The Prospective Relationship of Interpersonal Forgiveness and Psychological Distress Symptoms Among College Women

Holly K. Orcutt
Northern Illinois University

Forgiveness has frequently been theorized to be related to decreased psychological distress, and longitudinal survey research is important for the examination of this relationship. The prospective relation of forgiveness to psychological distress symptoms (i.e., depression, anxiety, and stress) at a later time point (an average of 36 weeks later) was examined in a sample of 182 female undergraduate students. Through use of structural equation modeling, it was observed that offense-specific (as compared with dispositional) forgiveness toward an offender of a self-identified interpersonal transgression was significantly negatively related to psychological distress symptoms at Time 2, above and beyond the impact of symptom levels at Time 1. Perceived severity and time since the offense at Time 1 were examined as possible moderators of this relationship; time since offense was found to moderate the relationship between forgiveness and change in psychological distress symptoms between Time 1 and Time 2. Implications for acceptance-based interventions and prevention of psychopathology are discussed.

Keywords: forgiveness, longitudinal, structural equation modeling, psychological acceptance

Forgiveness has been the subject of increased interest as a therapeutic intervention, evidenced in part by the number of self-help books on this subject (e.g., Enright, 2001; Luskin, 2003; Spring, 2004; Worthington, 2001). Although the body of empirical literature examining the impact of forgiveness on physical and mental health is growing, we may not yet be at the point where we can argue, as Luskin (2003) does in the title of his book, that forgiveness is a "proven prescription for health and happiness." Additional research is needed on the impact of forgiveness, particularly over time. The present study represents a step in this direction by examining the relationship between forgiveness (for a self-identified interpersonal transgression) with psychological distress symptoms at two time points in a sample of college women.

Although interpersonal forgiveness has an extensive history, application of scientific methods to the study of forgiveness is a relatively recent phenomenon and has increased significantly in the last decade (see, e.g., McCullough, Pargament, & Thoresen, 2000, for a review). A number of complex issues have arisen in defining interpersonal forgiveness. Enright, a prominent researcher in forgiveness, and colleagues (e.g., Baskin & Enright, 2004) have defined interpersonal forgiveness as the "willful giving up of resentment in the face of another's (or other's) considerable injustice and responding with beneficence to the offender even though

the offender has no right to the forgiver's moral goodness"(p. 80). Enright and colleagues have distinguished forgiveness from pardoning, condoning, excusing, forgetting, and reconciling (Enright & Coyle, 1998). *Pardoning* is specifically a legal term, whereas *condoning* involves justification of the offense. *Excusing* carries the implication that a transgression was committed but was justified by the circumstances (e.g., taking a car without permission to transport someone to the hospital). *Forgetting* implies that the memory of the transgression has decayed or is no longer in consciousness, and *reconciling* involves the restoration of the damaged relationship. Forgiveness scholars generally agree that forgiveness is distinct from forgetting, excusing, condoning, and pardoning (e.g., McCullough & Witvliet, 2002). In addition, most agree that forgiveness is distinct from reconciliation (cf., Hargrave & Sells, 1997; Worthington, 1988). Fincham (2000) argues that reconciliation "involves the restoration of violated trust and requires the goodwill of both partners" (p. 7). Thus, for reconciliation to occur, forgiveness must be present, but it may be possible to experience complete forgiveness in the absence of reconciliation. When the interpersonal transgression involves events such as physical and sexual assault, it may not be safe or appropriate to reconcile with the offender.

There is a lack of consensus among scholars on the necessity of benevolence when defining forgiveness. Specifically, there is disagreement as to whether an increase in positive feelings toward the offender, in addition to the absence of negative feelings, is required for one to demonstrate forgiveness (Exline, Worthington, Hill, & McCullough, 2003). For example, Worthington and Wade (Wade & Worthington, 2003; Worthington & Wade, 1999) have distinguished between granting forgiveness and reducing unforgiveness, arguing that forgiveness requires "experiencing strong, positive, love-based emotions as one recalls a transgression" (Worthington, Berry, & Parrott, 2001, p. 109).

