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Abstract

A growing body of research has documented the influence of negative religious coping on indicators of emotional distress. To extend this line of research, we examined whether neuroticism, fading affect, and religiousness could influence the relationship between negative religious coping and two forms of emotional distress (depressed mood and negative affective state) in a sample of 116 college students. Results of this exploratory study indicated that neuroticism did not act as a confounding variable for the relationship between negative religious coping and emotional distress. However, fading affect emerged as a partial mediator, while religiosity was found to be a moderating variable in the relationship between negative religious coping and emotional distress. Differences were also found between religious and nonreligious life events.

Unpleasant emotions are central, defining factors of mental health and well-being (Sue, Sue, and Sue 2006). Unpleasant emotions are considered so destructive that some religious traditions, such as Buddhism, suggest that these states of mind are a major hurdle to salvation (Goleman 2003). Although researchers have established the importance of variables that influence unpleasant emotions, scientists are only beginning to understand the role of religion in this process (see Exline 2013). With respect to negative religious coping, studies have demonstrated consistent positive correlations between this religious construct and unpleasant emotional outcomes (Ano and Vasconcelles, 2005; Exline 2013).

With the relationships between negative religious coping and unpleasant emotions firmly established in the literature, researchers are being encouraged to move beyond the mere documentation of these links and move toward more sophisticated analyses (Exline 2013). Therefore the aim of our study was to examine whether the relationship between negative religious coping and distress is influenced by other factors. Specifically, we examined religiousness as a potential moderator, evaluated fading affect as a potential mediator, and examined neuroticism as a potential confounder for the relationship between negative religious coping and two unpleasant emotional outcomes: depressed mood and unpleasant emotional affect. This approach moves beyond the simple question of whether an association exists toward the questions that focus on “for whom” (moderator effect) and “why” (mediator and confounder effects).

UNPLEASANT EMOTIONS: UNPLEASANT EMOTIONAL AFFECT AND DEPRESSED MOOD AS DISTRESS

Unpleasant emotions feel so aversive that they are described as being physically painful, which is understandable if one considers the fact that many unpleasant emotions activate the regions of the brain that are tied to physical pain (Mollet and Harrison 2006). Although people generally dislike the feel of unpleasant emotions, these emotions are important for survival, as they trigger urgent responses to threatening situations (Ekman 2003; Izard and Ackerman 2000). For instance, fear can help humans and other animals to avoid and escape danger, whereas sorrow can lead to the development of new plans and strategies for moving on from failures (Ekman 2003; Izard and Ackerman 2000). However, unpleasant emotions can lose their adaptive value and become harmful, especially when they are experienced too intensely and/or for a prolonged period of time (Ekman 2003). The undesirable outcomes may include academic underachievement (Hishinuma et al. 2012), elevated alcohol use (Lamis et al. 2010), poor perceptions of one’s health (Kraus, Adler, and Chen 2013), and actual poor physical health in the form of coronary artery disease (Friedman and Booth-Kewley 1987).

In addition to overt and physical manifestations, intense and prolonged unpleasant emotional states characterize many psychiatric conditions (American Psychiatric Association 2013) and are positively related to suicide (Lamis et al. 2010). It is important to recognize that unpleasant emotions manifest themselves in different ways. Whereas moods last days or weeks, emotional affective states last seconds or minutes (Ekman 2003). Although mood and emotional affective states differ in the length of time they are typically experienced, distress is experienced in each case when the unpleasant emotions are intense and/or persist beyond acceptable or expected durations. The current study evaluated two very different types of emotional distress: depression as a measure of unpleasant mood and negative affect state as a measure of unpleasant emotional affect.

NEGATIVE RELIGIOUS COPING AS A PREDICTOR OF DEPRESSION AND UNPLEASANT EMOTIONAL AFFECT

As was stated previously, various unpleasant emotional outcome measures are positively related to negative religious coping (Ano and Vasconcelles 2005; Exline 2013). Negative religious coping is a coping process that involves feelings of abandonment by God, confusion about one's faith, and reinterpretations of outcomes as acts of the Devil or God's punishment (Pargament, Smith, et al. 1998). Although negative religious coping reflects underlying tensions and struggles that are strongly linked to distress, it is important to recognize that this method may lead to growth and transformation (Pargament, Feuille, and Burdzy 2011). These expressions of spiritual struggle are observed as early as 12 years of age (Van Dyke et al. 2009), are linked to biomarkers of distress, such as pro-inflammatory cytokines (Ai et al. 2010), and are surprisingly common (Johnson and Hayes 2003). Negative religious coping is also not specific to Christians, who constitute many of the participants in the studies that have examined the construct. Rather, negative religious coping is found across many religious groups, including Jews (Rosmarin et al. 2009), Hindus (Tarakeshwar, Pargament, and Mahoney 2003), and Muslims (Khan and Watson 2006).

