct influence in the lives of individuals; therefore it is the individual's responsibility to solve problems for themselves

Spiritually Based Religious Coping: A Collaborative strategy of Religious Coping emphasizing the individual's loving and supporting relationship with God for coping

## CHAPTER TWO: REVIEW OF THE LITERATURE

### OVERVIEW

Emotion Regulation is an essential component of individual development, enabling a person to experience, recognize, express and modulate his<sup>2</sup> emotions (Cortez & Bugental, 1994; Garner & Spears, 2000; Kopp, 1989; Zeman & Garber, 1996). There are a number of factors which influence the development of Emotion Regulation, including family context (Thompson & Meyer, 2007), biology (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004), and primary caregiver interaction (Morris, Silk Steinberg, Myers, & Robinson, 2007). Attachment theory provides a theoretical framework for describing these developmental influences on Emotion Regulation and the resulting Emotion Regulation strategies an individual employs (Bowlby, 1982/1969). Primary Emotion Regulation strategies are developed and utilized when an individual has established a secure attachment with his primary caregiver (Mikulincer, 1998). When these secure attachments do not develop in the primary caregiver relationship, the resulting insecure attachment relationship leads the individual to develop and rely upon secondary Emotion Regulation strategies.

While attachment beliefs influence the ways in which a person responds to distress, coping strategies also play a significant role in Emotion Regulation (Boden & Baumeister, 1997; McFarland & Buehler, 1997). In particular, personal faith and religion provide individuals with a range of coping strategies which can be categorized into general positive and negative constructs, based in part on typical outcomes (Pargament 1997; Pargament, et al., 1998). What determines whether or not an individual will turn to religion in the coping process, and specifically which religious coping strategies will be employed? Attachment theory provides some direction. Research indicates that individual attachment beliefs not only shape perceptions of God as a

---

<sup>2</sup> The masculine pronoun is used throughout as a grammatical convenience, no gender bias is intended.

resource in times of stress, they also influence the ways in which religion may be used to manage emotions (Granqvist, 2005). However, the connections between specific religious coping strategies and individual attachment beliefs are only marginally supported, due to the limited number of studies examining this relationship. The purpose of this study is to extend current research in this area by investigating the relationship between religious coping strategies, attachment beliefs, and emotion regulation in a mixed sample of college students attending an evangelical university.

### EMOTION REGULATION

It has been said, “Everyone knows what an emotion is, until asked to give a definition. Then, it seems, no one knows” (Fehr & Russell, 1984, p. 480). Currently there are as many definitions of emotion as there are researchers studying the topic, and there is no gold standard for measurement of emotion (Cole, Martin, & Dennis, 2004). However, the theories used to describe emotion all include elements of cognition, physiology, and social context. Theorists agree that these elements are interwoven, with each making some contribution to the emotion experience (Malatesta-Magai & McFadden, 1995). The cognitive function of emotion experience involves *appraisal* and *action tendency*. When one encounters an event, the emotion that is felt is based in part on the *appraisal* of that event (Arnold, 1960; Clore, 1994) and the impact he believes the event will have on his personal wellbeing (Barrett & Campos, 1987; Frijda, 1986; Lazarus, 1991; Scherer, Schorr, & Johnstone, 2001). When faced with a situation one asks, often unconsciously, “Is the event threatening, and will it prevent me from reaching my goals?” One’s personal goals influence both the emotion that is felt (type and intensity) and the response action chosen (dampen the emotion, ignore the emotion, or heighten the emotion). The event also triggers a physiological response associated with emotion, which may involve fluctuations in



hormone levels, perspiration, or increased heart rate (Shweder, 1994; Kiecolt-Glaser, Malarkey, Cacioppo, & Glaser, 1994). Additionally, the social context of the individual impacts the emotional experience, influencing how events are appraised, what actions tendencies are chosen, and what physiological changes occur (Clark & Watson, 1994; Levenson, 1994). The strategies an individual uses to regulate these emotional experiences also revolve around the elements of cognition, physiology, and social context.

### Emotion Regulation Defined

There are various ways in which researchers conceptualize emotion regulation. Some view emotion regulation as the control of emotional experience and expression (especially the control of negative emotions) and the reduction of emotional arousal (Cortez & Bugental, 1994; Garner & Spears, 2000; Kopp, 1989; Zeman & Garber, 1996). In contrast, others emphasize the functional nature of emotions emphasizing an individual's capacity to, (a) experience a full range of emotions, (b) differentiate those emotions, (c) respond spontaneously and flexibly, and (d) exercise the ability to modulate the emotions experienced (Cole, Michel, & Teti, 1994; Gross & Munoz, 1995; Thompson, 1994b; Paivio & Greenberg, 1998). Similarly, other researchers have suggested that emotion regulation involves monitoring and evaluating emotional experience in addition to modifying it, highlighting the particular importance of awareness and understanding of emotions (Thomson & Calkins, 1996). In each of these views, emotion regulation involves altering the intensity or duration of an emotion rather than eliminating the particular emotion itself (Thompson, 1994b; Thompson & Calkins, 1996). This modulation of arousal is thought to be an attempt to reduce the urgency associated with the emotion so that the individual can control his behavior, as opposed to controlling the emotions themselves (Gratz & Roemer, 2004).

This understanding of emotion regulation emphasizes the ability to inhibit impulsive behaviors and to behave in accordance with desired goals (Linehan, 1993; Melnick & Hinshaw, 2000).

Although there are differing views on how to conceptualize emotion regulation, researchers do agree on some key aspects. Nearly all definitions of emotion regulation describe it as a process of initiating, monitoring, maintaining, and adjusting the occurrence, intensity, or duration of an emotion (Bridges & Grolnick, 1995; Eisenberg, Fabes, & Losoya, 1997; Gross, 1998). Several researchers include the relevance of the situational goals in the emotion regulation process as well (Thompson, 1994b). For example, a mother with children may experience certain emotions when confronted by a stranger which would differ if she was alone. For the purposes of this study, the definition of emotion regulation comes from Thompson (1994b), and comparable definitions are offered by Eisenberg and Spinrad (2004), Eisenberg and Morris (2002), Eisenberg, Fabes, and Lasoya (1997), Grolnick, Bridges, and Connell (1996) and Kopp (1989): *Emotion regulation consists of internal and external processes involved in initiating, maintaining, and modulating the occurrence, intensity, and expression of emotions.* This definition encompasses the main concepts surrounding emotion regulation, and offers an interpretation that allows the regulatory process to occur either intentionally or unintentionally. Although emotion regulation sometimes alters the actual emotion experienced (e.g. the arousal of shame rather than anger when falsely accused), more commonly emotion regulation is directed at affecting the intensity, and expression of emotion in order to meet individual goals. As such, emotion regulation is understood as a person's ability to respond in a socially appropriate, adaptive and flexible manner when faced with emotional experiences in order to meet personal goals (Morris, Silk, Steinberg, Myers, & Robinson, 2007; Cole, Michel, & Teti, 1994; Eisenberg & Morris, 2002; Walden & Smith, 1997).

## Emotion Regulation Strategies

Emotion regulation occurs on both conscious and unconscious levels of awareness, and researchers have identified a number of strategies that individuals employ in managing emotional expressions (Garber & Dodge, 1991; Karoly, 1993; Mayer & Stevens, 1994; Mayer & Salovey, 1995). The emotion generative process begins when an event signals to the individual that something important may be happening (Gross, Richards, & John, 2006). The emotion cues are attended to and evaluated, triggering a coordinated set of internal and external processes in an effort to modulate the individual's observable response. *Response-focused* strategies of emotion regulation address the ways emotions are experienced and expressed (Gross, Richards & John, 2006; Richards & Gross, 2000). First, one may reduce expression of a particular emotion by dampening the intensity of expression (e.g., minimizing facial expressions associated with sadness), or by masking the emotion with either a neutral expression (e.g. poker face) or substituting a different emotion to display instead (e.g. smiling to offset hurt feelings) (Levenson, 1994; Gross, 1999; John & Gross, 2004). Second, one may increase or amplify the intensity with which an emotion is expressed (e.g. crying loudly to communicate sadness). Thirdly, one may simply express the emotion just as it is felt with no intentional modification.

Conversely, *antecedent-focused* strategies of emotion regulation occur earlier in the emotion generative process and influence the ways in which individuals experience and appraise events and emotions (Richards & Gross, 2000). For example, one may regulate the experience of emotion by distracting oneself, intentionally focusing thought away from the unwelcome event in order to avoid a particular emotion. Similarly, one may suppress internal felt emotion by avoiding the personal awareness of negative affect and denying its presence (Weinberger, 1990; Weinberger, Schwartz, & Davidson, 1979). Alternatively one may use a reappraise strategy,

reframing a situation in order to change the felt response and dampen the intensity of emotional experience (Gross, 1999; Gross, 2002; John & Gross, 2004). There are a number of factors that influence which strategies an individual uses in order to regulate emotions.

### The Development of Emotion Regulation

The last two decades have produced a great deal of research focusing on the ways in which people experience and express emotions, and several interpersonal factors have been identified which influence the developing capacity to regulate emotions (Cole, Martin, & Dennis, 2004; Denham, 1998; Eisenberg & Fabes, 1998; Fox, 1994; Garber & Dodge, 1991; Goleman, 1995; Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004). Of particular interest is the way in which children learn how to effectively regulate emotional responses in socially appropriate and adaptive ways (Denham et al., 2003; Eisenberg et al., 2002; Halberstadt et al., 2001; Kopp, 1992; Saarni, 1999). A great deal of research focuses on the family context, which appears to play a crucial role in a child's social and emotional development, particularly in the ways in which a child learns how to manage stress and regulate emotions (Morris, Silk, Steinberg, Myers, & Robinson, 2007; Eisenberg et al., 1998; Eisenberg & Valiente, 2004). Current research also links biologically oriented factors such as temperament, neurophysiology, and cognitive development as influencing emotion regulation (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004). It appears that emotion regulation is a confluence of both biological and relational factors which influence a child's developing capacity to regulate and modulate emotions.

### *Family Context's Influence on Emotion Regulation*

The family context in which a child is raised is one of the primary factors affecting the overall growth and development emotion regulation (Cummings, Keller, & Davies, 2005;

Rogosch, Cicchetti, & Toth, 2004; Thompson & Meyer, 2007; Morris, Silk, Steinberg, Myers, & Robinson, 2007). While most studies focus primarily on the influence of the child-caregiver relationship on the development of emotion regulation (Calkins, 1994; Kopp, 1989; Sameroff & Emde, 1989; Sroufe, 1996), parenting activities and the family system play important roles as well (Diamond & Aspinwall, 2003; Volling et al., 2002; Zeman, Penza, Shipman, & Young, 1997). These familial relationships are important for how children learn to appraise and interpret their feelings, and they influence the developing skills and strategies for regulating emotions (Thompson & Meyer, 2007). The three primary ways the family context influences the developing capacity for emotion regulation are through (1) the quality of direct parental intervention to manage the emotions of their children (such as soothing an infant); (2) the sensitivity of parents' evaluation and response to their children's emotions; and (3) the overall emotional climate of the family context as a whole.

#### *Direct Parental Involvement*

The most basic form of extrinsic emotion regulation is when a parent intervenes directly to alter their child's emotional experience (Thompson & Meyer, 2007). From birth caregivers strive to soothe their children when distressed, which contributes to the emergence of behavioral expectations in the child. Namely, children learn a distress-relief pattern based on the predictability of parental involvement (Lamb, 1981). By six months of age, distressed infants begin to settle in apparent anticipation of the arrival of their mothers when they hear approaching footsteps (Gekoski, Rovee-Collier, & Carulli-Rabinowitz, 1983). However, variations in the consistency and quality of the caregiver's responsiveness influence how readily infants soothe to the adults approach and arrival.

Parents continue to directly involve themselves in their children's emotion regulation throughout the childhood years as their capacity for self regulation begins to increase (Calkins, Gill, Johnson, & Smith, 1999). Parents emotionally coach their children by directly involving themselves in providing ways to respond to emotional events (Gottman, Katz, & Hooven, 1996; Gottman, Katz, & Hooven, 1997). They may distract their child's attention away from potentially distressful events, assist in solving problems that frustrate the child, or strive to reframe the child's interpretation of negative experiences (Morris, Silk, Steinberg, Aucoin, & Keyes, 2007; Kalpidou, Power, Cherry, & Gottfried, 2004; Stansbury & Sigman, 2000). For example, one study found that when children were presented with a disappointing prize (socks), parents' attempts to help children reframe the situation in a more positive light (we can use them to make puppets) led to lower levels of expressed sadness and anger (Morris, Silk, Steinberg, Aucoin, & Keyes, 2007). In doing so, parents suggest adaptive ways for dealing constructively with emotions from which children learn emotion regulation skills and strategies that lead to more positive outcomes (Blandon, Calkins, Keane, & O'Brien, 2008; Calkins & Hill, 2007; Thompson & Meyer, 2007). The quality of the direct parental involvement in providing strategies to regulate affect directly impacts the child's developing capacity for emotion regulation.

### *Parental Modeling*

Children also learn about emotion regulation by observing the example provided by their parents' emotional expressions and interactions (Parke, 1994; Garber, Braafladt, & Zeman, 1991; Silk, Shaw, Skuban, Oland, & Kovacs, 2006) and then modeling this behavior in their own interactions (Bandura, 1977; Denham, Mitchell-Copeland, Strandberg, Auerbach & Blair, 1997; Emde, Biringen, Clyman, & Oppenheim, 1991; Barrett & Campos, 1987). This view suggests

that the parents' emotional interactions implicitly teach children which emotions are acceptable and model how to manage those felt emotions (Morris, Silk, Steinberg, Myers, & Robinson, 2007). Children observe that certain situations provoke certain emotions, and they watch the reactions of their parents in order to learn how they should react in similar situations (Denham, Mitchell-Copeland, Strandberg, Auerbach, & Blair, 1997). When the parental model is lacking, the child develops deficits in emotion regulation capacities (Cohn, Campbell, Matias, & Hopkins, 1990). For example, several studies found that depressed mothers are less responsive and more negative and subdued in their child interactions, and their children subsequently develop a limited repertoire of emotion regulation strategies compared to those children whose mothers were not depressed (Garber et al., 1991; Silk, Shaw, Skuban, Oland, & Kovacs, 2006). This highlights the importance of parents sensitively evaluating and responding to emotional events, and maternal sensitivity in particular is conceptually linked with the development of attachment beliefs, which is discussed later. Parents serve as a social reference to their children by providing key emotional signals through facial expressions and vocal tone, which guide a child in how to respond to emotionally ambiguous or confusing situations (Saarni, Mumme, & Campos, 1998; Klinnert, Campos, Sorce, Emde, & Svejda, 1983). In fact, children as young as one year of age regularly look for emotional cues from trusted caregivers (Thompson & Meyer, 2007).

### *Emotional Climate of the Family*

The emotional climate a child experiences on a day to day basis also influences the development of emotion regulation (Morris, Silk, Steinberg, Myers, & Robinson, 2007; Darling & Steinberg, 1993; Cummings & Davies, 1996; Eisenberg et al., 1998). The emotional climate of the family is based on the emotional expressiveness of the family members, the degree of

positive and negative emotions expressed, and the level of predictability and emotional stability within the family (Halberstadt, Crisp, & Eaton, 1999; Halberstadt & Eaton, 2003). Studies suggest that a family climate with moderate to high amounts of positive emotions expressed between family members contributes to the growth and development of emotion regulation (Eisenberg et al., 2002; Eisenberg, Valiente, Morris, Fabes, Cumberland, & Reiser, 2003; Valiente, Fabes, Eisenberg, & Spinrad, 2004). Conversely, when the emotional climate is negative or unpredictable, children are at risk of becoming highly emotionally reactive (Cummings & Davies, 1996). The family's emotional climate may enhance or hinder emotion management depending on the emotional demands placed on children in the home (Thompson & Meyer, 2007). When children have a consistently warm and responsive family, they develop emotionally security and feel freedom to express emotions because they believe their emotional needs will be met (Eisenberg et al., 1998). In this way, the emotional climate of the family serves to provide a model of emotion regulation which shapes child's developing schema for emotionality in the world at large (e.g. are emotions empowering? threatening? uncontrollable?). These family experiences create normative expectations for how people typically behave emotionally, and thus influence the child's developing capacity for emotion regulation (Thompson & Meyer, 2007). The emotional climate of the family also has the potential of impacting a child's neurological development. A child who experiences overstimulation from overwhelmingly negative events in the family context may experience stunted developmental growth, and these events can shape how the child's brain reacts to subsequent negative emotions.

#### *Biological Influences on Emotion Regulation*

While the family context plays an important role in the development of emotion regulation, current research also links biologically oriented factors such as neurophysiology and



cognitive development as impacting emotion regulation (Eisenberg & Morris, 2002; Goldsmith & Davidson, 2004; Fox, 1994). Research indicates that a child's biological functioning is a critical factor in the development of adaptive behavior, particularly in the development of emotion regulation (Calkins, Graziano, & Keane, 2007; Calkins & Keane, 2004; Calkins & Dedmon, 2000). Studies have found that individual differences in nervous system functioning may mediate the expression and regulation of emotions (Porges, 1996; 2001, 2003; Porges, Doussard-Roosevelt, & Maita, 1994; Calkins, 1997; Calkins & Dedmond, 2000; DeGangi, DiPietro, Greenspan, & Porges, 1991; Huffman, Bryan, del Carmen, Pederson, Doussard-Roosevelt, & Porges, 1998; Porges, Doussard-Roosevelt, Portales, & Greenspan, 1996), and evidence from developmental neuroscience suggests that the regions of the brain associated with emotion regulation include the prefrontal cortex, the anterior cingulate cortex, and the amygdala, some of which continue to develop through childhood (Davidson, Fox, & Kalin, 2007; Ochsner & Gross, 2007; Beauregard, Levesque, & Paquette, 2004).

Greenspan and Shanker recently discovered that emotional experiences in early childhood influence the developing structure of the brain (Greenspan et al., 2006). Their research found that the areas of the brain having to do with emotion regulation, interaction, and sequencing show increased metabolic activity during the second half of the first year of life. Additionally they discovered that emotional experiences during this period, as opposed to intellectual interaction, serve as the minds' primary architect. This supports earlier research by Greenspan (1990) which examines how individual differences in a child's motor planning, sensory processing, and sensory modulation is linked to various social emotional milestones. This research connects experiences of emotional interactions with the subsequent growth of intellectual capacities. A child's relational interactions not only influence cognitive development,

but ultimately the ability to effectively manage and regulate emotions (Goldsmith & Davidson, 2004; Morris, Silk, Steinberg, Myers, & Robinson, 2007). This highlights the essential role of the caregiver in shaping the young child's capacity for emotion regulation, where early life emotional experiences provide the building blocks for the developing capacity of the mind and of the developing neurobiological circuitry of the brain for effective emotion regulation.

#### *Primary Caregivers, Attachment and Emotion Regulation*

The ability to regulate emotion develops within a relational context, and the primary caregiver relationship during childhood is particularly important in shaping a child's developing capacities necessary for emotion regulation (Sameroff & Emde, 1989; Sroufe, 1996). Caregivers play a vital role in helping infants manage their emotions via thousands of interactions over the course of development (Calkins, 1994; Kopp, 1989). In the first few years of a child's life, the primary caregiver is responsible for much of the child's emotion regulation (Morris, Silk, Steinberg, Myers, & Robinson, 2007). A child responds to parents' initiatives based on the significant amount of trust placed in the caregiver, especially concerning emotional experiences, making the primary caregivers uniquely influential in soothing distress, providing comfort, and affecting the emotional experience of their children (Thompson & Meyer, 2007). Individual differences in the level of trust and security within the parent-child relationship have important implications for the development of emotion regulation, and are linked to ongoing strategies for emotion regulation throughout the individual's life (Isabella, Belsky, & von Eye, 1989; Sameroff, 1997). Attachment theory provides a framework for describing and understanding the individual differences regarding the nature of this dyadic relationship between child and caregiver (Bowlby, 1969, 1982). The parent-child attachment system reflects the emotional climate within the relationship, and research indicates that this attachment relationship predicts

strategies for emotion regulation throughout life (Gilliom, Shaw, Beck, Schonberg, & Lukon, 2002; Contreras, Kerns, Weimer, Gentzler, & Tomich, 2000; Kobak & Sceery, 1988).

### ATTACHMENT THEORY

John Bowlby (1969, 1982) was a British psychoanalyst who developed a unique perspective on human development, combining concepts from psychoanalysis, ethology, cognitive psychology, and developmental psychology in order to explain the development and maintenance of emotional bonds between a child and his primary caregiver. Bowlby (1969, 1982) conceptualized attachment as a behavior system which sets the foundation for relationship formation, autonomy, and emotion regulation. Attachment theory seeks to explain normative, developmental patterns of behavior and also to identify individual differences in these particular patterns of behavior (Hazan & Shaver, 1994). The attachment behavioral system consists of the primary caregiver and her infant developing a coordinated partnership in which the infant uses emotive behaviors (e.g. crying, clinging) during times of distress in order to obtain proximity to the caregiver, who in turn provides comfort, protection, and a secure-base from which the child can explore. These early caregiver experiences become encoded in the child's developing brain as mental representations called internal working models. These internal working models provide a template which influences how a person views the self, others, and relationships. Bowlby (1982, 1969) described attachment as an innate behavioral system which organizes an individual's behavior through the central nervous system in functional ways in order to ensure survival. In addition, Bowlby believed that an infant needs this close and continuous relationship with a primary caregiver in order to thrive emotionally.

## Attachment in Childhood

Mary Ainsworth and her colleagues sought to empirically investigate the attachment processes in childhood by devising the Strange Situation procedure (Ainsworth, 1973; Ainsworth et al., 1978). This experiment was designed to observe individual differences in attachment behavior based on the responses 12 to 18-month-old's provided to a series of separations from, and reunions with, their mothers. From these behavioral observations, Ainsworth, Blehar, Water, and Wall (1978) identified three classifications of attachment: A, B, and C (Main & Solomon, 1990). Secure infants (group B) actively explored their environment when the primary caregiver was present, using her as a secure base. When separated these children would show signs of distress by crying, and would pursue contact with the caregiver immediately upon her reunion. After being comforted by the caregiver, these children would then return to a mode of exploration and play.

In contrast, insecure avoidant (group A) infants would likewise explore their environment when the primary caregiver was present, but demonstrated no signs of distress when separated, instead focusing attention almost exclusively on the toys and the environment. When reunited, these children actively avoid and ignore the caregiver turning away and resisting being held. The anxious ambivalent children (group C) had difficulty separating from their caregivers in order to explore their environment, being almost exclusively preoccupied with the caregivers throughout the experiment. When separated, they demonstrated heightened levels of distress and exhibited a range of behaviors upon reunion, from passivity to crying and at times a combination of contact seeking and contact resisting (e.g. hitting, squirming) behaviors. These children were unable to be comforted and resisted exploration of their environment, instead focusing their attention on the primary caregiver. A fourth category of children (group D) was later identified by Main and

Solomon (1990) as disorganized-fearful, who demonstrated aberrant and conflicting behaviors in the presence of the caregiver. They were observed rocking on hands and knees after aborting an approach to the parent, freezing all movement while holding hands in the air, exhibiting trancelike facial expressions, and rising to meet the caregiver and then falling prone to avoid contact.