Another important concern when operationalizing interpersonal forgiveness is the concordance, or lack thereof, between lay and psychological definitions of interpersonal forgiveness. As noted above, psychological scholars generally distinguish forgiveness from forgetting, excusing, condoning, and to a large extent, reconciliation. Several recent studies have examined lay conceptions of forgiveness and found overlap as well as divergence with research definitions (e.g., Kearns & Fincham, 2005; Macaskill, 2005; Younger, Piferi, Jobe, & Lawler, 2004). Using an undergraduate student sample, Kearns and Fincham (2005) employed prototype analysis to identify central features in lay conceptions of forgiveness. Consistent with research definitions, lay conceptions emphasized the importance of experiencing a decrease in negative feelings. In addition, prototype analysis revealed the importance of a multidimensional conceptualization of forgiveness that includes affect, behavior, and cognition. Results, however, indicated important areas of divergence between lay and researcher definitions. Specifically, condoning was viewed by 12% of participants as an important, and sometimes central, attribute of forgiveness. Further, forgetting was viewed as an important attribute of forgiveness by 28% of participants. In addition, reconciliation was viewed as a central attribute of forgiveness by 21% of participants. Macaskill (2005) also found reconciliation to be an important aspect of forgiveness in a survey of Christian clergy and a general population sample. Younger et al. (2004) found that forgetting was endorsed as part of the definition of forgiveness among 10% of their undergraduate sample and 11% of their sample of community adults, whereas reconciliation was endorsed among 24% of their undergraduate sample and 16% of their sample of community adults. It is interesting, however, that 6% of the undergraduate sample and 8% of the community sample specifically mentioned that forgiveness does not mean forgetting (Younger et al., 2004). Thus, although overlap exists with lay and research definitions, discrepancies appear to exist as well, and these discrepancies have important implications for the assessment of forgiveness.

As yet, there is no "gold standard" forgiveness assessment. Interpersonal forgiveness is measured at either the dispositional level (i.e., a general tendency to be forgiving) or offense-specific (i.e., forgiveness toward a perpetrator of a specific transgression), and strengths and weaknesses exist for each measurement approach (see McCullough, Hoyt, & Rachal, 2000, for a helpful taxonomy of forgiveness measurements). In the two most commonly used offense-specific measures, the Enright Forgiveness Inventory (EFI; Enright & Fitzgibbons, 2000) and the Transgression-Related Interpersonal Motivations Scale (TRIM; McCullough et al., 1998), participants first identify an interpersonal transgression and then respond (by agreeing or disagreeing) to a series of statements about their current reactions to the offender.

The EFI consists of 60 items that assess both positive and negative affect (e.g., "I feel warm toward him/her, I feel repulsed toward him/her"), behavior (e.g., "I would do a favor, I would avoid"), and cognition (e.g., "I think he or she is a good person, I think he or she is worthless") toward the offender. The 60 items are divided equally among affect, behavior, and cognition. In addition, the EFI contains an additional final single item asking the individual to indicate to what extent he or she has forgiven the offender. The TRIM is a 12-item measure that focuses specifically on revenge (e.g., "I wish that something bad would happen to him/her") and avoidance (e.g., "I cut off the relationship with him/her") motivations. The TRIM items focus primarily on assessing behavior (e.g., "I withdraw from him/her") and cognition (e.g., "I want to see him/her hurt and miserable") rather than affect. It is important to note that because both the EFI and TRIM do not use the term *forgive* as part of the core instrument, the impact of potentially different lay understandings of the term *forgive* are minimized. The term *forgive* is used in most dispositional measures (e.g., Brown, 2003), and participants may have very divergent interpretations of this term. Dispositional measures often use a scenario method in which participants are asked to review descriptions of various transgressions and indicate how they would respond (e.g., DeShea, 2003). These scenario-based scales, however, have been found to be highly correlated with the extent to which an individual values forgiveness and holds the expectation that he or she should be forgiving (Brown, 2003). Thus, each measurement approach, offense specific and dispositional, has strengths and limitations, and future research is needed to clarify the relationship of dispositional and offense-specific measures over time.

