

**Dispositions toward Forgiveness and Revenge in Relation to Coping Styles and
Psychological Well-being**

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Abstract

Predispositions toward forgiveness and vengeance may influence stress appraisals and coping strategies in which people engage when confronted with relationship stressors, and hence may have implications for individuals' well-being. Male and female undergraduates ($N = 204$; 64 men, 140 women) completed questionnaires assessing dispositional forgiveness and vengeance, appraisals and coping in response to a relationship conflict, depressive affect, and life satisfaction. Regression analyses revealed that forgiveness and vengefulness were positively and negatively related with well-being (lower depressive affect, life satisfaction), respectively. Moreover, the relations between forgiveness and well-being were partially accounted for by the decreased propensity of high forgivers to endorse emotion-approach strategies or ruminative brooding to cope, or to appraise the conflict as threatening. The relations between vengefulness and well-being, however, were not mediated by factors associated with the appraisal and coping process. These findings suggest that, although forgiveness and vengeance may be related, their impacts on promoting or undermining well-being reflect distinct processes.

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Dispositions toward Forgiveness and Revenge in Relation to Coping Styles and Psychological Well-being

Virtually all of us have encountered situations in which we have been wronged or hurt by someone else. Despite the fact that these relationship stressors are all too common, the ways in which people cope with them vary; whereas some may choose to respond with forgiveness, others may not be so merciful, even resorting to vengeance. Although we are often faced with the choice to forgive or to exact revenge (or alternatively, to do nothing), some of us are simply predisposed to be more forgiving or more vengeful from the outset. Individuals' choice of response may, in turn, have implications for their health and well-being. Several studies have observed a positive correlation between both dispositional (e.g., Brown, 2003) and transgression-specific forgiveness (e.g., Freedman & Enright, 1996), and improved well-being such as lower levels of depression (Brown, 2003; Freedman & Enright, 1996; Maltby, Macaskill, & Day, 2001) and anxiety (Freedman & Enright, 1996; see McCullough, Pargament, & Thoresen, 2000 for an overview). Conversely, feelings of revenge, culminating in part from ruminating about a transgression, might be associated with poor mental and physical health (McCullough, Bellah, Kilpatrick, & Johnson, 2001).

Although the constructs of forgiveness and vengeance are related (albeit inversely), they may have unique effects; though someone who takes vengeance against another would clearly seem to be unforgiving, a lack of vengeful feelings or behaviours does not necessarily reflect forgiveness (Brown, 2003; Brown, 2004). In effect, forgiveness and revenge may act as distinct methods for coping with adverse interpersonal events (Bradfield & Aquino, 1999). Moreover, predispositions toward forgiveness and vengeance may also predict alternative coping strategies or stress

appraisals in which people engage when confronted with relationship stressors. Particular appraisal and coping styles, in turn, are often predictive of well-being outcomes (Matheson & Anisman, 2003; Ravindran, Matheson, Griffiths, Merali, & Anisman, 2002). Thus, a forgiving or vengeful nature may even influence one's well-being directly and/or indirectly through the stress appraisals or coping strategies that people with those dispositions tend to employ.

Some of the most common transgressions that challenge our ability to forgive are those that occur within intimate relationships. Relationship conflicts may exist in many forms, from minor disagreements to severe abuse, to the dissolution of the relationship altogether. Relationship stress can subsequently result in higher incidences of psychological disturbances (e.g., depression; Beach, Katz, Kim, & Brody, 2003; Kiecolt-Glaser & Newton, 2001). Although the association of relationship stress with mental distress is well established (e.g., Davis, Shaver, & Vernon, 2003), there is a relative paucity of research concerning the individual difference variables that may moderate this association. Consequently, it was the goal of the present thesis to examine the roles of forgiveness and revenge as predispositions for responding to relationship transgressions, and how these may alter the stress appraisals and coping strategies that are predictive of psychological well-being.

Forgiveness

Construct definition. Before investigating the role of forgiveness with respect to coping and well-being, one must ask the question of what is actually implied by the word *forgiveness*. Indeed, a lack of definition seems to be one of the greatest problems in the field of forgiveness research today (Elder, 1998; Enright, Freedman, & Rique, 1998; McCullough & Worthington, 1999). Within the psychological literature, Enright defines

forgiveness as “a willingness to abandon one’s right to resentment, negative judgment, and indifferent behaviour toward one who unjustly hurt us, while fostering the undeserved qualities of compassion, generosity, and even love toward him or her” (Enright et al., 1998, p. 46-47). From a clinical perspective, Denton and Martin (1998) have defined forgiveness as “an inner process, central to psychotherapy, where the injured person without the request of the other releases those negative feelings and no longer seeks to return hurt” (p. 281). McCullough (2000) has conceptualized forgiveness as both a motivational and prosocial construct, heavily influenced by several factors including “cognitive and emotional processes such as empathy, perspective-taking, rumination, and suppression; relationship qualities such as closeness, commitment, and satisfaction; and situational factors such as apology” (p. 46). In an attempt to compile the great diversity of definitions for the construct of forgiveness, McCullough and colleagues (2000) have noted that most of the definitions that exist at present share the common characteristic of a response that becomes more positive (i.e., more prosocial), while becoming less negative (i.e., reduced negative thoughts, feelings, or behaviours toward the offender).

Part of the ambiguity in defining forgiveness may stem from the fact that it has the capacity to be both an *interpersonal* as well as an *intrapersonal* construct. The definition provided by Enright and colleagues (1998) would suggest that forgiveness is more of an interpersonal construct, or a positive change in *behaviour* toward the one who committed the “unjust hurt” against us. This conceptualization is consistent with the notion of reconciliation, a construct that is proposed to be related, but not synonymous, with forgiveness (Govier, 2002). Denton and Martin (1998), on the other hand, have defined forgiveness primarily as an “inner process”, suggesting a more intrapersonal type of forgiveness. This definition of forgiveness does not necessarily require interaction,

apology, or reconciliation between the victim and the offender, but rather involves an internal process in which the victim releases resentment irrespective of the offender. In light of the current lack of agreement on this issue, McCullough and colleagues (2000) suggest that the most inclusive way to think of forgiveness at present may be as a “*psychosocial construct*” (p. 9), that is, having both intrapersonal and interpersonal components. Alternatively, in an effort to address concerns about “the” definition of forgiveness, Wohl, Kuiken, and Noels (in press) put forward the possibility that more than one type of forgiveness may exist. In a recent study conducted by these researchers, first-person accounts were reported to encompass three distinct types of forgiveness, including 1) interpersonal confrontation with the transgressor (e.g., leading to reconciliation), 2) intrapersonal evaluation of human fallibility and moral commitments (e.g., covert forgiveness, even without an apology), and 3) the attempt to resume a positive relationship without presuming that the transgression could be ignored or forgotten.

Although these definitions emphasize responses to specific transgressions, to add yet another dimension to the definitional confusion, several researchers have conceptualized forgiveness as a disposition (e.g., Berry, Worthington, Parrott, O’Connor, & Wade, 2001; Brown, 2003) or personality trait (e.g., McCullough & Worthington, 1999; Mullet, Barros, Frongia, Usaie, & Shafighi, 2003), rather than (or in addition to) an act or process in direct response to an offence. Sometimes termed *forgivingness* (Berry et al., 2001; Mullet, Houdbine, Laumonier, & Girard, 1998), dispositional forgiveness is one’s general tendency to forgive interpersonal transgressions across time, relationships, and situations (Berry et al., 2001; Brown, 2003).

Forgiveness and well-being. A number of psychological disturbances have been linked to a lack of forgiveness or an unforgiving personality. High scores of dispositional (Berry & Worthington, 2001; Brown, 2003; Lawler et al., 2005) and offence-specific forgiveness (Maltby et al., 2001) have been found to predict both mental and physical health. For example, in an intervention study with incest survivors, a forgiveness intervention group reported significantly greater reductions of depression and anxiety than did a control group (Freedman & Enright, 1996). Furthermore, when the control group in this study subsequently began the forgiveness intervention treatment, they also showed the same improvements to psychological well-being.

Although several studies have observed a positive relation between forgiveness and improved well-being (e.g., Lawler et al., 2003; Lawler et al., 2005; Witvliet, Ludwig, & Vander Laan, 2001), the mechanisms through which this relation exists are still under exploration. Several psychosocial characteristics have been suggested as possible mediators of the forgiveness-well-being connection, including self-efficacy, self-esteem (Thoresen, Harris, & Luskin, 2000), social support (Lawler et al., 2005; McCullough, 2000; Thoresen et al., 2000), and reductions in both negative affect and stress appraisals (Lawler et al., 2005). Increased religiosity or spirituality has also been posited to mediate the forgiveness-health connection (Lawler et al., 2005; Thoresen et al., 2000).

Some key factors that typically predict well-being in response to a stressor are how one appraises the implications of that stressor, and the individual coping styles that are subsequently employed (e.g., Folkman, Lazarus, Gruen, & DeLongis, 1986; Hojat, Gonnella, Erdmann, & Vogel, 2003). The processes of initially evaluating the nature and meaning of a stressful event, and determining the perceived options for coping with that event, are often referred to as primary and secondary appraisals, respectively (Folkman et

al., 1986). Given the large body of research relating well-being to coping styles, there is reason to believe that the relation between forgiveness and well-being may be mediated by people's appraisals of the stressor or by the coping strategies that they use. Moreover, forgiveness may also act as a strategy for coping in itself (Bradfield & Aquino, 1999). Little research to date, however, has focused on the roles of appraisals and coping in the relation between forgiveness and well-being.

Stress appraisals, coping, and well-being. According to the Folkman and Lazarus' model of stress and coping, the relation between appraisal and coping processes is reciprocal and dynamic (Carver, Scheier, & Weintraub, 1989; Folkman & Lazarus, 1980). When the stressor is perceived as controllable, problem-focused strategies may prevail, although such an appraisal may be more likely among individuals who typically adopt a problem-solving orientation. If the stressor is perceived as one that must be endured or it elicits particularly negative affect, emotion-focused coping strategies might predominate, although such an orientation may itself favour greater sensitivity to a threat and its potential consequences (Folkman & Lazarus, 1985; Stanton, Kirk, Cameron, & Danoff-Burg, 2000). In effect, while appraisals and the particular coping strategies adopted to respond to a stressor are undoubtedly situation-specific, they also vary as a function of stylistic differences between individuals (Carver et al., 1989; Lazarus & Folkman, 1984).

To the extent that there is a consensus regarding fundamental coping dimensions, problem-focused and emotion-focused styles dominate (Folkman & Lazarus, 1980; Parker & Endler, 1992). However, in addition to, or subsumed within these two core categories, is a wide range of coping strategies. Emotion-focused coping may encompass emotional expression, emotional containment, self- and other- blame, denial, or passive resignation, whereas problem-focused coping may entail cognitive restructuring or

problem-solving techniques (Carver et al., 1989; Matheson & Anisman, 2003). In addition, individuals may employ positive activity (constructive or recreational activities), social support seeking (as a buffer or venting outlet), humour, and/or rumination (Carver et al., 1989; Endler & Parker, 1994; Nolen-Hoeksema, Parker, & Larson, 1994).

In general, the literature relating coping to psychological well-being purports that problem-focused coping is associated with positive indices of well-being (e.g., Hynes, Callan, Terry, & Gallois, 1992), whereas emotion-focused coping is related with more negative well-being. For example, symptoms of depression have been associated with increased usage of emotion-focused coping, especially rumination (Nolen-Hoeksema et al., 1994) and emotional containment (Matheson & Anisman, 2003; Ravindran et al., 2002). Although these patterns of coping and well-being are general trends, it should be noted that particular coping styles may be situation specific (Folkman & Lazarus, 1980), may serve different functions, or may operate in conjunction with other strategies (Matheson & Anisman, 2003). Social support seeking, for instance, may provide a distraction from one's problems, or be a component of problem-solving, or an outlet for emotional expression (Endler & Parker, 1994; Parker & Endler, 1992).

A distinction can also be made between the actual coping styles people endorse and their perceptions of what would be the most effective coping styles to use. While the research to date concerning perceptions of coping effectiveness has focused mainly on participants' perceived effectiveness of the coping styles that they actually used (e.g., Bowman & Stern, 1995; Ntoumanis & Biddle, 1998), the present study sought to assess participants' perceptions of what would have been the most effective coping styles to use, in addition to their actual coping endorsements. In our previous research, we observed that transgression-specific forgiveness was related to women's perceptions of what would

have been effective coping strategies (in relation to an abusive dating relationship), but not with the coping styles that were actually endorsed (Ysseldyk, Sudom, Skomorovsky, Matheson, & Anisman, 2005). Specifically, unforgiving attitudes were associated with the perception of emotion-focused coping (e.g., rumination, self-blame, emotional containment) as an effective strategy, whereas the desire to take revenge was associated with the perception of passive resignation as an effective coping style in response to an abusive partner's behaviour. In the latter case, perhaps in spite of wanting revenge, these women believed that letting go of their resentment would indeed be a more adaptive strategy to deal with their situation; however, the severity of the transgression (abuse) did not allow for this. As forgiveness was not predicted by the coping styles that were actually endorsed, forgiveness appears to have been differentially related to perceptions of coping effectiveness, potentially resulting in a substantial discrepancy between the coping strategies that were employed and what was thought to have been effective. Such a pattern of inconsistency may, in itself, culminate in reductions of self-esteem or self-efficacy, thereby negatively influencing well-being.

Of particular relevance in the context of forgiveness is a large body of research that has evolved in recent years to include the dimension of religiosity within the coping paradigm (see Pargament, 1997, for an overview). Several subtypes of religious coping have emerged into the psychological literature, including, for example, prayer, seeking spiritual support, and forgiveness (Pargament, Koenig, & Perez, 2000). Levels of religiosity overall (e.g., religious service attendance and observance, termed *global indicators of religiousness*; Pargament et al., 2000) have been shown to positively relate to well-being (e.g., Koenig, 1999). Indeed, a recently conducted meta-analysis indicated that greater religiousness was generally associated with fewer symptoms of depression;

this relation was especially strong among people experiencing stress due to recent life events (Smith, McCullough, & Poll, 2003). However, religious coping seems to be divided into negative and positive forms, with negative and positive well-being outcomes following in suit (Ano & Vasconcelles, 2005). For example, *passive religious deferral* (passively waiting for God to control the situation) and *punishing God reappraisal* (redefining the stressor as a punishment from God) have been associated with poorer adjustment to stressors than other religious coping methods including *seeking spiritual support* (finding comfort through God's love and care), and *forgiveness* (Pargament et al., 2000).

Forgiveness, coping, and stress appraisals. Forgiveness has often been viewed as a positive form of religious coping (e.g., Pargament, 1997). However, what separates forgiveness from the remaining constellation of religious coping methods is that, although some may regard forgiveness to be a theological, spiritual act, it also shares a secular, socio-psychological aspect (McCullough & Worthington, 1999; Thoresen et al., 2000). Indeed, forgiveness seems to be the only religious coping method, which despite its intrinsically religious nature is as much secular as it is religious (Pargament, 1997; Thoresen et al., 2000).

Nevertheless, forgiveness is traditionally linked with religion. In addition to being viewed as a form of religious coping, forgiveness has also been shown empirically to positively relate with religiosity on the whole (Mullet et al., 2003). For example, differences in attitudes toward forgiveness have been observed as a function of religious service attendance. Interestingly, the social commitment to religion, rather than personal beliefs, may play a stronger role in promoting the willingness to forgive (Mullet et al., 2003). In addition, highly religious people have also been shown to hold a stronger

motivation to forgive, and to work harder in order to achieve forgiveness than nonreligious people (Gorsuch & Hao, 1993).