Unfortunately, this kind of spiritual struggle is associated with unpleasant emotional outcomes. Specific emotions, such as hostility (Khan and Watson 2006), grief (Lee, Roberts, and Gibbons 2013), and anxiety (Cole 2005), are positively related to negative religious coping as well as general states, such as depressed mood (Bjorck and Thurman 2007) and unpleasant emotional affect (Harrowfield and Gardner 2010). This connection is so robust that it has been found across different settings, such as laboratory studies that focus on emotional reactions (Lee, Roberts, and Gibbons 2013) and longitudinal studies of women who are HIV-positive (Hickman et al. 2013). Negative religious coping is so powerful that it can be used to predict post-traumatic stress symptoms across time

(Harris et al. 2012) as well as mortality rates among the elderly who are ill (Pargament, Koenig, et al. 2001). Because negative religious coping is a consistent predictor of unpleasant emotional outcomes, understanding the moderator, mediator, and confounding variables for this relationship is important scientific work.

INFLUENCES ON THE RELATIONSHIP BETWEEN NEGATIVE RELIGIOUS COPING AND DISTRESS

Religiousness as a Moderator

An important issue to examine in trying to understand the link between negative religious coping and distress is whether this association is moderated by religiousness. For some people, religion is a way of life. Daily habits, values, beliefs, and ways to relate to the world are framed in terms of religion for these religious individuals (see Pargament 1997). Although one's religiousness can be helpful (Zuckerman, Kasl, and Ostfeld 1984), it can also be particularly harmful during a spiritual crisis when one's identity as a religious person is directly challenged and threatened (Ellison, Fang, et al. 2013). Accordingly, researchers have found that when spiritual struggles are associated with greater depressive symptoms, the effects are more pronounced for more religiously identified individuals (Ellison, Fang et al. 2013; Krause and Wulff 2004; Pargament, Tarakeshwar, et al. 2001). These findings suggest that religiousness should moderate the relationship between negative religious coping and emotional distress.

Fading Affect as a Mediator

Another important issue to examine in studying the link between negative religious coping and distress is whether this association is mediated by emotional dysregulation in the form of fading affect. Generally, people manage their negative emotional experiences so that they can function and meet the demands of daily life (Ekman 2003). When people do not regulate their negative emotions effectively, they may experience a number of difficulties in day-to-day living (Werner and Gross 2010) and, in some cases, develop a psychiatric illness (Davidson 1998). One form of emotion dysregulation that is associated with distress is a phenomenon that memory researchers refer to as the Fading Affect (Walker et al. 2003; Walker, Skowronski, and Thompson, 2003). These researchers discovered that affect generally fades in intensity (i.e., fading affect) over time. These researchers also found that small changes in unpleasant affect are positively related to depressive symptoms (Walker et al. 2003). Although research has not yet linked negative religious coping to the fading affect phenomenon, a laboratory

study of mourners by Lee, Roberts, and Gibbons (2013) provides indirect support for this connection. Specifically, these researchers found that mourners who drew on negative religious coping for their loss maintained higher levels of negative emotions after an interview about a personal loss than did mourners who did not use negative religious coping. Given these findings, fading affect is expected to mediate the relationship between negative religious coping and emotional distress.

Neuroticism as a Confounding Variable

One variable that may account for variance in the relationship between negative religious coping and distress is neuroticism. Rather than mediating the relationship between negative religious coping and distress, neuroticism is a trait that should precede both negative religious coping and emotional distress in time and thus be considered a potential confounding variable. This basic dimension of personality reflects a generalized tendency to experience negative emotional states (Eysenck 1967), and it is so strongly tied to distress that it predicts a wide range of emotional and physical disorders (Lahey 2009). In particular, neuroticism has been found to positively correlate with negative affect (Watson 2000) and depressed mood (Lee, Yeh, and Surething, 2013).

Although the link between neuroticism and emotional distress has been consistently demonstrated in the literature, only a handful of studies have examined the connection between neuroticism and negative religious coping. Whereas Lee, Roberts, and Gibbons (2013) did not demonstrate a link between neuroticism and negative religious coping, Lee and Surething (2013) found a moderately strong positive association between neuroticism and negative religious coping among a large sample of bereaved pet owners. Ano and Pargament (2013) looked beyond a simple association and found that neuroticism predicted a unique variance in spiritual struggles beyond the influence of many important religious variables. Therefore neuroticism may be a confounding variable that accounts for relationships between negative religious coping and emotional distress.