Engaging in interpersonal forgiveness is theorized to result in a reduction in psychological distress through the release of negative emotions. Following an interpersonal transgression, one's initial response is likely to be fear, anger, or hurt. These initial responses are often compounded by a secondary process of rumination about the offense resulting in "delayed emotions, involving resentment, bitterness, residual anger, residual fear, hatred, hostility, and stress" (Worthington, 2001, p. 26). The process of forgiveness, at a minimum, is theorized to reduce these negative emotions. In addition, the process of forgiveness has been postulated to involve the emotional replacement of negative emotions with "positive emotions such as unselfish love, empathy, compassion, or even romantic love" (Worthington, 2001, p. 33). In a cross-cutting paper exploring links between Buddhist and psychological perspectives on well-being and emotional experience, Ekman, Davidson, Ricard, and Wallace (2005) noted that from a Buddhist perspective, some emotions are conducive to happiness that is genuine and enduring (i.e., sukha), whereas other emotional experiences create a vulnerability for states of suffering (i.e., duhkha). Ekman et al. discussed hatred as one of three key mental processes that are viewed as "fundamental toxins of the mind" (p. 60) and noted that the "Buddhist, but not Western, view considers hatred to be intrinsically harmful to those who experience it" (p. 62). Thus, the process of forgiveness is thought to involve the releasing of toxic emotions; this process would reasonably be expected to result in decreased psychological distress symptoms.

With regard to evidence for the positive impact of forgiveness on psychological distress, the extant literature is somewhat limited and consists largely of cross-sectional survey research and a handful of intervention studies. Forgiveness was associated with mental health in a cross-sectional survey of 324 undergraduate students (224 women, 100 men; Maltby, Macaskill & Day, 2001). Maltby et al. examined the relations between failure to forgive self and others (assessed with a dispositional measure by Mauger et al., 1992) and measures of physical (General Health Questionnaire; Goldberg & Williams, 1991) and mental health (Eysenck Personality Questionnaire; Eysenck & Eysenck, 1975). Among men, interpersonal forgiveness was significantly negatively correlated with depression and significantly positively correlated with extra-

version. Among women, interpersonal forgiveness was significantly negatively correlated with depression, psychoticism, and social dysfunction. In a survey of 39 undergraduate students (20 women, 19 men), dispositional forgiveness (assessed with two different measures) was significantly positively associated with better mental health status as measured with the SF-36 Health Survey (Berry & Worthington, 2001).

Among a small community sample of 68 adults, dispositional forgiveness (assessed with the Mauger et al., 1992, scale) was significantly negatively associated with anxiety and depression as measured by the State–Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970), and the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961; see Seybold, Hill, Neumann, & Chi, 2001). Forgiveness was also significantly associated with distress in a large national probability sample of 1,423 adults (Touissant, Williams, Musick, & Everson, 2001). When gender, ethnicity, marital status, education, income, and a set of religiousness and spirituality variables were controlled for, interpersonal forgiveness was significantly negatively associated with psychological distress (as assessed by six items such as "nervous," "hopeless," and "so sad that nothing could cheer the respondent up"). Krause and Ellison (2003) examined the relationship between forgiveness of others and well-being in a large national probability sample of 1,316 older individuals. Dispositional interpersonal forgiveness (assessed with three items) was significantly negatively associated with depressive affect (assessed with a subset of items from the Center for Epidemiological Studies Depression scale; Radloff, 1977).

In a general population sample of 2,616 male and female twins, forgiveness (assessed with six dispositional items developed by Kendler et al., 2003, on the basis of the Mauger et al., 1992, scale) was significantly associated with clinical diagnoses (Kendler et al., 2003). Forgiveness was significantly negatively associated with lower risk for nicotine dependence and drug abuse or dependence. Relatedly, Kendler et al. (2003) reported that vengefulness was significantly positively associated with increased risk for major depressive disorder, generalized anxiety disorder, phobia, and bulimia nervosa. Finally, in a sample of 213 combat veterans with clinically diagnosed posttraumatic stress disorder, difficulty forgiving others (as assessed dispositionally with Mauger et al.'s, 1992, measure) was significantly positively associated with posttraumatic stress disorder symptoms and depression (as assessed with the Beck Depression Inventory) but was not related to anxiety (as assessed by the State–Trait Anxiety Inventory; Witvliet, Phipps, Feldman, & Beckham, 2004).

With regard to forgiveness intervention studies, Baskin and Enright (2004) recently conducted a meta-analytic review of nine published studies with a total sample size of 330 participants. Baskin and Enright determined that the existing intervention studies could be classified as process based (interventions that involved an affective/empathic component) versus decision based (interventions that focused primarily on making the decision to forgive) interventions. Within the process-based studies, three were group based with an average effect size (d) of 0.59 (n = 120) for emotional health outcomes, and two were individually based with an average effect size of 1.42 (n = 22) for emotional health outcomes. Although these findings are based on a small selection of intervention studies, the initial results are promising.