Although forgiveness is often viewed as a form of religious coping, or as a direct component of religiosity itself, little research exists that relates forgiveness to *other* types of coping beyond the realm of religion. In one such study, however, forgiveness of an offending other was associated with *higher* levels of emotion-focused coping (Konstam, Holmes, & Levine, 2003). Conversely, in another study relating forgiveness and coping, *low* dispositional forgiveness was found to be associated with high levels of emotion-focused coping styles (Seybold, Hill, Neumann, & Chi, 2001). The difference between these two studies in the relational direction between forgiveness and emotion-focused coping may be due, at least in part, to the type of forgiveness that was measured; transgression-specific forgiveness was assessed in the former study (and hence, the relations with specific coping strategies may vary over time; Tennen, Affleck, Armeli, & Carney, 2000), whereas dispositional forgiveness was studied in the latter. However, research on the role of the specific aspects of emotion-focused coping (i.e., emotional expression, rumination) in relation to forgiveness is lacking (Konstam et al., 2003). Thus, it is possible that forgiveness may operate in conjunction with particular emotion-focused strategies, producing different outcomes as a result of the combinations endorsed, as has been suggested among other coping styles (Matheson & Anisman, 2003). For example, forgiveness of a transgressor coupled with self-blame may lead to reduced well-being, whereas forgiveness paired with emotional expression may lead to reconciliation between the offender and the victim, most likely resulting in positive outcomes for well-being.

Whereas the research relating forgiveness with other coping styles is scarce, the literature focusing on the relations between appraisals and forgiveness is even more so.

However, to the extent that forgiveness is implicated in the stress and coping process, it might be expected that it may be more likely evoked under particular appraisal conditions. For example, as a coping strategy, forgiveness may be more evident when the individual perceives the situation as one that is under their control; indeed, the ability to forgive may actually empower the individual, thus allowing them to gain back a sense of control over the situation. Lawler and colleagues (2005), one of the few research teams to directly assess the link between forgiveness and stress appraisals, found that the relation between state forgiveness and physical health was partially mediated by reductions in perceived stress, whereas the effect of trait forgiveness on health was fully mediated by reduced stress. Maltby and Mackaskill (2005), on the other hand, reported only a weak relation between state forgiveness and loss (of friendships, health, or self-esteem) appraisals in men, and found forgiveness and these primary appraisals to be completely unrelated in women. Clearly, given these contradictory findings, more research is needed in order to identify the patterns associated among forgiveness, stress appraisals, and coping styles.

Revenge

Construct definition. While some research has conceptualized forgiveness as a *lack* of revenge, this definition falls short of being comprehensive; while someone who takes vengeance against another would clearly seem to be unforgiving, a lack of vengeful feelings or behaviours does not necessarily reflect forgiveness (Brown, 2003). Likewise, revenge cannot simply be equated with a *lack* of forgiveness (Brown, 2003). Although these two constructs are related (albeit inversely), one should not be viewed simply as the absence of the other, either conceptually or empirically.

Within the academic literature, Stuckless and Goranson (1994) define revenge as “the infliction of harm in righteous response to perceived harm or injustice” (p. 803). These researchers also make it clear that vengeance is not to be confused with *retaliation*, *retribution*, *reciprocity*, or *hostility*, each of which differs conceptually from revenge. For example, Stuckless and Goranson (1992) suggest that the primary purpose of retaliation is deterrence, usually motivated by rational thought rather than affect; the main purpose of revenge, on the other hand, is to relieve the avenger from negative affect, based on motivations that are not necessarily rational. Retribution differs from revenge, in that, acts of retribution are sanctioned by the state and are generally less severe than acts of vengeance, which tend to surpass the original offence in intensity; likewise, the intensity of revenge behaviours typically supersedes acts of negative reciprocity. Revenge can also be distinguished from hostility in that the motivation for vengeful acts stems from the perception of having been wronged rather than general feelings of anger toward others (Stuckless & Goranson, 1992). Finally, McCullough and colleagues (2001) have recently defined vengeance as “an attempt to redress an interpersonal offence by voluntarily committing an aggressive action against the perceived offender” (p. 602). These researchers also propose that vengeance might encompass three secondary goals: 1) balancing the scales (i.e., getting even), 2) moral instruction (i.e., teaching the offender a lesson), and 3) saving face (i.e., reasserting the victim’s own value or self-worth). Overall, it would seem that revenge can be defined as an intense emotional state requiring relief, based on the perception and motivation that one has been wronged, rather than on rational thought, undifferentiated anger, or retributive justice.

As with forgiveness, vengeance can be viewed in terms of both interpersonal (i.e., carrying out vengeful behaviours) and intrapersonal (i.e., harbouring vengeful feelings

without action against the transgressor) functions (Crombag, Rassin, & Horselenberg, 2003). This disparity can again be seen in the various definitions above. Finally, in addition to entailing a response to a specific event, vengeance can also be thought of as a disposition or personality trait, namely *vengefulness* (McCullough et al., 2001; Stuckless & Goranson, 1992). Vengefulness entails both a general tendency to harbour feelings of revenge and a greater propensity to carry out these desires across time, situations, and relationships.

The issue of definition for both forgiveness and vengeance is far-reaching and beyond the scope of what this paper aims to accomplish. This brief overview, however, should give some insight into the difficulties present when attempting to measure constructs as multifaceted as forgiveness and revenge.

Revenge and well-being. In contrast to forgiving dispositions and behaviour, vengeful feelings and their expression have been linked to reductions in well-being. For example, McCullough et al. (2001) observed that vengefulness was negatively correlated with life satisfaction and positively correlated with negative affectivity. Stuckless and Goranson (1992) also reported a substantial positive correlation between measures of dispositional vengeance and trait anger. Indeed, it has been proposed that one specific component of negative affectivity, anger, may mediate the relation between experiencing a personal offence and a desire for revenge (Bies, Tripp, & Kramer, 1997). The relations between feelings such as anger and hostility with reduced well-being outcomes (e.g., cardiovascular disease) are well-documented (e.g., Smith, Cranford, & Mann, 2000). Thus, given the association between vengeance and anger (Stuckless & Goranson, 1992), it is not surprising that seeking revenge or having a vengeful disposition might also be associated with increased psychological and physical health problems. This also suggests

that revenge and forgiveness are qualitatively distinct constructs, given that different variables may mediate their relations with well-being.

While the general consensus in the literature is that revenge correlates negatively with indices of well-being, this finding is not without exception. Brown (2003) recently found that, after controlling for a disposition toward forgiveness, high scores of dispositional vengeance tended to be *negatively* related to depression, (i.e., participants with a more vengeful disposition had lower levels of depression), although this correlation was not statistically significant. Based on this finding, it is possible that those who fail to forgive a transgressor might be less depressed if they seek revenge than if they simply do nothing, thus at least partially gaining back a feeling of control over the situation rather than succumbing to feelings of helplessness (Brown, 2003). Indeed, according to several psychologists and philosophers, revenge can be constructive and prosocial (Bies et al., 1997), even moral (Jacoby, 1983; Murphy, 1995; Solomon, 1990). While these arguments are frequently disputed (e.g., Govier, 2002), they do suggest that there may be circumstances under which harbouring revenge might be beneficial, rather than damaging, to well-being.

Revenge, coping, and stress appraisals. As with forgiveness, revenge might be viewed as a coping strategy in itself (e.g., providing relief from negative affect; Bradfield & Aquino, 1999; Stuckless & Goranson, 1992), and it may also be associated with other forms of coping. Some research has indicated that a vengeful disposition is positively correlated with the coping strategy of rumination (Bradfield & Aquino, 1999; McCullough et al., 2001). Indeed, numerous researchers have posited that feelings and motivations for revenge most often result after a period of cognitive reflection and rumination about the transgression (Bradfield & Aquino, 1999; McCullough et al., 2001;

Stuckless & Goranson, 1992). Likewise, a vengeful disposition may drive individuals toward ruminating behaviour in the first place, making them more susceptible to a variety of pathologies (e.g., depression; Nolen-Hoeksema et al., 1994). Different types of rumination have been suggested, however (i.e., reflective pondering, ruminative brooding, ruminative depression; Treynor, Gonzalez, & Nolen-Hoeksema, 2003), which may be differentially related with vengeance. Reflective pondering may entail a period of cognitive reflection that resembles problem-focused coping, whereas ruminative depression and ruminative brooding may more closely resemble emotion-focused coping. Thus, given the relation between negative affect (anger) and vengeance, it seems probable that vengefulness would be more likely to evoke ruminative depression and brooding rather than reflective pondering, thereby accounting for the relation between vengeance and poor well-being.

Not surprisingly, another coping strategy that seems to be inextricably linked with revenge is other-blame. Several researchers have reported that victims who hold their offenders accountable are more likely to be motivated to have revenge cognitions (Bradfield & Aquino, 1999) or vengeful behaviour (Bies et al., 1997). Indeed, someone with an inherently vengeful disposition may be more inclined to place blame on another and, subsequently, succumb to negative well-being as a result. Thus, it would seem that, on the whole, vengeance is associated most frequently with emotionally-charged coping styles.

Finally, although much research has been done relating revenge with religion (i.e., the destructive power of religion resulting in terrorist violence, see Ellens, 2004a, b, and c for an overview), little research has been conducted that relates vengeance with religiousness (i.e., personal involvement in religiously based beliefs and practices). Not

surprisingly however, in one such study, Catholic participants who attested to believing in God and who attended religious services regularly tended to be less vengeful overall than their non-religious counterparts (Mullet et al., 2003).

The research relating revenge with primary stress appraisals is also sparse. It will be recalled that loss appraisals were found by Maltby & Macaskill (2005) to be inversely related with forgiveness among men. These researchers have also argued, however, that the converse of forgiveness is grudge-holding, a behaviour often associated with vengeful feelings and behaviours. Given some research suggesting that men are more likely to wish for revenge than women (Holbrook, White, & Hutt, 1995), Maltby and Macaskill propose that identifying the relations between loss appraisals, grudge-holding, and the desire for revenge may be informative and should be explored further.

The Present Study

Some of the most common transgressions that challenge our ability to forgive are those that occur within intimate relationships. Thus, it would seem prudent to investigate the implications of dispositions toward revenge and forgiveness within the realm of coping with intimate relationship conflicts and stress. The present study examined dating relationship stressors including disagreements within the relationship and the dissolution of the relationship altogether. Of particular interest in the present investigation were the roles of forgivingness and vengefulness in predicting the stress appraisals and coping styles (including religiosity and rumination) that were either endorsed or perceived to be effective when responding to relationship transgressions, and participants' subsequent psychological well-being outcomes, namely levels of life satisfaction and depressive symptomatology. Understanding the complexities that underlie the motivations for both forgiveness and revenge within the context of intimate relationships may not only

enhance individuals' well-being, but may facilitate our understanding of how forgiving and vengeful individuals cope when confronted with other types of transgressions as well.

The present study focused on forgiveness and vengeance as relatively stable dispositional styles, rather than as transgression-specific responses, in order to achieve a more in-depth study of the roles of these personality traits in relation to stress appraisals, coping, and well-being. Whereas offence-specific forgiveness or revenge may have short-lived influences on one's choice of coping response, and consequently, on one's well-being, dispositions toward forgiveness or vengeance should predict how an individual appraises and copes with a variety of stressors over time, and thus may be more telling of the long-term influences that forgiveness or vengeance might have, directly and/or indirectly, on well-being.

Although the focus of the present thesis was on the processes mediating the relations between dispositional forgiveness and vengeance with well-being, variations as a function of gender were also explored. Previous research concerning sex differences in levels of forgiveness is inconsistent. Whereas some research has found gender to be important in moderating one's willingness to forgive (e.g., men were more forgiving after recalling a similar offence of their own, whereas women were more forgiving in a control condition; Exline, 2005), other research has found gender to be an unimportant variable in either predicting or moderating forgiveness (Maltby & Macaskill, 2005; Mullet et al., 2003). It has also been observed that related issues, such as vengeance and judgements, do appear to display sex differences (Maltby & Macaskill, 2005). Indeed, men are more likely to wish for vengeance than women (Holbrook et al., 1995). Thus, in addition to analysing participant responses of both sexes together in the present study, the moderating effects of sex were assessed.

Hypotheses

Overall, the present study examined the associations among dispositional forgiveness, dispositional revenge, and well-being (depressive affect and life satisfaction), as well as the possible mediating roles of religiosity, rumination, stress appraisals, and coping (both endorsements and perceived effectiveness), in the context of intimate dating relationship transgressions. It was hypothesized that:

- 1) Dispositional forgiveness and dispositional revenge would be positively and negatively related to well-being, respectively (i.e., lower levels of depressive affect and higher levels of life satisfaction).
- 2) Both dispositional forgiveness and dispositional revenge would be related to stress appraisals; specifically, forgiveness would be positively related with appraisals of the situation as controllable and as a positive challenge, while negatively related with appraisals of the conflict as threatening and uncontrollable. Revenge would have the opposite relations with these appraisals.
- 3) Both dispositional forgiveness and dispositional revenge would be related to coping styles; specifically, forgiveness would be positively related (and revenge negatively related) to both endorsements and perceived effectiveness of problem-focused and religious coping styles, while negatively related (and revenge positively related) with emotion-focused coping styles. Moreover, forgiveness would be positively related (and revenge negatively related) with levels of religiosity and ruminative reflection, and negatively related (and revenge positively related) with ruminative depression and brooding.

- 4) Stress appraisals and coping (including religiosity and rumination) would mediate the relations between dispositional styles and well-being (see Figure 1).
- 5) Dispositional forgiveness and each of stress appraisals and coping (including religiosity and rumination) would interact to influence well-being; likewise, the same interactions were predicted for revenge and each of stress appraisals and coping. (For example, emotional expression may interact with forgiveness resulting in positive well-being, whereas avoidance strategies may interact with forgiveness resulting in more negative well-being outcomes; see Figure 2).

Figure 1

Mediated Model of Relations between Dispositional Styles (Predictors), Appraisals and Coping (including Religiosity and Rumination) (Mediators), and Well-being (Outcomes).

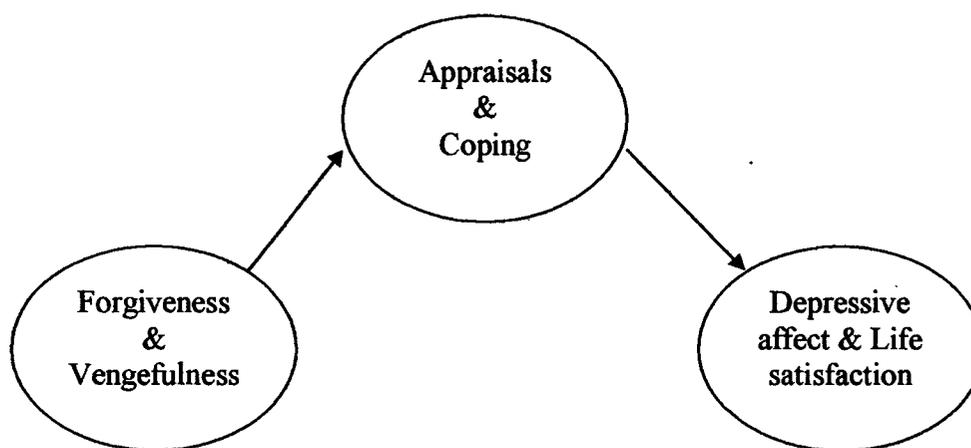
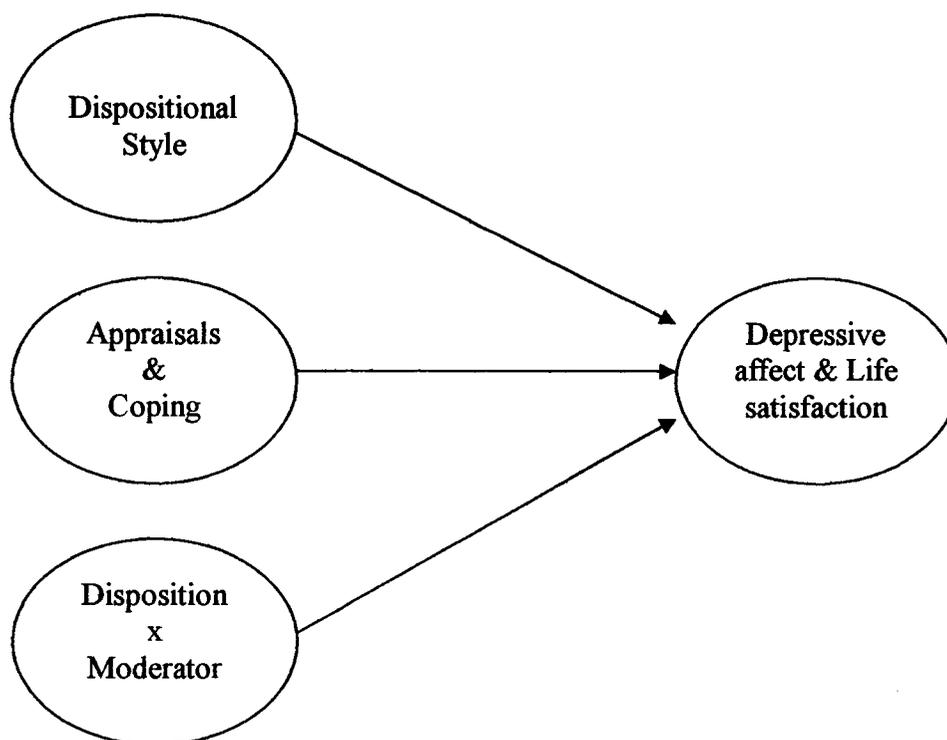


Figure 2

Moderated Model of Relations between Dispositional Styles (Predictors), Appraisals and Coping (including Religiosity and Rumination) (Moderators), and Well-being (Outcomes).