Ainsworth et al. (1978) found that each of the attachment categories was related to the infant-caregiver relationship outside of the Strange Situation experience. Parents of secure children are generally more available, responsive and sensitively attuned to their children's emotional and physical needs than parents of insecure children (Wallin, 2007). Parents of avoidant children are likely to be rejecting, avoiding physical contact with their children and withholding support and comfort when their children are distressed and in need of soothing. Parents of anxious-ambivalent children tend to be more self-preoccupied and they focus primarily on their own anxiety. These parents are also more intrusive and less consistent in their parenting. Disorganized-fearful children have parents who either overwhelm and frighten the child or parents who were themselves overly frightened or dissociated while interacting with the child (Wallin, 2007). The disorganized-fearful child faces the irresolvable paradox: the attachment figure is both the source of security and safe haven and also the source of alarm.

### The Attachment Behavioral System

Bowlby (1969, 1982) described the attachment behavioral system as a collection of inborn, instinctively guided responses to threat and insecurity which are evidenced by particular attachment behaviors (Wallin, 2007). This attachment system activates when an infant feels frightened or threatened, and the infant responds to the activating event by crying and seeking out the primary caregiver (set goal). This *proximity seeking* behavior is the primary strategy of

the attachment system (Mikulincer & Shaver, 2003). When the caregiver arrives and sensitively responds to the infant's pleas for comfort, the system is deactivated. An effective attachment figure will be quick, consistent, and sensitive to the child's proximity seeking behavior and their response will provide a *safe haven*, facilitating comfort and the alleviation of distress. Once the child is calmed, the attachment figure serves as a *secure base* from which the child can explore his environment, thus facilitating the development of the individual's emotion and personality (Bowlby, 1982/1969).

The goal of attachment behavior is not only protection against danger, but also reassurance of the caregiver's ongoing availability. Given that a caregiver may be physically present and emotionally absent, Bowlby (1969) defined the attachment figure's availability as a matter not only of accessibility, but also of emotional responsiveness. Bowlby (1973) asserted that the child's appraisal of the caregiver's availability was critical, and that this appraisal depended on the child's previous caregiver experiences. Similarly, Sroufe and Waters (1977) identified the set goal of attachment as "felt security" rather than proximity maintenance, highlighting the subjective role of the child's internal experience (Wallin, 2007).

The attachment system is a goal-directed enterprise which involves a cognitive aspect that evaluates progress and success, and corrects behaviors in order to produce desired outcomes (Mason, 2006). The cognitive function of attachment includes the evaluation of: environmental cues in order to monitor potential threats, one's inner state of comfort or distress, and the responses of attachment figures following proximity seeking behaviors (Mikulincer & Shaver, 2003). The mental representations of caregiver responses in attachment-relevant encounters influence the formation of internal working models of both the self and other (Bowlby, 1982/1969).

## Internal Working Models

John Bowlby (1973, 1980, 1988) asserted that the general aim of internal working models is to control the attachment system. He described them as higher-order control processes which contribute to the overall adaptation of the individual (Bowlby, 1980). Over time children internalize experiences with their primary caregiver in such a way that forms a prototype, or internal working model, which guide later relationships outside of the family context. These early working models serve to organize a child's memories of seeking comfort from his attachment figure, and the typical outcomes of those attempts (Main et al., 1985). The key experience that contributes to these early internal working models centers on the reliability of the attachment figure to effectively respond to the child's needs (Batgos & Leadbeater, 1994). Main et al. (1985) built upon this concept, describing internal working models as a set of rules that organize and interpret attachment related information. These rules are both conscious and unconscious, and they structure the assimilation of new information regarding one's self in relation to significant others throughout life. An individual's internal working models become enduring psychological structures which process and organize information throughout life, and they are reinforced by the assimilation of new experiences within the existing mental structures (Batgos & Leadbeater, 1994; Blatt, Auerbach, & Levy, 1997). These internal working models guide an individual's relationships and interaction throughout life, influencing one's ability to participate in close relationships and to experience intimacy (Granqvist, 2005).

Internal working models begin with specific mental representations of specific attachment relationships, and they move to more abstract and generalized representations of the self and the world as person develops into adulthood. Children develop beliefs and expectations regarding themselves and their primary caregivers based on how effectively the caregiver

responds in attachment activated experiences. When a caregiver responds quickly, consistently, and sensitively, the child develops positive beliefs and assumptions about self-worth and self-efficacy (e.g. I am worth of love and I am capable of getting my emotional needs met in times of distress). Additionally, the response a child receives from the primary caregiver to attachment behaviors influences beliefs and expectations about others regarding their reliability and accessibility (e.g., the self asks, “Are you trustworthy and can I count on you to help me when I need it?”). Thus, internal working models provide a mechanism for understanding the influence early attachment relationships have on adult relationships (Granqvist, 2005).

#### Primary and Secondary Attachment Strategies

Nearly all children become attached to their primary caregiver using the attachment-behavioral system described above, though not all children will achieve secure attachment (Mason, 2006). The attachment system is activated when a threat is perceived, and the primary attachment strategy is set in motion (Shaver & Mikulincer, 2002). The primary attachment strategy directs the individual toward proximity seeking behaviors (including crying, crawling, and expressions of anger), and when the attachment figure responds appropriately this leads to a safe haven experience. Once achieving safe haven, the child’s exploration system is reactivated and he feels confident to reengage the surrounding environment. Most of the individual differences in attachment style functioning is accounted for by the quality of the responses attachment figures provide to their children during times of need or distress. When attempts for proximity seeking and comfort are responded to quickly, consistently, and sensitively, children develop confidence in the availability of their attachment figure and their own ability to manage emotional distress through the attachment process. When primary caregiver responses are not quick, consistent, and sensitive, the child’s attachment system becomes disrupted and the set-



goal of safe haven is not achieved. This creates a two-fold problem for the child, not only is he distressed by the original activating event, but also serious doubts arise regarding; the trustworthiness of those close to them, their own ability to resolve distress, and the attainability of safety and whether the world is a safe place (Mikulincer & Shaver, 2003). A child who experiences negative interactions with an unresponsive or unavailable attachment figure will then seek out alternative strategies for emotion regulation to replace the primary attachment strategy. Main and Solomon (1990) term these secondary attachment strategies. In other words, the availability of the attachment figure is one of the major sources of individual variation in strategies for emotion regulation.

Secondary strategies involve either a *hyper-activation* or a *deactivation* of the attachment system, and both are considered markers of dysregulation and insecurity (Cassidy & Kobak, 1988; Main & Solomon, 1990). Hyper-activating strategies are considered a “fight” response (as opposed to a “flight” response) to frustrations experienced from unmet attachment needs. Instead of giving up on proximity seeking behaviors when the attachment figure does not respond adequately, the child intensifies bids for attention in an attempt to coerce support and care. The child amplifies both the awareness and expression of their attachment related feelings and needs in order to ensure continuing care. The attachment system is activated beyond the typical short term pleas for attention, and the child develops a vigilant preoccupation with proximity seeking despite the unavailability of the attachment figure. Children who adopt hyper-activation as a secondary strategy perceive proximity with their attachment figure as only possible with greater degrees of effort, and they tend to exhibit very energetic and insistent attempts to attain security (Cassidy & Kobak, 1988).

In contrast, a deactivating strategy is conceived as a “flight” response to the frustration of unmet attachment needs. Children who adopt a deactivating strategy essentially abandon the attachment behavior system as a means to alleviate distress and simply deactivate their system without achieving felt comfort or security. These children anticipate their mother’s rejection and their own anger in response, and minimize the pain and distress created by the unavailability of their attachment figures by down-regulating their attachment system. While outward displays of distress or discomfort may be eliminated, inwardly these individuals continue to experience distress. Both the hyper-activating and deactivating secondary strategies influence future interpersonal behavior, discussed in more detail below.

### Categorizing Adult Attachment Beliefs

Bowlby clearly understood attachment as a system that influenced the entire life-span, with particular importance during infancy: “(attachment behaviors) characterize human beings from the cradle to the grave” (Bowlby, 1979, p. 129). He hypothesized that early attachment experiences would be mentally encoded as internal working models which in turn would guide an individual’s beliefs and behaviors in close relationships throughout life (Bowlby, 1969, 1973, 1988). In the 1980’s, a number of investigators began to develop methods for measuring these internal working models in adults and adolescents. Mary Main and her colleagues (Main et al., 1985; George, Kaplan, & Main, 1985) began with the creation of the Adult Attachment Interview (AAI), a one-hour interview assessing the coherence of one’s state of mind with respect to attachment as it relates to childhood experiences (Main & Goldwyn, 1998). Using the AAI, four primary attachment classifications were identified, each theoretically and empirically linked to the four childhood attachment styles (Main & Goldwyn, 1998). Van Ijzendoorn (1995) found that classifying a pregnant mother’s attachment using the AAI could predict with up to

70% accuracy what the unborn child's attachment system would be at 12 months. Moreover, he found a nearly 80% degree of correspondence between an individual's attachment classification in childhood using the Strange Situation with the adult attachment classification using the AAI 16 to 20 years later.

Hazan and Shaver (1987) developed the first self-report measure of adult attachment, applying the childhood attachment paradigms developed by Ainsworth and colleagues (1978) to adult relationships, where romantic love is conceptualized as an attachment system. Ainsworth's three attachment styles were converted into statements describing adult relationship strategies, resulting in three paragraphs describing each adult attachment system (secure, avoidant, and anxious-ambivalent). Participants read the three descriptive paragraphs and choose the one that best describes them. These adult attachment styles influence an adult's experience of romantic love in relationships. Secure attachment is characterized by comfort with closeness and dependency on the romantic partner, and these adults are more likely to view their romantic partners as trustworthy friends (Hazan & Shaver, 1987). The anxious-ambivalent adult is preoccupied with security in their romantic relationship, and these individuals are more likely to fall in love at first sight and then long intensely for their partner's reciprocation. In contrast, adults with an avoidant attachment style seem uncomfortable depending on their partner for comfort and become overly self-reliant to manage emotional needs (Hazan & Shaver, 1987). Continued investigations into romantic adult attachment have replicated and extended Hazan and Shaver's (1987) original results (e.g., Bartholomew & Horowitz, 1991; Brennan, Shaver, & Tobey, 1991; Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1990; Kirkpatrick & Davis, 1994; Mikulincer, Florian, & Tolmcaz, 1990; Mikulincer & Nachshon, 1991; Shaver & Brennan, 1992; Shaver & Hazen, 1993; Simpson, 1990; Simpson, et al., 1992).

### Dimensions of Adult Attachment Beliefs

Researchers soon recognized the limitations of a categorical instrument for measuring adult attachment, and the descriptive paragraphs were deconstructed into multiple item scales which conceptualized attachment styles as regions in a two dimensional space (Bartholomew & Horowitz, 1991; Collins & Read, 1990; Simpson, 1990; Brennan, Clark, & Shaver, 1998). Griffin and Bartholomew (1994b) discovered two orthogonal (uncoorelated) dimensions which ascribe the underlying structure of adult attachment beliefs. The first dimension, view of self, focused on beliefs about self worth, and the second dimension, view of other, focus on beliefs about others reliability and trustworthiness. These two dimensions are intersected, creating a four category scheme for describing adult attachment in terms of an individual's internal working models which include: *secure, preoccupied, dismissing, and fearful categories*. *Secure* attachment is characterized by a positive view of both self and others, and individuals in this group are generally comfortable with intimacy and autonomy. *Preoccupied* individuals are characterized by a overly negative view of self and an unrealistically positive view of others, and these individuals tend to be preoccupied with relationships and threats of abandonment. *Dismissing* attachment is characterized by a overly positive view of self, and an exaggeratedly negative view of others, and these individuals tend to downplay the importance of intimacy and instead become compulsively self reliant. *Fearful* attachment is marked by a negative view of both self and others, and these individuals are likely to fear intimacy and are often avoidant of relationships altogether.

In response to the proliferation of adult attachment instruments, Brennan, Clark and Shaver (1998) developed an integrated measure using all of the items from all of the published adult attachment instruments. They began with a 323 item instrument which was administered to

1,086 college students, and factor analysis identified two primary factors which accounted for 62.8% of the total variance<sup>4</sup>. Brennan and her colleagues labeled these factors *attachment avoidance* and *attachment anxiety*, and the four resulting categories paralleled Bartholomew's four categories of attachment. *Avoidance* is characterized by an individual's discomfort with intimacy and interpersonal closeness, while *anxiety* is characterized by a chronic fear of interpersonal rejection and abandonment. Secure individuals are those identified with low anxiety and low avoidance. Dismissing adults report are those reporting low anxiety and high avoidance. Preoccupied individuals are those with high anxiety and low avoidance. Fearful adults report high levels of both anxiety and avoidance. The four categories are in line with Bowlby's theory (Bowlby, 1982/1969) which associates relationship functioning with emotion regulation (Mikulincer & Shaver, 2003; Shaver & Clark, 1994; Shaver & Hazan, 1993).

Each of the four categories of adult attachment can be located within a two dimensional space (see Figure 1 below). Adults with secure attachment have a positive view of self and other, and they experience low levels of avoidance and anxiety in their relationships. These individuals enjoy a healthy feeling of self worth, are comfortable with closeness and interdependence, and rely on support seeking and other constructive means of coping with stress. Adults with preoccupied attachment beliefs have a high view of others and a low view of self, and they report high levels of anxiety and low levels of avoidance. This region is defined by a lack of attachment security, a heightened need for closeness, worried about relationships, and a fear of rejection. The preoccupied adult is characterized by a low sense of self worth, and they often seek out others in a clingy manner which leaves them vulnerable if their bids for attention are rejected. In contrast adults with dismissing attachment beliefs have a high view of self and a low view of others, and they report high levels of avoidance and lower levels of anxiety. These individuals

---

<sup>4</sup> This instrument, known as the Experiences in Close Relationships Scale (ECR), now contains 36 self report items.

have a positive self worth which manifests itself in compulsive self reliance, and they avoid intimacy with others. Finally, adults with fearful attachment beliefs have a negative view of self and others, and they experience high levels of anxiety and avoidance in their relationships. These individuals look to others to validate their worth, though they have low expectations that others will meet their needs and so they tend to shy away from intimacy in order to avoid rejection (Bartholomew, 1990; Bartholomew & Horowitz, 1991).

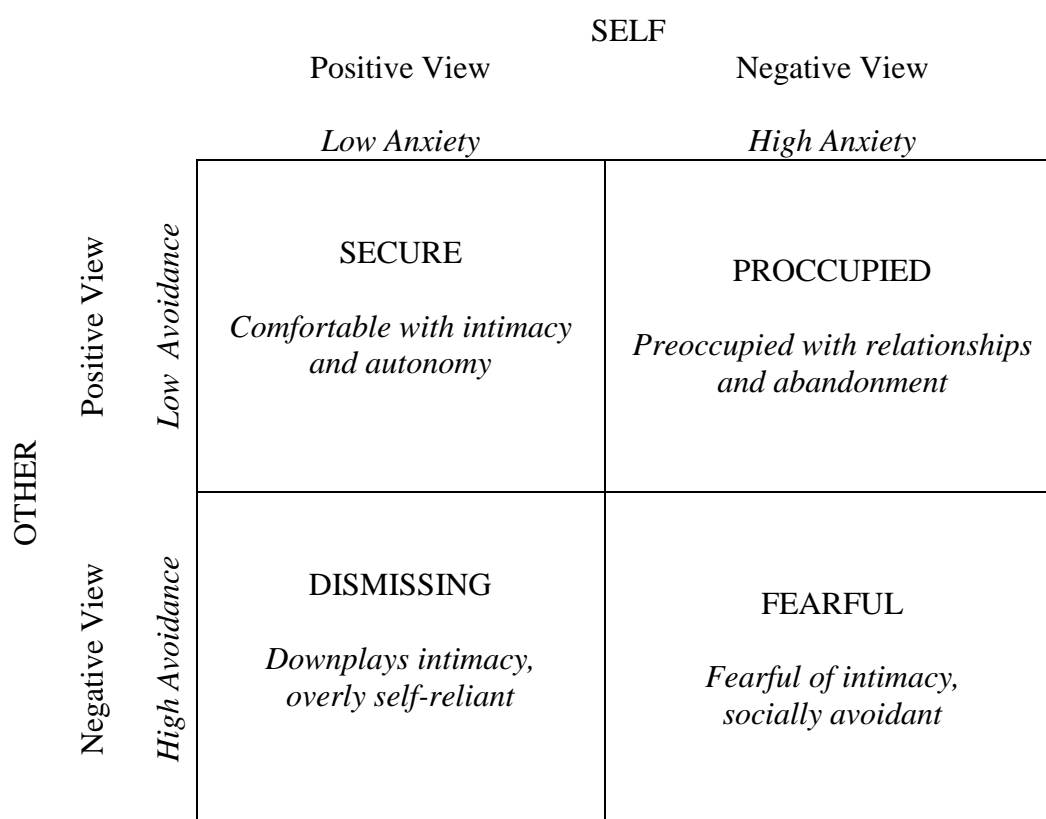


Figure 1. Bartholomew's model of self and other

### Attachment and Religion

Kirkpatrick's research (1992, 1994; Kirkpatrick & Shaver, 1990) extended the attachment framework to also include religious experience, where God is conceptualized as an attachment

figure. Attachment theorists have noted that the relationship between a believer and God often meets the three defining criteria of an attachment relationship (Ainsworth, 1985): 1) seeking and maintaining proximity, 2) achieving a safe haven during times of distress, and 3) using a “stronger and wiser” other as a secure base (Granqvist, 2005; Kirkpatrick, 2005). Believers view God as omnipresent, always nearby, and that they can increase proximity and closeness through religious practices such as prayer when uncertainty arises (Belavich & Pargament, 2002). Additionally, studies demonstrate that people frequently turn to God in times of distress through prayers seeking assistance, comfort, reassurance, and relief (Mikulincer & Shaver, 2007). Thus, researchers hypothesize that individuals utilize internal working models of human attachment figures in order to conceptualize God, which Kirkpatrick terms the “correspondence” hypothesis (Kirkpatrick, 1992; Granqvist, 2002). In other words, secure adults are likely to project positive working models onto God and thus feel comfortable seeking proximity with God, confident in God’s provision of support, and emotionally secure in opening themselves up to faith and spiritual transformation (Mikulincer & Shaver, 2007). Likewise, less secure individuals may have more difficulty conceiving God as an always-available, highly responsive attachment figure.

This does not imply that insecure individuals have no religious experiences or religious faith. Kirkpatrick (2005) noted that insecure adults may compensate for their frustrating human attachment experiences by directing their unmet attachment needs towards God (the “compensation” hypothesis). Insecure individuals may turn to God as an alternative attachment figure whose beneficence can overcome the fears associated with deficiencies experienced with human attachment figures. However, an insecure individual’s approach to religion will differ from that of a more secure background. The insecure individual may project not only a need for a

good attachment figure onto God, but also the insecurities and negative working models acquired in human attachment relationships. For example, God may be viewed as a harsh, rejecting figure. As a result, a preoccupied individual may feel uncertain about God's love, care, and acceptance, whereas a dismissing individual may attempt to maintain distance and independence from God. The insecurely attached individual is especially prone to dogmatic, fundamentalist beliefs which portray God as an angry, sometimes arbitrary, judgmental figure who needs to be obeyed and placated in order to avoid his anger and rage (Mikulincer & Shaver, 2007).

In support of these views, Kirkpatrick and Shaver (1990) found that individuals who report being more securely attached to parents or romantic partners are also more likely to believe in a personal God and to report having a personal relationship with God. These findings were replicated in subsequent cross-sectional studies and extended to other measures of religiosity (Granqvist, 1998; Granqvist & Hagekull, 1999, 2000; Kirkpatrick, 1998). Attachment security is associated with a more autonomous religious orientation (Diller, 2006; Kirkpatrick & Shaver 1990), greater commitment to religious beliefs and practices (Byrd & Boe, 2001; Kirkpatrick & Shaver, 1990, 1992; Mickelson, Kessler, & Shaver, 1997; Saroglou, Pichon, Trompette, Verschueren, & Dernelle, 2005), and higher scores of mature spirituality (TenElshof & Furrow, 2000). While most of these studies focus on Christians in the United States, recent studies have replicated the findings within a population of Israeli Jews (Diller, 2006).

#### *Attachment and Religious Conversion*

Research also links attachment beliefs with the path to religious conversion an individual is likely to follow. Individuals with attachment insecurities are more likely to experience religious conversions characterized by a sudden and intense personal experience (Kirkpatrick & Shaver, 1990; Granqvist, 1998, 2002; Granqvist & Hagekull, 1999, 2001). In a meta-analysis of



all available data on this issue, Granqvist and Kirkpatrick (2004) found that individuals classified as insecure in their relationships with parents are more likely than secure individuals to experience a sudden, emotionally charged, religious conversion. In contrast, securely attached individuals are more likely to adopt the religious beliefs of their parents and to display higher levels of religiosity than their insecure counterparts (Granqvist, 1998, 2002; Granqvist & Hagekull, 1999; Kirkpatrick & Shaver, 1990). Granqvist and Hagekull (1999; Granqvist, 2002) found that more securely attached individuals score higher on measures of socialization-based religiosity, that is the extent to which participants adopt their parents' religious views.

While both secure and insecure individuals can adopt a religious approach to life, there are differences in their forms of religiosity. Granqvist and Kirkpatrick's (2004) meta-analysis revealed that people with secure attachments were more likely to experience gradual changes in their religiosity, whereas the religious changes experienced by insecure individuals were more sudden and emotionally turbulent. Secure individuals' growth in religiosity are characterized by themes of affiliation and relationship with others, such as becoming more religious in connection with close friends who are also believers (Granqvist & Hagekull, 1999, 2001). In contrast, growth in religiosity among insecurely attached individuals is characterized by themes of compensation, for example becoming more religious in response to problematic relationships, personal crises, or physical illness (Granqvist, 2002; Granqvist & Hagekull, 1999, 2001). Furthermore, while securely attached individuals were more religious if their parents had been religious, insecure people were more religious when their parents displayed low levels of religiosity (Granqvist, 1998; Kirkpatrick & Shaver, 1990). Thus insecure individuals may use religiosity as a defensive attempt to distance themselves from parents and to compensate for

insecurities, where secure individuals develop a gradual and positive identification with the values and beliefs held by their parents (Mikulincer & Shaver, 2007).

#### *Attachment and God as Safe Haven*

Secure and insecure adults also differ in the extent to which God and religious beliefs provide a sense of safe haven and secure base (Mikulincer & Shaver, 2007). For example, securely attached individuals are more likely than their insecure counterparts to view God as a loving, approving, and caring figure (Granaqvist & Hagekull, 2001; Kirkpatrick, 1998; Kirkpatrick & Shaver, 1990, 1992). Moreover, secure individuals are more likely to seek God as a safe haven and a secure base when reacting to subliminal threats of rejection (Birgegard & Granqvist, 2004). An individual's religiosity influences the ways in which threats are appraised, distress is managed, and emotions are regulated, which is discussed in detail later.