Thus, existing research is consistent with the notion that forgiveness may result in decreased psychological distress symptoms. Although intervention studies provide critical information about the impact of forgiveness on distress, to my knowledge, there are no prospective studies examining the potential impact of forgiveness on psychological distress symptoms. Indeed, Fincham and Kashdan (2004) noted that "compelling, direct evidence documenting a *causal* link between forgiveness and physical and mental health is lacking" (p. 622). Prospective data provided important information about the potential benefits of forgiveness on psychological distress and the potential utility of forgiveness-based interventions. Therefore, by use of a longitudinal sample of female undergraduate students, the prospective impact of forgiveness on psychological distress symptoms was examined. On the basis of the cross-sectional findings reviewed above regarding the negative relationship of interpersonal forgiveness and mental health/distress symptoms (see, e.g., Touissant et al., 2001), it was hypothesized that offense-specific forgiveness (i.e., level of positive affect, cognitions, and behaviors toward the offender of a recent interpersonal transgression) reported at Time 1 would be significantly negatively associated with psychological distress symptoms at Time 2, above and beyond psychological distress symptoms reported at Time 1. Said another way, lower levels of forgiveness at Time 1 were hypothesized to be related to increased levels of psychological distress symptoms between Time 1 and Time 2.

Although exploratory in nature, perceived severity of the offense and length of time elapsed since the offense were included as potential moderators of the relationship between forgiveness and prospective psychological distress symptoms. Although perceptions of greater severity have been associated with lower levels of forgiveness (e.g., Boon & Slusky, 1997) and a longer duration of elapsed time following the offense has been associated with higher forgiveness levels (McCullough, Fincham, & Tsang, 2003), it seems useful to examine these variables in combination with forgiveness in predicting psychological distress rather than simply as predictors of forgiveness levels. With regard to perceived severity of the offense, offenses that are of greater perceived severity would be expected to have a stronger effect on both forgiveness and psychological distress than lesser offenses. For example, an assault would presumably usually result in lower forgiveness and higher distress than an insult. Therefore, it was hypothesized that the relationship between forgiveness and psychological distress will be stronger for offenses of greater as opposed to lesser perceived severity.

In terms of time since offense, it was assumed that psychological distress following interpersonal offenses diminishes with time, whereas interpersonal forgiveness increases with time. Therefore, in part because there may be less symptomatology to relieve when offenses are temporally remote, it was hypothesized that the relationship between interpersonal forgiveness and psychological distress would be strongest for more recent, as opposed to older, interpersonal transgressions.

Method

Participants and Procedure

The present study included data from 182 female undergraduate students at a large midwestern university who completed surveys at two points in

time (on average, 36 weeks apart, $M = 35.71$, $SD = 11.17$, range = 18.71–80.57). The first cohort ($n = 102$) provided data at Time 1 during the Fall 2002 semester and the second cohort ($n = 80$) provided data at Time 1 during the Fall 2003 semester. At Time 1, participants were students enrolled in an introductory psychology course who received partial course credit for their participation in experimental research. Participants signed up for the study on a large bulletin board containing experiment sign-up sheets for that week. The sign-up sheet listed the experiment number and indicated that participants needed to be female, over the age of 18, and able to speak English and could not have previously participated in the experiment. Participants completed a series of pencil-and-paper questionnaires in approximately 90-min sessions in groups composed of 30 or less female students. Informed consent was given by participants at the beginning of the session. Upon the completion of the packets, participants were debriefed on the nature and importance of the study and given resources for community counseling agencies.

After reading the informed consent, but before beginning the questionnaires, participants indicated whether they were interested in being contacted in the future to be informed of additional research opportunities (this was completely optional and did not impact their course credit). For the first cohort of 279 females, 180 agreed to be contacted in the future (64.5%), and for the second cohort of 218 females, 163 agreed to be contacted in the future (75%). Among those agreeing to be contacted, we attempted to recruit all participants into the follow-up study. Participants were contacted via telephone (and e-mail in several cases when phoning was not effective) and invited to participate in a follow-up postal survey. Participants were informed they would be given one draw in a lottery for $50.