Method

Participants

Male and female undergraduate student volunteers ($N = 204$; 64 men, 140 women), ranging in age from 17 to 48 ($M = 20.23$, $SD = 3.82$) participated in the study, which was described as concerning the impact of their relationship with an intimate partner on their psychological well-being. Students who indicated in a pre-measure administered to all introductory psychology courses that they were currently in a relationship or had recently broken-up with an intimate partner (within the last six months) were contacted and invited to participate. Participants also volunteered through

sign-up sheets. As incentive, participants received either experimental credit, or a combination of credit and \$10.

Whereas 64.7% ($n = 132$) of participants were currently involved in an intimate relationship, 35.3% ($n = 72$) of participants indicated that they had recently broken up with their partner. The majority of participants were Euro-Caucasian (69.6%, $n = 142$) in ethnicity, whereas the remainder of the sample identified themselves as Asian (11.8%, $n = 24$), Black (5.9%, $n = 12$), East Indian (3.4%, $n = 7$), Middle Eastern (3.4%, $n = 7$), Hispanic (0.5%, $n = 1$), Native Canadian (0.5%, $n = 1$), or did not specify their ethnicity (4.9%, $n = 10$). A wide variety of religious affiliations was also represented in our sample; although 33.8% ($n = 69$) of participants indicated that they were atheist or agnostic, the remaining participants identified themselves as Catholic (34.3%; $n = 70$), Protestant (19.1%; $n = 39$), Muslim (4.9%; $n = 10$), Jewish (2.0%; $n = 4$), Buddhist (1.5%; $n = 3$), or Hindu (0.5%; $n = 1$), whereas 2.0% ($n = 4$) indicated they were affiliated with other religions (e.g., Wicca, Bahai), or did not specify their religious affiliation (2.0%; $n = 4$).

Procedure

In an initial session, participants were run in small groups in the lab. Upon arrival, they were seated at desks separated by dividers to minimize social contact and awareness of one another. After being provided with a verbal overview of the study, participants completed an informed consent form and a series of background information questions (e.g., ethnicity, religious affiliation).

Next, participants were asked to describe a recent relationship conflict. Those instructions appeared as follows:

We are interested in how you dealt with a specific disagreement between you and your partner. Everyone has disagreements; some are serious arguments, whereas others may be just a difference of opinion. If you are currently in a relationship, please consider a disagreement that you and your partner had in the past month that you found the most troublesome. If you are not currently in a relationship, please use an example from your most recent relationship, or specifically, describe the break-up of that relationship itself.

Participants were given five minutes to complete a written description of their relationship conflict, after which they completed a series of questionnaires that tapped into their appraisals of the transgression, their coping endorsements, their perceived effectiveness of various coping strategies, and finally symptoms of depression¹ (see Appendix A for complete questionnaires).

At the end of the in-lab session, to ensure that no residual negative effects resulted from asking participants to recall a relationship conflict, participants completed a positive relationship task, during which they wrote down as many positive attributes or experiences that they could think of with regard to the partner with whom they had experienced the recent conflict or break-up. In addition, participants wrote down as many positive attributes or experiences that they could think of with regard to other sources of social support in their lives (e.g., best friends or relatives). Before departing, participants were given one experimental credit for their participation and a list of contact numbers for psychological services.

Because of the length of the in-lab session, students were given a take-home package with the remaining measures to be returned to the lab within one week. The take-home booklet included the measures of trait forgiveness, trait vengeance, dispositional rumination, and life satisfaction. Finally, full debriefing occurred upon the return of the take-home questionnaire to the lab. If participants did not return the take-home

¹ Several other measures (e.g., mood, salivary samples) were also included in this lab session as part of a larger research project.

questionnaire after one week had passed, they were contacted by one of the researchers and, in the event that participants chose not to return their questionnaires, they were emailed a copy of the full debriefing.

Measures

Trait forgiveness. The Tendency to Forgive Scale (TTF; Brown, 2003) is a brief validated measure of dispositional forgiveness. Although the TTF is comprised of only four items, its psychometric validity has been supported by several studies, including one in which individuals' self-reports of their tendency to forgive concurred with their romantic partners' ratings of their levels of forgiveness (Brown, 2003). Each item, rated on a Likert scale ranging from 0 (strongly disagree) to 6 (strongly agree), is intended to capture individual differences in the general tendency to engage in forgiving thoughts or behaviours across situations (e.g., "When people wrong me, my approach is just to forgive and forget"). This measure of forgiveness purports to assess this construct while keeping it separate from other related but distinguishable constructs, such as aggression or vengeance (Brown, 2003). Responses were reverse-scored as needed and summed (missing values were replaced by the participant's mean response to the remaining items) to provide a single index of trait forgiveness, such that higher scores reflected a disposition to forgive others more often (Cronbach's $\alpha = .66$).

Trait vengeance. It has been observed that some measures of forgiveness are perhaps better measures of vengeance than of the construct they propose to assess. The Forgiveness of Others Scale (FOO; Mauger et al., 1992), in which many of the items actually pertain to vengeance attitudes and behaviours, has been posited to have this property (Brown, 2003; McCullough et al., 2001). Therefore, as was done in a recent

study by McCullough et al. (2001), seven items taken from this measure were used to assess a vengeance-seeking disposition. Participants indicated whether they believed each statement (e.g., "If another person hurts you, it is all right to get back at him or her") to be true or false of their general tendencies across situations. Six out of the seven items in this scale positively endorse vengeful thoughts or behaviours. Responses were reverse-scored as needed and summed to provide a single index of trait vengeance, such that higher scores reflected a disposition to want revenge on others more often (Cronbach's $\alpha = .55$).

Religiosity. In addition to a single item through which participants self-identified their religious affiliation (e.g., Protestant, Catholic, etc.), three general items were used to quantitatively assess strength of religiosity. Respondents were asked to select from sets of response choices reflecting the frequency of attendance at religious services (e.g., from 0, "never", to 9, "pretty well everyday"), and the importance of prayer and religious observance in daily life (e.g., from 0, "not important" to 2, "very important") (Cronbach's $\alpha = .83$).

Rumination. The Ruminative Responses Scale (RRS; Treynor et al., 2003) is a 22-item measure that assesses each of the reflective pondering (5 items; Cronbach's $\alpha = .74$), brooding (5 items; $\alpha = .76$) and depression-related (12 items; $\alpha = .90$) components of rumination. Participants were asked to rate each item on a Likert scale ranging from 1 (never) to 4 (always), in terms of what they generally do when they feel down, sad, or depressed (Cronbach's $\alpha = .92$).

Stress appraisals. The Stress Appraisal Measure (SAM; Peacock & Wong, 1990) is a multidimensional scale that assesses participants' cognitive appraisals of a given situation. It includes six dimensions, including perceived threat, challenge, centrality,

controllable-by-self, controllable-by-others, and uncontrollable-by-anyone. In the present investigation, the SAM assessed participants' cognitions regarding the relationship conflict that they had described. Respondents answered 28 questions (e.g., "How threatening is this situation?") according to how they viewed the situation at that moment, using a 5-point scale ranging from 1 (not at all) to 5 (extremely). As seen in Table 1, correlations among the stress appraisal dimensions were moderate and each dimension demonstrated adequate reliability.

Table 1

Correlations among Stress Appraisal Dimensions (Cronbach's α s on the diagonal)

	1	2	3	4	5	6
Stress appraisals						
1. Centrality	.87					
2. Controllable-by-self	-.07	.77				
3. Controllable-by-others	.11	.37**	.86			
4. Threat	.60**	-.33**	.05	.85		
5. Challenge	.30**	.41**	.30**	-.02	.61	
6. Uncontrollable-by-anyone	.05	-.24**	-.04	.25**	-.08	.73

** $p < .01$

Coping styles. Although any of a number of multidimensional scales could have been used, we employed the Survey of Coping Profile Endorsement (SCOPE; Matheson & Anisman, 2003), which is comprised of 50 items that reliably assess 14 strategies that differentiate between various stress-related responses (Matheson, 2003; Matheson &

Anisman, 2003; Matheson & Cole, 2004). The strategies assessed include cognitive/behavioural (e.g., problem-solving, cognitive restructuring, active and cognitive distraction, and rumination) and socio-emotional responses (e.g., humour, social-support seeking, emotional expression, other- and self-blame, emotional containment, wishful thinking, and passive resignation), as well as religious faith. Respondents rated each item using a 5-point scale ranging from 0 (never) to 4 (almost always), which refers to the frequency with which they found themselves using each behaviour for coping with the specific disagreement with their partner during the past month or with the break-up of their most recent relationship itself. In addition to the *endorsement* of the specific coping strategies, participants were also asked to separately rate the *perceived effectiveness* of each of the 50 items (that is, how effective they thought each strategy *would* be, regardless of their previous coping endorsements). Responses for each subscale within the endorsement and effectiveness scales were summed (separately), in order to provide an index for each of the 14 coping strategies, in which higher scores indicated increased usage or perceptions of that strategy as effective, respectively.

The specific coping strategies are often combined to form two to four superordinate categories of coping (Parker & Endler, 1992; Carver et al., 1989). In the present study, a principal components analysis using varimax rotation with Kaiser normalization was conducted on the 14 coping endorsement subscales as well as on the 14 coping effectiveness subscales. Based on the scree tests and eigenvalues greater than 1 (Stevens, 2002), there appeared to be four components for both endorsed and perceived effectiveness of coping, explaining 59.46% and 63.60% of the variance, respectively. Although the resulting components were slightly different for coping endorsements versus effectiveness, the final factors were shaped using the combination of information

from both principal component analyses. This is sometimes necessary in order to make interpretable comparisons across the coping constructs and other variables of interest. Using the inclusion criteria of factor loadings of .40 or higher, the first factor reflected *emotion-focused approach* coping strategies including, rumination, emotional expression, other-blame, self-blame, emotional containment, and wishful thinking. The second factor represented *problem-focused coping*, including problem solving, cognitive restructuring, and social support seeking. The third factor was comprised of *emotion-focused avoidance* strategies, namely, active distractions, cognitive distractions, humour, and passive resignation. Although humour loaded onto the emotional avoidance dimension for coping effectiveness while representing its own component for endorsed coping, Cronbach's α s indicated that this strategy increased scale reliability when included in the emotional avoidance dimension for both coping endorsements and perceived coping effectiveness (see Table 2). It should be noted that although the item-total reliabilities for this latter component were low, these values were based on the subscale scores (rather than the individual items contributing to them). The fourth factor was represented by a single coping strategy, namely *religious coping*. Although ordinarily one-item factors would not be retained, given past research linking forgiveness to religious values (McCullough & Worthington, 1999; Mullet et al., 2003), in the present study, subsequent analyses included this dimension of coping. As seen in Table 2, coping dimensions were only moderately correlated. In order to ensure consistency of the factor solution across the sample, a principal components analysis, as described above, was again conducted for both of the coping scales on a random sample of the data. Both analyses yielded similar results, thus, the original factor solution was retained.

Table 2

*Correlations among Coping Endorsements and Effectiveness Ratings**(Cronbach's α on the diagonal)*

	1	2	3	4	5	6	7
Coping endorsements							
1. Problem-focused	.71						
2. Emotion-approach	.36**	.80					
3. Emotion-avoid	.53**	.35**	.51				
4. Religious coping	.34**	.17*	.12				
Coping effectiveness							
5. Problem-focused	.56**	.35**	.38**	.10	.74		
6. Emotion-approach	.27**	.44**	.29**	.28**	.18**	.81	
7. Emotion-avoid	.24**	.24**	.55**	.11	.45**	.40**	.69
8. Religious coping	.25**	.06	.10	.78**	.21**	.22**	.12

* $p < .05$; ** $p < .01$

Depressive affect. The 21-item Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) was used to assess depressive symptoms. Respondents were asked to select from sets of response choices reflecting increasing degrees of problem severity (e.g., from 0, "I do not feel sad" to 3, "I am so sad or unhappy that I can't stand it"), with sets of responses varying in number from 4 to 6 response choices. Responses across items were summed and scores could range from 0 to 63 (Cronbach's $\alpha = .89$).

Life satisfaction. A scale consisting of five single-item statements was used to assess global life satisfaction (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) (e.g., “I am satisfied with my life”). The SWLS measures life satisfaction as a cognitive-judgmental process, rather than an affective or an emotional one, and has been shown to have favourable psychometric properties (Diener et al., 1985). Respondents were asked to rate their agreement with each statement using a 6-point scale ranging from 1 (strong disagreement) to 6 (strong agreement). Responses across items were summed, such that higher scores indicated greater levels of life satisfaction (Cronbach's $\alpha = .86$).

Results

Preliminary analyses were conducted to assess outlier and missing data concerns, as were a series of diagnostic measures (e.g., normal probability and residual plots) to ensure that the assumptions of our planned analyses were met. These analyses are described in detail in Appendix B. Although distributions of a number of key variables of interest were found to be non-normal, transformations of these variables did not sufficiently normalize the distributions to merit further consideration. Thus, in an attempt to retain data accuracy, the analyses reported in the present study are those using the original participant responses.

Differences on Variables of Interest

Sex differences. Independent samples t-tests revealed that men and women differed on several of the variables of interest. As seen in Table 3, somewhat unexpectedly, men tended to have more forgiving dispositions overall, $t(181) = 4.78, p < .001$, yet did not differ from women in levels of vengefulness. Women, on the other hand, were inclined to both endorse and perceive as more effective all of the coping styles, with

the exception of the effectiveness of using emotion-approach coping. Men and women did not differ in their propensities to ruminate, their levels of religiosity, or their stress appraisal endorsements, with the exception that women appraised their relationship conflicts as being slightly more challenging than did men, $t(201) = -1.98, p < .05$. In line with previous research (Nolen-Hoeksema, Larson, & Grayson, 1999) however, women reported more depressive symptoms than did men, $t(201) = -2.58, p < .05$, and a greater propensity to engage in brooding rumination, $t(181) = -2.47, p < .05$. Levels of life satisfaction did not differ between the sexes.

Table 3

Descriptive Statistics (Means, SDs) as a Function of Sex

	Males			Females		
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>
Forgivingness	55	13.27	3.83	128	10.10***	4.23
Vengefulness	55	3.29	1.80	128	2.87	1.72
Coping endorsements						
Problem-focused	64	5.70	2.27	138	7.00***	2.16
Emotion-approach	64	9.90	11.75	138	11.75**	4.18
Emotion-avoid	64	7.84	2.18	138	8.74**	2.30
Religious coping	64	0.72	1.05	138	1.22*	1.38
Coping effectiveness						
Problem-focused	64	6.48	2.41	138	7.84***	2.06
Emotion-approach	64	5.01	3.09	138	5.45	3.65

Table 3 (continued)

Descriptive Statistics (Means, SDs) as a Function of Sex

	Males			Females		
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>
Coping effectiveness						
Emotion-avoid	64	6.48	2.83	138	7.56*	2.85
Religious coping	64	0.89	1.24	138	1.40*	1.42
Stress appraisal						
Centrality	64	3.19	1.20	139	2.99	1.11
Controllable-by-self	64	3.90	0.80	139	3.93	0.77
Controllable-by-others	64	2.77	1.11	139	3.11	1.20
Threat	64	2.27	0.81	139	2.35	0.87
Challenge	64	2.82	0.90	139	3.07*	0.84
Uncontrollable-by-anyone	64	1.92	0.95	139	2.03	0.96
Ruminative depression	55	25.90	6.28	128	27.62	7.23
Ruminative brooding	55	10.44	2.85	128	11.66*	3.13
Ruminative reflection	55	10.22	2.97	128	10.87	3.24
Religiosity	58	3.72	3.26	136	3.91	3.38
Depressive affect	64	7.45	6.45	139	10.48*	8.32
Life satisfaction	55	20.93	4.82	128	20.03	5.70

* $p < .05$; ** $p < .01$; *** $p < .001$

Note: Sample sizes vary due to missing values in response to particular scales.