#### *Attachment and Emotion Regulation*

Attachment theory is essential for understanding the emotion regulation strategies an individual employs, particularly because of its emphasis on adaptation, stress reduction through proximity seeking, and secondary attachment strategies used in response to unmet attachment needs (Bowlby, 1982/1969, 1973). Bowlby highlighted the essential role interpersonal relationships play as a resource for regulating emotions throughout the lifespan (see also, Mikulincer et al., 2003). Strategies for regulating emotions develop through the interactions an individual experiences with significant others (Bowlby, 1973), beginning during infancy with interactions with the primary caregiver. Bowlby (1973) theorized that individuals regulate their emotions in different ways based on their attachment styles, and later research confirmed this theory (Mikulincer, Florian, & Tolmacz, 1990; Simpson, Rholes, & Nelligan, 1992).

Mikulincer (1998) conceptualized individual differences in attachment as being manifested in different strategies for emotion regulation. He postulated that the mechanisms of self-regulation involve “self claims” (i.e., the traits one attributes to himself). Part of the regulatory strategy is not only to convince the self of certain “self claims” (i.e. “I am capable of handling this problem on my own”), but also to convince others of these claims. Mikulincer (1998) hypothesized that when distressed, avoidant-dismissing individuals would attempt to *deactivate* their attachment system and increase self-reliance by inflating their positive view of self. Individuals who score high on attachment avoidance trust the self and not others to manage distress, thus their goal is to enhance their sense of self-reliance by demonstrating that they are in control and capable of managing distress completely on their own. In contrast, preoccupied individuals attempt to regulate distress by *hyper-activating* their attachment system in order to present themselves as overtly needy and incapable of regulating their own emotions. This supports the *negative view of self / positive view of other* conceptualization of the preoccupied attachment style. These preoccupied individuals do not trust their inner resources to cope with problems, and so they look to others to alleviate distress. The deactivating and hyper-activating strategies for emotion regulation are considered secondary strategies, and are discussed in detail below. An individual with secure attachment beliefs would not rely on these secondary strategies in order to manage distress, and would instead maintain a more balanced view of the self and others. Mikulincer (1998) theorized that when distressed, the secure individual would not have as favorable impression of oneself as the avoidant-dismissing person, nor as negative a view of self as the preoccupied person. Instead, the secure individual would rely on the primary strategy of proximity seeking as a reliable and trustworthy strategy for regulating emotions.

### *Primary Emotion Regulation Strategies*

As described previously, an individual's attachment system is activated when a potential or actual threat is perceived, and the primary attachment strategy is set in motion. Once the attachment system is activated, a quick and sensitive response from the attachment figure results in a sense of attachment security for the individual, and the primary strategy is validated. The primary strategy is aimed at alleviating distress, and repeated successful experiences using this strategy reinforce its continued use and broaden a person's resources for maintaining mental health in times of distress (Fredrickson, 2001; Mikulincer et al., 2003). As a person gains experience and develops cognitively, the attachment figure can be internalized as a resource for personal strength and resilience when they may not be physically present. For example, a child who experiences success using the primary strategy may be calmed and comforted merely by hearing an attachment figure in another room. In adulthood the availability of the attachment figure is evaluated in terms of internal as well as external attachment adequacy.

The primary strategy leads adults to turn to internalized representations of attachment figures or to actual support of others, and to maintain symbolic or actual proximity with these attachment figures. In times of need infants use proximity seeking behaviors to be comforted by their primary caregiver (Ainsworth, 1973, 1991; Heinicke & Westheimer, 1966). Likewise with adults, conceptually parallel research shows that the departure of a romantic partner heightens the overt displays of proximity seeking behaviors (Fraley & Shaver, 1998), that adults are likely to seek out support of an available other while awaiting some noxious event (Shaver & Klinnert, 1982), and that adults will turn to others for assistance during, or after, stressful events (Kobak & Duemmler, 1994; Lazarus & Folkman, 1984). Each of these studies provides an example of the primary attachment strategy at work in adults. Additional studies have also shown that thoughts

related to proximity seeking and mental representations of attachment figures tend to be activated even in minimally threatening situations (Mikulincer, Birnbaum, Woddis, & Nachmias, 2000; Mikulincer, Gillath, & Shaver, 2002).

Primary attachment based strategies are characteristic of securely attached adults who score relatively low on attachment anxiety and attachment avoidance. Studies demonstrate that low scores along the anxiety and avoidance dimensions are linked to optimistic beliefs about distress management, positive views of the self and other, and maintenance of mental health and effective functioning in times of stress (Collins & Read, 1994; Mikulincer, 1995; Mikulincer & Florian, 1998). These secure individuals who score low on avoidance and anxiety are also more likely to acknowledge and disclose their emotions (Fuendeling, 1998), seek support in times of need and rely on constructive means of coping (Mikulincer & Florian, 1998), explore new stimuli and environment (Mikulincer, 1997), and revise their perspectives based on new evidence (Mikulincer & Arad, 1999). There is also evidence that adults who score low on anxiety and avoidance are less hostile to out-of-group members and more empathetic toward people in need (Mikulincer et al., 2000; Mikulincer & Shaver, 2001).

#### *Secondary Emotion Regulation Strategies*

When an attachment figure is unavailable in times of need, it results in attachment insecurity and compounds the distress experienced by the individual in need. This state of insecurity forces the individual into a decision, conscious or unconscious, about whether continued proximity behaviors are a viable option as a means of regulation (Shaver & Mikulincer, 2002). The decision the individual makes during this state of heightened insecurity leads to the activation of secondary attachment strategies used to regulate emotions. If the individual believes proximity seeking is a viable option, the resulting strategy leads to hyper-

activation where attempts to attain proximity and support become more and more energetic and insistent (Cassidy & Kobak, 1988). If proximity seeking is not seen as viable, the resulting strategy leads to deactivation where the attachment system is shut down and attempts at proximity seeking are abandoned altogether (Cassidy & Kobak, 1988).

### *Hyper-Activation Strategies*

Individuals who adopt the secondary strategy of hyper-activation exhibit constant vigilance, concern, and effort until an attachment figure is perceived as available and they attain a sense of security. Children who experience inconsistent and erratic responses from their caregiver when seeking comfort and support more often adopt the secondary strategy of hyper-activation, and as adults these preoccupied individuals frequently become emotionally enmeshed in close relationships. Their hyper-activation is exhibited in magnified bids for care and involvement from their romantic partners through clinging and controlling responses aimed at minimizing distance (Shaver & Hazan, 1993). They often attempt to manage their higher levels of anxiety by vigilantly monitoring their partner, and expending significant emotional energy to seek and maintain relational proximity. (Bartholomew, 1990; Bartholomew & Horowitz, 1991). These efforts for closeness are aimed not only at establishing physical contact, but also perceived intimacy and oneness (Mikulincer & Shaver, 2003). The secondary strategy of hyper-activation indicates an adult's overdependence on relationship partners as a source of protection (Shaver & Hazan, 1993) and the perception of oneself as helpless and incompetent for regulating emotions (Mikulincer & Florian, 1998).

According to Shaver and Mikulincer (2002), hyper-activating strategies involve both an increase in the monitoring of perceived threats to the self and also the potential unavailability of the attachment figure. This secondary strategy results in a tendency to detect threats in nearly

every transaction with the physical and social world, and to exaggerate the potential negative consequences which may result (Mikulincer, et al., 2003). Adults who adopt this strategy intensify negative emotional responses to threats and heighten mental ruminations on threat related concerns, keeping them foremost in their mind. Attachment figure unavailability and rejection are viewed as particularly significant threats, fostering anxious, hyper-vigilant attention to relationship partners and rapid detection of possible signs of disapproval or impending abandonment. The hyper-activating strategy produces a self-amplifying cycle of distress in adults, where chronic activation of the attachment-system interferes with normal functioning, making it likely that new sources of distress will be confused with old sources, creating a chaotic and undifferentiated mental structure (Mikulincer, et al., 2003).

Hyper-activating strategies are characteristic of individuals classified as preoccupied, who score high on attachment anxiety and low on attachment avoidance. Research supports the descriptions above, demonstrating that heightened attachment anxiety is linked to exaggerations of perceived threats, negative views of the self, and pessimistic beliefs about transactions with others (Bartholomew & Horowitz, 1991; Mikulincer, 1995; Mikulincer & Florian, 1998). Adults who score high on the dimension of anxiety also tend to react to stressful events with intense distress, and are more likely to ruminate on threat-related worries (Mikulincer & Florian, 1998). They readily access painful memories and the negative emotions associated with them (Mikulincer & Orbach, 1995), and they activate mental representations of their attachment figures and attachment related-worries (e.g. potential abandonment) even when there is no external threat perceived (Mikulincer et al., 2000; Mikulincer, et al., 2002).

### *Deactivation Strategies*

When an individual decides that proximity seeking is not a viable option for achieving security in response to chronic unavailability of the attachment figure, he will inhibit the quest for support, deactivate proximity seeking behaviors, and attempt to handle the distress alone. This is characteristic of the deactivating attachment strategy (Cassidy & Kobak, 1988), where the primary goal is to keep the attachment system deactivated in order to avoid frustration and further distress caused by the unavailability of the attachment figure. These individuals believe that expressions of negative emotions will not result in needed attention and support, but rather that their bids for comfort may actually heighten the negative affect rather than relieve it. This secondary strategy leads to the denial of attachment needs; the avoidance of closeness, intimacy, and dependence on others; and an unhealthy striving for self-reliance and independence and a tendency to develop addictive behaviors (Mikulincer, et al., 2003).

According to Shaver and Mikulincer (2002), this distancing involves both an active inattention to threats and personal vulnerabilities, as well as the suppression of thoughts and memories which may evoke distress. This strategy also fosters avoidance of challenging activities and new information, as the novelty of these experiences may introduce a threat (Mikulincer, et al., 2003). The extreme self-reliance that these individuals adopt also encourages the denial of personal imperfections, as personal weakness may suggest a threat to one's only source of protection (Mikulincer, 1995). Though this strategy appears effective at controlling anxiety, it severely limits meaningful relationships and limits interpersonal connection (Fuendeling, 1998). They may appear emotionally self-sufficient, but in order to maintain interpersonal distance they tend to lead a sharply restricted emotional life.



Deactivating strategies are characteristic of individuals categorized as dismissing who score high on the avoidance dimension of attachment. Research supports the link between avoidance and the deactivation strategies discussed above. Studies have identified that heightened levels of avoidance are associated with: lower levels of intimacy and emotional involvement in close relationship, suppression of painful thoughts, repression of negative memories, projection of negative self-traits onto others, failure to acknowledge negative emotions, and denial of basic fears (Dozier & Kobak, 1992; Fraley & Shaver, 1997; Mikulincer, 1995; Mikulincer et al., 1990; Mikulincer & Horesh, 1999; Mikulincer & Orbach, 1995). Research has also found that high scores on avoidance are associated with a lack of mental access to attachment-related worries (Mikulincer et al., 2000) and a deactivation of mental representations of attachment figures following reminders of personal separation (Mikulincer, et al., 2002).

Each of the attachment related strategies have has a specific regulatory goal. While the primary attachment strategy aims to alleviate distress, build personal resources, and broaden perspectives, the secondary attachment strategies aim to manage the activation of the attachment system and to limit the pain caused by frustrated proximity seeking attempts. With secondary strategies, distress regulation stops being the main regulatory goal and instead hyper-activation or deactivation becomes the primary goal. Hyper-activation strategies keep the attachment system chronically activated, constantly alert for threats and betrayals, whereas deactivating strategies keep the attachment system continually in check. Both secondary strategies are considered markers of dysregulation with serious consequences for emotion regulation (Cassidy & Kobak, 1988; Main & Solomon, 1990).

## RELIGIOUS COPING STRATEGIES

While attachment beliefs influence the way a person responds to distress, coping strategies also play a significant role in emotion regulation (Boden & Baumeister, 1997; McFarland & Buehler, 1997). The most widely held views of stress and coping emphasize both the subjective evaluation of external stressors and the assessment of the individual's capacity to cope using perceived resources (Matheny, et al., 1986). According to these views, individuals experience the consequences of stress when the perceived demands of a situation exceed the perceived resources for coping (McCarthy, et al., 2006). An individual's religious beliefs are of particular interest, as they influence how individuals evaluate stressors and assess their perceived resources for coping (Pargament, 1997).

When faced with stressful life events, studies repeatedly demonstrate that Americans frequently turn to religion to cope with distressful situations (Bjorck, & Cohen, 1993; Schottenbauer et al., 2006). For example, Neighbors, Jackson, Bowman, and Gurin (1983) found that prayer was the most common coping strategy used among elderly African Americans to respond to personal problems. McCrae (1984) reported that the most common response when experiencing a personal loss is to rely on one's religious faith. Likewise, men over the age of 65 identified religious thought and activity as the most important strategies for coping with illness (Koenig, Cohen, Blazer, & Pieper, 1992). In support of this, Pargament (1997) found that the more stressful an event is, the more likely it is to evoke a religious response.

### Categorizing Religious Coping Strategies

Hathaway and Pargament (1992) note that personal faith and religion provide individuals with a range of coping strategies. Pargament (1997; Pargament, et al., 1998) posits that these religious coping can be categorized into general positive and negative constructs, based in part

on typical outcomes<sup>5</sup>. Positive religious coping includes a variety of strategies which involve aspects of social support, and positive cognitions, and they usually lead to constructive and beneficial outcomes. In contrast, negative religious coping is generally associated with negative cognitions and less successful outcomes.

Pargament et al. (1988) identify three primary strategies for religious coping: self-directed, deferring, and collaborative. *Self-directing strategies* reflect the belief that God has little direct influence in the lives of individuals, and it is therefore the individual's responsibility to solve problems for themselves. Conversely, *deferring strategies* emphasize the choice to wait for God to directly intervene in human affairs to provide solutions to presenting problems. The *collaborative coping strategies* involve a decision to share responsibility with God for solving the problem. The collaborative coping strategies are the only approaches which consistently displays a positive relationship with emotional adjustment measures (Belavich & Pargament, 2002). The self-directive and deferring strategies are generally negatively correlated with emotional adjustment measures, except in certain situations where events may be entirely beyond the control of an individual (Belavich & Pargament, 2002). For example, Friedel (1995) found that emergency health care workers benefitted from a deferring strategy of religious coping when they believed they had no control over the death of a patient. However in most situations a collaborative coping strategy is most effective for emotion regulation (Pargament, et al., 1998).

Within the three primary religious coping strategies Pargament et al. (1990; Pargament, et al., 1988) developed a set of six subscales: spiritually based coping, religious social support, religious discontent, religious avoidance, religious pleading, and good deeds. Spiritually based coping and religious social support are both considered collaborative forms of religious coping.

---

<sup>5</sup> Outcomes in the religious coping literature are correlated with measurements of emotional adjustment and regulation

Spiritually-based coping emphasizes the individual's loving and supportive relationship with God for coping. God is conceived as caring and supportive, available for help in times of need. Similarly, religious social support is a collaborative strategy in which the individual looks to relationships with other believers, such as clergy and other church members, for care and support. For example, a woman with a sick child may pray to God to provide peace and healing (spiritual coping) and share her concerns with friends at church in attempt to find emotional support (religious social support). In a study of several hundred active church members, Pargament et al. (1990) found that these collaborative religious coping strategies consistently predicted emotional adjustment and positive outcomes.

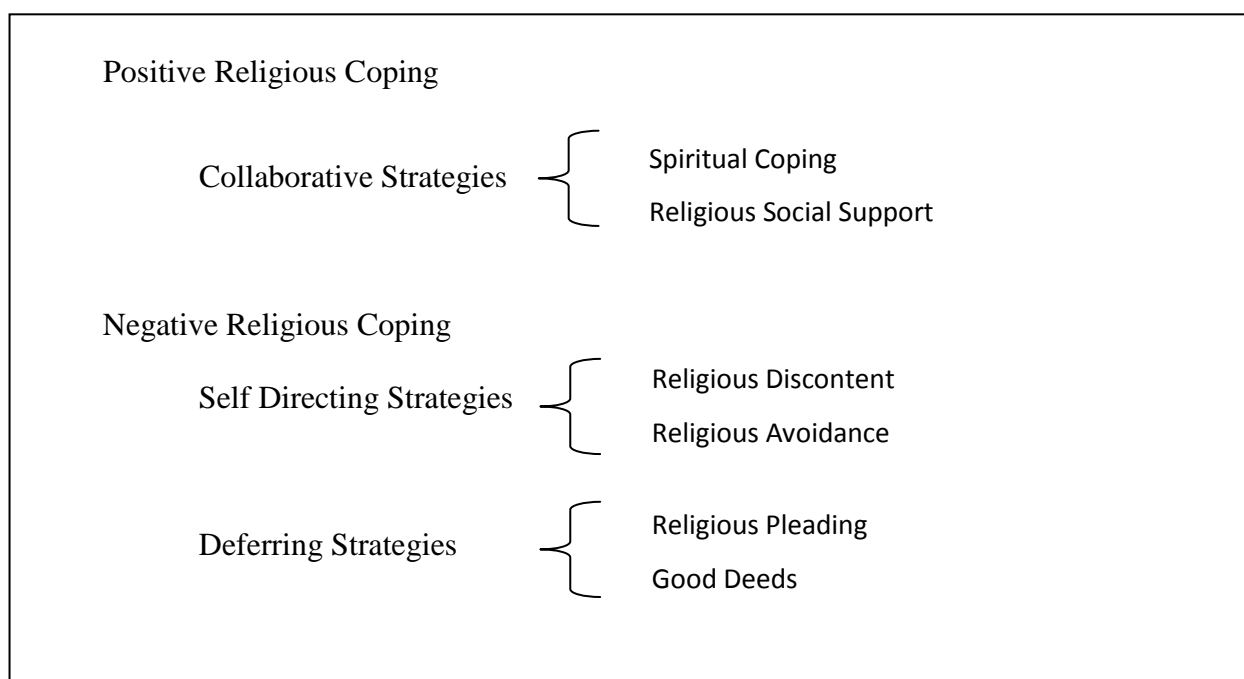


Figure 2. Categorizing Religious Coping Strategies

In contrast, self directing strategies of religious coping emphasize the individual's responsibility in responding to distress and a belief that God is unlikely to be an active or

available resource. Both religious discontent and religious avoidance are self directing strategies and forms of negative religious coping. Religious discontent measures an individual's expression of anger and distancing directed towards God and other believers. God is not conceived as a viable resource, and religious discontent moves the individual away from God and other believers in order to avoid continued disappointment and hurt. For example, a man who suddenly loses his job may become angry with God and cease going to (religious discontent). Similarly, religious avoidance involves coping activities used to divert an individual's attention away from the distress through religious means. These religious activities are not conceived as relieving the distress themselves, but as providing an effective distraction so that the distressing thoughts can be avoided. Self directing strategies are characteristic of negative religious coping because they do not lead to positive outcomes.

The deferring strategies of religious coping emphasize an individual's inability to cope on their own and the choice to wait for God to directly intervene in human affairs to provide solutions to presenting problems. The deferring strategies include pleading to God and participating in good deeds. Pleading strategies include petitions for God to miraculously intervene and bargaining with God for desired outcomes. Individuals who rely on this strategy do not believe they are capable of handling distressing events on their own, and they result to begging and bargaining in an attempt to convince God to provide for their needs. For example, a woman who has lost her job may choose to sit at home praying for God to provide new employment, without actually going out to look for job openings. The coping strategy of good deeds is similar, in that the individual seeks to focus attention on living a better life in order to please God and earn His approval. By choosing to live what they believe is a good life, these individuals hope that God will look favorably upon them and respond by removing stress and

worldly problems. The woman who lost her job may give extra money to the church, hoping that by pleasing God He might provide employment. Like self directing strategies, deferring strategies of religious coping do not lead to positive outcomes and are thus categorized as negative religious coping.

### Attachment Beliefs and Religious Coping

What determines whether or not an individual will turn to religion in the coping process, and specifically which religious coping strategies will be employed? Attachment may provide some direction. In religions where God is personified, the patterns established early in life for relating to primary caretakers may not only shape perceptions of God, but also influence the methods used to appraise and manage emotions (Pargament, 1997; McIntosh, 1995). Kirkpatrick (1999) found that some believers' relationships with God bear striking resemblance to the infant-caregiver dynamic, meeting the defining criteria for attachment relationships according to Ainsworth (1985) and Bowlby (1969, 1988). The most well documented attachment behavior in the context of religion is the use of God as a safe haven in emotionally stressful situations (Hood, et al., 1996; Johnson & Spilka, 1991; O'Brien, 1982). Significant negative life events are likely to activate the attachment system, and God may be conceptualized as a secure base utilized for emotion regulation.

Studies have identified a relationship between attachment beliefs and specific religious behaviors (Kirkpatrick, 1999; Belavich & Pargament, 2002; Schottenbauer et al., 2006). Granqvist and Hagekull (2000), Kirkpatrick (1998), and Kirkpatrick and Shaver (1992) found links between secure attachment and positive images of God, and better perceived relationships with God. For example, Belavich and Pargament (2002) found that when a loved one underwent surgery, individuals with secure attachment were more likely to pray to God for strength and

guidance and to look to other church members for emotional support than their insecure counterparts. The way that people attach themselves to God and others may help explain why individuals choose particular religious coping strategies and reject others.

Attachment beliefs not only shape perceptions of God as a resource in times of stress, they also influence the ways in which religion may be used to manage emotions (Granqvist, 2005). Belavich and Pargament (2002) found that perceived attachment to God may be linked to individual differences in religious coping strategies. While this research focused on perceived attachment to God, more recent studies have found that romantic attachment beliefs are related to choice of religious coping behaviors (Granqvist, 2005; Schottenbauer, et al., 2006). In these cross sectional studies of adults, it was found that perceptions of the caregiver not only shaped perceptions of God, but also influenced the methods used to appraise and cope with stress using established religious resources (Pargament, 1997; Belavich & Pargament, 2002; Granqvist, 2005). During a crisis, God may be sought out and kept in proximity through prayer and thus be perceived as providing a safe haven. This is reminiscent of an attachment figure providing a secure base for exploring the environment. Studies have also identified a relationship between secure attachment beliefs and better-perceived relationship with God (Granqvist & Hagekull, 2000; Kirkpatrick, 1998; Kirkpatrick & Shaver, 1992). Many make use of religious faith and religious resources in a particular way to help them cope, and some patterns of religious coping are associated with better functioning than others (Pargament, 1997).

#### *Attachment and Religious Coping Strategies*

Theoretically, attachment beliefs may be used to predict the religious coping strategies an individual will employ when faced stressful events. Someone with secure attachment beliefs would be expected to choose more collaborative coping strategies, because to them God is

conceived as a trustworthy attachment figure who will comfort and protect in times of danger. Moreover, these individuals would view God as providing a secure base from which to explore from during times of safety. It would be expected for a securely attached individual to employ Spiritual coping, as it emphasizes the individuals experiencing and trusting in God's love, deriving strength from God, and looking to God for guidance (Pargament et al., 1990). Likewise, these individuals would be expected to employ Religious Support Coping, which looks to others within their religion (e.g. a pastor, congregation members) for comfort and support. The collaborative religious coping strategies balance an individual's own efforts for managing stress with seeking help and support from others. Spiritual coping places focus on the vertical plane of attachment relationship (believer to God), whereas Religious Support Coping focuses on the horizontal (believer to other believers). Both of these types of behaviors are consistent with those a securely attached individual might employ with an attachment figure, seeking out comfort and support in the belief that it will readily be available and effective.