THE CURRENT STUDY

The literature shows a link between negative religious coping and emotional distress. In the current exploratory study, we evaluated two dimensions of emotional distress: emotional affect and depressed mood. Emotional affect captures a feeling state that is experienced in one moment of time, whereas mood reflects emotions that have lasted for a period between an hour to weeks (Ekman 2003). Although emotional states and moods are related, each construct represents a distinct temporal perspective and process of emotion (Ekman 2003). The literature suggests that neuroticism, fading affect, and religiousness could influence the relationship

between negative religious coping and emotional distress. Therefore we examined the moderating effect of religiousness, the mediating effect of fading affect, and the confounding effect of neuroticism on the relationship between negative religious coping and emotional distress. We also examined negative religious coping and fading affect separately for religious and nonreligious events. Because emotion and coping processes can vary according to the demands of particular situations (Folkman and Lazarus 1985), we wanted to explore whether our analyses differed if the unpleasant life events were considered religious or nonreligious.

It is important to note that this study is based on a dataset that is being used to examine the fading affect bias (FAB) across religious and nonreligious events using instructional manipulations. Because the FAB study has a different purpose, focuses on different variables, and utilizes different analyses than our study, we determined that our study fit within appropriate guidelines for producing a distinct publication (Fine and Kurdek 1994).

Participants

Data from 116 college students were used in the current study. The predominantly (81.9 percent) white sample consisted of 78 women and 38 men. The participants ranged from 17 to 23 years of age (mean: 19.23, standard deviation: 2.03). The religious identity of the sample included Christians (82.8 percent), agnostics (8.6 percent), atheists (3.4 percent), and others (5.4 percent).

Measures

Religiousness. We used the General Religiousness measure (Rowatt et al. 2009) to measure religiousness. Participants indicated the extent to which they engaged in religiously oriented activity and perceived themselves to be religious. An example of an item from this scale is “How often do you attend religious service?” Because response formats differed for different items, we created an index score by averaging all of the z -scores calculated per item across participants. This four-item measure achieved a solid level of internal consistency ($\alpha = 0.91$).

Negative Religious Coping. We used a subscale of the Brief RCOPE (Pargament, Smith, et al. 1998) to measure the use of negative religious activities to cope with unpleasant life events. On a scale ranging from 1 (not at all) to 4 (a great deal), participants rated how often they experienced religiously unsupportive activities, such as “Felt punished by God for my lack of devotion,” in the context of coping with an unpleasant life event. Participants completed one measure of negative religious coping for a nonreligious event and another for an unpleasant religious

event. This seven-item measure showed solid internal consistency for nonreligious ($\alpha = 0.77$) and religious ($\alpha = 0.78$) unpleasant life events.

Fading Affect. We used a single-item pleasantness scale that is used in FAB research (e.g., Skowronski et al. 2004) to measure affect associated with unpleasant life events. On a scale ranging from -3 (extremely unpleasant) to $+3$ (extremely pleasant), participants rated one unpleasant religious and one unpleasant nonreligious life event of their own choosing. For each life event, the participants rated their affect at the time of the event as well as their current affect for the event. We calculated a fading affect score by subtracting the initial affect from the current affect.

Neuroticism. We used the emotional stability subscale of the Mini Markers (Saucier 1994) to measure neuroticism. On a scale ranging from 1 (extremely inaccurate) to 9 (extremely accurate), participants rated the extent to which they believed in the accuracy of self-descriptive adjectives (e.g., relaxed). This eight-item measure showed solid internal consistency ($\alpha = 0.76$).

Negative Affective State. We used the Negative Affect subscale of the PANAS (Watson, Clark, and Tellegen 1988) to measure negative affective state. On a scale ranging from 1 (very slightly or not at all) to 5 (extremely), participants rated their feelings at the present moment. This ten-item scale showed solid internal consistency ($\alpha = 0.85$).

Depressed Mood. We used the Center for Epidemiologic Studies Depression Scale (Radloff 1977) to assess depressed mood. On a scale ranging from 1 (rarely or none of the time) to 4 (most or all of the time), participants rated how often they experienced a depression-related emotion or behavior during a one-week period. This twenty-item scale achieved a high level of internal consistency ($\alpha = 0.90$).

Results

Data were screened for meeting the assumptions of multivariate statistical analysis (Tabachnick and Fidell 2001). Assumptions about linearity, normality, heteroscedasticity of residuals, multicollinearity, singularity, and suppression were met for all variables except for negative religious coping for unpleasant nonreligious events. A logarithmic transformation was applied to negative religious coping for unpleasant nonreligious events (skewness = 2.62, kurtosis = 8.43) to make the scores fall within reasonable parameters of normality (skewness = 1.60, kurtosis = 2.67).