Relationship status differences. Independent samples t-tests were also used to compare participants who were coping with a conflict within an existing relationship versus those who described dealing with the break-up of a relationship. Participants who had recently suffered a break-up relied more on emotional avoidance coping, $t(200) = 4.30, p < .001$, perceived this coping style to be more effective, $t(200) = 3.87, p < .001$, and also appraised their situation as uncontrollable-by-anyone, $t(201) = 3.97, p < .001$ (see Table 4), but did not differ from participants currently in relationships on any other variables of interest.

Table 4

Descriptive Statistics (Means, SDs) as a Function of Relationship Status

	Currently in Relationship			Recently Broken-up		
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>
Forgivingness	118	11.15	4.30	65	10.88	4.48
Vengefulness	118	3.15	1.75	65	2.72	1.74
Coping endorsements						
Problem-focused	131	6.45	2.26	71	6.85	2.23
Emotion-approach	131	10.79	4.16	71	11.84	4.26
Emotion-avoid	131	7.97	2.18	71	9.36***	2.25
Religious coping	131	1.03	1.30	71	1.11	1.34
Coping effectiveness						
Problem-focused	131	7.19	2.21	71	7.81	2.32
Emotion-approach	131	5.24	3.46	71	5.44	3.55

Table 4 (continued)

Descriptive Statistics (Means, SDs) as a Function of Relationship Status

	Currently in Relationship			Recently Broken-up		
	<i>n</i>	<i>Mean</i>	<i>SD</i>	<i>n</i>	<i>Mean</i>	<i>SD</i>
Coping effectiveness						
Emotion-avoid	131	6.66	2.67	71	8.25***	2.95
Religious coping	131	1.18	1.41	71	1.35	1.33
Stress appraisal						
Centrality	132	3.13	1.13	71	2.90	1.14
Controllable-by-self	132	3.92	0.80	71	3.92	0.75
Controllable-by-others	132	2.90	1.17	71	3.20	1.18
Threat	132	2.30	0.80	71	2.37	0.94
Challenge	132	2.99	0.86	71	3.00	0.89
Uncontrollable-by-anyone	132	1.80	0.86	71	2.35***	1.04
Ruminative depression	118	26.79	6.88	65	27.68	7.19
Ruminative brooding	118	11.18	3.06	65	11.49	3.16
Ruminative reflection	118	10.39	3.01	65	11.19	3.39
Religiosity	125	3.96	3.64	69	3.67	2.70
Depressive affect	132	8.83	7.60	71	10.81	8.30
Life satisfaction	118	20.82	5.47	65	19.35	5.24

*** $p < .001$

Note: Sample sizes vary due to missing values in response to particular scales.

Religious affiliation differences. One-way analyses of variance (ANOVAs) revealed that differences between religious groups existed only in levels of religiosity, $F(7,186) = 9.62, p < .001$, endorsements of religious coping, $F(7,190) = 11.20, p < .001$, and perceptions of the effectiveness of both emotion-approach, $F(7,190) = 3.51, p < .001$, and religious coping styles, $F(7,190) = 11.91, p < .001$. Follow-up pairwise comparisons using Tukey's correction for maintaining family-wise error rate at $p < .05$ were conducted. As seen in Table 5, not surprisingly, atheists and agnostics reported significantly lower levels of religiosity than did Protestants, Catholics, or Muslims, and were also less likely to endorse, or to perceive as effective, religious coping methods than members of these religious groups. Among the religious groups, however, Muslims were significantly more likely to use religious coping than Protestants, Catholics, or members of the Jewish faith, although they perceived religious coping methods to be more effective only over the latter group. Interestingly, the differences in perceptions of the effectiveness of emotion-approach coping were traced to members of the Buddhist faith, who were significantly more inclined to view this type of coping as effective over Protestants, Catholics, Jews, or atheists and agnostics (see Table 5). However, given the small group size for some religious affiliations in the present study, these results should be interpreted carefully.

Table 5

Descriptive Statistics (Means, SDs) as a Function of Religious Affiliation

	Atheist/ agnostic (<i>n</i> = 69)	Catholic (<i>n</i> = 70)	Protestant (<i>n</i> = 39)	Muslim (<i>n</i> = 10)	Jewish (<i>n</i> = 4)	Buddhist (<i>n</i> = 3)
	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>
Forgivingness	11.12 (4.27)	11.18 (4.62)	10.55 (4.75)	11.70 (3.89)	11.00 (1.63)	12.00 (0.00)
Vengefulness	3.22 (1.79)	3.09 (4.58)	4.75 (1.96)	1.90 (1.37)	3.25 (2.50)	1.50 (0.71)
Coping endorsements						
Problem-focused	6.13 (2.23)	6.59 (2.24)	6.75 (2.53)	7.70 (1.70)	6.63 (1.05)	6.86 (3.59)
Emotion-approach	11.36 (3.83)	10.27 (4.12)	11.09 (5.14)	13.71 (2.92)	11.52 (3.20)	12.83 (6.86)
Emotion-avoid	8.23 (2.25)	8.27 (2.27)	8.95 (2.46)	7.99 (2.51)	9.67 (0.99)	10.29 (3.34)
Religious coping	0.31 ^a (0.57)	1.34 (1.40)	1.32 (1.38)	3.20 ^b (0.95)	0.13 (.025)	1.33 (1.15)
Coping effectiveness						
Problem-focused	7.10 (2.25)	7.58 (2.27)	7.38 (2.57)	7.59 (1.94)	8.59 (1.71)	6.58 (2.74)
Emotion-approach	5.01 (3.20)	4.94 (3.19)	4.72 (3.40)	7.70 (2.86)	5.02 (3.15)	12.75 ^c (6.75)

Table 5 (continued)

Descriptive Statistics (Means, SDs) as a Function of Religious Affiliation

	Atheist/ agnostic	Catholic	Protestant	Muslim	Jewish	Buddhist
	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>
Coping effectiveness						
Emotion-avoid	7.12 (3.10)	7.06 (2.79)	7.36 (3.03)	7.73 (1.66)	7.45 (1.86)	9.68 (3.95)
Religious coping	0.28 ^d (0.62)	1.83 (1.45)	1.53 (1.48)	2.65 ^e (0.97)	0.25 (0.50)	2.17 (1.26)
Stress appraisal						
Centrality	3.04 (1.21)	3.09 (1.15)	3.10 (1.12)	2.70 (1.28)	2.94 (0.31)	3.08 (0.88)
Controllable- by-self	3.81 (0.86)	4.07 (0.74)	3.88 (0.72)	4.13 (0.81)	6.39 (0.88)	3.92 (0.29)
Controllable- by-others	2.91 (1.14)	3.06 (1.26)	3.13 (1.20)	3.33 (0.99)	2.1.3 (0.72)	1.67 (0.58)
Threat	2.26 (0.90)	2.26 (0.79)	2.36 (0.87)	2.40 (0.89)	2.36 (0.78)	3.19 (0.79)
Challenge	2.91 (0.88)	3.06 (0.91)	3.01 (0.83)	3.03 (0.96)	3.06 (0.43)	2.92 (0.52)
Uncontrollable- by-anyone	1.88 (0.90)	2.11 (1.00)	1.99 (1.04)	1.80 (0.67)	1.81 (0.31)	2.67 (2.08)

Table 5 (continued)

Descriptive Statistics (Means, SDs) as a Function of Religious Affiliation

	Atheist/ agnostic	Catholic	Protestant	Muslim	Jewish	Buddhist
	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>	<i>Mean (SD)</i>
Ruminative depression	27.52 (6.37)	26.29 (7.22)	26.71 (8.20)	26.50 (6.02)	30.75 (5.25)	28.00 (7.07)
Ruminative brooding	11.11 (3.11)	11.03 (3.24)	11.39 (3.26)	12.00 (1.63)	12.00 (3.16)	12.00 (2.83)
Ruminative reflection	10.95 (3.34)	9.73 (2.96)	11.10 (3.04)	12.00 (2.00)	12.00 (5.35)	11.00 (1.41)
Religiosity	1.53 ^f (1.26)	4.76 (2.74)	5.05 (4.46)	6.90 (4.04)	3.25 (3.86)	5.67 (1.53)
Depressive affect	10.50 (8.09)	8.96 (7.54)	8.49 (8.09)	8.50 (9.89)	15.75 (6.90)	6.00 (3.61)
Life satisfaction	19.49 (5.67)	20.71 (5.44)	21.61 (5.36)	20.40 (5.06)	21.25 (3.86)	21.50 (4.95)

^a Atheists and agnostics endorsed significantly lower levels of religious coping than did Protestants, Catholics, or Muslims.

^b Muslims were significantly more likely to endorse religious coping than Protestants, Catholics, or members of the Jewish faith.

^c Buddhists perceived emotion-approach coping to be significantly more effective than did Protestants, Catholics, Jews, or atheists and agnostics.

^d Atheists and agnostics perceived religious coping to be significantly less effective than did Protestants, Catholics, or Muslims.

^e Muslims perceived religious coping to be significantly more effective than did members of the Jewish faith.

^f Atheists and agnostics reported significantly lower levels of religiosity than did Protestants, Catholics, or Muslims.

Relations among Forgivingness, Vengefulness, and Well-being

As expected, only a moderate negative correlation was found between dispositional forgiveness and vengefulness ($r = -.34, p < .01$), indicating that, although they were somewhat related, they were not merely opposites of one another but rather distinct traits.

To assess whether either of these constructs predicted unique variability in well-being, two multiple regression analyses were conducted in which each of the indices of well-being (i.e., depressive affect and life satisfaction) were regressed onto dispositions toward forgiveness and revenge simultaneously. Dispositional style predicted depressive affect, $R^2 = .058, F(2, 179) = 5.52, p < .01$. Although both higher levels of dispositional forgiveness ($r = -.22, p < .001; \beta = -.19, p < .05$) and lower levels of vengefulness ($r = .16, p < .05; \beta = .10, ns$) were significantly correlated with lower depressive affect, examination of the regression coefficients indicated that only forgivingness predicted unique variance in depressive symptoms. A similar pattern of results was found when life satisfaction was regressed onto these dispositional styles, $R^2 = .064, F(2, 180) = 6.14, p < .01$. However, although higher levels of dispositional forgiveness were related to greater life satisfaction ($r = .25, p < .001; \beta = .24, p < .01$), levels of vengefulness were not significantly related to life satisfaction ($r = -.11, ns; \beta = -.02, ns$)². Overall, these findings provide support for the notion that a forgiving personality may enhance well-being (e.g., Witvliet et al., 2001), whereas the vengeful personality may result in diminishing health outcomes (e.g., McCullough et al., 2001). However, it appears that the aspects of vengefulness that result in poorer well-being involve a concurrent lack of forgiveness.

² Although sex differences were assessed in the relations among forgivingness, vengefulness, and well-being, no significant differences were found.

Relations among Forgivingness, Vengefulness, and Religiosity

It was expected that high levels of dispositional forgiveness would coincide with increased religiosity, while dispositional vengeance would have the opposite relation. Surprisingly, when religiosity was regressed onto dispositions toward forgiveness and vengeance, this relation was not found to be significant, $R^2 = .008$, $F < 1$.³ This finding may lend support for the notion that forgiveness is as much secular as it is religious (Pargament, 1997; Thoresen et al., 2000), in that people high in religiosity are not necessarily more forgiving (or less vengeful).

Relations among Forgivingness, Vengefulness, and Stress Appraisals

It was expected that a forgiving or vengeful disposition would also be associated with appraisals of the relationship conflict or break-up. When forgivingness was regressed onto the six stress appraisal dimensions as a set, dispositional forgiveness was significantly associated with the appraisals, $R^2 = .104$, $F(6,175) = 3.39$, $p < .01$. Specifically, higher levels of dispositional forgiveness were uniquely related to appraisals of the conflict as more controllable by oneself, as well as less threatening (see Table 6). Upon regressing dispositional vengeance onto the six appraisal dimensions, a significant association was also revealed, $R^2 = .073$, $F(6,175) = 2.31$, $p < .05$. As seen in Table 6, examination of the zero-order correlations indicated that vengefulness was associated

³ Although the interactions between gender and dispositions toward forgiveness and vengeance did not significantly predict religiosity, some of our other research in the lab has found that the relation between one's willingness to forgive and religious faith (as a coping style) differed as a function of sex. Thus, religiosity was regressed onto the dispositional styles separately for men and women. Consistent with these findings, religiosity was marginally predicted by one's dispositions toward forgiveness and vengeance in men, $R^2 = .340$, $F(2, 47) = 3.07$, $p = .056$, but not in women, $R^2 = .002$, $F < 1$. Specifically, men's tendencies to forgive appeared to be positively related with religiosity ($r = .24$, $p < .05$), whereas women's forgivingness and religiosity were not related ($r = -.04$, *ns*). Vengefulness and religiosity were negatively related among men ($r = -.30$, $p < .05$), but not at all related among women ($r = .01$, *ns*). Neither forgivingness nor vengefulness predicted unique variance in religiosity among either sex.

with appraising the conflict as less controllable by the self or by another person, and as less of a positive challenge; however, none of these appraisals were uniquely related to vengefulness, suggesting that this attitude was associated with an aspect of these appraisals that was common to all of them, perhaps having to do with the probability of being able to work out a satisfactory solution⁴.

Table 6

Regression Analyses Predicting Dispositional Forgiveness and Vengeance from Stress Appraisals

	Dispositional Forgiveness			Dispositional Vengeance		
	<i>r</i>	β	R^2	<i>r</i>	β	R^2
Stress appraisals			.104**			.073*
Centrality	-.03	.15		-.05	-.10	
Controllable-by-self	.25***	.19*		-.13*	.01	
Controllable-by-others	.08	.01		-.17*	-.13	
Threat	-.24***	-.28**		.09	.18	
Challenge	.10	-.03		-.20**	-.14	
Uncontrollable-by-anyone	-.06	.04		-.04	-.09	

* $p < .05$; ** $p < .01$; *** $p < .001$

⁴ Although sex differences were assessed in the relations among forgivingness, vengefulness, and stress appraisals, no significant differences were found.

Relations among Forgivingness, Vengefulness, and Coping

It was anticipated that participants' forgiving or vengeful dispositions would also be related to the coping strategies that they perceived as effective, and hence endorsed. When each dispositional style was regressed, in separate analyses, onto the four perceived coping effectiveness dimensions, forgivingness was not significantly associated with the coping effectiveness ratings as a set, $R^2 = .045$, $F(4,176) = 2.09$, *ns*. However, a closer examination of the correlation and regression coefficients (Table 7) revealed that higher levels of forgivingness were significantly related with perceiving emotional avoidance coping as a less effective strategy. Conversely, upon regressing dispositional vengeance onto the set of coping effectiveness variables, vengefulness and perceptions of coping effectiveness were significantly related, $R^2 = .080$, $F(4,176) = 3.82$, $p < .01$. In particular, as seen in Table 7, higher levels of dispositional vengeance were uniquely related with a decreased tendency to view religious coping as an effective strategy to deal with the relationship conflict.