In contrast, an individual with dismissing attachment beliefs views God as distant and unavailable (Kirkpatrick & Shaver, 1992). Paralleling their beliefs about attachment figures throughout life, dismissing individuals are more likely to conceive God as being distant, impersonal, and as having little or no interest in their personal affairs or problems (Belavich & Pargament, 2002). They may believe that God does not care about them or even like them. Theoretically, it would be expected that these dismissing individuals would utilize more self directing strategies of religious coping, which downplay personal vulnerability and emphasize self reliance. Individuals who use these strategies believe that they must solve their problems on their own without the help of God. They would be expected to report using Religious Discontent, which seeks to distance oneself from religion and God in the coping process (Pargament et al.,



1990). This is conceived as a type of deactivation strategy, where the attachment figure is not sought after in times of distress, and instead the individual relies entirely on himself. In a similar way, Religious Avoidance offers another type of deactivation strategy one would expect to see in a dismissing individual. In this approach, the dismissing individual seeks to shift focus away from the distressing problem and onto religious activities, which are used to not deal with the problem, but to forget the problem even exists. These self directing religious coping strategies seem to parallel the secondary strategy of deactivation for emotion regulation. It is expected that individuals with a dismissing attachment beliefs would more frequently use these self directing coping strategies.

An individual with preoccupied attachment beliefs conceptualize God as inconsistent in His reactions to them, which parallel beliefs throughout life regarding attachment figures (Belavich & Pargament, 2002). At times God is views as warm and receptive, and at others God's love may be questioned or expressed in ways that are difficult to understand (Kirkpatrick & Shaver, 1992). Individuals with preoccupied attachment would be expected to more frequently use deferring strategies of religious coping. Like the secondary strategy of hyper-activation, the deferring religious coping strategy places extreme emphasis on others for help in times of distress and minimizes the individual's own role for responding and coping with problems. These individuals may become wholly dependent on God for solving all of life's problems, and attempt a constant clinging to God for security rather than only when distressed. This may take the form of Religious Pleading where the individual begs for God to miraculously intervene, or bargains with God in an effort to manipulate the desired outcome. They may also be more likely to employ Good Deeds as a coping strategy as a means of earning God's attention and support. These deferring religious coping strategies seem to fall within the hyper-activation strategy of

emotion regulation, which are most frequently employed by individuals with preoccupied attachment beliefs.

### *Research Linking Religious Coping and Attachment Beliefs*

The connections between specific religious coping strategies and individual attachment beliefs are only marginally supported, due to the limited number of studies examining the relationship. In a cross sectional study, Belavich and Pargament (2002) surveyed 155 adults waiting for their loved ones undergoing surgery in an effort to correlate attachment to God and specific religious coping strategies. Among their results, they found that secure attachment was significantly correlated with collaborative coping, and more specifically spiritual coping. They also found that dismissing attachment was significantly related to Religious Discontent and Self Directing forms of religious coping. However, preoccupied attachment was not significantly linked with any of the deferring strategies of religious coping.

Granqvist (2005) followed this study with one investigating the relationship between adult attachment (as opposed to God attachment) and particular religious coping strategies. He reasoned that in Belavich and Pargament's (2002) study attachment to God was already part of the participants' religious orienting system, creating a measurement overlap (i.e. poor discriminate validity). He surveyed 197 adults in Sweden, a highly secularized country, who were participating in various church services. His study found no significant relationships between secure attachment and religious coping, and only minor correlations between insecure attachment and self directing forms of religious coping.

A more recent study (Schottenbauer, et al., 2006) followed up on Granqvist's (2005) study and examined the relationship between adult attachment and specific religious coping behaviors. Using the internet, 1289 participants from across the United States completed a

survey online reporting items including attachment history and religious coping styles. Using factor analysis and structural equation modeling, they found that secure attachment was associated with positive forms of religious coping, and that both preoccupied and dismissing attachments were associated with negative strategies for religious coping. This supports Belavich and Pargament's (2002) findings, and extends the theoretical link between adult attachment and religious coping strategies.

### THE PRESENT STUDY

These studies underscore the need for further investigation regarding the relationship between attachment beliefs and strategies for religious coping and emotion regulation. Very little research exists in this area, and the few studies which have been conducted thus far have just begun to reveal the dynamics between attachment and religious coping. Schottenbauer et al. (2006) point out the need for additional studies which focus on participants with more religious backgrounds. The purpose of this study is to extend current research in this area by investigating the relationship between religious coping strategies, attachment beliefs, and emotion regulation in a mixed sample of college students attending an evangelical university. This study uses a cross sectional correlation research design, where college students were administered measures of adult attachment, God attachment, religious coping, and emotion regulation.

#### Research Question One and Associated Hypotheses

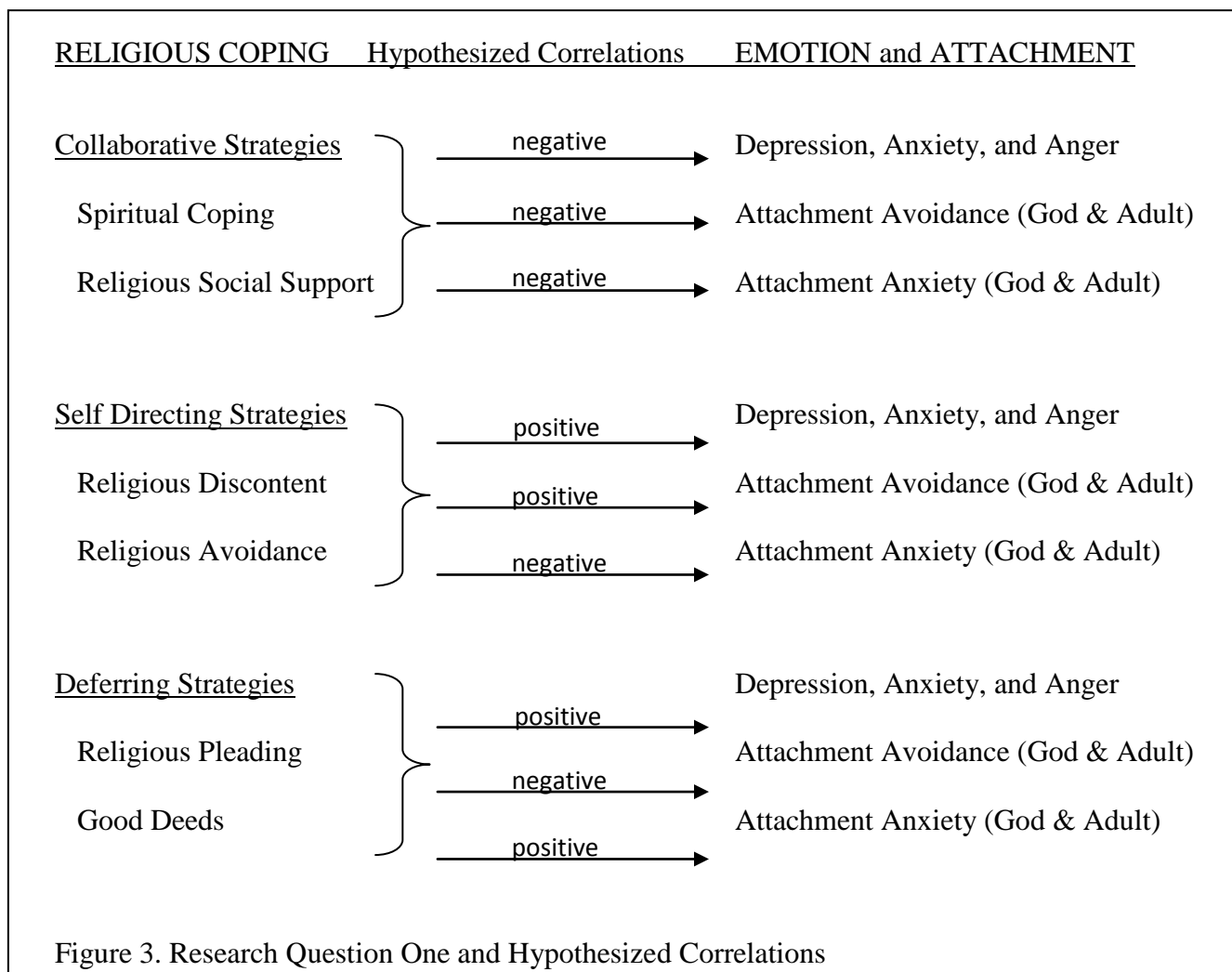
The first question of this study examines whether religious coping is correlated with adult attachment, God attachment, and emotion regulation. It was hypothesized that students' scores for Collaborative Religious Coping (Spiritual Coping and Religious Social Support) will be negatively correlated with their reported scores for attachment anxiety and attachment avoidance on both God and Adult Attachment measures (see Figure 3 below for an overview). Students

who use Collaborative forms of Religious Coping are expected to report more secure attachment beliefs in both their relationship with God and in adult relationships. Their scores for attachment anxiety and avoidance should therefore be negatively correlated with Collaborative Coping Strategies. Moreover, it is hypothesized that these Collaborative forms of Religious Coping will be negatively correlated with measures for Depression, Anxiety and Anger. It is thought that the Collaborative forms of Religious Coping will help students more effectively regulate their emotions and address the mood items measured, consistent with securely attached individuals.

It was hypothesized that students' scores for Self Directing forms of Religious Coping (Religious Discontent and Religious Avoidance) will be negatively correlated with attachment anxiety and positively correlated with attachment avoidance. The Self Directed styles of Religious Coping are expected to be associated with students who report higher levels of attachment avoidance, and therefore are less likely to seek God to solve their problems. It is also hypothesized that Self Directing forms of Religious Coping will be positively correlated with scores for Depression, Anxiety, and Anger. This form of Religious Coping has been reported to be less effective at regulating negative emotions, and it is anticipated that these mood scores will be higher for these students.

It is also hypothesized that students' scores for Deferring strategies of Religious Coping (Religious Pleading and Good Deeds) will be positively correlated with attachment anxiety and negatively correlated with attachment avoidance. The Deferring form of Religious Coping is expected to be associated with students who report higher levels of attachment anxiety, and therefore are going to view themselves as incapable of solving problems and God as their only hope for responding to stressors. It is also hypothesized that Deferring forms of Religious Coping will be positively correlated with scores for Depression, Anxiety, and Anger. Like the

Self Directing Strategies, form of Religious Coping has been reported to be less effective at regulating negative emotions, and it is anticipated that these mood scores will be higher for these students.



### Research Question Two and Associated Hypothesis

The second question of this study examines whether religious coping offers unique variance in Emotion Regulation after accounting for variance associated with God Attachment and Adult Attachment. No study to date has examined this question, and it is unknown whether

the influence of Religious Coping on Emotion is unique or merely a dynamic associated with an individual's attachment system. It was hypothesized that in this study Religious Coping Strategies would account for unique variance in Emotion Regulation (i.e. Depression, Anxiety, and Anger) after accounting for variance associated with both God Attachment and Adult Attachment.

## CHAPTER THREE: METHODOLOGY

### METHOD

#### Participants

A pool of students was recruited from an Evangelical university for the current study during the fall semester of 2006. Of this pool one group was exclusively freshmen in their first semester of college, recruited from a required General Education class. The second group was primarily second year students recruited from an entry level course in the Family and Consumer Science department. A series of t-tests and chi-square tests confirmed that these two groups were not significantly different on relevant measures and could therefore be combined into a single sample for further analysis. The purpose of this study was to examine the relationship between Emotion Regulation, Attachment Beliefs, and Religious Coping Strategies using a cross sectional design.

There were a total of 211 participants in the sample, consisting of 49 male and 162 female undergraduate students. The recruitment of participants was restricted to singles aged 18 to 28. The age range was limited because the significance of romantic relationships increases during this period in an individual's life. The age range of 18 to 26 is considered "emerging adulthood" during which individuals increase their focus on romantic relationships and prioritize searching for a mate (Arnett, 2004). Students were recruited to participate in the study during first weeks of classes in the fall semester of 2006. Professors teaching in these two departments invited their students to participate, and those agreeing to do so were asked to sign an informed consent form at the time of the study.

Table 1 below displays the demographic characteristics of the participants in the study. The sample ranged in age from 18 to 26, though most of the population was 18 to 20 (80.6%).

Over three quarters of the participants identified themselves as Caucasian (84.8%), while 5.6% identified themselves as Hispanic, 3.8% identified themselves as African American, 2.8% were identified as Asian, and 2.3% as Other. Additionally, 23% of the participants were male and 76.6% were female.

**Table 1**  
Demographic Frequencies of the Initial Sample

Demographic	Type	<i>n</i>	Percentage
Sex	Male	49	23.2%
	Female	162	76.7%
Race	African-American	8	3.8%
	Asian	6	2.8%
	Caucasian	179	84.8%
	Hispanic	12	5.6%
	Other	5	2.3%
Age	18	66	31.2%
	19	65	30.8%
	20	39	18.4%
	21	20	9.5%
	22	12	5.7%
	23	3	1.4%
	24	4	1.9%
	25	1	0.5%
	26	1	0.5%

### Procedures

This study was approved by the Institutional Review Board in the summer of 2006, and students were provided a consent form explaining the voluntary nature of the study. The measurement packet used in this study included a Background Information and Family History form (see Appendix A) that included basic demographic information and a number of details regarding the participants' family of origin. The packet included four instruments: The Attachment to God Inventory (AGI), the Experiences in Close Relationships (ECR I), the Brief



Mood Survey (BMS), and the Religious Coping Activities Scale (RCAS) were given to the sample at the beginning of the semester ( $n=211$ ). The data from these particular instruments were collected and analyzed at the end of the semester for the purposes of this study.

## MEASURES

### Background Information and Family History

Participants completed a background information questionnaire which included descriptive information such as gender, age, race/ethnicity, and original date of matriculation. Additionally, a family history questionnaire was included asking participants to identify their religious background, their family of origin, and any recent family losses. Participants were also asked to identify if there was a history of any significant mental disorders in their family (e.g. Suicide, Depression, and Bipolar).

### Attachment Beliefs

#### *Experiences in Close Relationships*

Attachment beliefs were assessed using the *Experiences in Close Relationships* survey (ECR; Brennan, Clark, & Shaver, 1998), a 36-item self report instrument in which participants rate statements regarding their romantic relationships on a 1 (strongly disagree) to 7 (strongly agree) Likert-type scale. Answers to these questions are used to assess two dimensions that are presumed to underlie adult attachment organization, avoidance and anxiety. The Avoidance scale (18 items) assesses discomfort with closeness and intimacy in relationships (e.g. "I don't feel comfortable opening up to romantic partners") and the Anxiety scale (18 items) measures fear of rejection and abandonment (e.g. "I worry a fair amount about losing my partner").

This instrument was originally created by collecting all of the non-redundant items from every published, and many non-published, inventory used to assess adult attachment in 1996.

The resulting 323-item instrument was then used in a study of 1,086 college students and results were analyzed using factor analysis. The research identified two primary factors which accounted for 62.8% of the total variance, which aligned very closely with Bartholomew's two dimensions of attachment. These factors were labeled by Brennan and colleagues as avoidance and anxiety. Hierarchical cluster analysis revealed four categories paralleling Bartholomew's four categories of attachment (secure, preoccupied, dismissing, and fearful). Individuals who scored low on avoidance and anxiety were classified as Secure, those with low anxiety and high avoidance were classified as Dismissing, high anxiety and low avoidance indicated the Preoccupied classification, and high scores on both anxiety and avoidance dimensions were classified as Fearful.

The ECR has high internal consistency (coefficient alphas), with Brennan et al. (1998) reporting Cronbach alphas of .94 and .91 for the Avoidance and Anxiety scales. The ECR is the recommended attachment instrument in the handbook of attachment research (Crowell, Fraley, & Shaver, 1999), and construct and predictive validities of the ECR scales have been demonstrated across several independent studies (Shaver & Mikulincer, 2002).

#### *Attachment to God Inventory*

The Attachment to God inventory (AGI: Beck & McDonald, 2004) was developed to assess avoidance and anxiety dimensions as they applied to individuals and their relationship to God. The 28 item instrument is based on the ECR (Brennan et al., 1998), in which participants rate statements regarding their relationship with God on a 1 (strongly disagree) to 7 (strongly agree) Likert-type scale. Answers to these questions are used to assess two dimensions that are presumed to underlie attachment organization as it relates to God, avoidance and anxiety. The Avoidance scale (12 items) assesses discomfort with closeness and dependence on God (e.g. "I

prefer not to depend too much on God”) and the Anxiety scale (12 items) measures fear of God’s rejection (e.g. “I often worry about whether God is pleased with me”).

The AGI demonstrated good factor structure and construct validity in Beck and McDonald’s (2004) multiple sample study. The AGI dimensions of anxiety and avoidance were found to be significantly correlated with each other and both adult attachment anxiety and adult attachment avoidance. The avoidance dimension reported a Cronbach alpha of .86, and was associated with 15.4% of total variance. The anxiety dimension reported a Cronbach alpha of .82 and 17.9% of total variance.

In the original study, researchers found that subscale scores for anxiety and avoidance on the AGI significantly correlated with subscales scores for anxiety and avoidance on the ECR, matching results for God Attachment with Adult Attachment. The AGI has been shown to correlate with Emotion Regulation (i.e. Anxiety, Depression, and Anger). Moreover, the AGI was also found to significantly correlate with spiritual well being, religious emphasis, parental spirituality, and parental attachment.

### Emotion Regulation

The Brief Mood Survey (BMS; Burns, 1997) is a self report instrument which assesses an individual’s level of various emotions related to current life experiences. Participants are asked to rate 22 statements regarding emotions they may have felt during the preceding week on a 0 (not at all) to 4 (substantially) Likert-type scale. The instrument is divided into four subscales measuring emotions associated with Depression, Anxiety, Anger, and Relationship Satisfaction. The Depression subscale is comprised of 5 items (e.g. Worthless or inadequate), the Anxiety subscale has 5 items (e.g. Worrying about things), and the Anger subscale has 5 items (e.g. Resentful). The Relationship Satisfaction subscale includes 4 statements which participants rate

on a 1 (very dissatisfied) to 7 (very satisfied) Likert-type scale (e.g. Degree of affection and caring). Initial studies indicate moderately high internal consistency estimates for each of the four subscales. Cronbach alpha statistics for internal reliability on each of the four subscales are: Depression (.94), Anxiety (.91), Anger (.94), and Relationship Satisfaction (.93).

### Religious Coping Activities

Spilka, Hood, Hunsberger, and Gorsuch (1985) identified a number of ways in which religion is associated with coping activities, including religion's ability to increase one's sense of control in difficult circumstances and building one's self esteem. Pargament et al. (1990) developed the Religious Coping Activity Scales (RCAS) to assess specific ways in which individuals use religion to cope with stressful life circumstances. The researchers developed a 31 item instrument in which participants rate their reliance on various religious coping activities on a 1 (not at all) to 4 (a great deal) Likert-type scale. The instrument was administered to a sample of 586 church members from 10 congregations in the Midwest representing a variety of denominations. Factor analysis of their responses revealed six primary subscales: Spiritually Based, Good Deeds, Discontent, Religious Support, Plead, and Religious Avoidance.

The Spiritually Based Activities subscale (12 items) assesses the extent to which individuals rely on a close and loving relationship with God in order to cope with distress (e.g. Experienced God's love and care). The Good Deeds subscale (6 items) focuses on living in accordance with one's religious standards and commitments (e.g. Attended religious services or participated in religious rituals). The Discontent subscale (3 items) measures anger toward, and alienation from God and the church (e.g. Felt angry with or distance from God). The Religious Support subscale (2 items) involves seeking assistance from church members and clergy (e.g. received support from the clergy). The Plead subscale (3 items) assesses an individual's pleas for

divine miracles and bargaining for God to directly intervene in human affairs (e.g. Bargained with God to make things better). The Religious Avoidance subscale (3 items) involves attempts to use religious activities to divert attention away from the presenting distress (e.g. prayed or read the Bible to keep my mind off my problems).

Pargament et al. (1990) reported moderately high internal consistency estimates for each of the six subscales. The Cronbach alpha statistics calculated for internal consistency of each of the six subscales are: Spiritually Based (.92), Good Deeds, (.82), Discontent (.68), Religious Support (.78), Plead (.61), and Religious Avoidance (.61). Additional items were subsequently added to the Plead and Religious Avoidance subscales in order to strengthen their internal consistency, and Pargament et al. (1990) reported evidence for the validity of each of the six subscales within the RCAS. The Religious Coping Activities Scale has been correlated in recent studies with dimensions of religiosity and religious problem solving (Sheffield, 2003), self esteem and social support (Bradley, Schwartz, and Kaslow, 2005), and spiritual maturity (Wong, 2007).

## DATA ANALYSIS

The first research question was addressed using a series of zero-order correlations arranged in a correlation matrix which displays the six subscales of Religious Coping and examines their relationship to God Attachment, Adult Attachment, and Emotion Regulation (i.e. Anxiety, Depression, and Anger).

The second research question was address using a series of hierarchical multiple regressions which examined whether Religious Coping accounted for unique variance in Emotion Regulation (i.e. Anxiety, Depression and Anger) after accounting for both Adult and God Attachment. In the series of multiple regressions, each of the emotions (Anxiety,

Depression, and Anger) was individually regressed first onto the block of Adult Attachment (Anxiety and Depression), followed by the block God Attachment (Anxiety and Depression), and then followed by the block of Religious Coping subscales. The first  $R^2$  generated by this method addressed whether Adult Attachment accounted for significant variance on the target emotion (e.g. Anxiety, Depression, or Anger). The second  $R^2$  identified the amount of total variance accounted for by both God and Adult Attachment. The Change in  $R^2$  identified the unique variance accounted for by God Attachment after controlling for Adult Attachment. The third  $R^2$  reflected the total variance accounted for by all three blocks of variables, and the second Change in  $R^2$  identified the amount of unique variance accounted for by the block of Religious Coping, after accounting for both Adult Attachment and God Attachment.

## CHAPTER FOUR: FINDINGS

### INTRODUCTION

The purpose of this study was to investigate the relationship between religious coping strategies, attachment beliefs, and emotion regulation in a mixed sample of college students attending an evangelical university. The study used a cross sectional correlation research design, where college students were administered measures of adult attachment, God attachment, religious coping, and emotion regulation. There were two research questions the study sought to answer. First, does Religious Coping correlate with Adult Attachment, God Attachment, and Emotion Regulation? Second, does Religious Coping account for unique variance in Emotion Regulation after accounting for variance attributed to God Attachment and Adult Attachment? The first research question was addressed using a series of zero-order correlations arranged in a correlation matrix which displayed the six subscales of Religious Coping and examined their relationship to God Attachment, Adult Attachment, and Emotion Regulation (i.e. Anxiety, Depression, and Anger). The second research question was addressed using a series of multiple regressions which examined whether Religious Coping accounted for unique variance in Emotion Regulation (i.e. Anxiety, Depression and Anger) after accounting for both Adult and God Attachment.