Unpleasant Life Events. The unpleasant life events were converted into categories for descriptive purposes. The religious life events included death or injury-related events (21.6 percent), challenge or disconnection with faith (17.2 percent), religious event without prayer (16.4 percent), other (16.4 percent), discussions with others about faith (14.7 percent), religious realization or acceptance of a negative circumstance (8.6 percent), and natural life events (2.6 percent); 2.6 percent of respondents did not provide descriptions of their life events. The nonreligious life events included romantic relationship conflict (21.6 percent), death or injury-related events (18.1 percent), family conflict (18.1 percent), school conflict (13.8 percent), other (12.1 percent), friendship conflict (10.3 percent), and social event (3.4 percent); 2.6 percent of respondents did not provide descriptions of their life events

No mean-level differences were found between religious and nonreligious events in fading affect and negative religious coping. Specifically, the amount of fading affect was not significantly different between religious ($M = 1.96$) and nonreligious ($M = 2.09$) events: $t(115) = 0.69$, $p = 0.49$, nonsignificant. The level of negative religious coping was also not significantly different between religious ($M = 1.32$) and nonreligious ($M = 1.29$) events: $t(115) = 0.63$, $p = 0.53$, nonsignificant.

Correlation Analyses. We ran zero-order correlations to determine the linear associations between the variables (see Table 1). Negative affectivity was positively correlated with depression, neuroticism, and both forms of negative religious coping but negatively correlated with both forms of fading affect. Depression was positively correlated with neuroticism and negative religious coping for nonreligious events but negatively correlated with fading affect for nonreligious events. The two forms of fading affect were positively correlated with each other. Similarly, the two forms of negative religious coping were positively correlated with each other. Negative religious coping for nonreligious events was negatively correlated with both forms of fading affect. Neuroticism was not correlated with any forms of fading affect or negative religious coping, while religiousness was not correlated with any of the variables. Taken together, the correlations do demonstrate links between negative religious coping and the two criterion variables of negative affective state and depressed mood but only for nonreligious events. The correlations also demonstrate that neuroticism does not account for these relationships.

Table 1: Intercorrelations of Variables

	1	2	3	4	5	6	7	8
1. NA	—							
2. DEP	0.57***	—						
3. NEU	0.40***	0.54***	—					
4. REL	0.14	-0.05	-0.09	—				
5. FA	-0.27**	-0.20*	-0.16	0.13	—			
6. FAR	-0.27**	-0.15	-0.06	0.05	0.42***	—		
7. NRC	0.28**	0.24*	0.16	0.10	-0.20*	-0.21*	—	
8. NRCR	0.27**	0.14	-0.04	0.09	0.04	0.04	0.38***	—

$N = 116$.

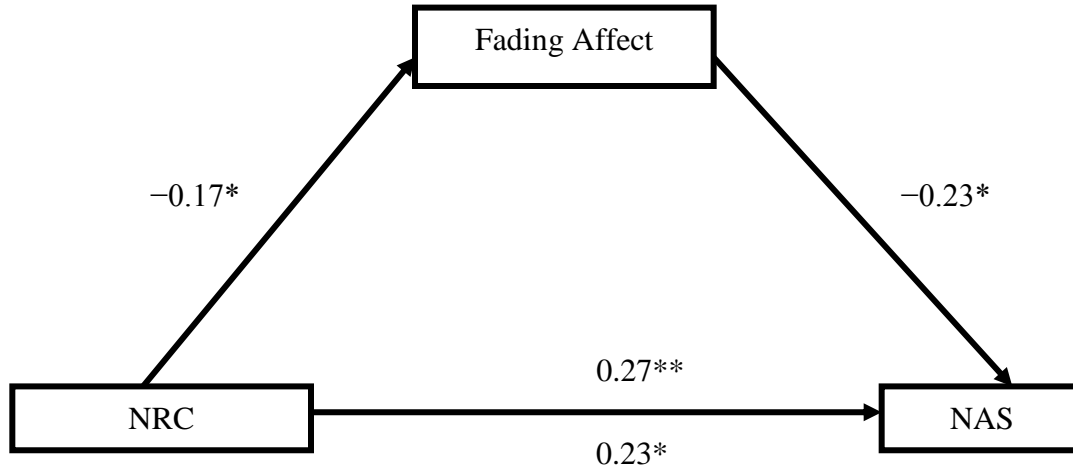
NA = negative affective state; DEP = depressed mood; NEU = neuroticism; REL = religiousness; FA = fading affect for unpleasant nonreligious event; FAR = fading affect for unpleasant religious event; NRC = negative religious coping for unpleasant nonreligious event; NRCR = negative religious coping for unpleasant religious event.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Mediation Analyses. Examination of the correlations between the variables indicates that fading affect for nonreligious events may have acted as a mediator in the relationship between negative religious coping for nonreligious events and the two outcome variables: negative affectivity and depressed mood. To formally test these effects, we conducted two separate mediation analyses following Baron and Kenny's (1986) conditions and Shrout and Bolger's (2002) bias-corrected bootstrap procedure, using 2,000 samples. These bias-corrected bootstrap procedures are effective in detecting mediating effects because they calculate confidence intervals that are not biased by sample size, effect size, or level of statistical significance (Mallinckrodt et al. 2006).