These perceptions of coping effectiveness appeared to somewhat translate into the strategies used to cope with the conflict, in that, both dispositional forgiveness and vengeance were related to the coping styles that were actually endorsed. When forgivingness was regressed onto the four coping endorsement styles, a significant relation was revealed, $R^2 = .079$, $F(4,176) = 3.77$, $p < .01$. In particular, as seen in Table 7, higher levels of dispositional forgiveness were associated with a decreased tendency to endorse emotional approach strategies. Although the regression coefficients were suggestive that forgivingness was also associated with an increased propensity to endorse problem-focused coping, given that the zero-order correlation was not significant, this was likely reflective of a suppression effect. Similarly, dispositional vengeance was

significantly related to coping endorsements as a set, $R^2 = .086$, $F(4,176) = 4.16$, $p < .01$, and was uniquely related to a reduced inclination to endorse problem-focused coping strategies, although the negative zero-order correlation with religious coping was also significant (see Table 7)⁵. In short, it appears that forgiveness was linked to a reduced likelihood of perceiving as effective or endorsing emotion-focused coping strategies (avoidance and approach, respectively), whereas vengefulness was associated with being less likely to adopt problem-focused efforts or to expect that religious faith would resolve the situation.

⁵ Although sex differences were assessed in the relations among forgiveness, vengefulness, coping endorsements, and perceived coping effectiveness, no significant differences were found.

Table 7

Regression Analyses Predicting Dispositional Forgiveness and Vengeance from Coping Endorsements and Effectiveness Ratings (in separate analyses)

	Dispositional Forgiveness			Dispositional Vengeance		
	<i>r</i>	β	R^2	<i>r</i>	β	R^2
Coping endorsements			.079**			.086**
Problem-focused	.11	.22*		-.19**	-.27**	
Emotion-approach	-.19**	-.24**		.05	.12	
Emotion-avoid	-.06	-.09		.06	.16	
Religious coping	.08	.06		-.17*	-.12	
Coping effectiveness			.045			.080**
Problem-focused	-.07	-.01		-.11	-.16	
Emotion-approach	-.02	.04		.06	.09	
Emotion-avoid	-.18**	-.21*		.10	.16	
Religious coping	.09	.04		-.20**	-.21**	

* $p < .05$; ** $p < .01$

Relations among Forgiveness, Vengefulness, and Rumination

It was expected that the dispositional tendency toward rumination would be particularly related to forgiveness and vengefulness, negatively with the former and positively with the latter. However, when overall rumination scores were regressed onto dispositions toward forgiveness and vengeance (simultaneously), dispositional style overall did not predict rumination, $R^2 = .024$, $F(2, 180) = 2.17$, *ns*, although, dispositional forgiveness was significantly negatively correlated with rumination ($r = -.15$, $p < .05$).

It will be recalled, however, that different types of rumination have been posited, which may be differentially related to forgiveness and vengeance. When each of ruminative depression, brooding, and reflection were considered separately, this was indeed the case. Although dispositional style failed to predict ruminative depression overall, $R^2 = .016$, $F(2, 180) = 1.45$, *ns*, ruminative brooding, $R^2 = .038$, $F(2, 180) = 3.52$, $p < .05$, and reflection, $R^2 = .038$, $F(2, 180) = 3.52$, $p < .05$, on the other hand, were both significantly predicted by dispositional style. Specifically, as seen in Table 8, dispositional forgiveness uniquely predicted a lesser inclination to engage in ruminative brooding, whereas, consistent with our expectations, dispositional vengeance uniquely predicted a lesser propensity to engage in ruminative reflection⁶.

Table 8

Regression Analyses Predicting Rumination from Dispositional Forgiveness and Vengeance

	Ruminative Depression			Ruminative Brooding			Ruminative Reflection		
	<i>r</i>	β	R^2	<i>r</i>	β	R^2	<i>r</i>	β	R^2
Dispositional styles			.016			.038*			.038*
Forgivingness	-.12*	-.12		-.19**	-.20**		-.08	-.14	
Vengefulness	.06	.03		.03	-.04		-.14*	-.19*	

* $p < .05$; ** $p < .01$

⁶ A significant sex difference was found in the relation between rumination and forgivingness, $R^2 = .185$, $F(3, 175) = 3.91$, $p < .01$. Specifically, the ruminative reflection and dispositional forgiveness interaction was significant ($\beta = -1.07$, $p < .01$). However, simple effects analyses revealed that ruminative reflection and forgivingness were not correlated among men ($r = .13$, *ns*) yet were uniquely related ($\beta = .49$, $p < .01$), suggesting a suppression effect. Among women, ruminative reflection and forgivingness were completely unrelated ($r = -.11$, *ns*; $\beta = -.14$, *ns*).

Relations among Stress Appraisals and Coping

Inasmuch as the coping styles people use may be related to forgivingness, vengeance, and well-being, one's appraisals of the situation and perceptions of coping effectiveness were expected to be related to the coping styles that were endorsed, although certainly these relations are likely to be reciprocal and dynamic in nature. Thus, the relations among these variables were examined. As noted earlier in Table 2, perceptions of coping effectiveness were positively correlated with endorsements of the respective coping styles. In addition, coping endorsements were regressed, in separate analyses, onto the stress appraisal dimensions. Stress appraisals uniquely predicted endorsements of problem-focused coping, $R^2 = .277$, $F(6, 195) = 12.47$, $p < .001$. Specifically, problem-focused coping endorsements were positively correlated with each of the stress appraisal dimensions, with the exceptions of appraisals of the situation as threatening or uncontrollable-by-anyone, and each appeared to account for unique variability in problem-focused coping endorsements, with the additional exception of centrality (see Table 9). Stress appraisals were also predictive of emotion-approach coping endorsements, $R^2 = .322$, $F(6, 195) = 15.43$, $p < .001$. In particular, as seen in Table 9, appraisals of the situation as central, controllable-by-others, threatening, and uncontrollable-by-anyone were positively related with endorsements of emotion-approach coping, while appraising the conflict as controllable by oneself was negatively related with this coping style. However, only perceptions that the conflict was in another's control and was a more serious threat accounted for unique variability in endorsing emotional approach coping strategies. Emotion-avoidance coping endorsements were predicted by stress appraisals to a lesser degree, $R^2 = .121$, $F(6, 195) = 4.49$, $p < .001$. As with problem-focused coping, endorsing emotional avoidance strategies was significantly

positively related to appraisals of the conflict as controllable by oneself and by others, and as challenging, although only the latter predicted unique variance. Finally, stress appraisals only marginally predicted endorsements of religious coping, $R^2 = .054$, $F(6, 195) = 1.85$, $p = .092$; specifically, appraisals of the situation as controllable by oneself and as representing a challenge were positively associated with this coping style (see Table 9)⁷. Thus, as expected, appraisals of the conflict were linked to the coping strategies that were endorsed.

⁷ Although sex differences were assessed in the relations among stress appraisals, coping endorsements, and perceived coping effectiveness, no significant differences were found.

Table 9

Regression Analyses Predicting Coping Endorsements from Stress Appraisals

	Problem-focused			Emotion-approach			Emotion-avoid			Religious coping		
	<i>r</i>	β	R^2	<i>r</i>	β	R^2	<i>r</i>	β	R^2	<i>r</i>	β	R^2
Stress appraisals			.277***			.322***			.121***			.054
Centrality	.13*	-.04		.27***	-.11		.03	-.14		.04	-.12	
Controllable-by-self	.33***	.20**		-.13*	-.05		.17**	.11		.13*	.13	
Controllable-by-others	.39***	.24***		.20**	.19**		.23***	.14		.09	.01	
Threat	.06	.11		.51***	.53***		.07	.16		.08	.22*	
Challenge	.39***	.27***		.09	.10		.24***	.21**		.14*	.13	
Uncontrollable-by-anyone	.09	.14*		.24***	.11		.10	.12		-.07	-.08	

* $p < .05$; ** $p < .01$; *** $p < .001$

Religiosity, Stress Appraisals, Coping, Rumination, and Well-being

It was argued that coping, appraisals, religiosity, and rumination would mediate the relations between dispositional style and well-being. For this to be true, these mediating variables must also predict well-being. Depressive affect and life satisfaction were thus regressed, in separate analyses, onto each of the variable sets that were significantly related to either dispositional forgiveness or vengefulness.

Increased religiosity uniquely predicted fewer depressive symptoms, $R^2 = .028$, $F(1, 191) = 5.56$, $p < .05$; $\beta = -.17$, $p < .05$, but was not associated with levels of life satisfaction, $R^2 = .029$, $F(3, 161) = 1.58$, *ns*. Nevertheless, given that religiosity was not found to be related to either forgivingness or vengefulness in the present study, it could not mediate the relations between these dispositions and depressive affect.

When depressive affect was regressed onto the stress appraisal dimensions, depressive symptoms were highly related to participants' appraisals of the relationship conflict, $R^2 = .218$, $F(6, 196) = 9.10$, $p < .001$. Appraisals of the situation as threatening appeared to play a key role in predicting higher levels of depressive symptoms (see Table 10). Zero-order correlations among the appraisal and well-being variables also indicated that higher levels of depressive symptomatology were associated with appraising the relationship conflict as more central and uncontrollable by anyone, while being less controllable by oneself. Regressing life satisfaction onto the stress appraisal dimensions revealed that, as a set, these variables were marginally related, $R^2 = .064$, $F(6, 175) = 1.98$, $p = .070$ (see Table 10). However, higher levels of life satisfaction were significantly correlated with greater appraisals of the conflict as controllable by oneself and with viewing the conflict as less of a threat.

Table 10

Regression Analyses Predicting Well-being from Stress Appraisals

	Depressive Affect			Life Satisfaction		
	<i>r</i>	β	R^2	<i>r</i>	β	R^2
Stress appraisals			.218***			.064
Centrality	.17**	-.10		-.06	.08	
Controllable-by-self	-.26***	-.08		.18**	.11	
Controllable-by-others	-.06	-.03		.08	.06	
Threat	.43***	.44***		-.20**	-.21*	
Challenge	-.10	-.01		.03	-.06	
Uncontrollable-by-anyone	.23***	.10		-.12	-.05	

* $p < .05$; ** $p < .01$; *** $p < .001$

Perceptions of coping effectiveness were not associated with either depressive symptoms, $R^2 = .020$, $F(4,197) = 1.01$, *ns*, or life satisfaction, $R^2 = .017$, $F < 1$, and so these perceptions could not mediate the relations between forgiveness or vengefulness and well-being.

As demonstrated in past research, when each of the dimensions of well-being was regressed onto participants' endorsements of the four coping strategies (simultaneously), coping endorsements were significantly related to both depressive affect, $R^2 = .361$, $F(4,197) = 27.84$, $p < .001$, and life satisfaction, $R^2 = .120$, $F(4,176) = 5.99$, $p < .001$, with both problem-focused and emotion-approach coping predicting unique variance in these

relations (see Table 11). However, despite the significance of the regression coefficients pertaining to problem-focused coping, this coping style was not significantly correlated with depressive symptoms or life satisfaction, and hence appears to have been acting as a suppressor variable, rather than being directly related to the well-being outcomes.

Table 11

Regression Analyses Predicting Well-being from Coping Endorsements and Effectiveness Ratings (in separate analyses)

	Depressive Affect			Life Satisfaction		
	<i>r</i>	β	R^2	<i>r</i>	β	R^2
Coping endorsements			.361***			.120***
Problem-focused	-.10	-.34***		.07	.21*	
Emotion-approach	.51***	.63***		-.29***	-.35***	
Emotion-avoid	.08	.04		-.08	-.05	
Religious coping	-.04	-.04		.03	.04	
Coping effectiveness			.020			.017
Problem-focused	.07	.08		-.05	-.04	
Emotion-approach	.08	.09		-.08	-.09	
Emotion-avoid	.06	.00		-.07	-.03	
Religious coping	-.07	-.11		.06	.10	

* $p < .05$; *** $p < .001$

As anticipated, the tendency to ruminate was strongly related to negative well-being. When depressive symptoms were correlated with overall rumination scores, increased symptoms coincided with higher levels of rumination, $r = .50, p < .001$. When depressive affect was regressed onto each of the three types of rumination however, only ruminative depression predicted unique variance in depressive symptomatology, although each type of rumination was positively correlated with depressive affect (see Table 12). Likewise, increased rumination was also related to lower levels of life satisfaction, $r = -.54, p < .001$. When each style of rumination was considered separately however, each type was negatively correlated with life satisfaction, although only ruminative depression and brooding predicted unique variance (see Table 12)⁸.

Table 12

Regression Analyses Predicting Well-being from Rumination

	Depressive Affect			Life Satisfaction		
	<i>r</i>	β	R^2	<i>r</i>	β	R^2
Ruminative styles			.311***			.310***
Depression	.55***	.62***		-.54***	-.43***	
Brooding	.30***	-.12		-.46***	-.17*	
Reflection	.33***	.03		-.34***	.01	

* $p < .05$; *** $p < .001$

⁸ Although sex differences were assessed among the possible mediating variables and well-being, no significant differences were found.

Mediated Models

Given the previous analyses, the possibility that the relations between dispositional style (i.e., forgiveness and vengefulness) and well-being (i.e., depressive symptoms and life satisfaction) might be mediated by coping endorsements, stress appraisals, rumination, or religiosity was explored, as delineated by Baron and Kenny's (1986) determination of a mediated model. To constitute a mediational model, first, the predictor variables (dispositional forgiveness and vengeance) must be related to the outcome variables (depressive symptoms and life satisfaction). Although dispositional forgiveness was related to both of these indices of well-being, dispositional vengeance was only related to depressive affect, and hence only this mediated model was pursued.

Second, the mediation variables must be related to both the predictor and outcome variables. In this respect, the possible variables mediating the relations between forgiveness and depressive affect included an emotional approach style of coping, rumination (specifically, ruminative depression and brooding), and appraisals of the extent to which the individual perceived the self to control the conflict situation and that the conflict represented a threat. The same set of possible mediators was identified in the relation between forgiveness and life satisfaction. However, the only two variables that had common relations to both dispositional vengeance and depressive affect were appraisals of whether the self had control over the conflict and ruminative reflection, and thus these were the only potential mediating variables in this relation.

To assess the mediated models, the outcome variables (depressive symptoms or life satisfaction) were each regressed onto the relevant predictors (forgiveness or vengefulness) and mediating variables, with each mediated path being evaluated in

separate regressions. The significance of the mediated links was then assessed using Sobels *t*.

The mediated paths between dispositional forgiveness and depressive affect.

When the mediated paths between forgivingness and depressive affect were assessed, as seen in Table 13, in all instances forgiveness remained at least a marginally significant predictor, and hence this relation was, at best, partially mediated through consideration of the coping and appraisal variables. Of the possible mediating variables, all of the mediated links were at least marginally significant, with the exception of ruminative depression. The decreased propensity of high dispositional forgivers to appraise the relationship conflict as threatening or to endorse an emotion-approach strategy to cope with the conflict appeared to be particularly important in accounting for the lower levels of depressive affect, in that these factors alone accounted for 65.08% and 59.50% of the variability in the relation between forgivingness and depressive affect, respectively.

Table 13

Regression Coefficients Assessing Mediated Model of Relations between Forgiveness (Predictor), Coping and Appraisals (Mediators), and Depressive Affect (Outcome).

	β	Zero-order r	Semi-Partial r	R^2	% variance accounted for by mediator	Sobel's t
Depressive affect				.254*		
Emotion-approach coping	.46**	.49***	.45**			-2.38*
Dispositional forgiveness	-.14*	-.22***	-.14*		59.50%	
Depressive affect				.277*		
Overall rumination	.48***	.50***	.48***			-1.93†
Dispositional forgiveness	-.15*	-.22***	-.15*		53.51%	
Depressive affect				.327*		
Ruminative depression	.53***	.55***	.53***			-1.65
Dispositional forgiveness	-.16*	-.22***	-.16*		47.12%	
Depressive affect				.121*		
Ruminative brooding	.27***	.30***	.27***			-2.14*
Dispositional forgiveness	-.17*	-.22***	-.17*		40.29%	
Depressive affect				.087*		
Controllable-by-self appraisal	-.20**	-.24***	-.19**			-2.14*
Dispositional forgiveness	-.17*	-.22***	-.17*		40.29%	
Depressive affect				.175†		
Threat appraisal	.37***	.40***	.35***			-2.78**
Dispositional forgiveness	-.14†	-.22***	-.13†		65.08%	

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

The mediated paths between dispositional forgiveness and life satisfaction. When the mediated paths between forgivingness and life satisfaction were assessed, as seen in Table 14, in all instances forgiveness remained a significant predictor, and hence this relation was also, at best, only partially mediated through consideration of the coping and appraisal variables. Indeed, of the possible mediating variables, the mediated links of emotion-approach coping endorsements and ruminative brooding alone were significant. The decreased propensity of high dispositional forgivers to endorse an emotion-approach strategy to cope with the conflict, or to engage in ruminative brooding, partially accounted for the higher levels of life satisfaction, in that these factors accounted for 36.00% and 53.76% of the variability in the relation between forgivingness and life satisfaction, respectively.