### RESULTS

#### Research Question One

The first research question was addressed using a series of zero-order correlations arranged in a correlation matrix displaying the six subscales of Religious Coping and their relationship to God Attachment, Adult Attachment, and Emotion Regulation. Pearson's correlation coefficients were calculated using SPSS to determine the degree and direction of the

linear relationships between each of the six subscales for Religious Coping across Emotion Regulation (Anxiety, Depress, and Anger), and the two dimensions of God Attachment (Anxiety and Avoidance), and the two dimensions of Adult Attachment (Anxiety and Avoidance). The reader should keep in mind that the anxiety dimension refers to one's beliefs about and self, and the avoidance dimension has to do with beliefs about others. High anxiety scores reflect negative beliefs about one's self worth and lovability, while high avoidance scores reflect negative beliefs about the reliability, accessibility and trustworthiness others or God (depending on the measure). Because specific predictions were made about the direction of the correlations, a one-tailed test with an alpha level of 0.05 was used to determine whether or not a nonzero correlation existed. See Table 2 below for an overview of the correlation matrix.

#### *Correlations for Collaborate Religious Coping Strategies*

It was hypothesized that students' scores for Collaborative Religious Coping (Spiritual Coping and Religious Social Support) would be negatively correlated with their reported scores for attachment anxiety and attachment avoidance on both God and Adult Attachment measures, and negatively correlated with measures for Depression, Anxiety and Anger. The findings of the data analysis largely supported this hypothesis.

#### *Spiritual Coping*

In the review of the data, Spiritual Coping was found to negatively correlate with both dimensions of Adult Attachment and God Attachment. More specifically, Spiritual Coping was significantly negatively correlated with Adult Attachment Anxiety ( $r = -0.204, p = .002$ ). Also as hypothesized, Spiritual Coping was found to be significantly negatively correlated with both God Attachment Anxiety ( $r = -0.322, p = .000$ ) and God Attachment Avoidance ( $r = -0.632, p = .000$ ). Thus individuals who are more likely to turn to God in times of need by praying and seeking his



support are more likely to feel positively about themselves and have a higher sense of trust about God and the accessibility of others to help in times of need. Spiritual Coping was not significantly correlated with Adult Attachment Avoidance.

Table 2

Correlations of Religious Coping Subscales with Measures of Emotion Regulation, Adult Attachment, and God Attachment

Religious Coping Subscales	Measure						
	<u>DEP</u>	<u>ANX</u>	<u>ANG</u>	<u>AD AVD</u>	<u>AD ANX</u>	<u>G AVD</u>	<u>G ANX</u>
Spiritually Based Coping	-.376**	-.177**	-.279**	-.062	-.204**	-.632**	-.322**
Religious Social Support	-.247**	-.201**	-.123*	-.030	-.054	-.330**	-.169*
Religious Pleading	.216**	.168**	.317**	-.048	.124*	.080	.277**
Good Deeds	-.277**	-.154*	-.228**	-.039	-.153*	-.484**	-.159*
Religious Discontent	.431**	.289**	.322**	.065	.191**	.392**	.400**
Religious Avoidance	-.200**	-.106	-.120*	-.041	-.087	-.532**	-.229**

Note. DEP = Depression; ANX = Anxiety; ANG = Anger; AD AVD = Adult Attachment

Avoidance; AD ANX = Adult Attachment Anxiety; G AVD = God Attachment Avoidance; G

ANX = God Attachment Anxiety.

\* $p \leq .05$  \*\* $p \leq .01$

As predicted in the first hypothesis, Spiritual Coping was also found to be negatively correlated with each of the three subscales for Emotion Regulation. Spiritual Coping was significantly negatively correlated with Depression ( $r = -0.367$ ,  $p = .000$ ), Anxiety ( $r = -0.177$ ,  $p = .005$ ), and Anger ( $r = -0.279$ ,  $p = .000$ ). Therefore, individuals who employed Spiritual Coping in response to distress (praying, seeking God for help) reported experiencing lower levels of Depression, Anxiety, and Anger.

### *Religious Social Support*

Religious Social Support likewise demonstrated negative correlations with the two dimensions for God Attachment. As hypothesized, Religious Social Support was found to be significantly negatively correlated with both God Attachment Anxiety ( $r = -0.169, p=.007$ ) and with God Attachment Avoidance ( $r = -0.330, p=.000$ ). Thus individuals who turn to religious leaders and friends from church for support during times of need are more likely to demonstrate a higher sense of trust about God. Religious Social Support was not found to be significantly correlated with either Adult Attachment Anxiety or Adult Attachment Avoidance.

Religious Social Support was also found to be negatively correlated with each of the three subscales for Emotion Regulation. As hypothesized, Religious Social Support was significantly negatively correlated with Depression ( $r = -0.247, p=.000$ ), Anxiety ( $r = -0.201, p=.002$ ), and Anger ( $r = -0.123, p = 0.038$ ). Thus individuals who use Religious Social Support reported experiencing lower levels of Depression, Anxiety, and Anger.

### *Correlations for Deferring Religious Coping Strategies*

It was hypothesized that students' scores for Deferring Religious Coping (Religious Pleading and Good Deeds) would be negatively correlated with the dimension of Avoidance for both God and Adult Attachment, positively correlated with the dimension of Anxiety for both God and Adult Attachment, and positively correlated with measures for Depression, Anxiety and Anger. The findings of the study partially supported this hypothesis.

### *Religious Pleading*

In support of the hypothesis, the correlational analysis revealed a significant positive correlation between Religious Pleading and the dimension of Anxiety for both God Attachment ( $r = 0.277, p=.000$ ) and Adult Attachment ( $r = 0.124, p=.038$ ). Thus individuals who employ

Religious Pleading in times of distress (i.e. immobilized to act on their own, and instead beg God for help) report more negative feelings about themselves in regards to their relationships with God and others. Religious Pleading was not found to significantly correlate with the dimension of Avoidance for either Adult Attachment or God Attachment at the  $p \leq 0.05$  levels.

As hypothesized, Religious Pleading was significantly positively correlated with the three subscales for Emotion Regulation. Religious Pleading was significantly positively correlated with Depression ( $r = 0.216, p=.001$ ), Anxiety ( $r = 0.178, p=.007$ ), and Anger ( $r = 0.317, p=.000$ ). Therefore individuals who use Religious Pleading in times of distress are more likely to report experiencing feelings of Depression, Anxiety, and Anger.

### *Good Deeds*

It was hypothesized that Good Deeds would be positively correlated with the dimension of Anxiety both for God and Adult Attachment, but the data analysis revealed just the opposite. There was a significant negative correlation between Good Deeds and both God Attachment Anxiety ( $r = -0.159, p=.011$ ) and Adult Attachment Anxiety ( $r = -0.153, p=.014$ ). Supporting the hypothesis, there was a significant negative correlation between Good Deeds and God Attachment Avoidance ( $r = -0.484, p=.000$ ). Thus individuals who report using Good Deeds (i.e. feeding the poor, increasing church involvement) in times of need are more likely to feel positively about their relationship with God and have a higher sense of trust about God and the accessibility of others to help in times of need.

As opposed to what was hypothesized, Good Deeds was significantly negatively correlated with the three subscales for Emotion Regulation where a positive relationship was hypothesized. Good Deeds was significantly negatively correlated with Depression ( $r = -0.277, p=.000$ ), Anxiety ( $r = 0.154, p=.013$ ), and Anger ( $r = -0.228, p=.000$ ). Therefore, individuals

who use Good Deeds to cope in times of need reported experiencing lower levels of Depression, Anxiety, and Anger. These findings present limited support for the study's hypothesis regarding Deferring Strategies of Religious Coping and require additional consideration.

*Correlations for Self Directing Religious Coping Strategies*

It was hypothesized that students' scores for Self Directing forms of Religious Coping (Religious Discontent and Religious Avoidance) would be positively correlated with their scores for God and Adult Attachment Avoidance, negatively correlated with their reported scores for God and Adult Attachment Anxiety, and positively correlated with measures for Depression, Anxiety and Anger. The findings partially supported this hypothesis.

*Religious Discontent*

As hypothesized, the data analysis found a strongly positive correlation between Religious Discontent and God Attachment Avoidance ( $r = 0.392, p = .000$ ). Unexpectedly, there were also positive correlations between Religious Discontent and the dimension of Anxiety for both God Attachment ( $r = 0.400, p = .000$ ) and Adult Attachment ( $r = 0.191, p = .006$ ), which was opposite from the hypothesis. Thus individuals who report Religious Discontent (i.e. who feel anger and frustration with God and distance themselves from God and other believers) also score high on Adult Attachment Anxiety and high on God Avoidance and God Anxiety. This indicates that they tend to have strong negative feeling about themselves in Adult Relationships (i.e. feeling needy and inadequate) and have negative beliefs about God's reliability and accessibility in terms of God Attachment. No statistically significant correlation was found between Religious Discontent and Adult Attachment Avoidance.

Religious Discontent was significantly positively correlated with each of the three subscales for Emotion Regulation. Religious Discontent was significantly correlated with

Depression ( $r = 0.431, p = .000$ ), Anxiety ( $r = 0.289, p = .000$ ), and Anger ( $r = 0.322, p = .000$ ).

Therefore individuals who use Religious Discontent in times of distress are more likely to report experiencing feelings of Depression, Anxiety, and Anger. These findings present mixed support for the study's hypothesis regarding Self Directing Strategies of Religious Coping, and require additional consideration.

### *Religious Avoidance*

It was hypothesized that Religious Avoidance would be positively correlated with the dimension of Avoidance for both God and Adult Attachment and negatively correlated with Anxiety for both God and Adult Attachment. The analysis did reveal a negative correlation between Religious Avoidance and God Attachment Anxiety ( $r = -0.229, p = .001$ ). However, the analysis also found a strongly negative correlation between Religious Avoidance and God Attachment Avoidance ( $r = -0.532, p = .000$ ) where a positive correlation was hypothesized. No statistically significant correlation was found between Religious Avoidance and either of the dimensions of Adult Attachment. Thus individuals who use religious activities (reading the bible, church activities) in order to divert attention away from distressing events are more likely to feel positively about God and themselves in relationship to God.

Religious Avoidance was significantly correlated with two of the three subscales for Emotion Regulation, and both were oppositely what were hypothesized. Religious Avoidance was significantly negatively correlated with Depression ( $r = -0.200, p = .002$ ) and Anger ( $r = -0.120, p = .041$ ), where a positive relationship was hypothesized. This indicates that individuals who use religious activities to avoid distressing events report significantly lower levels of depression and anger. There was no significant correlation found between Religious Avoidance and Anxiety. These findings present mixed support for the study's hypothesis regarding Self

Directed forms of Religious Coping, and additional consideration is needed particularly for Religious Avoidance.

### Research Question Two

The second research question was addressed using a series of hierarchical multiple regressions in order to determine whether Religious Coping accounted for unique variance in Emotion Regulation after accounting for both Adult and God Attachment. In the first series of regressions, each of the subscales for Emotion Regulation was individually regressed first onto the block of Adult Attachment, followed by the block God Attachment, and then followed by the block of Religious Coping subscales. The first  $R^2$  generated by this method addressed whether Adult Attachment accounted for significant variance on the target emotion. The second  $R^2$  identified the amount of total variance accounted for by both God and Adult Attachment. The change in  $R^2$  identified the unique variance accounted for by God Attachment after controlling for Adult Attachment. The third  $R^2$  reflected the total variance accounted for by all three blocks of variables, and the second Change in  $R^2$  identified the amount of unique variance accounted for by the block of Religious Coping, after accounting for both Adult Attachment and God Attachment.

### *Variances Associated with Depression*

The first set of multiple regressions examined Depression, and the unique variance associated with Adult Attachment, God Attachment, and Religious Coping. It was hypothesized that Religious Coping would account for unique variance in Depression after accounting for God Attachment and Adult Attachment, and the findings supported this hypothesis. See Table 3 below for an overview of the findings.

Table 3

### Hierarchical Regression predicting the unique variances on Depression

Step and predictor variable	$R^2$	$\Delta R^2$	$F$ Change
Step 1	0.134***	0.134***	15.545***
Adult Attachment			
Step 2	0.231***	0.097***	12.579***
Adult Attachment			
God Attachment			
Step 3	0.320***	0.089***	4.227***
Adult Attachment			
God Attachment			
Religious Coping			

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p \leq .001$

In the first step of the analysis Depression was regressed onto the two dimensions of Adult Attachment (Anxiety and Avoidance), which revealed a significant amount degree of unique variance ( $R^2 = 0.134$ ,  $p = 0.000$ ,  $F = 15.545$ ). The second step regressed Depression onto the two dimensions of Adult Attachment and God Attachment (Anxiety and Avoidance). This also revealed a significant degree of unique variance accounted for the combined effect of both Adult Attachment and God in Depression ( $R^2 = 0.231$ ,  $p = 0.000$ ,  $F = 12.579$ ). Additionally, God Attachment accounted for unique variance in Depression ( $R^2$  Change = 0.197) after controlling for Adult Attachment. The third step regressed Depression onto both dimensions of Adult and God Attachment (Anxiety and Avoidance) and the block of Religious Coping. The three blocks combined accounted for a significant amount of variance ( $R^2 = 0.320$ ,  $p = 0.001$ ,  $F = 4.227$ ). As hypothesized, Religious Coping accounted for a statistically significant amount of unique variance in Depression ( $R^2$  Change = 0.089) after accounting for both Adult Attachment and God Attachment. This indicates that the Religious Coping strategies an individual uses to regulate

Depression do have unique influence above and beyond their Adult Attachment and God Attachment beliefs.

Table 4

Hierarchical Regression Analysis Predicting Depression with Attachment and Religious Coping

Variables

Step 3 and predictor variable	Beta	t
AD AVD	-0.006	-0.098
AD ANX	0.218***	3.277***
G AVD	-0.036	-0.438
G ANX	0.171*	2.325*
Spiritually Based Coping	-0.113	-1.185
Religious Social Support	-0.110	-1.649
Religious Pleading	0.031	0.458
Good Deeds	-0.031	-0.398
Religious Discontent	0.226**	2.786**
Religious Avoidance	0.005	0.068

Note. AD AVD = Adult Attachment Avoidance; AD ANX = Adult Attachment Anxiety; G AVD = God Attachment Avoidance; G ANX = God Attachment Anxiety.

\*p=.05, \*\*p=.01, \*\*\* p=.001

Examination of the Beta weights in the final model reveal that Adult Attachment Anxiety (Beta = 0.218, t = 3.277 ), God Attachment Anxiety (Beta = 0.171, t = 3.277 ), and Religious Discontent (Beta = 0.226, t = 2.786 ) were all significant predictors of Depression. Of all the Religious Coping variables, only Religious Discontent contributed significantly to the model with a Beta weight of 0.266. The means that as Religious Discontent increased by one standard



deviation, Depression increase by about a quarter of a standard deviation after accounting for the influence of God Attachment and Adult Attachment. See Table 4 above for an overview of the predictor variables.

#### *Variances Associated with Anger*

Anger was examined using a regression analysis in the same manner as Depression above. The three steps of the multiple regression examined Anger, and each of the unique variances associated with Adult Attachment, God Attachment, and then Religious Coping. It was hypothesized that Religious Coping would account for unique variance in Anger after accounting for God Attachment and Adult Attachment, and the findings statistically support this hypothesis. See Table 5 below for an overview of the findings.

Table 5

#### Hierarchical Regression Predicting the Unique Variances on Anger

Step and predictor variable	$R^2$	$\Delta R^2$	F Change
Step 1	0.071***	0.071***	7.678***
Adult Attachment			
Step 2	0.102*	0.031*	3.387*
Adult Attachment			
God Attachment			
Step 3	0.207***	0.106***	4.298***
Adult Attachment			
God Attachment			
Religious Coping			

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\*  $p \leq .001$

In the first step of the analysis Anger was regressed onto the two dimensions of Adult Attachment (Anxiety and Avoidance), which revealed a significant amount degree of unique variance ( $R^2 = 0.620$ ,  $p = 0.001$ ). The second step regressed Anger onto the two dimensions of

Adult Attachment and God Attachment (Anxiety and Avoidance). This also revealed a significant degree of unique variance accounted for the combined effect of both Adult Attachment and God in Anger ( $R^2 = 0.083, p = 0.036$ ). Additionally, God Attachment accounted for unique variance in Anger ( $R^2$  change = 0.031) after controlling for Adult Attachment. The third step regressed Anger onto both dimensions of Adult and God Attachment (Anxiety and Avoidance) and the block of Religious Coping. The three blocks combined accounted for a significant amount of variance ( $R^2 = 0.207, p = 0.000$ ) in Anger. As hypothesized, Religious Coping accounted for a statistically significant amount of unique variance in Anger ( $R^2$  Change = 0.106) after accounting for both Adult Attachment and God Attachment. This indicates that the Religious Coping strategies an individual uses to regulate Anger do have unique influence above and beyond their Adult Attachment and God Attachment beliefs.

Examination of the Beta weights in the final model (see Table 6 below for an overview) reveal that Adult Attachment Anxiety (Beta = 0.189,  $t = 3.277$ ) and Religious Pleading (Beta = 0.238,  $t = 3.227$ ) were significant predictors of Anger. Of all the Religious Coping variables, only Religious Pleading contributed significantly to the model with a Beta weight of 0.238. This means that as Religious Pleading increased by one standard deviation, Anger increase by about a quarter of a standard deviation after accounting for the influence of God Attachment and Adult Attachment.

Table 6

Hierarchical Regression Analysis Predicting Anger with Attachment and Religious CopingVariables

Step 3 and predictor variable	<u>Beta</u>	<u>t</u>
AD AVD	-0.011	-0.098
AD ANX	0.189**	2.626**
G AVD	-0.011	-0.438
G ANX	-0.015	2.325*
Spiritually Based Coping	-0.185	-1.796
Religious Social Support	-0.022	-0.303
Religious Pleading	0.238***	3.227***
Good Deeds	-0.032	-0.382
Religious Discontent	0.089	1.012
Religious Avoidance	0.038	0.471

Note. AD AVD = Adult Attachment Avoidance; AD ANX = Adult Attachment Anxiety; G AVD = God Attachment Avoidance; G ANX = God Attachment Anxiety.

\*p=.05, \*\*p=.01, \*\*\* p=.001

*Variances Associated with Anxiety*

Anxiety was likewise examined using a regression analysis in the same manner as Depression and Anger above. The three steps of the multiple regression examined Anxiety, and each of the unique variances associated with Adult Attachment, God Attachment, and Religious Coping. It was hypothesized that Religious Coping would account for unique variance in

Anxiety after accounting for God Attachment and Adult Attachment, and the findings exhibited marginal support for this hypothesis. See Table 7 below for an overview of the findings.

Table 7

Regression predicting the unique variances on Anxiety

Step and predictor variable	$R^2$	$\Delta R^2$	F Change
Step 1	0.110***	0.110***	12.425***
Adult Attachment			
Step 2	0.153**	0.043**	5.010**
Adult Attachment			
God Attachment			
Step 3	0.205*	0.052*	2.115*
Adult Attachment			
God Attachment			
Religious Coping			

\* $p \leq .053$ , \*\* $p \leq .01$ , \*\*\*  $p \leq .001$

In the first step of the analysis Anxiety was regressed onto the two dimensions of Adult Attachment (Anxiety and Avoidance), which revealed a significant amount of unique variance ( $R^2 = 0.110$ ,  $p = 0.000$ , F Change = 12.425). The second step regressed Depression onto the two dimensions of Adult Attachment and God Attachment (Anxiety and Avoidance). This also revealed a significant degree of unique variance accounted for the combined effect of both Adult Attachment and God in Depression ( $R^2 = 0.153$ ,  $p = 0.008$ , F Change = 5.010). Additionally, God Attachment accounted for unique variance in Depression ( $R^2$  Change = 0.043) after controlling for Adult Attachment. The third step regressed Depression onto both dimensions of Adult and God Attachment (Anxiety and Avoidance) and the block of Religious Coping. The three blocks combined accounted for a marginal degree of variance ( $R^2 = 0.205$ ,  $p = 0.053$ ; F Change = 2.115). Religious Coping accounted for a mild amount of unique variance in Anxiety

after accounting for both Adult Attachment and God Attachment. This suggests that the Religious Coping strategies an individual uses to regulate Anxiety marginally influence emotion above and beyond their Adult Attachment and God Attachment beliefs.

Table 8

Hierarchical Regression Analysis Predicting Anxiety with Attachment and Religious Coping

Variables

Step 3 and predictor variable	<u>Beta</u>	<u>t</u>
AD AVD	0.080	1.214
AD ANX	0.219**	3.043**
G AVD	-0.108	-1.202
G ANX	0.158*	1.988*
Spiritually Based Coping	0.025	0.239
Religious Social Support	-0.145*	-2.010*
Religious Pleading	0.033	0.444
Good Deeds	-0.009	-0.109
Religious Discontent	0.184*	2.098*
Religious Avoidance	-0.018	-0.225

Note. AD AVD = Adult Attachment Avoidance; AD ANX = Adult Attachment Anxiety; G AVD = God Attachment Avoidance; G ANX = God Attachment Anxiety.

\*p=.05, \*\*p=.01, \*\*\* p=.001

Examination of the Beta weights in the final model reveal that Adult Attachment Anxiety (Beta = 0.219, t = 3.043 ), God Attachment Anxiety (Beta = 0.158, t = 1.988 ), Religious Social Support (Beta = -0.145, t = -2.010 ), and Religious Discontent (Beta = 0.184, t = 2.098) were all significant predictors of Anxiety in the sample population. Of all the Religious Coping variables,

both Religious Social Support and Religious Discontent contributed significantly to the model with Beta weights of -0.145 and 0.184 respectively. This means that as Religious Discontent increased by one standard deviation, or when Religious Social Support decreased by one standard deviation, that Anxiety increase by about an eighth of a standard deviation after accounting for the influence of God Attachment and Adult Attachment. See Table 8 above for an overview of the predictor variables.

## CHAPTER FIVE: SUMMARY FINDINGS, DISCUSSION, AND RECOMMENDATIONS

### SUMMARY OF FINDINGS

#### Research Question One

The first research question examined whether the six subscales of Religious Coping were correlated with the two dimensions for God and Adult Attachment (Anxiety and Avoidance) and the three subscales of Emotion Regulation (Depression, Anxiety, and Anger). A correlation matrix revealed that all six subscales of Religious Coping were significantly correlated with both Attachment and Emotion Regulation, and these correlations supported the researcher's hypotheses in most instances (see Table 2).

#### *Religious Coping and Emotion Regulation*

There were three basic hypotheses regarding Religious Coping and Emotion Regulation. First, it was hypothesized that Collaborative Coping (Spiritually Based Coping and Religious Social Support) would negatively correlate with Emotion Regulation, second that Deferring Coping (Pleading and Good Deeds) would positively correlate with Emotion Regulation, and third that Self Directed Coping (Religious Discontent and Religious Avoidance) would also positively correlate with Emotion Regulation. The findings of the correlation matrix mostly supported these hypotheses.

As expected, the two forms of Collaborative Religious Coping did negatively correlate with all three subscales for Emotion Regulation; Anger, Anxiety and Depression. This indicates that students who use collaborative forms of religious coping also report experiencing lower levels of Anger, Anxiety, and Depression. Also supporting the researcher's hypothesis, students who reported using Religious Pleading (a form of Deferring Religious Coping) or Religious Discontent (a form of Self Directed Religious Coping) reported higher levels of all three

Emotion Regulation subscales. This indicates that individuals who rely upon Religious Pleading or Religious Discontent are more likely to report higher levels of Anxiety, Depression, and Anger. These findings support the hypothesis that religious coping strategies which mimic secure base attachment behavior (Collaborative Coping) will be more common among students who are effective in Emotion Regulation. Likewise, those students who use religious coping strategies which mimic insecure base attachment behavior (Deferring and Self Directive Coping) will be more likely to report less effective Emotion Regulation.