The results of the mediation analyses show that that fading affect for nonreligious events partially mediated the relationship between negative religious coping for nonreligious events and negative affective state (95% confidence interval = 0.00 to 0.11, $p < 0.05$) (see Figure 1). However, fading affect for nonreligious events did not mediate the relationship between negative religious coping for a nonreligious event and depressed mood (95% confidence interval = -0.01 to 0.10, $p = 0.11$, nonsignificant). Collectively, these findings show that fading affect for nonreligious events demonstrates a mediating effect only with negative affective state, not with depressed mood.

Figure 1: Mediating Effect of Fading Affect on the Association Between Negative Religious Coping for Nonreligious Events and Negative Affective State



Note: Values reflect standardized regression coefficients. NRC = negative religious coping (logarithmically transformed) for nonreligious life event; Fading Affect = fading affect for nonreligious and unpleasant life event; NAS = negative affective state. The initial path between NRC and NAS is indicated by the coefficient above the line connecting these variables; the coefficient under this path indicates the coefficient after fading affect (the mediating variable) has been taken into account.

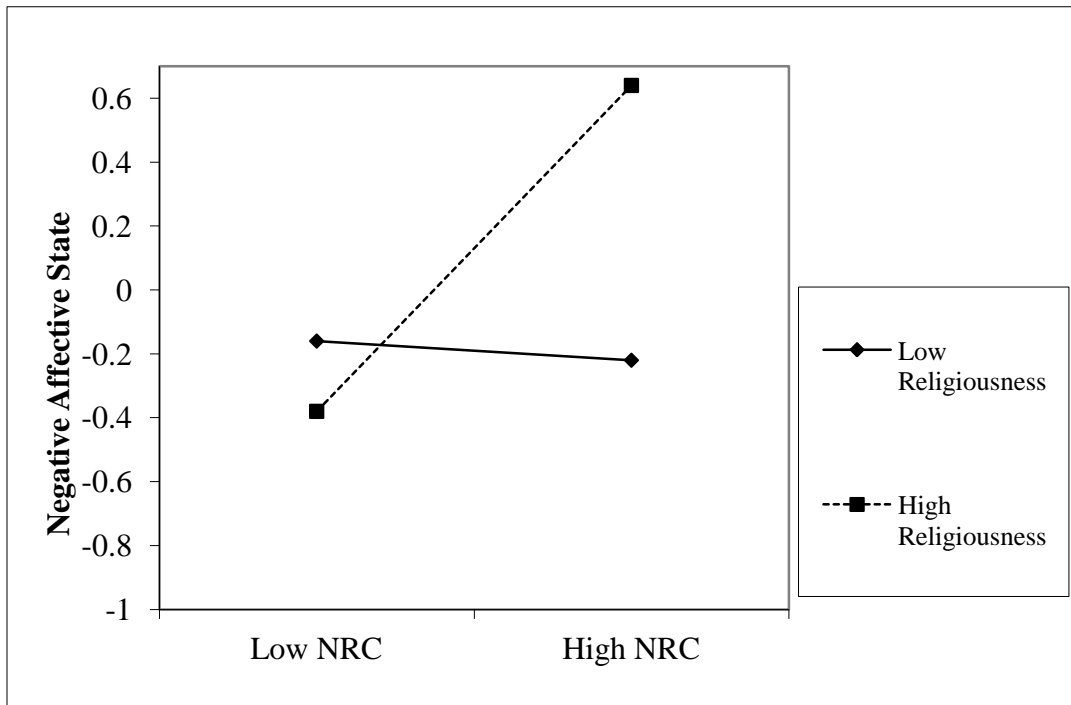
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Moderation Analyses. We conducted two separate moderation analyses to determine whether the relationships between negative religious coping for nonreligious events and the two criterion variables, negative affectivity and depressed mood, were moderated by religiousness. Following the recommendations of Friedrich (1982), we converted scores to standardized values before running the regression analyses to avoid problems associated with multicollinearity and to improve the interpretability of the coefficients. We calculated interaction terms by multiplying negative religious coping scores with the criterion variable scores. If an interaction term demonstrated predictive power, it was further subjected to simple slopes analyses to determine where along the slopes the effects were most pronounced (O'Conner 1998). The moderation analyses demonstrated that religiousness did not demonstrate a moderating effect with depression as the criterion variable. However, religiousness did show moderating effects with negative affective state as the criterion variable under both conditions of negative religious coping (i.e., religious events and nonreligious events).