Table 14

Regression Coefficients Assessing Mediated Model of Relations between Forgiveness (Predictor), Coping and Appraisals (Mediators), and Life Satisfaction (Outcome).

	β	Zero-order r	Semi-Partial r	R^2	% variance accounted for by mediator	Sobel's t
Life satisfaction				.125**		
Emotion-approach coping	-.25***	-.29***	-.25***			2.06*
Dispositional forgiveness	.21**	.25***	.20***		36.00%	
Life satisfaction				.324**		
Overall rumination	-.52***	-.54***	-.51***			1.94†
Dispositional forgiveness	.18**	.25***	.17**		53.76%	
Life satisfaction				.329**		
Ruminative depression	-.52***	-.54***	-.52***			1.65
Dispositional forgiveness	.19**	.25***	.19**		42.24%	
Life satisfaction				.236*		
Ruminative brooding	-.42***	-.46***	-.42***			2.41*
Dispositional forgiveness	.17*	.25***	.17*		53.76%	
Life satisfaction				.076**		
Controllable-by-self appraisal	.12	.18**	.12			1.46
Dispositional forgiveness	.22**	.25***	.21**		29.44%	
Life satisfaction				.084**		
Threat appraisal	-.15*	-.20**	-.15*			1.72
Dispositional forgiveness	.22**	.25***	.21**		29.44%	

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$

The mediated paths between dispositional vengeance and depressive affect. Given the negative relations of controllable-by-self appraisals with both depressive affect and dispositional vengeance, the possibility that this type of appraisal might serve as a mediator in the relation between vengefulness and depressive symptoms was also examined. When appraisals of the conflict as controllable by oneself were controlled for, vengefulness failed to explain unique variance in depressive affect ($\beta = .13$, *ns*) reducing the amount of variance accounted for by 34.6%, from 2.6% to 1.7%. Although the relation between appraisals of the conflict as controllable by oneself and depressive affect was significant ($\beta = -.23$, $p < .01$), the Sobels value assessing the mediated path was not significant, Sobels $t = 1.50$, *ns*.

Finally, the potential mediating role of ruminative reflection in the relation between dispositional vengeance and depressive symptoms was assessed. When ruminative reflection was controlled for, vengefulness continued to explain unique variance in depressive symptomatology ($\beta = .21$, $p < .01$); however, the amount of variance explained was *increased*, from 2.6% to 4.5%, suggesting a mild suppression effect rather than a mediating role, and indeed, the regression coefficient reflecting the relation between ruminative reflection and depressive affect was also greater than its zero-order correlation, ($r = .33$, $p < .001$; $\beta = .36$, $p < .001$).

Taken together, it appears that the relations between vengefulness and depressive affect were not particularly strong and were not mediated by factors associated with the appraisal and coping process.

Moderated Models

Although the primary focus of this thesis was on the mediating role of appraisals and coping in the relations between dispositional style (i.e., forgivingness and

vengefulness) and well-being (i.e., depressive symptoms and life satisfaction), there was also a possibility that these relations were moderated by stress appraisals, coping, rumination, or religiosity. This possibility was investigated through a series of hierarchical regressions wherein each index of well-being was regressed onto standardized scores for dispositional forgiveness or vengeance on the first step, the standardized scores for each set of moderating variables (coping endorsements, appraisals, religiosity, and rumination) on the second step (with each set of variables in separate analyses), and the interactions between standardized scores for forgiveness or vengeance and each moderator (i.e., their cross-products) on the third step.

Of these analyses, only one of the interactive effects was found to be significant. Specifically, variance in depressive symptoms was predicted by the interaction between forgiveness and rumination, $R^2 = .388$, $F(3, 174) = 4.47$, $p < .01$. In particular, the interaction between forgiveness and ruminative depression was significant ($\beta = -.27$, $p < .01$). Follow-up simple slope analysis assessing the relations between dispositional forgiveness and depressive affect at low versus high levels of ruminative depression (i.e., one standard deviation above and below the mean of ruminative depression) indicated that at low levels of engaging in ruminative depressive thoughts, forgiveness and depressive affect were not related ($\beta = .02$, *ns*), whereas at higher levels of ruminative depression, dispositional forgiveness was related to less depressive symptoms ($\beta = -.34$, $p < .001$).

Discussion

It was the goal of the present thesis to examine the roles of forgiveness and revenge as predispositions for responding to intimate relationship transgressions. Specifically, it was of interest to determine the appraisal and coping factors that mediate

the relations between these dispositions and psychological well-being, including both situation-specific responses (i.e., appraisals and coping in relation to a specific conflict) and dispositional coping styles (i.e., religiosity and the tendency to ruminate). Although the patterns of appraisals and coping were consistent with what has been found in previous research in terms of predicting well-being (e.g., Matheson & Anisman, 2003), the processes associated with forgiving and vengeful dispositions were distinct.

To some degree, forgiveness and vengeance might be regarded as polar opposites of one another, and indeed some measures of forgiveness subsume the notion of vengeance in the form of 'reverse-coded' items (e.g., the Forgiveness of Others Scale, Mauger et al., 1992; the Transgression-Related Interpersonal Motivations Inventory, McCullough et al., 1998). Indeed, consistent with previous research (e.g., Brown, 2003; Brown, 2004), forgiving and vengeful dispositions were moderately negatively correlated with one another in the present study and were associated with positive and negative well-being, respectively. Whereas dispositional forgiveness was predictive of reduced depressive symptoms and increased life satisfaction, dispositional vengeance was likewise related to higher levels of depressive affect, although it was not related to diminished life satisfaction. Given the association of vengefulness with depressive affect but not with life satisfaction, it may be that, although a vengeful disposition might promote negative affectivity, inherently vengeful people attain a sort of satisfaction from their vengeful desires. However, given that some past research has found a significant negative relation between vengefulness and life satisfaction (e.g., McCullough et al., 2001), it is also possible that sampling or measurement issues contributed to the lack of evidence for this relation in the present investigation. Clearly, replication of this finding is necessary before the association (or lack thereof) between vengefulness and life

satisfaction can be asserted. Moreover, vengeance appeared to be redundant with forgiveness in predicting depressive affect, suggesting that its impacts may very well be derived from its association with a lack of forgiveness.

Although there appear to be commonalities in the constructs of forgiveness and vengeance, the underlying processes mediating their relations with well-being were not the same. The relations between forgivingness and well-being were partially accounted for by stress appraisals and coping styles endorsed in the face of a relationship conflict, whereas the relations between vengefulness and well-being did not appear to be mediated by these factors. Moreover, the specific patterns of appraisal and coping processes associated with these two dispositions differed. These findings suggest that, although forgiveness and vengeance may be related, their impacts on promoting or undermining well-being appear to reflect distinct processes.

Forgivingness and the Coping Process

The relations between forgivingness and appraisals of the relationship conflict were moderate; specifically, forgivingness was associated with diminished perceptions of the threat associated with the conflict, as well as increased perceptions that the conflict was controllable by oneself. In effect, people tending toward forgiveness were those who also tended to employ appraisals that limited the extent of the conflict. At this juncture, however, it should be emphasized that these data were correlational, and so although we had anticipated this causal direction, it could very well be that individuals who perceive stressors as relatively unthreatening and controllable are also more amenable to holding a forgiving attitude. In addition, it could be that a third variable was influencing this relation. A highly optimistic personality, for example, may be operating in order to promote both a forgiving attitude and more positive appraisals of the stressor.

Few studies have examined the relations between forgiveness and the coping process. Of those that have done so, nearly all have been cross-sectional, non-experimental studies in which the constructs were assessed via self-report. Although these studies are useful in determining that any relations exist *at all* among these variables, they are limited in that causality cannot be assessed. In order to ascertain whether a causal direction exists between these variables, either prospective studies or laboratory experiments (in which specific components of the processes involved could be manipulated) are of course necessary, and should be pursued in future research.

The pattern of appraisals associated with forgiveness somewhat translated into the coping styles that were endorsed (or rejected) and perceived to be effective (or ineffective). High dispositional forgivers tended not to endorse emotion-focused *approach* coping (i.e., rumination, emotional expression, other-blame, self-blame, emotional containment, and wishful thinking). However, although high levels of forgiveness were associated with reduced emotional approach strategies, they were also related to acknowledging that emotion-focused *avoidance* coping strategies (i.e., active distractions, cognitive distractions, humour, and passive resignation) were more ineffective. Taken together, these findings may suggest that people with an inclination toward forgiving recognized, on some level, that emotion-focused coping strategies were generally not a favoured option, a finding that corresponds with previous research (Seybold et al., 2001). However, once again, given the correlational design of the present investigation, although having a predisposition to forgive may indeed make one more inclined to reject emotion-focused coping styles when dealing with relationship transgressions, we cannot preclude the possibility that it is the tendency to avoid emotion-

focused coping strategies that causes the individual to seek out other methods for coping with the situation, leading them to forgiveness.

In line with high dispositional forgivers' rejection of emotion-focused coping styles as a response to a specific relationship conflict, decreased dispositional propensities toward rumination were also found to be related to forgiveness. It was argued that reflective pondering may entail a period of cognitive reflection resembling problem-focused coping, whereas ruminative depression and brooding may more closely resemble emotion-focused coping (Treyner et al., 2003). As forgiveness was associated with decreased tendencies to use both ruminative depression and brooding, it may be that forgiving individuals choose not to dwell on their conflicts, and instead choose to cope using the age-old-adage, "forgive and forget".

It will be recalled that some prior investigations have shown that increased usage of emotion-focused coping strategies, including rumination, was associated with negative well-being (e.g., Nolen-Hoeksema et al., 1994; Ravindran et al., 2002), while problem-focused coping was related to positive well-being (e.g., Hynes et al., 1992). Thus, the tendency for high dispositional forgivers to reject emotion-focused strategies when dealing with a conflict, as well as their tendencies to avoid depressive and brooding ruminative thoughts may, at least partially, help to explain the forgiveness-well-being link that has recently been observed in several different contexts (Brown, 2003; Freedman & Enright, 1996; Maltby et al., 2001; Witvliet et al., 2001; Ysseldyk et al., 2005). It is therefore conceivable that a forgiving disposition may lead to increased well-being indirectly, through the coping styles in which people with a tendency to forgive might engage, or even through those in which they resist engaging (i.e., emotion-focused). Indeed, high dispositional forgivers' reduced inclination to endorse emotion-approach

coping strategies or ruminative brooding to deal with the relationship conflict partially accounted for both their reduced depressive symptomatology and increased life satisfaction⁹. Moreover, the relation between forgivingness and depressive affect was also partially accounted for by individuals' diminished appraisals of the extent of the threat associated with the conflict, as well as increased appraisals of the conflict being controllable by oneself. In effect, the tendency for high dispositional forgivers to *not* use strategies that envelop them in the emotional consequences of the conflict, and at the same time, employ appraisals that limit the conflict to the context in which it occurred, may explain the positive well-being outcomes found to be associated with forgiveness in this and in previous research.

In addition to the mediating roles of appraisals and coping in the relation between forgivingness and depressive symptoms, the possibility was examined that these appraisal and coping styles might play a moderating role. Interestingly, only ruminative depression served as a moderator in this relation, perhaps because it was assessed at the level of a stable dispositional characteristic, as opposed to the measurement of appraisals and coping which were in direct response to a specific relationship conflict. At low levels of engaging in ruminative depressive thoughts, forgivingness and depressive affect were not related, whereas at higher levels of ruminative depression, dispositional forgiveness was related to less depressive symptoms. Given the negative relation between forgivingness and ruminative depression observed in the present study, perhaps forgiving provides some relief for people inclined to engage in constant depressive rumination, thereby resulting in

⁹ It should be noted that although emotional-avoidance coping was perceived as particularly ineffective by high dispositional forgivers, perceptions of coping effectiveness were not related to either depressive symptoms or life satisfaction and, therefore, could not mediate the relations between forgivingness and well-being.

less depressive affect. The interplay among these processes, once again, underlines the need for a more prospective approach by examining the processes of forgiveness, vengeance, and coping at different stages and time frames *within* participants.

It is interesting to note that forgivingness was not related to religious coping in the present study. However, previous research relating forgiveness and religious coping has, for the most part, conceptualized forgiveness as a religious coping method in itself, rather than in relation to other types of religious coping (e.g., prayer, blaming God; Pargament et al., 2000). Conversely, rather than focusing on forgiveness, the religious coping items in the present study centred around prayer and asking for God's guidance, items that would normally be endorsed or perceived as effective exclusively by people with religious faith. Moreover, no differences were found in levels of dispositional forgiveness as a function of religious affiliation or levels of self-reported religiosity. These findings support the notion that forgiveness may be as much secular as it is religious (Pargament, 1997; Thoresen et al., 2000). In this case, the lack of associations between both religiosity and religious coping, and the forgiving personality would not be surprising.

Interestingly, religious coping was not related to depressive affect, yet consistent with previous research (Smith et al., 2003) higher levels of religiosity (e.g., religious service attendance) were predictive of decreased depressive symptoms. Several factors related to religious involvement, such as social support, have been posited to protect against depressive symptoms (Koenig, McCullough, & Larson, 2001; George, Larson, Koenig, & McCullough, 2000) and may help to explain this finding. With that said, although the search for the factors which may account for the links between religion and well-being is valuable, one must also take heed of what Pargament (2002) terms as "explaining religion versus explaining religion away" (p. 239). We should aim to learn

more about the associations between religion, coping, and well-being, “not to explain religion away, but to gain a more complete understanding of religion and human nature more generally” (p. 243).

Vengefulness and the Coping Process

Whereas forgivingness was expected to relate to appraisals and coping styles that have evidenced positive well-being in previous research, it was predicted that vengefulness would be associated with those appraisals and coping strategies considered to be of less adaptive value. Vengefulness was, in fact, related to a distinct set of appraisals regarding the relationship conflict; highly vengeful people did not view their relationship conflict as particularly controllable by themselves or by others, and failed to see the situation as a positive challenge from which they might grow and learn. Given that each of these appraisals was positively related with problem-focused coping, it is not surprising that individuals with a highly vengeful disposition also rejected this type of coping style. It was therefore anticipated that the rejection of problem-focused strategies, coupled with a reduced inclination to reflect in a constructive manner following a relationship conflict (the one type of rumination posited to have potentially beneficial outcomes; Treynor et al., 2003), might have mediated the relation in which people with a vengeful nature experienced impaired well-being.

It will be recalled that life satisfaction also failed to be significantly related to vengefulness, whereas depressive affect did appear to co-occur with this disposition. Indeed, whereas the links between vengeance, appraisals, coping, and depressive symptoms were strong, those with life satisfaction were less robust. Inasmuch as forgivingness and vengeance appeared to be more involved in diminishing negative and positive strategies (respectively) for coping with the conflict, these processes may also

have been operating more on diminishing negative affect (i.e., depressive symptoms) rather than increasing positive well-being (i.e., life satisfaction) in the present work.