### *Religious Coping and Attachment Beliefs*

There were also three hypotheses regarding Religious Coping and Attachment Beliefs. First, it was hypothesized that Collaborative Coping (Spiritually Based Coping and Religious Social Support) would negatively correlate with the two dimensions of Attachment (Anxiety and Avoidance) for both God Attachment and Adult Attachment. Second, it was hypothesized that Deferring Religious Coping would positively correlate with the dimension of Anxiety and negatively correlate with the dimension of Avoidance for both God and Adult Attachment. Third, it was hypothesized that Self Directing forms of Religious Coping would negatively correlate with the dimension of Anxiety and positively correlate with the dimension of Avoidance for both God and Adult Attachment. Again, the findings in the correlation matrix mostly supported these hypotheses.

As hypothesized, the two forms of Collaborative Religious Coping did negatively correlate with the dimension of Anxiety for both God and Adult Attachment, and also negatively for the dimension of God Avoidance. This indicates that individuals who report secure God Attachment and secure Adult Attachment are also more likely to use Collaborative forms of Religious Coping. Likewise as hypothesized, Religious Pleading (a form of Deferring Religious



Coping) positively correlated with the dimension of Anxiety for both God and Adult Attachment, and Good Deeds (the second form of Deferring Religious Coping) was negatively correlated with the dimension of God Avoidance. The hypothesis was also supported in that Religious Discontent (a form of Self Directed Religious Coping) positively correlated with the dimension of God Avoidance. This indicates that individuals who report using Deferring and Self Directing forms of Religious Coping are more likely to report less secure attachments with God and Adults. These results provide good support for the hypotheses regarding the relationships between Religious Coping and Attachment Beliefs.

#### Research Question Two

The second research question sought to determine whether Religious Coping offered unique variance in Emotion Regulation after controlling for the influence of both Adult Attachment and God Attachment. A series of regressions for each of the three Emotions (Depression, Anger, and Anxiety) revealed that Religious Coping did offer a statistically significant amount of unique variance for both Depression and Anger, and marginal variance for Anxiety (see Tables 3 - 8) after accounting for the variances associated with Adult Attachment and God Attachment. These findings supported the second hypothesis regarding Religious Coping and Emotion Regulation and indicate that the Religious Coping strategies an individual employs will influence Emotion Regulation above and beyond the influence of their attachment belief systems, for both God Attachment and Adult Attachment.

#### LIMITATIONS

There were a handful of limitations to this study that must be considered when reviewing the findings. First, this particular study used a cross sectional design where a longitudinal study would have provided more statistically powerful design. While most existing research in the area

of Religious Coping and Attachment have been limited to cross sectional designs, future studies should use a longitudinal approach. Secondly, this study was limited to a population of students attending an Evangelical college. The findings cannot be generalized to the greater population, nor to other forms of Christianity (Catholicism, Orthodox). It is possible that different forms of Christianity conceptualize Religious Coping strategies differently, as will be discussed further below. Likewise, the sample was limited to a population of college students which does not represent the greater population as a whole, or even necessarily the greater Evangelical population. Future research should examine whether the dynamics found in the current study are replicated with populations representing other forms of Christianity, and whether the findings are consistent with other age groups who identify themselves as Evangelicals.

It should also be noted that the current study did not account for specific stressful life events which students may have been experiencing at the time they participated in the study. It is possible that some answers were given in response to unusually difficult life circumstances and did not reflect their normal experience in life. It is also possible that the freshmen in the study may have experienced a greater degree of stress at the time of the study than the sophomores who were already acclimated to life away from home. In addition, all of the measurement instruments used in this study were of a self report nature relying upon the honesty and accuracy of the sample. The results of this study are only accurate to the degree the sample population honestly answered the questions presented. Future studies should control for current stressful life events and utilize more interview based instruments for Attachment and Emotion Regulation, though no interview based instruments currently exist for Religious Coping.

## DISCUSSION AND RECOMMENDATIONS

### Unexpected Findings Regarding Good Deeds and Religious Avoidance

The study identified two Religious Coping subscales which were significantly correlated in the opposite direction with Emotion Regulation and Attachment than what was hypothesized. First, Good Deeds was negatively correlated with all three subscales of Emotion Regulation, where a positive correlation was expected. Likewise, Good Deeds demonstrated a negative correlation with attachment Anxiety for both God and Adult Attachment where a positive relationship was expected. This indicates that individuals in the study who used Good Deeds as a religious coping strategy also felt good about themselves and themselves in relationship to God and also reported lower levels of Anger, Depression and Anxiety.

Also unexpected, Religious Avoidance was negatively correlated with Depression, Anxiety and Anger, where a positive correlation was expected. Religious Avoidance was also strongly negatively correlated with God Avoidance, where a positive relationship was hypothesized. This would indicate that people who use Religious Avoidance also feel positively about God and report lower levels of Anxiety, Anger, and Depression. These are completely opposite from the hypotheses, and do not seem to line up with the theoretical framework developed by Pargament (1990) when he developed the Religious Coping Activities Scale.

Pargament (1990) conceptualized Good Deeds as a Deferring Coping strategy, where individuals do not believe they are capable of handling distressing events on their own and instead they look to God to intervene on their behalf. From this perspective, Good Deeds is similar to a *hyper-activation* strategy where much energy is given to attract an attachment figure's attention in the hopes of gaining their help and support in regulating emotions. In terms of Religious Coping, it means an individual experiencing distress will choose to do good thing in

the hopes of attracting God's attention, earning His approval, and manipulating Him to help deal with the presenting stressor. Pargament's (1990) theoretical framework assumes a disingenuous motivation, but the findings in this study indicate that this may actually not be the case among Evangelicals. Instead, for the sample population Good Deeds may actually serve as a form of proximity seeking behavior with God as described by Kirkpatrick (1999). In other words, by doing good deeds a believer may be seeking closeness with God, not attempting to manipulate God's approval. This seems to be a concept reflected in the Christian Scriptures. Jesus explains in Matthew 25 that when believers do good deeds by serving the poor and hungry, they are actually serving Him. In this way Evangelicals may employ Good Deeds as a more of a Collaborative form of religious coping, where the coping behavior is more in line with a secure attachment strategy.

Similarly, while Religious Avoidance was conceptualized by Pargament (1990) as a Self Directing form of Religious Coping, it may instead serve some Evangelical believers as form of proximity seeking behavior. Pargament (1990) theorized that a person who used Religious Avoidance by engrossing themselves in prayer or religious activity did so in order to avoid a presenting problem. This perspective understands Religious Avoidance as a type of *deactivation* strategy and demonstrative of avoidant attachment behavior where an individual ignores a stressor by intentionally directing attention elsewhere. However for Evangelicals the activities common to Religious Avoidance may actually serve as a strategy for drawing close to God in an attempt to gain attachment security. The focused time in religious activity may not be an avoidant strategy, but instead an attempt for closeness with God. By focusing attention fully on God through prayer, scripture reading, or attending services, an Evangelical may not be avoiding a problem but seeking proximity to God and the church body as attachment figures. This

likewise would demonstrate a potential form of proximity seeking and be more characteristic of individuals with secure attachments, which was supported by finding in the study.

The believer who conceptualizes their faith as described above may be demonstrating secure base functioning by serving others through good deeds or by dedicating concerted time and energy to religious activity apart from the distractions of the distressing events. Where Pargament (1990) conceptualized these as negative forms of Religious Coping, the Evangelical believer may use them as strategies typical of healthy attachment functioning. Future research should examine whether various forms of Christianity (i.e. Catholic, Orthodox, and Evangelical) conceptualize Religious Coping strategies differently, and whether they serve these populations uniquely. Additionally, future studies should examine the underlying organization and function of Good Deeds and Religious Avoidance and their relationship to secure attachment behaviors (Sroufe, 1996).

#### The Influence of Religious Discontent on Depression

Of particular interest in the findings was the influence Religious Discontent had on Depression. The findings indicate that this particular Religious Coping strategy was a significant predictor of Depression after controlling for the influence of God and Adult Attachment. Religious Discontent does not reflect a disbelief in God, but anger towards God and a movement away from God and other believers in response to a stressful event. It may be that individuals who choose this unhealthy form of religious coping are cognitively pessimistic about God and their relationship with God. The attitudinal positioning toward God may account for an individual choosing Religious Discontent and the increase in Depression. Research does link pessimistic cognitions with depression (“Excessive Pessimism”, 2005). There is also evidence that pessimism predicts health outcomes in cancer patients (Rinquant, Frohlich, & Silberseisen,

2007). In the instance of religious coping, it may be that the attitudinal position of the individual influences the use of Religious Discontent and contributes to the increase in depression. If future research can reveal a relationship between pessimism and Religious Discontent, it may help explain why this particular religious coping strategy so strongly predicts depressed mood and may lead to findings linking Religious Discontent to other negative health outcomes. In other words, pessimism as a general cognitive style may explain the connection between Religious Discontent and depressed mood. Future research may want to examine this relationship more closely.

#### The Influence of Religious Pleading on Anger

It was also very interesting to find that Religious Pleading strongly predicted Anger after accounting for the influence of God and Adult Attachment. Religious Pleading, as conceptualized by Pargament (1990), is a type of *hyper-activation* strategy which is common among individuals with the preoccupied form of attachment. These individuals do not see themselves as capable of providing for their own needs and instead seek out others with exaggerated pleas for help. This strategy is grounded in the belief that others can help, but that they will only do so if an urgent need is presented and their attention can be gained. There is also uncertainty as to whether others will consistently provide support. Therefore all needs are perceived as urgent and are used by the individual to seek and maintain proximity with others. When individuals conceptualize their relationship with God in this manner, there is the potential of creating a chronic disconnect with God. The belief forms that God cannot be trusted to consistently provide security when needs are presented, and so the individual must beg and plead in an attempt to gain His attention and response. It is not a question of whether God is capable of providing, or whether He is aware of the presenting need. Pleading may represent a belief that

God will not intervene of His own accord and must instead be coerced into helping the individual in need. In doing so, the individual is likely to become angry and anxious with God and their situation in life. They feel incapable of providing for their own needs, and may perceive God as ambivalent about providing for their need. As expected, individuals using Religious Pleading also reported negative feelings about their self in relationship to God.

Theoretically, one would expect to find a relationship between Religious Pleading and Religious Doubt, and future research should examine whether a relationship exists. When a person believes they must beg and plead to gain God's approval, one would expect that individual to also report higher levels of Religious Doubt. No scholarship to date has examined Religious Doubt and its relationship to the various Religious Coping strategies, and studies are needed to better understand how these two areas may be related.

#### Potential Implications for the Church

This study raises some implications for religious leaders and the way the church provides direction and guidance for believers. First, pastors and religious leaders should consider providing specific training on how a believer can use his faith in times of distress. It is important that believers recognize unhealthy forms of Religious Coping and the faulty beliefs that may underlie them. By doing so, religious leaders will help their congregations not only better understand God and their relationship with Him, but also lead them towards more healthy forms of Emotion Regulation. Secondly, the church should focus attention on helping their congregations specifically develop Collaborative forms of Religious Coping. This may include cultivating interpersonal relationships within the congregation through the use of small groups and accountability partners. It may also involve initiating more intentional discipleship

relationships, where more mature believers build relationships with those newer to their faith. In doing so these relationships may serve as a foundation for Religious Social Support.

The church may also provide teaching and training in ways individuals may seek God for help in solving problems in order to cultivate Spiritual Coping. It seems important that believers should not perceive themselves as completely incapable of meeting their own needs, especially in light of the resources God provides. The church can help individuals recognize the many resources their faith offers them both spiritually and within their church body, and guide believers in using them effectively during times of need. In doing so, the church will help individuals learn more positive ways of Religious Coping which in turn will provide more effective Emotion Regulation, regardless of the individual's attachment beliefs.

Finally it seems that teaching on contentment may help individuals reframe the stressors they are facing, and help them choose more effective Religious Coping strategies. Moving a person towards an attitude of contentedness directly addresses issues of pessimism and discontent. The church might encourage the use of various spiritual disciplines (meditation, prayer, fasting, etc) and whether or not these practices can influence the types of spiritual coping. Consider Paul's exhortation in his letter to the Philippians, to find contentment in all circumstances. In doing so, believers may move attitudinally to a more trusting position of God. This also moves believers towards security in relationship with God and away from a pragmatic drive of solving presenting problems. Metaphysically, it also helps believers look beyond the presenting problems of this world to an eternal relationship with God which transcends physical realities.



### Considerations Regarding Correspondence and Compensation Theories

While the current study did not specifically examine the Correspondence or Compensation hypotheses, there are some observations worth noting. There are two primary views on what sort of relationship exists between a person's attachment beliefs and their religiosity (Kirkpatrick, 1992). The Correspondence theory posits that individuals with secure adult attachments will also have secure God attachment. This theory views individuals with secure childhood attachments as having formed the relational foundation for developing a relationship with God (Granqvist, 2002). Their secure childhood relationships correspond with a secure adult relationship with God (Granqvist & Hagekull, 1999). The Correspondence hypothesis theorizes that just as secure children depend on and trust their parents during times of need, so will they depend on and trust God as adults when facing difficult life circumstances (Granqvist, 1998).

In contrast, the Compensation hypothesis anticipates that individuals with insecure adult attachments will have secure God attachment. This theory makes an assumption that individuals who experience insecure childhoods have a greater need to establish compensatory relationships with God in order to regulate their distress and enable them to experience felt security (Granqvist & Kirkpatrick, 2004). Needing a secure base, the Compensation hypothesis suggests these individuals seek out God as a surrogate attachment figure (Kirkpatrick, 1992). The new relationship with God functions as a surrogate attachment relationship, which helps these individuals regulate their emotions and promotes feelings of security (Granqvist, 2002).

The current study relied on the conceptual framework behind the Correspondence theory when making predictions about Attachment beliefs and their relationship with Religious Coping. It was hypothesized that the relationship between Religious Coping and Adult Attachment

beliefs would mirror the relationship between Religious Coping and God Attachment beliefs. In other words, it was expected that relationships with Adult Attachment would correspond with relationships with God Attachment. It was thought that the two attachment systems would correspond with one another throughout the study. The findings supported this throughout the correlational table (see Table 2) used for Research Question One. This study found that all the adult measures lined up with God attachment measures, supporting the correspondence hypothesis. Throughout the correlations between Religious Coping and Attachment Beliefs, both God Attachment and Adult Attachment lined up very closely with one another. In fact, there was not a single significant correlation in the current study which could be viewed as supporting the Compensation hypothesis.

Other studies have found mixed support for both of these hypotheses (Granqvist & Kirkpatrick, 2004). Most of the studies regarding these two theories examined pathways for religious conversion. It is recommended that future studies should explore the various ways the two theories might explain how individuals use and rely upon their faith to deal with the stresses and difficulties of life.

## CONCLUSION

This study extended current research regarding the relationships between Emotion Regulation, Attachment Beliefs, and Religious Coping Strategies. The study found that in the sample population specific Religious Coping strategies were strongly correlated with Emotion Regulation and the dimensions of attachment for both God and Adult Attachment. Moreover, it found that Religious Coping contributed unique variance to each of the subscales of Emotion Regulation, even after controlling for the influence of God Attachment and Adult Attachment. The findings supported almost all of the hypotheses presented in the study. The few

contradictory findings seem to indicate that the theoretical framework behind Religious Coping needs to be reevaluated in light of different forms of Christianity. It is possible that different Religious Coping strategies are conceptualized differently by various forms of Christianity.

The findings regarding Religious Coping are valuable from a number of standpoints. First, these findings indicate that positive forms of Religious Coping are more effective at Emotion Regulation than negative forms of Religious Coping. Moreover, the study found that the Religious Coping mechanisms a person employs are not merely a dynamic of their attachment system, but they provide unique influence on Anger, Depression, and Anxiety above and beyond the influence of their attachment beliefs regarding God and Adults. This supports the idea that Religious Coping strategies are an essential component for how individuals manage their emotions during difficult life circumstances. It also heightens the need for individuals to learn positive ways of Religious Coping, to identify negative Religious Coping strategies when they are used and to replace them with healthy forms of Religious Coping instead.

These findings heighten the importance for church leaders to better understand how individuals in their congregations are using their faith to cope with stress, and to equip them specifically in how to use Religious Social Support and Spiritual Coping. Churches should train and equip people to recognize and use their faith based resources for coping with difficult life circumstances, and to identify negative forms of religious coping which may lead to negative outcomes. It is also important that church leaders work to address the faulty beliefs about God that may be responsible for a believer using more negative forms of Religious Coping.

It is also important that Christian counselors begin to incorporate concepts of religious coping in their practices. The counselors should examine why their clients have adopted certain Religious Coping strategies and look for the attitudinal and cognitive reasons behind their use. It

may be that an individual needs to reexamine their underlying attachment beliefs about God and others in order to better understand the strategies they're relying upon to regulate their emotions.

The primary application for this study is not merely to help people move towards more effective forms of Religious Coping and to achieve better emotional adjustment. It is the desire of the author that this study might also help people grow stronger in their faith and that the findings of this study may help believers better understand the dynamics associated with their attachment relationship with God. In order to form a healthy attachment with God it is essential that believers view God as a reliable, trustworthy and willing to help in times of need. In order to use this secure base relationship in times of distress, believers need to recognize the spiritual resources God provides, both through a personal relationship with Himself and through His church. In times of distress, believers will be best served in regulating their emotions by seeking proximity with attachment figures and by pursuing collaborative forms of Religious Coping. By doing so, believers cultivate a closer relationship with God where He is trusted to provide a secure base for functioning. This concept echoes in the words of Peter in his first epistle, when he exhorts the believers to cast their anxieties upon God, because He cares for them. Just as a child learns to trust his parents more and more through their quick, consistent, and effective responses in times of distress, so will a believer grow closer to God as he seeks and trusts in God using positive Religious Coping strategies in order to effectively regulate his emotions.

## REFERENCES

- Ainsworth, M. D. (1985). Patterns of attachment. *Clinical Psychologist*, 38, 27-29.
- Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B. M. Caldwell & H. N. Ricciuti (Eds.), *Review of child development research* (Vol. 3, pp. 1-94). Chicago, IL: University of Chicago Press.
- Ainsworth, M. D. S. (1991). Attachment and other affectional bonds across the life cycle. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 33-51). New York: Routledge.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: Assessed in the strange situation and at home*. Hillsdale, NJ: Erlbaum.
- Allen, J. P., Moore, C., Kuperminc, G., & Bell, K. (1998). Attachment and adolescent psychosocial functioning. *Child Development*, 69, 1406-1419.
- Arnett, J., (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.
- Arnold, M. (1960). *Emotion and personality. Vol. 1 Psychological aspects*. New York: Columbia University Press.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Barrett, K. C., & Campos, J. J. (1987). Perspectives on emotional development: A functionalist approach to emotions. In J. D. Osofsky (Ed.), *Handbook of infant development* (2<sup>nd</sup> Ed.) (pp. 555-578). New York: Wiley.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7, 147-178.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 67, 226-244.
- Batgos, J. & Leadbeater, B. J. (1994). Parental attachment, peer relations, and dysphoria in adolescence. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 155-178). New York: The Guilford Press.
- Beauregard, M., Lévesque, J., & Paquette, V. (2004). Neural basis of conscious and voluntary self-regulation of emotion. In M. Beauregard (Ed.), *Consciousness, emotional self-regulation and the brain* (pp. 35-59). Philadelphia: John Benjamins.

- Beck, R., & McDonald, A. (2004). Attachment to God: The Attachment to God Inventory, tests of working model correspondence, and an exploration of faith group differences. *Journal of Psychology & Theology*, 32(2), 92-103.
- Belavich, T., & Pargament, K. I. (2002). The role of attachment in predicting spiritual coping with a loved one in surgery. *Journal of Adult Development*, 9, 13-29.
- Birgegard, A., & Granqvist, P. (2004). The correspondence between attachment to parents and God: Three experiments using subliminal separation cues. *Personality and Social Psychology Bulletin*, 30(9), 1122-1135.
- Bjorck, J., & Cohen, L. (1993). Coping with threats, losses, and challenges. *Journal of Social & Clinical Psychology*, 12(1), 56-72.
- Blandon, A., Calkins, S., Keane, S., & O'Brien, M. (2008). Individual differences in trajectories of emotion regulation processes: The effects of maternal depressive symptomatology and children's physiological regulation. *Developmental Psychology*, 44(4), 1110-1123
- Blatt, S., Auerbach, J., Levy, K. (1997). Mental representations in personality development, psychopathology, and the therapeutic process. *Review of General Psychology*, 4, 351-374.
- Boden, J., & Baumeister, R. (1997). Repressive coping: Distraction using pleasant thoughts and memories. *Journal of Personality and Social Psychology*, 73(1), 45-62.
- Bowlby, J. (1969). *Attachment* (2<sup>nd</sup> ed.). New York: Basic Books.
- Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation: Anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Bowlby, J. (1980). *Attachment and loss: Vol. 3. Sadness and depression*. New York: Basic Books.
- Bowlby, J. (1982/1969). *Attachment and loss: Vol. 1. Attachment* (2<sup>nd</sup> ed.). New York: Basic Books.
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- Bradley, R., Schwartz, A., & Kaslow, N. (2005). Post traumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence and suicidal behaviors: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress*, 18(6), 685-696.

- Brennan, K., Shaver, P., & Tobey, A. (1991). Attachment styles, gender and parental problem drinking. *Journal of Social and Personal Relationships*, 8(4), 451-466.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: The Guilford Press.
- Bridges, L. J., & Grolnick, W. S. (1995). The development of emotional self-regulation in infancy and early childhood. In N. Eisenberg (Ed.), *Review of personality and social psychology, Vol 15: Social development* (pp. 185-211). Thousand Oaks, CA: Sage.
- Burns, D. (1997). The brief mood survey, in *The Therapist's Toolkit*. (Available from Feeling Good Inc. by contacting toolkit@feelgood.com).
- Byrd, K., & Boe, A. (2001). The correspondence between attachment dimensions and prayer in college students. *International Journal for the Psychology of Religion*, 11(1), 9-24.
- Calkins, S. D. (1994). Individual differences in the biological aspects of temperament. In J. E. Bates, & T. D. Wachs (Eds.), *Temperament: Individual differences at the interface of biology and behavior, APA science volumes* (pp. 199-217). Washington, DC: American Psychological Association.
- Calkins, S. D. (1997). Cardiac vagal tone indices of temperamental reactivity and behavioral regulation in young children. *Developmental Psychobiology*, 31, 125-135.
- Calkins, S. D., & Dedmon, S. E. (2000). Physiological and behavioral regulation in two-year-old children with aggressive/destructive behavior problems. *Journal of Abnormal Child Psychology*, 2, 103-118.
- Calkins, S. D., Gill, K. A., Johnson, M. C. & Smith, C. (1999). Emotional reactivity and emotion regulation strategies as predictors of social behavior with peers during toddlerhood. *Social Development*, 8, 310-341.
- Calkins, S. D., Graziano, P., & Keane, S. P. (2007). Cardiac vagal regulation to emotional challenge differentiates among child behavior problem subtypes. *Biological Psychology*, 74, 144-153.
- Calkins, S. D., & Hill, A. (2007). Caregiver influences on emerging emotion regulation: Biological and environmental transactions in early development. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-26). New York: Guilford Press.
- Calkins, S. D., & Keane, S. P. (2004). Cardiac vagal regulation across the preschool period: Stability, continuity, and implications for childhood adjustment. *Developmental Psychobiology*, 45, 101-112.