For the first cohort, complete data were obtained from 102 (56%) of the 180 females who agreed to be contacted, and for the second cohort, complete data were obtained from 80 (49%) of the 163 females who agreed to be contacted.[1]

Among the 182 females that composed the final sample, 134 (73.6%) participants described their identity as "Caucasian/White," 23 (12.6%) as "African American/Black," 9 (4.9%) as "Latino/Hispanic," 7 (3.8%) as "Asian American," and 6 (3.3%) as "Other," and 3 people did not indicate their ethnicity. The average age at Time 1 was 19.31 years ($SD = 1.57$).

Measures

Potential covariates. On the basis of the distribution of ethnicity, race was collapsed into three categories (coded as Black, $n = 23$, 12.9%; White, $n = 133$, 74.7%; and Other, $n = 22$, 12.4%) and was dummy coded as two variables: Black versus not Black and White versus not White. Weeks elapsed between Time 1 and Time 2 and age at Time 1 were also examined as potential covariates.

Forgiveness. The EFI (Enright & Rique, 2004) is an offense-specific (as opposed to dispositional) measure of forgiveness and was administered at Time 1. Participants were asked to "think of the most recent experience of someone hurting you unfairly and deeply." Participants next rated the perceived severity of the offense by indicating "how deeply were you hurt when the incident occurred" with $1 = No\ hurt$, $2 = A\ little\ hurt$, $3 = Some\ hurt$, $4 = Much\ hurt$, and $5 = A\ great\ deal\ of\ hurt$. Participants indicated how long ago the event occurred.[2] Participants provided a brief description of the transgression and then responded to 60 items that assessed positive and negative affect (e.g., "I feel tender toward him/her, I feel cold toward him/her"), behavior (e.g., "I would show friendship, I would ignore"), and cognition (e.g., "I think he or she is loving, I think he or she is a bad person") toward the perpetrator. The EFI uses a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The three subscale scores (Affect, Behavior, and Cognition) are obtained by computing a mean score for each of the 20 items within each subscale. A total score was also obtained by computing a mean score for all 60 items. As reported in Table 1, the internal consistency for the total forgiveness scale was .99, and the internal consistency for each subscale was .98. Enright and Fitzgibbons

(2000) summarized cross-cultural reliability and validity data for the EFI and reported that internal consistency estimates were very high (greater than .95) and that a 2-week test–retest reliability with 36 college students was .86. The correlation between the 60-item EFI and a single item administered at the end of the scale assessing whether the person had forgiven the offender has been examined as an indicator of construct validity; in a series of U.S. and cross-cultural samples, this correlation has ranged from .59 to .78 (Enright & Fitzgibbons, 2000). The manual for the EFI reports that higher scores on the EFI are associated with lower scores on the State–Trait Anxiety Inventory and the Beck Depression Inventory (Enright & Rique, 2004).

The interpersonal transgressions were coded by myself and a trained research assistant into the following eight categories: (1) 153 participants reported some form of emotional hurt such as lying or betrayal, (2) 1 participant reported being hurt physically, (3) 6 participants reported unwanted sexual contact, (4) 12 participants reported the termination of a friendship or romantic relationship, (5) 2 participants reported the death of another person as the transgression, (6) 1 participant reported job termination, (7) 1 participant reported an event that did not fall into the other six categories, and (8) 6 people did not provide sufficient or clear information in response to the open-ended question as to allow coding (missing for 4 participants and unclear who the perpetrator was or what the event was for 2 participants). On the basis of a random sample of 25 protocols, a kappa coefficient of .73 was obtained indicating good agreement. Among those 25 protocols, there was one disagreement which was resolved through communication between coders. Overall, any coding disagreements or questions were resolved through communication with the two coders.