In the first moderator analysis, we examined the moderating effect of religiousness on the relationship between negative religious coping with nonreligious events and negative affective state. We entered the predictor variables of negative

religious coping ($\beta = 0.21, p < 0.05$), fading affect for nonreligious events ($\beta = -0.25, p < 0.01$), and religiousness ($\beta = 0.14, p = 0.11$, nonsignificant) into the first step of a hierarchical multiple regression analysis, which accounted for 12 percent (adjusted R^2) of explained variance, $F(3, 112) = 6.27, p < 0.01$. In the next step, negative religious coping ($\beta = 0.20, p < 0.05$), fading affect for nonreligious events ($\beta = -0.23, p < 0.05$), and religiousness ($\beta = 0.18, p < 0.05$) were significant predictors when the interaction term ($\beta = 0.22, p < 0.05$), which was also significant, was included in the model, $F(4, 111) = 6.04, p < 0.001$. The interaction term accounted for an additional 3 percent (adjusted R^2) of explained variance. We followed up this finding up with a simple slopes analysis, which showed that the moderating effect was significant for scores at the medium ($t = 2.73, p < 0.01$) and high ($t = 3.80, p < 0.001$) levels of religiousness (see Figure 2). In other words, negative affect was greatest among individuals who were moderately to highly religious and frequently engaged in negative religious coping compared to their less religious counterparts who were also frequently engaged in negative religious coping.

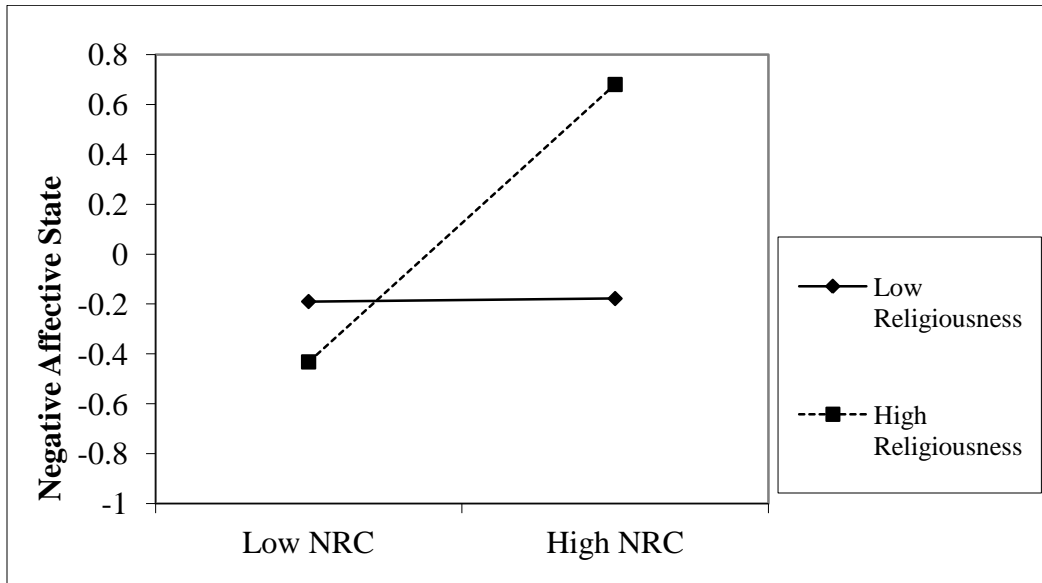
Figure 2: Moderating Effect of Religiousness on the Relationship Between Negative Religious Coping for Nonreligious Events and Negative Affective State



Note: Standardized values are based on one standard deviation below and above sample means. Moderation is statistically significant at the medium and high levels of religiousness.

The second moderator analysis examined the moderating effect of religiousness on the relationship between negative religious coping with religious events and negative affective state. We entered the predictor variables of negative religious coping ($\beta = 0.15, p < 0.01$) and religiousness ($\beta = 0.07, p = 0.21$, nonsignificant) into the first step of a hierarchical multiple regression analysis, which accounted for 7 percent (adjusted R^2) of explained variance, $F(2, 113) = 5.13, p < 0.01$. Fading affect was not included in this model because it was not correlated with negative religious coping for religious events. In the next step, which included the interaction term ($\beta = 0.16, p < 0.01$), negative religious coping ($\beta = 0.17, p < 0.01$) continued to be a significant predictor, whereas religiousness ($\beta = 0.09, p = 0.09$, nonsignificant) did not. The interaction term accounted for an additional 4 percent (adjusted R^2) of explained variance, $F(3, 112) = 5.95, p < 0.01$. We followed this finding with a simple slopes analysis, which showed that the moderating effect was significant for scores at the medium ($t = 3.17, p < 0.01$) and high ($t = 3.86, p < 0.001$) levels of religiousness (see Figure 3). As in the previous finding, negative affect was greatest among those who were moderately to highly religious and frequently engaged in negative religious coping compared to their less religious counterparts who also frequently engaged in negative religious coping.