Much like the processes involved in the forgiveness and well-being relations, it was anticipated that appraisals or coping might also mediate the relation between vengeance and depressive affect; however, this was not the case. To be sure, those high in dispositional vengeance were less likely to appraise the conflict as controllable or to endorse problem-focused strategies or ruminative reflection to cope with the situation, and the failure to endorse these strategies appeared to co-occur with depressive symptoms, which were also more evident among vengeful people. Yet, it cannot be said that appraisals or coping mediated the effects of vengeance on affective state. The possibility was therefore examined that these appraisal and coping styles operated as moderating factors against depressive symptoms among those high in vengeance; however, these moderating effects were not borne out. Thus, it appears that vengeance, appraisals, and coping with a transgression operated independently of one another in promoting depressive affect. Given the lack of evidence in the present study for the mediating or moderating roles of appraisals and coping in the relation between vengeance and well-being, future research might attempt to assess other variables that may be acting on both constructs. For example, it will be recalled that increased anger and negative affectivity have been associated with a vengeful disposition (McCullough et al., 2001; Stuckless & Goranson, 1992). Likewise, cognitive models of depression suggest that affective disorders may be characterized by negative biases of appraisal processes (Alloy & Clements, 1998; Beck, 1967; Lawson & MacLeod., 1999; Lawson, MacLeod, & Hammond, 2002). Thus, it may be that a bias toward negative thoughts and feelings is causally related to both vengeance and depressive symptoms independently,

which may at least partially explain the failure of appraisals and coping to mediate or moderate their relation.

Finally, whereas the results of the present study suggest that the forgiving personality may be present to the same extent among people both with and without religious faith, the same does not appear to be true of vengefulness. Although a vengeful disposition was not related with overall levels of religiosity, it was related with both decreased usage and perceived effectiveness of religious coping in dealing with the relationship conflict. Moreover, it has been suggested that people with religious faith may view negative life events as opportunities for spiritual growth (Smith et al., 2003). In line with this proposition, in the present investigation, vengefulness was negatively associated with both appraisals of the situation as a positive challenge and with religious coping (which, incidentally, were positively related with each other). The link between positive religious coping and positive health outcomes is well-established (e.g., Anos & Vasconcelles, 2005). Consequently, it might be that the failure to appraise situations as an opportunity for learning and growth, accompanied by the rejection of religious coping strategies may be yet another path through which people with a vengeful disposition succumb to various pathologies; however, these mediating paths were not evidenced.

Implications for the Meanings of Forgiveness and Vengeance

In summary, it appears that people high in forgivingness versus those high in vengefulness appraise and cope with conflicts using distinct approaches. Whereas forgivingness was associated with appraisals of a relationship conflict as controllable and less threatening, vengefulness was associated with appraisals of the situation as uncontrollable and as less of a positive challenge. Whereas people high in forgivingness tended to refrain from endorsing emotional approach strategies, those high in

vengefulness tended to refrain from using problem-focused and religious coping styles. Whereas forgivingness was related to the rejection of ruminative depression and brooding as methods for coping with the conflict, vengefulness was related to the rejection of ruminative reflection. The fact that these dispositions were differentially related to the appraisals and coping strategies used in response to a relationship conflict suggests that, although forgiveness and vengeance may be somewhat related, their impacts on promoting or undermining well-being appear to reflect distinct processes.

The modest, negative correlation between the dispositional styles provided further evidence that forgiveness should not simply be conceptualized as a *lack* of revenge, nor should revenge be defined as a lack of forgiveness (Brown, 2003; Brown, 2004). Instead, one might infer from the present study's findings that the forgiving personality is characterized by someone who seeks to minimize and take control over negative relationship events rather than dwelling on the potential emotional costs. The vengeful personality, on the other hand, might be characterized by someone who refuses to acknowledge the positive potential within a situation and resists adaptive solutions to conflicts. As such, there may be considerable overlap between dispositions toward forgiveness and vengeance with various other personality characteristics. For example, given the appraisal and coping processes favoured by high forgivers, the forgiving individual may also share traits such as optimism or agreeableness. Indeed dispositional forgiveness has been found to be associated with such personality traits in prior research (e.g., Brown, 2003). Similarly, given the appraisals and coping strategies preferred by vengeful individuals, personality characteristics such as neuroticism or narcissism (Brown, 2004; McCullough et al., 2001) may overlap with vengefulness. Consequently, the logical next step would be to examine forgiveness and revenge, not only as

dispositional styles, but as transgression-specific behaviours in relation to the appraisal and coping strategies employed to deal with a specific relationship conflict. If dispositions toward forgiveness and vengeance are, in fact, predictive of the feelings and behaviours that are actually carried out when one is confronted with a relationship transgression, the relations observed in the present study among forgivingness, vengefulness, and appraisal and coping processes should hold. However, recent research has observed that some measures of dispositional forgiveness did *not* predict state forgiveness (Brown, 2005); thus, clearly more research centred around *state* forgiveness and vengeance in relation to appraisals and coping must be conducted before this claim can be made.

Conclusions and Caveats

Having stated some directions in which further exploration of the links between forgiveness, vengeance, and coping might be fruitful, it is worthwhile to make explicit some of the limitations of the present study. For example, there may be a limitation in terms of the generalizability of the present study's findings. Past research has suggested that a sample consisting solely of first year university students may not be sufficiently representative of the population to answer some research questions (Wintre, North, & Sugar, 2001). In this case, the relatively young university sample may not have been fully representative of the population in terms of forgiveness behaviour, as some research has suggested that older people tend to be more forgiving than younger people (Mullet et al., 1998). The opposite may be true of vengefulness (i.e., younger people may be more vengeful than older people). Moreover, appraisals and coping strategies employed may also differ as a function of age. For example, lower levels of rumination and more positive thinking have been observed in older adults compared to adolescents and young

adults (Hunt, Wisocki, & Yanko, 2003; Wadsworth et al., 2004), while younger adults preferred to cope with their stressors using humour (Hunt et al., 2003). Thus, the appraisal and coping patterns observed in the present work in relation to predispositions toward forgiveness or revenge may also reflect age differences. Future research might attempt to replicate our findings with a sample of participants who encompass a broader age range.

Along with age, gender differences have been implicated in influencing levels of forgiveness (Exline, 2005) and vengeance (Holbrook et al., 1995), although these findings are inconsistent. It is interesting to note that men were found to have more forgiving personalities overall than women in the present investigation, whereas no differences in vengefulness were found; however, this difference in forgivingness between the sexes did not evidence itself as a moderator in the relations between forgivingness and any other variables of interest.

Given that the appraisals and coping styles endorsed in the present study were in response to a conflict within an intimate dating relationship, alternative patterns in relation to forgivingness and vengefulness might also be evidenced when coping with other types of transgressions. State forgiveness has been shown to be associated with pre-offence intimacy (Brown & Phillips, 2005); likewise, the coping strategies endorsed in the face of a relationship transgression may also be reflective of the bond between the people involved. For example, more forgiving attitudes may surface in response to a conflict between intimate partners compared to a transgression between two acquaintances; thus, the appraisals and coping strategies associated with those forgiving (or not so forgiving) attitudes may also follow in suit. Moreover, an entirely different pattern of coping may result when the transgression occurs at the inter-group level (in which the transgressor may effectively be a stranger, known only by group affiliation),

compared to a conflict occurring at the interpersonal level. However, having noted such limitations, given the relative paucity of research relating either forgiveness or vengeance to appraisals and coping, each investigation conducted contributes unique and meaningful information to this burgeoning topic.

One final caveat concerns the nature of the transgressions that may have been reported by forgiving versus vengeful individuals from the outset, consequently resulting in different patterns for appraisal and coping, not as a function of dispositional style alone, but as a function of the severity of the conflict. Rather than providing a constant stimulus for all participants (i.e., a hypothetical vignette) as has been done in some previous research, participants were asked to recall a recent relationship conflict or break-up of their own. This method was deliberately employed in an attempt to ensure the meaningfulness of the stressor for each individual, and hence, meaningful appraisals and coping in relation to the transgression. The possibility therefore existed, however, that the nature of the transgression recalled differed as a function of the individuals' disposition toward forgiveness or vengeance. As a content analysis was conducted and conflicts were coded for severity (e.g., minor, moderate, severe, break-up), these ratings in relation to dispositional styles were assessed, yielding no significant results. Thus, it appears that, although participants reported and appraised their own relationship conflicts, the nature or severity of the transgression reported did not differ between forgiving and vengeful individuals.

In closing, although we may not easily be able to change our general dispositions for feeling forgiving or vengeful toward others, each time we are confronted with a transgression, we have a choice—to do nothing, to exact revenge, or to forgive. As people with an innate predisposition to forgive others may be intuitively drawn toward engaging

in coping strategies of more adaptive value (or avoiding those considered to be maladaptive), compared to those strategies chosen by vengeful people, identifying these patterns is important. When confronted with relationship stressors, we can also choose the strategies with which we will cope with the conflict. Given the positive relations evidenced between the forgiving personality and well-being in the present work, along with the avoidance of those coping strategies considered to be of less adaptive value, it may be that Samuel Johnson, one of the most important English writers of the eighteenth century, was correct—“a wise man will make haste to forgive, because he knows the full value of time and will not suffer it to pass away in unnecessary pain” (Stokes, 2002).

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Appendix A: Measures

TENDENCY TO FORGIVE SCALE (TTF)

Directions: Rate the extent to which you agree or disagree with each statement by **circling one** number.

1. I tend to get over it quickly when someone hurts my feelings.

0.....1.....2.....3.....4.....5.....6
strongly disagree strongly agree

2. If someone wrongs me, I often think about it a lot afterwards.

0.....1.....2.....3.....4.....5.....6
strongly disagree strongly agree

3. I have a tendency to harbor grudges.

0.....1.....2.....3.....4.....5.....6
strongly disagree strongly agree

4. When people wrong me, my approach is just to forgive and forget.

0.....1.....2.....3.....4.....5.....6
strongly disagree strongly agree

FORGIVENESS OF OTHERS SCALE (FOO)

Directions: Rate the extent to which you agree or disagree with each statement by circling T or F, which will indicate if you believe that statement to be true or false for you.

	True	False
1. If another person hurts you it is all right to get back at him or her.	T	F
2. When other people insult me, I tell them off.	T	F
3. If a person hurts you on purpose you deserve to get whatever revenge you can.	T	F
4. When someone insults or hurts me, I think for hours about things I could have said or done to get even.	T	F
5. When someone treats me unfairly, I feel like telling others all the bad things I know about him or her.	T	F
6. People who criticize me better be ready to take some of their own medicine.	T	F
7. It is not right to take revenge on a person who tries to take advantage of you.	T	F

RELIGIOSITY

- Religious affiliation :
(Please circle one)
- a) none (atheist or agnostic)
 - b) Protestant (e.g. United, Anglican, Baptist, Presbyterian, Lutheran, Pentecostal, Mennonite, etc.)
 - c) Catholic (e.g. Roman Catholic, Ukrainian Catholic)
 - d) Jewish
 - e) Muslim
 - f) Buddhist
 - g) Hindu
 - h) Other (Please specify _____)

How often do you attend religious services?

- a) pretty well every day
- b) 2-3 times a week
- c) once a week
- d) 2-3 times a month
- e) once a month
- f) a few times a year
- g) once a year
- h) less than once a year
- i) only on religious holidays

How important is prayer to you in your daily life?

- a) very important
- b) somewhat important
- c) not important

How important is religious observance to you in your daily life?

- a) very important
- b) somewhat important
- c) not important

RUMINATIVE RESPONSES SCALE (RRS)

People think and do many different things when they feel down. Please read each of the items below and indicate whether you never, sometimes, often, or always think or do each one when you feel down, sad, or depressed. Please indicate what you *generally* do, not what you think you should do.

- | | | | | |
|--|-------|-----------|-------|--------|
| 1. think about how alone you feel | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 2. think "I won't be able to do my job if I don't snap out of this." | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 3. think about your feelings of fatigue and achiness | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 4. think about how hard it is to concentrate | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 5. think "What am I doing to deserve this?" | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 6. think about how passive and unmotivated you feel | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 7. analyze recent events to try to understand why you are depressed | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 8. think about how you don't seem to feel anything anymore | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 9. think "Why can't I get going?" | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| | | | | |
| 10. think "Why do I always react this way?" | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |

- | | | | | |
|---|-------|-----------|-------|--------|
| 11. go away by yourself and think about why you feel this way | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 12. write down what you are thinking and analyze it | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 13. think about a recent situation, wishing it had gone better | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 14. think "I won't be able to concentrate if I keep feeling this way." | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 15. think "Why do I have problems other people don't have?" | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 16. think "Why can't I handle things better?" | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 17. think about how sad you feel | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 18. think about all your shortcomings, failings, faults, mistakes | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 19. think about how you don't feel up to doing anything | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 20. analyze your personality to try to understand why you are depressed | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 21. go someplace alone to think about your feelings | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |
| 22. think about how angry you are with yourself | 1 | 2 | 3 | 4 |
| | Never | Sometimes | Often | Always |

STRESS APPRAISAL MEASURE (SAM)

This questionnaire is concerned with your thoughts about various aspects of the relationship disagreement or break-up that you described earlier. There are no right or wrong answers. Please respond according to how you view this situation right NOW. Please answer ALL questions. Answer each question by CIRCLING the appropriate number corresponding to the following scale.

	1	2	3	4	5
	Not at all	Slightly	Moderately	Considerably	Extremely
1. Is this a totally hopeless situation?	1	2	3	4	5
2. Does this situation create tension in me?	1	2	3	4	5
3. Is the outcome of this situation uncontrollable by anyone?	1	2	3	4	5
4. Is there someone or some agency I can turn to for help if I need it?	1	2	3	4	5
5. Does this situation make me feel anxious?	1	2	3	4	5
6. Does this situation have important consequences for me?	1	2	3	4	5
7. Is this going to have a positive impact in me?	1	2	3	4	5
8. How eager am I to tackle this problem?	1	2	3	4	5
9. How much will I be affected by the outcome of this situation?	1	2	3	4	5
10. To what extent can I become a stronger person because of this problem?	1	2	3	4	5
11. Will the outcome of this situation be negative?	1	2	3	4	5
12. Do I have the ability to do well in this situation?	1	2	3	4	5
13. Does this situation have serious implications for me?	1	2	3	4	5
14. Do I have what it takes to do well in this situation?	1	2	3	4	5
15. Is there help available to me for dealing with this problem?	1	2	3	4	5
16. Does this situation tax or exceed my coping resources?	1	2	3	4	5
17. Are there sufficient resources available to help me in dealing?	1	2	3	4	5
18. Is this beyond anyone's power to do anything about this situation?	1	2	3	4	5
19. To what extent am I excited thinking about the outcome of this situation?	1	2	3	4	5
20. How threatening is this situation?	1	2	3	4	5
21. Is the problem unresolvable by anyone?	1	2	3	4	5

22. Will I be able to overcome the problem?	1	2	3	4	5
23. Is there anyone who can help me manage the problem?	1	2	3	4	5
24. To what extent do I perceive this situation as stressful?	1	2	3	4	5
25. Do I have the skills necessary to achieve a successful outcome to this situation?	1	2	3	4	5
26. To what extent does this event require coping efforts on my part?	1	2	3	4	5
27. Does this situation have long-term consequences for me?	1	2	3	4	5
28. Is this going to have a negative impact on me?	1	2	3	4	5

SURVEY OF COPING PROFILE ENDORSEMENT (SCOPE)

The following is a list of things that people may do to cope with a stressful situation. Please consider the same disagreement you described earlier that you and your partner (present or most recent) had that you found the most troublesome. Please read each item and then indicate the extent to which the statement describes what you did to cope with this event.

Which of the following strategies do you think you would find yourself using in response to this situation?