Depression Anxiety Stress Scales–21 (DASS-21). The DASS-21 (Lovibond & Lovibond, 1995a) was used as a measure of psychological distress symptoms at both Time 1 and Time 2. The DASS-21 is a short form of the original 42-item DASS. Antony, Bieling, Cox, Enns, and Swinson (1998) compared the psychometric properties of the DASS and the DASS-21 in two separate samples (nonclinical volunteers and a clinical sample of patients with mixed diagnoses). Antony et al. reported that the two versions were extremely similar in performance but noted that the 21-item version may be preferable because of fewer items and slightly cleaner factor structure. Because of the similarity between the DASS and the DASS-21 and because greater psychometric data exist for the DASS, findings on the psychometric properties of the DASS are reviewed. Brown, Chorpita, Korotitsch, and Barlow (1997) reported strong temporal stability and internal consistency for the DASS in a sample of 417 patients. A handful of studies using factor analysis (exploratory and confirmatory) in both clinical and nonclinical samples have supported the proposed factor structure of the DASS and DASS-21 and have also provided good evidence that the factor structure is comparable in both clinical and nonclinical samples (Antony et al., 1998; Brown et al., 1997; Clara, Cox, & Enns, 2001; Crawford & Henry, 2003; Lovibond & Lovibond, 1995b). With regard to convergent and discriminant validity, in several different studies, the subscales of the DASS have been correlated with commonly used measures of depression, anxiety, worry, and negative affect (e.g., Beck Depression Inventory, Beck Anxiety Inventory; Beck & Steer, 1990; Positive and

---

[1] For the first cohort, of the 180 women who agreed to be contacted, 15 could not be reached; 38 agreed, but we were unable to obtain completed questionnaires from them; 25 refused to participate; and 102 completed the questionnaire. For the second cohort, of the 163 women who agreed to be contacted, 10 could not be reached; 46 agreed, but we were unable to obtain completed questionnaires from them; 27 refused to participate; and 80 completed the questionnaire.

[2] Unfortunately, 33 participants placed a check mark in front of, for example, "weeks ago" instead of writing in the specific number of weeks ago. As it was not possible to accurately score these responses, 33 participants are missing data on time since offense.

Table 1
Means, Standard Deviations, Correlation Matrix, and Reliability Estimates for Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. EFI total	.99																	
2. EFI affect	.97*	.98																
3. EFI behavior	.98*	.93*	.98															
4. EFI cognition	.97*	.90*	.93*	.98														
5. Time 1 stress	−.27*	−.29*	−.27*	−.24*	.84													
6. Time 1 depression	−.23*	−.23*	−.22*	−.21*	.78*	.89												
7. Time 1 anxiety	−.19*	−.18*	−.19*	−.17*	.63*	.60*	.83											
8. Time 1 total DASS	−.26*	−.27*	−.26*	−.24*	.92*	.91*	.81*	.94										
9. Time 2 stress	−.30*	−.28*	−.32*	−.27*	.50*	.49*	.39*	.52*	.86									
10. Time 2 depression	−.31*	−.30*	−.31*	−.29*	.39*	.51*	.35*	.47*	.75*	.91								
11. Time 2 anxiety	−.26*	−.25*	−.27*	−.24*	.41*	.48*	.48*	.52*	.74*	.66*	.87							
12. Time 2 total DASS	−.32*	−.31*	−.33*	−.30*	.48*	.55*	.44*	.56*	.93*	.90*	.86*	.95						
13. Offense severity	−.33*	−.36*	−.27*	−.31*	.27*	.28*	.18*	.28*	.28*	.29*	.19*	.29*	—					
14. Time since offense[a]	−.19*	−.21*	−.15†	−.19*	−.14	−.05	−.06	−.09	.07	.12	−.01	.07	.26*	—				
15. Race W/NW[b]	−.03	−.04	−.05	−.01	.05	−.07	−.05	−.03	−.05	−.17*	−.11	−.12	.02	.00	—			
16. Race B/NB[c]	.02	.01	.03	.03	−.14†	.00	−.07	−.08	−.09	−.01	−.04	−.05	−.11	−.03	.65*	—		
17. Time 1 and Time 2 interval	.08	.07	.07	.10	−.03	−.05	.01	−.03	.01	.00	.03	.01	−.02	.01	−.16*	−.19*	—	
18. Age at Time 1	.08	.06	.09	.10	.08	.05	.07	.07	.05	.07	.10	.08	.12	.16†	.02	−.01	−.02	—
M	4.23	3.81	4.30	4.57	.92	.68	.49	.69	.79	.57	.37	.58	3.87	.02	.75	.12	36.08	19.30
SD	1.37	1.52	1.37	1.36	.63	.66	.50	.53	.62	.60	.45	.50	1.05	.95	.43	.33	11.22	1.59
N	175	175	175	175	176	176	176	176	176	176	176	176	174	143	173	173	175	173

Note. Coefficient alphas are on the diagonal. EFI = Enright Forgiveness Inventory; DASS = Depression Anxiety Stress Scales–21.
[a] Time since offense was rank normal transformed. [b] White = 1, and non-White = 0. [c] Black = 1, and non-Black = 0.
† p < .10. * p < .05.