Figure 3: Moderating Effect of Religiousness on the Relationship Between Negative Religious Coping for Unpleasant Religious Events and Negative Affective State



Note: Standardized values are based on one standard deviation below and above sample means. Moderation is statistically significant at the medium and high levels of religiousness.

Collectively, the moderation analyses showed that negative affective state was greatest among moderately to highly religious individuals who tended to draw on negative religious coping strategies to deal with unpleasant life events. This pattern appeared to generalize across religious and nonreligious events.

DISCUSSION

Research has shown that mental health and well-being can be substantially affected by religion (Koenig, King, and Carson 2011). One of the most consistent findings in this literature is the strong link between negative religious coping and negative emotional outcomes (Ano and Vasconcelles 2005; Exline 2013). However, researchers have not systematically examined factors that influence this connection. Therefore the results of the current study filled a void in the literature by demonstrating some influences on the relationship between negative religious coping and two forms of emotional distress in a small sample of college students.

The results of the correlation analyses showed that neuroticism was positively associated with negative affective state (Watson 2000) and depressed mood (Lee, Yeh, and Surething 2013), as it has in previous work. Because neuroticism was not correlated with negative religious coping, however, it did not act as a confounding variable in the relationship between negative religious coping and distress. Although we found no evidence for neuroticism as a confounding variable in this study, it is important to recognize that the previous work examining this link has been mixed in that some studies demonstrated the relationship (Ano and Pargament 2013; Lee and Surething 2013) and other studies did not (Lee, Roberts, and Gibbons 2013). Therefore future research should examine this relationship under specific conditions (e.g., varying sample sizes, varying religious compositions, varying degrees of neuroticism) to determine whether this relationship depends on particular factors or it is simply spurious.

The results of the correlation analyses also indicated that fading affect was associated with both negative religious coping and emotional distress but only in the context of a nonreligious event and negative affective state. The subsequent mediation analysis supported our hypothesis that fading affect would mediate the relationship between negative religious coping and emotional distress but only as a partial mediator. This finding suggests that negative religious coping is partially associated with current feelings of negativity for nonreligious events because unpleasant affect did not fade over time for these events. This finding is consistent with previous work, which showed that negative religious coping is associated with emotion dysregulation in the form of prolonged recovery. Specifically, Lee, Roberts, and Gibbons (2013) found that students who drew on negative religious coping strategies during bereavement tended to maintain higher levels of grief

intensity after a discussion about their loss compared to students who were less inclined to use that kind of coping strategy.

The predicted mediational analyses applied only to nonreligious events, not to religious events. These different results make the point that nonreligious and religious events are qualitatively different. They also suggest that religious events may elicit a positive buffering effect that does not produce the relationships between negative religious coping, fading negative affect, and emotional distress. For example, the events in Lee, Roberts and Gibbons's (2013) study of grief for death events may have produced relationships between negative religious coping and unpleasant emotional outcomes because they were not buffered in the same way as religious events would be. Future research could evaluate this explanation by asking participants to rate the degree to which unrestricted (via labeling) events as well as religious and nonreligious events naturally elicit positive emotional buffering.

The current study also did not produce a relationship between negative religious coping and emotional distress in the form of depression, which was surprising if one considers past research showing such relationships (Ai et al. 2010; Bjork and Thurman 2007; Pirutinsky et al. 2011). However, the nature of the instructional manipulations pertaining to event type (nonreligious and religious) and initial event affect (pleasant and unpleasant) in the current study could have limited such relationships as they limited the scope of events from which the participants could choose. Although future research could remove these instructional restrictions and produce the relationships between negative religious coping and depression not using such manipulations (e.g., Pirutinsky et al. 2011), the analyses in the current study were pulled from a larger study that was designed to examine the differences in nonreligious and religious events. Therefore, the results of the current study suggest that relationships between variables can be influenced by instructional manipulations that restrict the type of autobiographical events that are recalled and evaluated.