- Cassidy, J., & Berlin, L. J. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development, 65*, 971-991.
- Cassidy, J., & Kobak, R. R. (1988). Avoidance and its relationship with other defensive processes. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 300-323). Hillsdale, NJ: Erlbaum.
- Clark, L. A., & Watson, D. (1994). Distinguishing functional from dysfunctional affective responses. In P. Ekman & R. J. Davidson (Eds.) *The nature of emotion: Fundamental questions* (pp. 131-136). Oxford: Oxford University Press.
- Clore, G. C. (1994). Why emotions are felt. In P. Ekman & R. J. Davidson (Eds.) *The nature of emotion: Fundamental questions* (pp. 103-111). Oxford: Oxford University Press.
- Cohn, J., Campbell, S., Matias, R., & Hopkins, J. (1990). Face-to-face interactions of postpartum depressed and nondepressed mother-infant pairs at 2 months. *Developmental Psychology, 26*(1), 15-23.
- Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Challenges for child development research. *Child Development, 75*, 317-333.
- Cole, P. M., Michel, M. K., & Teti, L. O. (1994). The development of emotion regulation and dysregulation: A clinical perspective. In N. A. Fox (Ed.), *The development of emotion regulation: Biological and behavioral considerations. Monographs of the Society for Research in Child Development. 59* (Serial No. 240), 73-100.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and care-giving in intimate relationships. *Journal of Personality and Social Psychology, 78*, 1053-1073.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 644-663.
- Collins, N. L., & Read, S. J. (1994). Cognitive representations of attachment: The structure and function of working models. In K. Bartholomew & D. Perlman (Eds.), *Attachment processes in adulthood* (pp.53-92). London: Jessica Kingsley.
- Contreras, J. M., & Kerns, K. A. (2000). Emotion regulation processes: Explaining links between parent-child attachment and peer relationships. In Kerns, K. A., Contreras, J. M., Barnett, N., & Angela, M. (Eds.). *Family and peers: Linking two social worlds*. Westport, CT, Praeger Publishers.
- Contreras, J. M., Kerns, K. A., Weimer, B. L., Gentzler, A. L., & Tomich, P. L. (2000). Emotion regulation as a mediator of associations between mother-child attachment and peer relationships in middle childhood. *Journal of Family Psychology, 14*, 111-124.



- Cortez, V. L., & Bugental, D. B. (1994). Children's visual avoidance of threat: A strategy associated with low social control. *Merrill Palmer Quarterly*, 40, 82-97.
- Crowell, J., Fraley, C., & Shaver, P. (1999). Measurement of individual differences in adolescent and adult attachment. In J. Cassidy, & P. Shaver (Ed.s), *Handbook of attachment: Theory, research, and clinical applications* (434-465). New York: Guilford Press.
- Cummings, E. M., & Davies, P. T. (1996). Emotional security as a regulatory process in normal development and the development of psychopathology. *Development and Psychopathology*, 8, 123-139.
- Cummings, E. M., Keller, P. S., & Davies, P. T. (2005). Towards a family process model of maternal and paternal depressive symptoms: Exploring multiple relations with child and family functioning. *Journal of Child Psychology and Psychiatry*, 46, 479-489.
- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, 113, 487-496.
- Davidson, R., Fox, A., & Kalin, N. (2007). Neural bases of emotion regulation in nonhuman primates and humans. In Gross, James J. (Ed), *Handbook of emotion regulation* (pp. 47-68). New York: Guilford Press.
- De Wolff, M. S., & Van Ijzendoorn, M. H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development*, 68, 571-591.
- DeGangi, G., DiPietro, J., Greenspan, S., & Porges, S. W. (1991). Psychophysiological characteristics of the regulatory disordered infant. *Infant Behavior and Development*, 14, 37-50.
- Denham, S., Blair, K., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan (2003). Preschool emotional competence: Pathway to social competence? *Child Development*, 74(1), 238-256.
- Denham, S. A. (1998). *Emotional development in young children*. New York: The Guilford Press.
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., et al. (2003). Preschool emotional competence: Pathway to social competence? *Child Development*, 74, 238-256.
- Denham, S. A., Mitchell-Copeland, J., Strandberg, K., Auerbach, S., & Blair, K. (1997). Parental contributions to preschoolers' emotional competence: Direct and indirect effects. *Motivation and Emotion*, 21, 65-86.

- Diamond, L. & Aspinwall, L. (2003). Emotion regulation across the life span: An integrative perspective emphasizing self-regulation, positive affect, and dyadic processes. *Motivation and Emotion*, 27( 2), 125-156.
- Diamond, L. M., Hicks, A. M. & Otter-Henderson, K. (2006). Physiological evidence for repressive coping among avoidantly attached adults. *Journal of Social and Personal Relationships*, 23(2), 205-229.
- Diller, L. (2006). *The last normal child: Essays on the intersection of kids, culture, and psychiatric drugs*. Westport, CT.: Praeger Publishers.
- Dozier, M., & Kobak, R. (1992). Psychophysiology in attachment interviews: Converging evidence for deactivating strategies. *Child Development*, 63(6), 1473-1480.
- Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, 9, 241-273.
- Eisenberg, N., & Morris, A. S. (2002). Children's emotion-related regulation. In H. Reese, & R. Kail (Eds.), *Advances in child development and behavior* (Vol. 30, pp. 189-229). San Diego, CA: Academic Press.
- Eisenberg, N., & Fabes, R., (1998). Prosocial development. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology, 5<sup>th</sup> ed.: Vol 3. Social, emotional, and personality development* (pp. 701-778). Hoboken, NJ: John Wiley & Sons Inc.
- Eisenberg, N., Fabes, R. A., & Losoya, S. (1997). Emotional responding: Regulation, social correlates, and socialization. In P. Salovey & D. J. Sluyter, *Emotional development and emotional intelligence: Educational implications* (pp. 129-163).
- Eisenberg, N., & Spinrad, T. L. (2004). Emotion-related regulation: Sharpening the definition. *Child Development*, 75(2), 334-339.
- Eisenberg, N., Spinrad, T., & Morris, A. (2002). Regulation, resiliency, and quality of social functioning. *Self & Identity*, 1(2), 121-128.
- Eisenberg, N., & Valiente, C. (2004). Elaborations on a theme: Beyond main effects in relations of parenting to children's coping and regulation. *Parenting: Science and Practice*, 4, 319-323.
- Eisenberg, N., Valiente, C., Morris, A. S., Fabes, R. A., Cumberland, A., & Reiser, M. (2003). Longitudinal relations among parental emotional expressivity, children's regulation, and quality of socioemotional functioning. *Developmental Psychology*, 39, 3-19.
- Emde, R. N., Biringen, Z., Clyman, R. B., & Oppenheim, D. (1991). The moral self of infancy: Affective core and procedural knowledge. *Developmental Review*, 11, 251-270.

- Excessive pessimism, depression may influence path to dementia (2005). *Geriatrics*, 60(6), 17.
- Feeney B. C., & Collins, N. L. (2001). Predictors of caregiving in adult intimate relationships: An attachment theoretical perspective. *Journal of Personality and Social Psychology*, 80, 972-994.
- Feeney, J. A., & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. *Journal of Personality and Social Psychology*, 59(2), 281-291.
- Fehr, B., & Russell, A. J. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General*, 113, 464-486.
- Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organization of infant-mother attachment at year one of age. *Child Development*, 62(5), 891-906.
- Fox, N. (1994). Dynamic cerebral processes underlying emotion regulation. *Monographs of the Society for Research in Child Development*, 59(2), 152-166.
- Fraley, R. C., & Shaver, P. R. (1997). Adult attachment and the suppression of unwanted thoughts. *Journal of Personality and Social Psychology*, 73(5), 1080-1091.
- Fraley, R. C., & Shaver, P. R. (1998). Airport separations: A naturalistic study of adult attachment dynamics in separating couples. *Journal of Personality and Social Psychology*, 75, 1198-1212.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56, 218-226.
- Friedel, L. (1995). *The impact of controllable and uncontrollable negative events in the work environment: The role of religious and non-religious coping strategies*. Unpublished master's thesis, Bowling Green State University.
- Frijda, N. H. (1986). *The emotions*. New York, Cambridge University Press.
- Fuendeling, J. M. (1998). Affect regulation as a stylistic process within adult attachment. *Journal of Social and Personal Relationships*, 15, 291-322.
- Garber, J., Braafladt, N., & Zeman, J. (1991). The regulation of sad affect: An information-processing perspective. In J. Garber and K. A. Dodge (Eds.) *The development of emotion regulation and dysregulation: Cambridge studies in social and emotional development* (pp. 208-240). Cambridge: Cambridge University Press.
- Garber, J., & Dodge, K. A. (Eds.). (1991). *The development of emotion regulation and dysregulation*. Cambridge: Cambridge University Press.

- Garner, P. W., & Spears, F. M. (2000). Emotion regulation in low-income preschoolers. *Social Development, 9*, 246-264.
- Gekoski, M., Rovee-Collier, C., & Carulli-Rabinowitz, V. (1983). A longitudinal analysis of inhibition of infant distress: The origins of social expectations? *Infant Behavior & Development, vol. 6(3)*, 339-351.
- George, C., Kaplan, N., & Main, M. (1985). *Adult Attachment Interview*. Unpublished manuscripts, University of California, Berkeley.
- Gilliom, M., Shaw, D., Beck, J., Schonberg, M., & Lukon, J. (2002). Anger regulation in disadvantaged preschool boys: Strategies, antecedents, and the development of self-control. *Developmental Psychology, 38*, 222-235.
- Goldsmith, H. H., & Davidson, R. J. (2004). Disambiguating the components of emotion regulation. *Child Development, 75*, 361-365.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam Books Inc.
- Gottman, J. M., Katz, L. F. & Hooven, C. (1996). Parental meta-emotion philosophy and the emotional life of families: Theoretical models and preliminary data. *Journal of Family Psychology, 10*, 243-268.
- Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion*. Mahwah, NJ: Lawrence Erlbaum.
- Granqvist, P. (1998). Religiousness and perceived childhood attachment: On the question of compensation or correspondence. *Journal for the Scientific Study of Religion, 37(2)*, 350-367.
- Granqvist, P. (2002). Attachment and religiosity in adolescence: Cross-sectional and longitudinal evaluations. *Personality and Social Psychology Bulletin, 28(2)*, 260-270.
- Granqvist, P. (2005). Building a bridge between attachment and religious coping: Test of moderators and mediators. *Mental Health, Religion, and Culture, 8*, 35-47.
- Granqvist, P., & Hagekull, B. (1999). Religiousness and perceived childhood attachment: Profiling socialized correspondence and emotional compensation. *Journal for the Scientific Study of Religion, 38(2)*, 254-273.
- Granqvist P., & Hagekull, B. (2000). Religiosity, adult attachment, and why “singles” are more religious. *International Journal for the Psychology of Religion, 10*, 111-123.
- Granqvist, P. & Hagekull, B. (2001). Seeking security in the new age: On attachment and emotional compensation. *Journal for the Scientific Study of Religion, 40(3)*, 527-545.

- Granqvist, P., & Kirkpatrick, L. (2004). Religious conversion and perceived childhood attachment: A meta-analysis. *International Journal for the Psychology of Religion, 14*(4), 223-250.
- Gratz, K., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment, 26*(1), 41-54.
- Greenspan, S. (1990). *The development of the ego: Implications for personality theory, psychopathology, and the psychotherapeutic process*. New York: International Universities Press.
- Greenspan, S., Shanker, S., & Benderly, B. (2006). The emotional architecture of the mind. In R. Cavoukian & S. Olfman (Eds.), *Child honoring: How to turn this world around* (pp 5-15). Westport, CT: Praeger Publisher.
- Griffin, D. & Bartholomew, K. (1994a). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew (Ed.) *Attachment processes in adulthood (17-52)*, London, Jessica Kingsley Publishers.
- Griffin, D. W. & Bartholomew, K. (1994b). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology, 67*, 430-445.
- Grolnick, W. S., Bridges, L. J., & Connell, J. P. (1996). Emotion regulation in two-year-olds: Strategies and emotional expression in four contexts. *Child Development, 67*, 928-941.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*, 271-299.
- Gross, J. J. (1999). Emotion regulation: Past, present, future. *Cognition and emotion 13*(5): 551-573.
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology, 39*: 281-291.
- Gross, J. J., & Munoz, R. F. (1995). Emotion regulation and mental health. *Clinical Psychology: Science and Practice, 2*, 151-164.
- Gross, J. J., Richards, J. M., & John, O. P. (2006). Emotion regulation in everyday life. In D. K. Snyder, J.A. Simpson, & J. N. Hughes (Eds.). *Emotion regulation in families: Pathways to dysfunction and health*. Washington, D. C.: American Psychological Association.
- Halberstadt, A., & Eaton, K. (2003). A meta-analysis of family expressiveness and children's emotion expressiveness and understanding. *Marriage & Family Review, 34*(1), 35-62.

- Halberstadt, A. G., Crisp, V. W., & Eaton, K. L. (1999). Family expressiveness. In P. Philippot, R. S. Feldman, & E. J. Coats (Eds.), *The social context of nonverbal behavior*. Cambridge: Cambridge University Press.
- Halberstadt, A. G., Denham, S. A., & Dunsmore, J. C. (2001). Affective social competence. *Social Development, 10*, 79-119.
- Hathaway, W. L., & Pargament, K. I. (1992). The religious dimensions of coping: Implications for prevention and promotion. In K. I. Pargament, K. I. Maton, & R. E. Hess (Eds.), *Religion and prevention in mental health: Research, vision, and action* (pp. 129-154). New York: Haworth Press.
- Hazan, C., Campa, M., & Gur-Yaish, N. (2006). What is adult attachment? In Mikulincer, M., Goodman, G. S. (Eds.), *Dynamics of Romantic Love: Attachment, Caregiving, and Sex* (47-70). New York: Guilford Press.
- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.
- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 59*, 270-280.
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5*, 1-22.
- Heinicke, C., & Westheimer, I. (1966). *Brief separations*. New York: International Universities Press.
- Hood, R. W. Jr., Spilka, B., Hunsberger, B., & Gorsuch, R. L. (1996). *The Psychology of Religion: An Empirical Approach*, 2<sup>nd</sup> Edn. NY: Guilford Press
- Huffman, L. C., Bryan, Y. E., del Carmen, R., Pederson, F. A., Doussard-Roosevelt, J. A., & Porges, S. W. (1998). Infant temperament and cardiac vagal tone: Assessments at twelve weeks of age. *Child Development, 69*, 624-635.
- Isabella, R. A., Belsky, J., & von Eye, A. (1989). The origins of infant-mother attachment: An examination of interactional synchrony during the infant's first year. *Developmental Psychology, 25*, 12-21.
- John, O. P. & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality 72* (6).
- Johnson, P., & Spilka, B. (1991). Religion and the breast cancer patient: The roles of clergy and faith. *Journal of Religion and Health, 31*, 21-33.

- Kalpidou, M. D., Power, T. G., Cherry, K. E., & Gottfried, N. W. (2004). Regulation of emotion and behavior among 3- and 5-year-olds. *Journal of General Psychology, 131*, 159-178.
- Karoly, P. (1993). Mechanisms of self-regulation: A systematic view. *Annual Review of Psychology, 44*, 23-52.
- Kerns, K., Abraham, M., Schlegelmilch, A., & Morgan, T., (2007). Mother-child attachment in later middle childhood: Assessment approaches and associations with mood and emotion regulation. *Attachment & Human Development, 9*(1), 33-53.
- Kiecolt-Glaser, J., Malarkey, W., Cacioppo, J., & Glaser, R. (1994). Stressful personal relationships: Immune and endocrine function. In Glaser, R., & Kiecolt-Glaser, J. (Eds), *Handbook of human stress and immunity* (pp. 321-339). San Diego, CA, US: Academic Press.
- Kirkpatrick, L. (1992). An attachment-theoretical approach to the psychology of religion. *International Journal for the Psychology of Religion, 2*, 3-28.
- Kirkpatrick, L. (1994). The role of attachment in religious belief and behavior. In K. Bartholomew and D. Perlman (Eds.) *Attachment Processes in Adulthood* (239-265). London: Jessica Kingsley Publishers.
- Kirkpatrick, L. (1999). Attachment and religious representations and behavior. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 803-822). New York: Guilford Press.
- Kirkpatrick, L. (2005). *Attachment, evolution and the psychology of religion*. New York: Guilford Press.
- Kirkpatrick, L., & Shaver, P. (1990). Attachment theory and religion: Childhood attachments, religious beliefs, and conversion. *Journal for the Scientific Study of Religion, 29*, 315-334.
- Kirkpatrick, L., & Shaver, P. (1992). An attachment-theoretical approach to romantic love and religious belief. *Personality and Social Psychology Bulletin, 18*, 266-275.
- Kirkpatrick, L. A. (1998). God as a substitute attachment figure: A longitudinal study of adult attachment style and religious change in college students. *Personality and Social Psychology Bulletin, 24*, 961-973.
- Kirkpatrick, L. A., & Davis, K. E. (1994). Attachment style, gender, and relationship stability: A longitudinal analysis. *Journal of Personality and Social Psychology, 66*, 502-512.
- Klennert, M. D., Campos, J. J., Sorce, J. F., Emde, R. N., & Svejda, M. (1983). Emotions as behavior regulators: Social referencing in infancy. In R. Plutchik & H. Kellerman (Eds.),

- Emotion: Theory, research and experience, Vol. 2 (pp. 57-86). New York: Academic Press.
- Kobak, R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development, 59*, 135-146.
- Kobak, R. R., & Duemmler, S. (1994). Attachment and conversation: Toward a discourse analysis of adolescent and adult security. In K. Bartholomew & D. Perlman (Eds.), *Attachment processes in adulthood* (pp. 121-149). London: Jessica Kingsley.
- Koenig, H., Cohen, H., Blazer, D., & Pieper, C. (1992). Religious coping and depression among elderly, hospitalized medically ill men. *American Journal of Psychiatry, 149*(12), 1693-1700.
- Kopp, C. B. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental Psychology, 25*, 343-354.
- Kopp, C. B. (1992). Emotional distress and control in young children. In Eisenberg, & N., Fabes, R. A. (Eds.), *Emotion and its regulation in early development (41-56)*. San Francisco, CA: Jossey-Bass.
- Lamb, M. (1981). Developing trust and perceived effectance in infancy. *Advances in Infancy Research*, vol. 1, 101-127.
- Lazarus, R. S. (1991). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist, 46*(8), 819-834.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Levenson, R. W. (1994). Human emotion: A functional view. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 123-126). Oxford: Oxford University Press.
- Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder*. New York: The Guilford Press.
- Main, M., & Goldwyn, R. (1998). *Adult attachment scoring and classification system*. Unpublished scoring manual, Department of Psychology, University of California, Berkeley.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing pains in attachment theory and research*. Monographs of the Society for Research in Child Development, 50, 66-104.



- Main, M., & Solomon, J. (1986). Discovery of an insecure-disorganized / disoriented attachment pattern. In T. Brazelton (Ed.) *Affective Development in Infancy* (95-124). Westport, CT: Ablex Publishing.
- Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in preschool years: Theory, research, and intervention* (pp. 121-160). Chicago: University of Chicago Press.
- Malatesta-Magai, C. Z., & McFadden, S. H. (1995). *The role of emotions in social and personality development: History, theory, and research*. New York: Plenum.
- Mason, M., (2006). In search of a default mental mode: Stimulus-independent thought, stream of consciousness, and the psychology of mindwandering. Dissertation Abstracts International: Section B: The Sciences and Engineering, Vol 67 (5).
- Matheny, K. B., Aycock, D. W., Pugh, J. L., Curlette, W. L., & Canella, A. (1986). Stress coping: A qualitative and quantitative synthesis with implications for treatment. *Counseling Psychologist, 14*(4), 499-549.
- Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology, 4*, 197-208.
- Mayer, J. D., & Stevens, A. A. (1994). An emerging understanding of the reflective (Meta)experience of mood. *Journal of Research in Personality, 28*, 351-373.
- McCarthy, C. J., Lambert, R. G., & Moller, N. P. (2006). Preventative resources and emotion regulation expectancies as mediators between attachment and college student's stress outcomes. *International Journal of Stress Management, 13*, 1-22.
- McFarland, C. & Buehler, R. (1997). Negative affective states and the motivated retrieval of positive life events: The role of affect acknowledgment. *Journal of Personality and Social Psychology, 73*(1), 200-217.
- McCrae, R. (1984). Situational determinants of coping responses: Loss, threat, and challenge. *Journal of Personality and Social Psychology, 46*(4), 919-928.
- McIntosh, D. (1995). Religion as schema, with implications for the relation between religion and coping. *International Journal for the Psychology of Religion, 5*(1), 1-16.
- Melnick, S. M., & Hinshaw, S. P. (2000). Emotion regulation and parenting in AD/HD and comparison boys: Linkages with social behaviors and peer preference. *Journal of Abnormal Child Psychology, 28*, 73-86.
- Mickelson, K., Kessler, R., & Shaver, P. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology, 73*(5), 1092-1106.

- Mikulincer, M. (1995). Attachment style and the mental representation of the self. *Journal of Personality and Social Psychology*, 69, 1203-1215.
- Mikulincer, M. (1997). Adult attachment style and information processing: Individual differences in curiosity and cognitive closure. *Journal of Personality and Social Psychology*, 72, 1217-1230.
- Mikulincer, M. (1998). *Adult attachment style and affect regulation: Strategic variations in self-appraisals*. *Journal of Personality and Social Psychology*, 75(2), 420-435.
- Mikulincer, M., & Arad, D. (1999). Attachment, working models, and cognitive openness in close relationships: A test of chronic and temporary accessibility effects. *Journal of Personality and Social Psychology*, 77, 710-725.
- Mikulincer, M., Birnbaum, G., Woddis, D., & Nachmias, O. (2000). Stress and accessibility of proximity-related thoughts: Exploring the normative and intraindividual components of attachment theory. *Journal of Personality and Social Psychology*, 78, 509-523.
- Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York: Guilford Press.
- Mikulincer, M., Florian, V., & Tolmacz, R. (1990). Attachment styles and fear of personal death: A case study of affect regulation. *Journal of Personality and Social Psychology*, 58, 273-280.
- Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and posttraumatic psychological distress: The impact of the Gulf War in Israel. *Journal of Personality & Social Psychology*, 64, 817-826.
- Mikulincer, M., Gillath, O., & Shaver, P. (2002). Activation of the attachment system in adulthood: Threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology*, 83(4), 881-895.
- Mikulincer, M., & Horesh, N. (1999). Adult attachment style and the perception of others: The role of projective mechanisms. *Journal of Personality and Social Psychology*, 76(6), 1022-1034.
- Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology*, 61(2), 321-331.
- Mikulincer, M., & Orbach, (1995). Attachment styles and repressive defensiveness: The accessibility and architecture of affective memories. *Journal of Personality and Social Psychology*, 68(5), 917-925.

- Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology, 81*, 97-115.
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 35). New York: Academic Press.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in Adulthood: Structure, Dynamics, and Change*. New York: Guilford Press.
- Mikulincer, M., Shaver, P. R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion, 27*(2), 77-102.
- Morris, A. S., Silk, J. S., Steinberg, L., Aucoin, K. J., & Keyes, A. W. (2007). Parental influences on children's emotion regulation and emotionality. Manuscript submitted for publication.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development, 16*(2), 361-388.
- Neighbors, H., Jackson, J., Bowman, P., & Gurin, G. (1983). Stress, coping, and Black mental health: Preliminary findings from a national study. *Prevention in Human Services, 2*(3), 5-29.
- O'Brien, M. E. (1982). Religious faith and adjustment to long-term hemodialysis. *Journal of Religion and Health, 21*, 68-80.
- Ochsner, K., & Gross, J. (2007). The neural architecture of emotion regulations. In Gross, James J. (Ed), *Handbook of emotion regulation* (pp. 87-109). New York: Guilford Press.
- Oppenheim, D., & Waters, H. S. (1995). Narrative process and attachment representations: Issues of development and assessment. *Monographs of the Society for Research in Child Development, 60*, 197-215.
- Paivio, S. C., & Greenberg, L. S. (1998). Experiential theory of emotion applied to anxiety and depression. In W. F. Flack Jr. & J. D. Laird (Eds.), *Emotions in psychopathology: Theory and research* (pp. 229-242). New York: Oxford University Press.
- Pargament, K. I. (1997). *Psychology of religion and coping: theory, research, and practice*. New York: Guilford Press.

- Pargement, K., Ensing, D., Falgout, K., & Olsen, H. (1990). God help me: Religious coping efforts as predictors of the outcomes to significant negative life events. *American Journal of Community Psychology, 18*(6), 793-824.
- Pargament, K. I., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W. (1988). Religion and the problem-solving process: Three styles of coping. *Journal for the Scientific Study of Religion, 27*, 90-104.
- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion, 37*, 710-724.
- Parke, R. (1994). Progress, paradigms, and unresolved problems: A commentary of recent advances in our understanding of children's emotions. *Merrill-Palmer Quarterly, 40*, 157-169.
- Porges, S. W. (1996). Physiological regulation in high-risk infants: A model for assessment and potential intervention. *Development and Psychopathology, 8*, 43-58.
- Porges, S. W. (2001). The polyvagal theory: Phylogenetic substrates of a social nervous system. *International Journal of Psychophysiology, 42*, 123-146.
- Porges, S. W. (2003). The polyvagal theory: Phylogenetic contributions to social behavior. *Physiology and Behavior, 79*, 503-513.
- Porges, S. W., Doussard-Roosevelt, J. A., & Maita, A. K. (1994). Vagal tone and the physiological regulation of emotion. In N. A. Fox (Ed.), *Emotion regulation: Behavioral and biological considerations* (pp. 167-186). *Monographs of the Society for Research in Child Development, 59*(2-3, Serial No. 240).
- Porges, S. W., Doussard-Roosevelt, J. A., Portales, A. L., & Greenspan, S. I. (1996). Infant regulation of the vagal "brake" predicts child behavior problems: A psychobiological model of social behavior. *Developmental Psychobiology, 29*, 697-712.
- Richards, J. M., & Gross, J. J. (2000). Emotion regulation and memory: The cognitive costs of keeping one's cool. *Journal of Personality and Social Psychology, 79*(3): 410-424.
- Rinquant, M., Frohlich, C., & Silberseisen, R. (2007). Optimism, pessimism, and change of psychological well-being in cancer patients. *Psychology, Health & Medicine, 12*(4), 421-432.
- Rogosch, F. A., Cicchetti, D., & Toth, S. L. (2004). Expressed emotion in multiple subsystems of the families of toddlers with depressed mothers. *Development and Psychopathology, 16*, 689-709.

- Rowatt, W. & Kirkpatrick, L. (2002). Two dimensions of attachment to God and their relation to affect, religiosity, and personality constructs. *Journal for the Scientific Study of Religion*, 41(4), 637-651.
- Saarni, C. (1999). *The development of emotional competence*. New York: Guilford Press.
- Saarni, C., Mumme, D., & Campos, J. (1998). Emotional development: Action, communication, and understanding. In N. Eisenberg (Vol. Ed.), *Social, emotional, and personality development* (pp. 237-311). Vol. 3 of W. Damon (Series Ed.), *Handbook of child psychology*. New York: John Wiley.
- Sameroff, A. J. (1997, April). *Developmental contributions to the study of psychopathology*. Master lecture presented at the biennial meeting of the Society for Research in Child Development, Washington, DC.
- Sameroff, A. J., & Emde, R. N. (1989). *Relationship disturbances in early childhood*. New York: Basic Books.
- Saroglou, V., Pichon, I., Trompette, L, Verschueren, M., & Dernelle, R. (2005). Prosocial behavior and religion: New evidence based on projective measures and peer ratings. *Journal for the Scientific Study of Religion*, 44(3), 323-348.
- Scherer, K. R., Schorr, A., & Johnstone, T. (2001). *Appraisal processes in emotion: Theory, methods, research*. New York: Oxford University Press.
- Schottenbauer, M. A., Dougan, B. K., Rodriguez, B. F., Arnkoff, D. B., Glass, C. R., & LaSalle, V. H. (2006). Attachment and affective resolution following a stressful event: General and religious coping as possible mediators. *Mental Health, Religion & Culture*, 9(5), 448-471.
- Shaver, P. R., & Brennan, K. A. (1992). Attachment styles and the “Big Five” personality traits: Their connections with each other and with romantic relationship outcomes. *Personality and Social Psychology Bulletin*, 18, 536-545.
- Shaver, P. R., & Clark, C. L. (1994). The psychodynamics of adult romantic attachment. In J. M. Masling & R. F. Bornstein (Eds.), *Empirical perspectives on object relations theories* (pp. 105-156). Washington, DC: American Psychological Association.
- Shaver, P. R., & Hazen, C. (1993). Adult romantic attachment: Theory and evidence. In D. Perlman & W. Jones (Eds.), *Advances in personal relationships* (Vol. 4, pp. 29-70). London: Jessica Kingsley.
- Shaver, P. R., & Klinnert, M. (1982). Schachter’s theories of affiliation and emotions: Implications of developmental research. In L. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 3, pp. 37-71). Beverly Hills, CA: Sage.

- Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. *Attachment and Human Development, 4*, 133-161.
- Sheffield, J. (2003). An investigation of the relationships between forgiveness, religiosity, religious coping, and psychological well-being. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 65(2-B)*, 974.
- Shweder, R. A. (1994). You're not sick; you're just in love: Emotion as an interpretive system. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 32-44). Oxford: Oxford University Press.
- Silk, J. S., Shaw, D. S., Skuban, E. M., Oland, A. A., & Kovacs, M. (2006). Emotion regulation strategies in offspring of childhood-onset depressed mothers. *Journal of Child Psychiatry, 47*, 69-78.
- Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology, 59*, 971-980.
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology, 62*, 434-446.
- Spilka, B., Hood, R., Hunsberger, B., & Gorsuch, R. (1985). *The psychology of religion: An empirical approach, 3<sup>rd</sup> ed.* New York: Guilford Press.
- Sroufe, A. (1985). Attachment classifications from the perspective of infant-caregiver relationships and infant temperament. *Child Development, 56(1)*, 1-14.
- Sroufe, L. A. (1996). *Emotional development: The organization of emotional life in the early years.* Cambridge, England: Cambridge University Press.
- Sroufe, L. A., & Fleeson, J. (1986). Attachment and the construction of relationships. In W. W. Hartup and Z. Rubin (Eds.), *Relationships and development* (pp. 51-71). Hillsdale, NJ: Erlbaum.
- Sroufe, L. A., & Waters, E. (1977). Attachment as an organizational construct. *Child Development, 48*, 1184-1199.
- Stansbury, K., & Sigman, M. (2000). Responses of preschoolers in two frustrating episodes: Emergence of complex strategies for emotion regulation. *Journal of Genetic Psychology, 161*, 182-202.
- TenElshof, J., & Furrow, J. (2000). The role of secure attachment in predicting spiritual maturity of students at a conservative seminary. *Journal of Psychology & Theology, 28(2)*, 99-108.

- Thompson, R. A. (1994a). Emotion and self-regulation. In R. A. Thompson (Ed.), *Socioemotional development Nebraska Symposium on Motivation, Vol. 36* (pp. 367-467). Lincoln, NE: University of Nebraska Press.
- Thompson, R. A. (1994b). Emotion regulation: A theme in search of definition. In N. A. Fox (Ed.), *The development of emotion regulation: Biological and behavioral considerations. Monographs of the Society for Research in Child Development, 59* (Serial No. 240), 25-52.
- Thompson, R. A., & Meyer, S. (2007). Socialization of emotion regulation in the family. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 249-268). New York: Guilford Press.
- Thompson, R. A., & Calkins, S. D. (1996) The double-edged sword: Emotional regulation for children at risk. *Development and Psychopathology, 8*, 163-182.
- Valiente, C., Fabes, R., Eisenberg, N., & Spinrad, T. (2004). The relations of parental expressivity and support to children's coping with daily stress. *Journal of Family Psychology, 18*(1), 97-106.
- Van IJzendoorn, M., (1995). Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin, 117*(3), 387-403.
- Van IJzendoorn, M., & Kroonenberg, P. (1988). Cross-cultural patterns of attachment: A meta-analysis of the strange situation. *Child Development, 59*(1), 147-156.
- Volling, B. L., McElwain, N. L., & Miller, A. L. (2002). Emotion regulation in context: The jealousy complex between young siblings and its relations with child and family characteristics. *Child Development, 73*, 581-600.
- Walden, T. A., & Smith, M. C. (1997). Emotion regulation. *Motivation and emotion, 21*, 7-25.
- Wallin, D. (2007). *Attachment in psychotherapy*. New York: Guilford Press..
- Weinberger, D. A. (1990). The construct validity of the repressive coping style. In J.L. Singer (Ed.), *Repression and dissociation: Implications for personality theory, psychopathology, and health* (pp. 337-386). Chicago: University of Chicago Press.
- Weinberger, D. A., Schwartz, G. E., & Davidson, R. J. (1979). Low-anxious, high-anxious, and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress. *Journal of Abnormal Psychology, 88*, 369-380.
- Wong, L. (2007). From atheists to evangelicals: The Christian conversion experiences of Mainland Chinese intellectuals in the United States of America. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 68*(1-A), 973.

Zeman, J., & Garber, J. (1996). Display rules for anger, sadness, and pain: In depends on who is watching. *Child Development, 67*, 957-973.

Zeman, J., Penza, S., Shipman, K., & Young, G. (1997). Preschoolers as functionalists: The impact of social context on emotion regulation. *Child Study Journal, 27*, 41-67.



## APPENDIX A

**CONSENT FORM**

You are invited to be in a research study on how your life experiences and your personality influence your first semester here at Liberty, emotionally, spiritually, relationally, and religiously. You were selected as a possible participant because you are a college freshman at a faith based institution. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

**Confidentiality:**

The records of this study will be kept private and anonymous. We are asking for your student ID number so we can track if your return to school next semester and record your first semester GPA. Research records will be stored securely and only researchers will have access to the records. Publications from this research study will only report on statistical information and no personal information will be cited.

**Voluntary Nature of the Study:**

Participation in this study is voluntary. Your decision whether or not to participate will not affect your grade in this class or any way affect your relationship with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without question.

**Contacts and Questions:**

The researchers conducting this study are: Dr. Gary Sibcy and Mr. Kevin Corsini. Please feel free to ask questions at any time during the course of this study. If you have questions later, **you are encouraged** to contact them in the Counseling Department at 592-4049.

**Procedures:**

If you agree to be in this study, we would ask you complete the attached questionnaire during this class period. When you are complete, please submit it to the proctor before leaving class. You will be asked to complete a second questionnaire in a couple of weeks during class and a third questionnaire at the end of this semester.

**Statement of Consent:**

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

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Signature of Investigator: \_\_\_\_\_ Date: \_\_\_\_\_

## BACKGROUND INFORMATION

1. Student ID #: \_\_\_\_\_ 2. Year Born: \_\_\_\_\_
3. Year Started at LU: \_\_\_\_\_ 4. Gender: \_\_\_ Male \_\_\_ Female
5. Liberty Email Address: \_\_\_\_\_
6. Ethnicity: \_\_\_ Caucasian \_\_\_ Hispanic \_\_\_ African American \_\_\_ Asian \_\_\_ Other
7. Marital Status: \_\_\_\_\_ Single \_\_\_\_\_ Married \_\_\_\_\_ Widowed \_\_\_\_\_ Divorced
8. Children: *Gender and date of birth only*
- a. Male/Female DOB \_\_\_\_\_ c. Male/Female DOB \_\_\_\_\_
- b. Male/Female DOB \_\_\_\_\_ d. Male/Female DOB \_\_\_\_\_
9. Year Graduated High School: \_\_\_\_\_ 9. High School GPA \_\_\_\_\_
10. SAT Scores: Math: \_\_\_\_\_ Reading: \_\_\_\_\_ Writing: \_\_\_\_\_
11. Parent's zip code (or where you previously resided) \_\_\_\_\_ *i.e. 30188*
12. Do you consider yourself a born again Christian? \_\_\_\_\_
- (a.) If YES, at what age did this conversion occur? \_\_\_\_\_
- (b.) If YES, select **ONE** statement that best describes your born again experience.
1. \_\_\_\_\_ I cannot recall the distinct moment when I made a commitment to follow God. It was a gradual process where I became increasingly committed to God.
  2. \_\_\_\_\_ I can recall as a child making a decision to follow God, and since that time have grown closer to him.
  3. \_\_\_\_\_ There was a very distinct period when I decided to commit my life to God, which was a sudden, dramatic life changing experience.
  4. \_\_\_\_\_ I can recall as a child making a decision to follow God, but later made a distinct decision to rededicate my life to God.
- If you selected #4 (rededication to God), answer the following:
- a. What age were you when you rededicated your life? \_\_\_\_\_
  - b. Which best describes your rededication (select **ONE**):
    - i) \_\_\_\_\_ Rededication occurred during a crisis in your life.
    - ii) \_\_\_\_\_ Rededication was an outgrowth of a gradual process that came about over time.



## AGI

The following statements concern how you feel about your relationship with God. We are interested in how you generally experience your relationship with God, not just in what is happening in that relationship currently. Respond to each statement by indicating how much you agree or disagree with it. Use the following rating scale.

1	2	3	4	5	6	7
Strongly Agree	Moderately Agree	Agree	Neutral/ Mixed	Disagree	Moderately Disagree	Strongly Disagree

1. \_\_\_\_\_ I worry a lot about my relationship with God.
2. \_\_\_\_\_ I just don't feel a deep need to be close with God
3. \_\_\_\_\_ If I can't see God working in my life, I get upset or angry.
4. \_\_\_\_\_ I am totally dependent upon God for everything in my life.
5. \_\_\_\_\_ I am jealous at how God seems to care more for other than for me.
6. \_\_\_\_\_ It is uncommon for me to cry when sharing with God.
7. \_\_\_\_\_ Sometimes I feel that God loves other more than me.
8. \_\_\_\_\_ My experiences with God are very intimate and emotional.
9. \_\_\_\_\_ I am jealous at how close some people are to God.
10. \_\_\_\_\_ I prefer not to depend too much on God.
11. \_\_\_\_\_ I often worry about whether God is please with me.
12. \_\_\_\_\_ I am uncomfortable being emotional in my communication with God.
13. \_\_\_\_\_ Even if I fail, I never question that God is pleases with me.
14. \_\_\_\_\_ My prayers to God are often matter-of-fact and not very personal.
15. \_\_\_\_\_ Almost daily I feel that my relationship with God foes back and forth from "hot" to "cold."
16. \_\_\_\_\_ I am uncomfortable with emotional displays of affection to God.
17. \_\_\_\_\_ I fear God does not accept me when I do wrong.
18. \_\_\_\_\_ Without God I couldn't function at all.
19. \_\_\_\_\_ I often feel angry with God for not responding to me when I want.
20. \_\_\_\_\_ I believe people should not depend on God for things they should do for themselves.
21. \_\_\_\_\_ I crave reassurance from God that God loves me.
22. \_\_\_\_\_ Daily I discuss all my problems and concerns with God.
23. \_\_\_\_\_ I am jealous when others feel God's presence when I cannot.
24. \_\_\_\_\_ I am uncomfortable allowing God to control every aspect of my life.
25. \_\_\_\_\_ I worry a lot about damaging my relationship with God.
26. \_\_\_\_\_ My prayers to God are very emotional.
27. \_\_\_\_\_ I get upset when I feel God helps others, but forgets about me.
28. \_\_\_\_\_ I let God make most of the decisions in my life.

## ECR I

The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Strongly Agree	Moderately Agree	Agree	Neutral/ Mixed	Disagree	Moderately Disagree	Strongly Disagree

- \_\_\_\_\_ 1. I prefer not to show a partner how I feel deep down.
- \_\_\_\_\_ 2. I worry about being abandoned.
- \_\_\_\_\_ 3. I am very comfortable being close to romantic partners.
- \_\_\_\_\_ 4. I worry a lot about my relationships.
- \_\_\_\_\_ 5. Just when my partner starts to get close to me I find myself pulling away.
- \_\_\_\_\_ 6. I worry that romantic partners won't care about me as much as I care about them.
- \_\_\_\_\_ 7. I get uncomfortable when a romantic partner wants to be very close.
- \_\_\_\_\_ 8. I worry a fair amount about losing my partner.
- \_\_\_\_\_ 9. I don't feel comfortable opening up to romantic partners.
- \_\_\_\_\_ 10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
- \_\_\_\_\_ 11. I want to get close to my partner, but I keep pulling back.
- \_\_\_\_\_ 12. I often want to merge completely with romantic partners, and this sometimes scares them away.
- \_\_\_\_\_ 13. I am nervous when partners get too close to me.
- \_\_\_\_\_ 14. I worry about being alone.
- \_\_\_\_\_ 15. I feel comfortable sharing my private thoughts and feelings with my partner.
- \_\_\_\_\_ 16. My desire to be very close sometimes scares people away.
- \_\_\_\_\_ 17. I try to avoid getting too close to my partner.
- \_\_\_\_\_ 18. I need a lot of reassurance that I am loved by my partner.
- \_\_\_\_\_ 19. I find it relatively easy to get close to my partner.
- \_\_\_\_\_ 20. Sometimes I feel that I force my partners to show more feeling, more commitment.

- \_\_\_\_\_ 21. I find it difficult to allow myself to depend on romantic partners.
- \_\_\_\_\_ 22. I do not often worry about being abandoned.
- \_\_\_\_\_ 23. I prefer not to be too close to romantic partners.
- \_\_\_\_\_ 24. If I can't get my partner to show interest in me, I get upset or angry.
- \_\_\_\_\_ 25. I tell my partner just about everything.
- \_\_\_\_\_ 26. I find that my partner(s) don't want to get as close as I would like.
- \_\_\_\_\_ 27. I usually discuss my problems and concerns with my partner.
- \_\_\_\_\_ 28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
- \_\_\_\_\_ 29. I feel comfortable depending on romantic partners.
- \_\_\_\_\_ 30. I get frustrated when my partner is not around as much as I would like.
- \_\_\_\_\_ 31. I don't mind asking romantic partners for comfort, advice, or help.
- \_\_\_\_\_ 32. I get frustrated if romantic partners are not available when I need them.
- \_\_\_\_\_ 33. It helps to turn to my romantic partner in times of need.
- \_\_\_\_\_ 34. When romantic partners disapprove of me, I feel really bad about myself.
- \_\_\_\_\_ 35. I turn to my partner for many things, including comfort and reassurance.
- \_\_\_\_\_ 36. I resent it when my partner spends time away from me.

## BMS

Use the following scale to indicate how depressed, anxious or angry you've been feeling **over the past week, including today. Please answer all the items.**

0	1	2	3	4
Not At All	Somewhat	Moderately	A Lot	Substantially

Depression

1. \_\_\_\_\_ Sad or down in the dumps
2. \_\_\_\_\_ Discouraged or hopeless
3. \_\_\_\_\_ Low self-esteem
4. \_\_\_\_\_ Worthless or inadequate
5. \_\_\_\_\_ Loss of pleasure or satisfaction in life

Anxiety

1. \_\_\_\_\_ Anxious
2. \_\_\_\_\_ Frightened
3. \_\_\_\_\_ Worrying about things
4. \_\_\_\_\_ Tense or on edge
5. \_\_\_\_\_ Nervous

Anger

1. \_\_\_\_\_ Frustrated
2. \_\_\_\_\_ Annoyed
3. \_\_\_\_\_ Resentful
4. \_\_\_\_\_ Angry
5. \_\_\_\_\_ Irritated

## RCAS

Please read the statements listed below and for each statement please indicate to what extent each of the flowing was involved in your coping with the event. Please use the following scale to record your answers.

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

1. \_\_\_\_\_ Trusted that God would not let anything terrible happen to me.
2. \_\_\_\_\_ Experienced God's love and care.
3. \_\_\_\_\_ Realized that God was trying to strengthen me.
4. \_\_\_\_\_ In dealing with the problem, I was guided by God.
5. \_\_\_\_\_ Realized that I didn't have to suffer since Jesus suffered for me.
6. \_\_\_\_\_ Used Christ as an example of how I should live.
7. \_\_\_\_\_ Took control over what I could and gave the rest to God.
8. \_\_\_\_\_ My faith showed me different ways to handle the problem.
9. \_\_\_\_\_ Accepted the situation was not in my hands but in the hands of God.
10. \_\_\_\_\_ Found the lesson from God in the event.
11. \_\_\_\_\_ God showed me how to deal with the situation.
12. \_\_\_\_\_ Used my faith to help me decide how to cope with the situation.
13. \_\_\_\_\_ Tried to be less sinful.
14. \_\_\_\_\_ Confessed my sins.
15. \_\_\_\_\_ Led a more loving life.
16. \_\_\_\_\_ Attended religious services or participated in religious rituals.
17. \_\_\_\_\_ Participated in church groups (support groups, prayer groups, Bible studies).
18. \_\_\_\_\_ Provided help to other church members.
19. \_\_\_\_\_ Felt angry with or distant from God.
20. \_\_\_\_\_ Felt angry with or distant from the members of the church.
21. \_\_\_\_\_ Questioned my religious beliefs and faith.
22. \_\_\_\_\_ Received support from the clergy.
23. \_\_\_\_\_ Received support form other members of the church.
24. \_\_\_\_\_ Asked for a miracle.
25. \_\_\_\_\_ Bargained with God to make things better.
26. \_\_\_\_\_ Asked God why it happened.
27. \_\_\_\_\_ Focused on the world-to-come rather than the problems of this world.
28. \_\_\_\_\_ I let God solve my problems for me.
29. \_\_\_\_\_ Prayed or read the Bible to keep my mind off my problems.