<i>Ordinarily, in recent weeks have you</i>	<i>Never</i>	<i>Seldom</i>	<i>Sometimes</i>	<i>Often</i>	<i>Almost always</i>
1. accepted that there was nothing you could do to change your situation?	0	1	2	3	4
2. tried to just take whatever came your way?	0	1	2	3	4
3. talked with friends or relatives about your problems?	0	1	2	3	4
4. tried to do things which you typically enjoy?	0	1	2	3	4
5. sought out information that would help you resolve your problems?	0	1	2	3	4
6. blamed others for creating your problems or making them worse?	0	1	2	3	4
7. sought the advice of others to resolve your problems?	0	1	2	3	4
8. blamed yourself for your problems?	0	1	2	3	4
9. exercised?	0	1	2	3	4
10. fantasized about unreal things (e.g., the perfect revenge or winning a million dollars) to feel better?	0	1	2	3	4
11. been very emotional compared to your usual self?	0	1	2	3	4
12. gone over your problems in your mind over and over again?	0	1	2	3	4
13. asked others for help?	0	1	2	3	4
14. thought about your problems a lot?	0	1	2	3	4
15. became involved in recreation or pleasure activities?	0	1	2	3	4
16. worried about your problems a lot?	0	1	2	3	4
17. tried to keep your mind off things that are upsetting you?	0	1	2	3	4
18. tried to distract yourself from your troubles?	0	1	2	3	4
19. avoided thinking about your problems?	0	1	2	3	4
20. made plans to overcome your problems?	0	1	2	3	4
21. told jokes about your situation?	0	1	2	3	4
22. thought a lot about who is responsible for your problems (besides yourself)?	0	1	2	3	4
23. shared humorous stories etc. to cheer yourself and others up?	0	1	2	3	4

<i>Ordinarily, in recent weeks have you</i>	<i>Never</i>	<i>Seldom</i>	<i>Sometimes</i>	<i>Often</i>	<i>Almost always</i>
24. told yourself that other people have dealt with problems such as yours?	0	1	2	3	4
25. thought a lot about how you have brought your problems on yourself?	0	1	2	3	4
26. decided to wait and see how things turn out?	0	1	2	3	4
27. wished the situation would go away or be over with?	0	1	2	3	4
28. decided that your current problems are a result of your own past actions?	0	1	2	3	4
29. gone shopping?	0	1	2	3	4
30. asserted yourself and taken positive action on problems that are getting you down?	0	1	2	3	4
31. sought reassurance and moral support from others?	0	1	2	3	4
32. resigned yourself to your problems?	0	1	2	3	4
33. thought about how your problems have been caused by other people?	0	1	2	3	4
34. daydreamed about how things may turn out?	0	1	2	3	4
35. been very emotional in how you react, even to little things?	0	1	2	3	4
36. decided that you can grow and learn through your problems?	0	1	2	3	4
37. told yourself that other people have problems like your own?	0	1	2	3	4
38. wished I was a stronger person or better at dealing with problems?	0	1	2	3	4
39. looked for how you can learn something out of your bad situation?	0	1	2	3	4
40. asked for God's guidance?	0	1	2	3	4
41. kept your feelings bottled up inside?	0	1	2	3	4
42. found yourself crying more than usual?	0	1	2	3	4
43. tried to act as if you were not upset?	0	1	2	3	4
44. prayed for help?	0	1	2	3	4
45. gone out?	0	1	2	3	4
46. held in your feelings?	0	1	2	3	4
47. tried to act as if you weren't feeling bad?	0	1	2	3	4
48. taken steps to overcome your problems?	0	1	2	3	4
49. made humorous comments or wise cracks?	0	1	2	3	4
50. told others that you were depressed or emotionally upset?	0	1	2	3	4

If you were to use each of the following strategies in response to the situation you described earlier, *how effective* do you think that the response would be in improving the situation for you, either psychologically or in reality? In this instance, we aren't interested in what you actually did, but rather your thoughts on what you think *would* have been best to do.

This response would have been:

	<i>Not at all effective</i>	<i>A little</i>	<i>Somewhat</i>	<i>Very</i>	<i>Totally effective</i>
1. accepted that there was nothing you could do to change your situation?	0	1	2	3	4
2. tried to just take whatever came your way?	0	1	2	3	4
3. talked with friends or relatives about your problems?	0	1	2	3	4
4. tried to do things which you typically enjoy?	0	1	2	3	4
5. sought out information that would help you resolve your problems?	0	1	2	3	4
6. blamed others for creating your problems or making them worse?	0	1	2	3	4
7. sought the advice of others to resolve your problems?	0	1	2	3	4
8. blamed yourself for your problems?	0	1	2	3	4
9. exercised?	0	1	2	3	4
10. fantasized about unreal things (e.g., the perfect revenge or winning a million dollars) to feel better?	0	1	2	3	4
11. been very emotional compared to your usual self?	0	1	2	3	4
12. gone over your problems in your mind over and over again?	0	1	2	3	4
13. asked others for help?	0	1	2	3	4
14. thought about your problems a lot?	0	1	2	3	4
15. became involved in recreation or pleasure activities?	0	1	2	3	4
16. worried about your problems a lot?	0	1	2	3	4
17. tried to keep your mind off things that are upsetting you?	0	1	2	3	4
18. tried to distract yourself from your troubles?	0	1	2	3	4
19. avoided thinking about your problems?	0	1	2	3	4
20. made plans to overcome your problems?	0	1	2	3	4
21. told jokes about your situation?	0	1	2	3	4
22. thought a lot about who is responsible for your problems (besides yourself)?	0	1	2	3	4
23. shared humorous stories etc. to cheer yourself and others up?	0	1	2	3	4
24. told yourself that other people have dealt with problems such as yours?	0	1	2	3	4

	<i>Not at all effective</i>	<i>A little</i>	<i>Somewhat</i>	<i>Very</i>	<i>Totally effective</i>
25. thought a lot about how you have brought your problems on yourself?	0	1	2	3	4
26. decided to wait and see how things turn out?	0	1	2	3	4
27. wished the situation would go away or be over with?	0	1	2	3	4
28. decided that your current problems are a result of your own past actions?	0	1	2	3	4
29. gone shopping?	0	1	2	3	4
30. asserted yourself and taken positive action on problems that are getting you down?	0	1	2	3	4
31. sought reassurance and moral support from others?	0	1	2	3	4
32. resigned yourself to your problems?	0	1	2	3	4
33. thought about how your problems have been caused by other people?	0	1	2	3	4
34. daydreamed about how things may turn out?	0	1	2	3	4
35. been very emotional in how you react, even to little things?	0	1	2	3	4
36. decided that you can grow and learn through your problems?	0	1	2	3	4
37. told yourself that other people have problems like your own?	0	1	2	3	4
38. wished I was a stronger person or better at dealing with problems?	0	1	2	3	4
39. looked for how you can learn something out of your bad situation?	0	1	2	3	4
40. asked for God's guidance?	0	1	2	3	4
41. kept your feelings bottled up inside?	0	1	2	3	4
42. found yourself crying more than usual?	0	1	2	3	4
43. tried to act as if you were not upset?	0	1	2	3	4
44. prayed for help?	0	1	2	3	4
45. gone out?	0	1	2	3	4
46. held in your feelings?	0	1	2	3	4
47. tried to act as if you weren't feeling bad?	0	1	2	3	4
48. taken steps to overcome your problems?	0	1	2	3	4
49. made humorous comments or wise cracks?	0	1	2	3	4
50. told others that you were depressed or emotionally upset?	0	1	2	3	4

BECK DEPRESSION INVENTORY (BDI)

On this questionnaire are groups of statements. Please read the entire group of statements of each category. Then pick out ONE statement in that group which best describes the way you feel. Check off the number beside the statement you have chosen.

1. 0 = I do not feel sad
 1 = I feel sad or blue
 2a = I am blue or sad all of the time and I can't snap out of it
 2b = I am so sad or unhappy that it is very painful
 3 = I am so sad or unhappy that I can't stand it

2. 0 = I am not particularly pessimistic or discouraged about the future
 1 = I feel discouraged about the future
 2a = I feel I have nothing to look forward to
 2b = I feel I won't ever get over my troubles
 3 = I feel that the future is hopeless and things cannot improve

3. 0 = I do not feel like a failure
 1 = I feel I have failed more than the average person
 2a = I feel I have accomplished very little that is worthwhile or that means anything
 2b = As I look back on my life, all I can see is a lot of failures
 3 = I feel I am a complete failure as a person

4. 0 = I am not particularly dissatisfied
 1a = I feel bored most of the time
 1b = I don't enjoy things the way I used to
 2 = I don't get satisfaction out of anything anymore
 3 = I am dissatisfied with everything

5. 0 = I don't feel particularly guilty
 1 = I feel bad or unworthy a good part of the time
 2a = I feel quite guilty
 2b = I feel bad or unworthy practically of the time now
 3 = I feel as though I am very bad or worthless

6. 0 = I don't feel I am being punished
 1 = I have a feeling that something bad may happen to me
 2 = I feel I am being punished or will be punished
 3a = I feel I deserve to be punished
 3b = I want to be punished

7. 0 = I don't feel disappointed in myself
 1a = I am disappointed in myself
 1b = I don't like myself
 2 = I am disgusted with myself
 3 = I hate myself

8. 0 = I do not feel I am any worse than anybody else
 1 = I am very critical of myself for my weaknesses or mistakes
 2a = I blame myself for everything that goes wrong
 2b = I feel I have many bad faults

9. ___ 0 = I don't have thoughts of harming myself
 ___ 1 = I have thoughts of harming myself but I would not carry them out
 ___ 2a = I feel I would be better off dead
 ___ 2b = I have definite plans about committing suicide
 ___ 2c = I feel my family would be better off if I were dead
 ___ 3 = I would kill myself if I could
10. ___ 0 = I don't cry anymore than usual
 ___ 1 = I cry more now than I used to
 ___ 2 = I cry all the time now. I can't stop it
 ___ 3 = I used to be able to cry but now I can't cry at all even though I want to
11. ___ 0 = I am no more irritated now than I ever am
 ___ 1 = I get annoyed or irritated more easily than I used to
 ___ 2 = I get irritated all the time
 ___ 3 = I don't get irritated at all the things that used to irritate me.
12. ___ 0 = I have not lost interest in other people
 ___ 1 = I am less interested in other people than I used to be
 ___ 2 = I have lost most of my interest in other people and I have little feeling for them
 ___ 3 = I have lost all my interest in other people and don't care about them at all
13. ___ 0 = I make decisions about as well as ever
 ___ 1 = I am less sure of myself now and try to put off making decisions
 ___ 2 = I can't make decisions anymore without help
 ___ 3 = I can't make decisions at all anymore
14. ___ 0 = I don't feel I look any worse than I used to
 ___ 1 = I am worried that I am looking old or unattractive
 ___ 2 = I feel that there permanent changes in my appearance and they make me look unattractive
 ___ 3 = I feel that I am ugly or repulsive looking
15. ___ 0 = I can work about as well as before
 ___ 1a = It takes extra effort to get started at doing something
 ___ 1b = I don't work as well as I used to
 ___ 2 = I have to push myself very hard to do anything
 ___ 3 = I can't do any work at all
16. ___ 0 = I can sleep as well as usual
 ___ 1 = I wake up more tired in the morning than I used to
 ___ 2 = I wake up 1-2 hours earlier than usual and find it hard to get back to sleep
 ___ 3 = I wake up early every day and can't get more than 5 hours sleep
17. ___ 0 = I don't get anymore tired than usual
 ___ 1 = I get tired more easily than I used to
 ___ 2 = I get tired from doing anything
 ___ 3 = I get too tired to do anything
18. ___ 0 = My appetite is no worse than usual
 ___ 1 = My appetite is not as good as it used to be
 ___ 2 = My appetite is much worse now
 ___ 3 = I have no appetite at all any more

19. ___ 0 = I haven't lost much weight, if any, lately
___ 1 = I have lost more than 5 pounds
___ 2 = I have lost more than 10 pounds
___ 3 = I have lost more than 15 pounds
20. ___ 0 = I am no more concerned about my health than usual
___ 1 = I am concerned about aches and pains or upset stomach or constipation or other unpleasant feelings in my body
___ 2 = I am so concerned with how I feel or what I feel that it's hard to think of much else
___ 3 = I am completely absorbed in what I feel
21. ___ 0 = I have not noticed any recent change in my interest in sex
___ 1 = I am less interested in sex than I used to be
___ 2 = I am much less interested in sex now
___ 3 = I have lost interest in sex completely

SATISFACTION WITH LIFE SCALE (SWLS)

Below are five statements with which you may agree or disagree. Using the scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

Strong Disagreement	Moderate Disagreement	Slight Disagreement	Slight Agreement	Moderate Agreement	Strong Agreement
1	2	3	4	5	6

1. ____ In most ways my life is close to my ideal.
2. ____ If I could live my life over, I would change almost nothing.
3. ____ I am satisfied with my life.
4. ____ So far I have gotten the important things I want in life.
5. ____ The conditions of my life are excellent.

Appendix B: Preliminary Analyses

Outliers and Missing Data

Frequency distributions were conducted on the scores for each of the dispositional styles, potential mediating variables, and outcomes in order to check for outliers and missing data. Outliers due to data entry errors were corrected. No outliers greater than three z-scores in absolute value were found for trait forgiveness, trait vengeance, or the religiosity, rumination, or coping endorsement scores; however, several outliers were found among the coping effectiveness scores and were adjusted to z-scores of positive or negative three as appropriate¹⁰. Outliers on the set of predictors were assessed using centred leverage values, identifying hat elements $> .050$ ($3p/n = 3(3)/181$). Only one case exceeded this value, having self-reported both high dispositional forgiveness and revenge scores; however, given the argument that forgivingness and vengefulness are related yet qualitatively different traits, this case was retained for the analyses¹¹. The maximum value found for Mahalanobis Distance did not exceed the critical value of 15 (i.e., at 5% with 2 predictors and $N = 181$; Stevens, 2002), and no influential data points were found upon examination of the data with Cook's distance (i.e., values were all < 1).

Coping endorsements and effectiveness ratings were missing for only two participants, depressive symptoms were not reported by one participant, and self-reported religiosity was missing for 16 participants, who failed to complete these scales; however 21 participants failed to return their take-home questionnaire booklets, therefore

¹⁰ Although these outlier scores were adjusted, subsequent analyses conducted both with and without the outlier adjustments yielded almost identical results; thus, in an attempt to retain data accuracy, the analyses reported in the present study are those using the original participant responses.

¹¹ It should be noted that all analyses were conducted both with and without this outlier as well, yielding very similar results.

dispositional forgiveness and vengeance, rumination, and life satisfaction scores for those participants were also missing. The dispositional variables were dummy-coded and several independent sample t-tests were conducted in order to ensure that the data were missing at random. All tests were non-significant, indicating that the failure to return the take-home questionnaire booklets was a random phenomenon.

Regression Assumptions

Before beginning the regression analyses, the assumptions of independence, normality, linearity, and homoscedasticity (Stevens, 2002; Tabachnick & Fidell, 2001) were assessed. Given that the participants completed the study in the lab and separated by dividers, the assumption of independence was deemed to be met. There is also no reason to believe that the take-home questionnaire booklets were not completed independently.

Because no statistical test for multivariate normality exists on SPSS (Stevens, 2002), bivariate normality was assessed for each variable. The Shapiro-Wilk test for normality was not significant for dispositional forgiveness, indicating that this variable was normally distributed across the sample; however dispositional vengeance was not normally distributed according to Shapiro-Wilk. Several transformations of the variable were done in an attempt to reduce skewness (e.g., square-root, logarithm; Stevens, 2002; Tabachnick & Fidell, 2001), without success. Thus, for ease of interpretation, the original scores for dispositional vengeance were retained for subsequent analyses.

Normality was also assessed for each of the coping dimensions. Shapiro-Wilk tests indicated that both emotion-focused approach and avoidance coping endorsements were normally distributed, while problem-focused and religious coping endorsements were not. The same pattern was true for coping effectiveness ratings, with the addition that emotion-approach effectiveness failed to be normally distributed. Transformations

were again attempted on the non-normal coping dimensions. Subsequent Shapiro-Wilk tests indicated that the coping dimensions could not be successfully transformed to normality; thus, the original scores for the coping dimensions were included in ensuing analyses.

Not surprisingly, the rumination and religiosity variables were not normally distributed across the sample. Several transformations were thus applied to these variables; however subsequent Shapiro-Wilk tests indicated that normality was still not achieved. Thus, the original participant responses for the rumination and religiosity variables were retained for analyses.

A similar set of transformations was conducted in an attempt to normalize the outcome measures of depressive symptoms and life satisfaction, with no success. Thus, the original variable scores for these well-being measures were also retained in subsequent analyses.

In order to investigate further violations of the non-linearity and non-constant variance assumptions, a series of residual plots (i.e., the standardized residuals versus predicted values) were assessed. None of the residual plots demonstrated any systematic pattern or clustering of the residuals; no model violations were therefore suspected (Stevens, 2002; Tabachnick & Fidell, 2001).