The results also partially supported the hypothesis that religiousness would moderate the relationship between negative religious coping and emotional distress. Specifically, religiousness moderated the relationship between negative religious coping and negative affective state across both religious and nonreligious events. This finding showed that the highest levels of negativity were found among the negative religious copers who were moderately to highly religious. These results are consistent with previous work showing that strong identification with religion can be particularly harmful to one's state of mind during a spiritual crisis (Ellison, Fang, et al. 2013; Krause and Wulff 2004; Pargament, Tarakeshwar, et al. 2001). However, unlike these previous studies, our study did not find a moderating effect of religiousness on negative religious coping's relationship with depressed mood. Although we are uncertain as to the reason that our

findings applied only to negative affective state, other researchers have also failed to find a significant interaction between religiousness and measures of spiritual strain. For instance, in a large-scale study of Presbyterians, negative interactions within one's congregation were no more problematic for members with greater role commitments to the church than for less-committed members (Ellison, Zhang, et al. 2009). In a laboratory study, religious mourners who drew on negative religious coping to deal with their loss exhibited grief reactions that were not different from those of their less religious counterparts who also utilized negative religious coping (Lee, Roberts, and Gibbons 2013). Therefore, future research would benefit from a closer examination of this issue.

Collectively, these findings lead to practical implications for clinical practice. Although high levels of religiousness and negative religious coping lead to emotional distress in the form of a negative affective state, ethical therapeutic approaches cannot attempt to reduce religiousness. Rather, therapeutic practices typically attempt to reduce negative emotions without bringing in religion. For example, recent research by Gratz, Levy, and Tull (2012) used adjunctive emotion regulation group therapy lasting fourteen weeks and improved emotion dysregulation, depression, and stress symptoms. However, some therapeutic practices do acknowledge and incorporate religion in their interventions to reduce negative emotions. For instance, D'Souza and Rodrigo (2004) successfully integrated religion in cognitive-behavioral therapy to reduce negative emotions across sixteen sessions. Alternatively, therapeutic approaches could incorporate religion directly by attempting to reduce negative religious coping in an effort to reduce negative emotions. Of course, therapeutic techniques could be combined to examine whether they produce additive or multiplicative effects.

The current study was limited in a few ways. First, we used retrospective procedures to collect data. Past researchers who examined fading affect have provided convincing arguments justifying the use of retrospective methods in the field of autobiographical memory (e.g., Gibbons et al. 2013). Nevertheless, future research could certainly employ diary study methodology to enhance the validity of the study. Diary studies could also help to determine the causal direction of the relationship between negative religious coping and emotional distress, which is important, as previous research has yielded mixed results. For example, Pirutinsky and colleagues (2011) demonstrated that negative religious coping predicts future emotional distress, whereas Neimeyer and Burke (2011) found the opposite pattern of results. In addition, studies have shown that personality, particularly neuroticism, predisposes individuals to negative emotional outcomes (see Lahey 2009). Therefore future research should assess neuroticism and other attributes of personality in conjunction with diary studies and/or cross-panel longitudinal studies to examine whether negative religious coping can predict emotional distress for particular types of individuals (e.g., neurotic individuals).

Second, we examined a relatively small convenience sample of college students, which restricts the generalizability of these results to the population at large. However, the sample size was relatively small because the study was conducted in person to ensure (via observation, prodding, and redirection) that participants followed the instructional manipulations. Even with these controls, data are lost from participants not following directions (e.g., Gibbons et al. 2013). In fact, 5 percent of the data in our study were lost from participants not providing the proper initial affect for events. Future researchers should consider using online crowd-sourcing websites, such as Amazon Mechanical Turk, to collect data from larger and more diverse samples, but to guide participants to provide accurate responses and limit data loss, these studies must devise specific instructions that will replace the guidance of experimental observers. Thus replications of this study with different cohort groups will allow us to see whether the current findings extend to noncollege populations, ethnic minority groups, and older adults.

Third, our study used negative religious coping as the lone measure of spiritual struggles. Future researchers should consider also using newer measures of spiritual struggles, such as the Religious and Spiritual Struggles Scale (Exline et al. 2014), to examine a wider range of this construct. Finally, we examined only self-report components of emotion, which is just one way for participants to express their emotions. Emotions are expressed in many other ways, such as via behavioral and physiological means (Gross and Thompson 2007). Future research should evaluate emotions by using behavioral observation and physiological instruments to extend the results of our study to methods beyond self-report.

In summary, we identified factors that influence the relationship between negative religious coping and emotional distress as measured by depressed mood and unpleasant emotional affect. Specifically, we demonstrated that neuroticism did not confound this relationship, fading affect partially mediated the relationship, and religiousness moderated the relationship for unpleasant emotional affect across religious and non religious events. We suggested that future research should clarify our findings and improve upon our methodology. We also suggested possible therapeutic approaches to reducing negative religious coping and emotional distress. In conclusion, we affirm negative religious coping is an important variable because it is strongly and consistently related to emotional distress, but explanations for this relationship and important factors that influence this relationship have just begun to be investigated.

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