Negative Affect Schedule; Watson, Clark, & Tellegen, 1988) and have been found to possess adequate evidence of convergent and discriminant validity (Antony et al., 1998; Brown et al., 1997; Crawford & Henry, 2003; Lovibond & Lovibond, 1995b).

The DASS-21 contains three 7-item subscales: Depression (e.g., "I couldn't seem to experience any positive feelings at all"), Anxiety (e.g., "I felt scared without any good reason"), and Stress (e.g., "I tended to overreact to situations") symptoms. Using the past week as a referent point, each symptom is rated on a 4-point scale ranging from 0 (*did not apply at all*) to 3 (*applied to me very much, or most of the time*). Subscale scores were obtained by computation of a mean score for each of the items on the subscale. As can be seen in Table 1, internal consistency estimates were good at both time points and for all subscales.

Results

Preliminary Analyses

To examine potential biases due to attrition and nonresponse, I conducted a series of analyses within each cohort comparing (a) women who agreed at Time 1 to be contacted to be invited to participate in future studies versus those who did not want further contact and (b) among the subset who agreed to be contacted, those who completed the questionnaire versus those who did not complete the questionnaire (please see supplement materials, which are available on the Web at http://dx.doi.org/10.1037/0022-0167.53.3.350.supp). Comparing women who agreed to be contacted with those who did not want to be contacted, the two groups did not significantly differ on race, forgiveness, and the three psychological distress symptom subscales. In the first cohort, however, there was a significant difference for age group; by use of a categorical age variable, it was determined that 72.7% of 18 year olds agreed to be contacted compared with 54.9% of 19 year olds, 58.3% of 20 year olds, and 56.7% of those 21 years and older, $\chi^2(3, N = 279) = 8.75, p < .05$. Among those who agreed to be contacted, comparing women who completed at Time 2 versus those who did not complete, the two groups did not significantly differ on race, age, forgiveness, and the three psychological distress symptom subscales.

By use of the procedure for establishing equivalency outlined by Tryon (2001), inferential confidence intervals were also calculated for all continuous variables. A 5% significance level was set and an inferential confidence interval (CI) was computed around each mean. In computing the interval, the standard descriptive CI was reduced "such that nonoverlapping inferential CIs are algebraically equivalent to" a null hypothesis statistical test (Tryon, 2001, p. 374). Specifically, in these comparisons, the null hypothesis is that the groups are not equivalent. After calculating the inferential CIs, the range (R_g) for each comparison was calculated as the difference between the lower CI limit of the smaller mean and the upper CI limit of the greater mean. The delta (Δ) interval was also established for each comparison. The Δ interval reflects a difference, on the basis of substantive considerations, that is considered inconsequential. In this case, Δ intervals were set as one standard deviation (on the basis of the full sample for each cohort). Finally, each R_g was compared with each Δ interval. For all comparisons, the R_g was smaller than the Δ interval, indicating statistical equivalence (please see supplementary materials, available on the Web at http://dx.doi.org/10.1037/0022-0167.53.3.350.supp, for more information). Thus, the completers and noncompleters appeared comparable on the variables of interest at Time 1.

In a final set of comparisons, women in the first cohort were compared with women in the second cohort. No significant differences emerged on race, age in weeks, forgiveness, the three psychological distress symptom subscales, and weeks between Time 1 and Time 2. In addition, inferential CIs demonstrated equivalence. On the basis of the comparability between the two cohorts on variables of interest, the two cohorts were collapsed.

Data were screened for outliers and nonnormality. With regard to nonnormality, time since offense was determined to be significantly skewed and kurtotic and was Blom transformed and rank normalized (Blom, 1958); this resulted in nonsignificant skew and kurtosis levels. With regard to outliers, all values on the three forgiveness subscales and the DASS Stress subscale at both timepoints were within three standard deviations of the mean. One participant was more than three standard deviations above the mean on the Time 1 DASS depression scale with a value of 3.0, and 4 participants were more than three standard deviations above the mean on the Time 2 DASS Depression scale with values from 2.57 to 3.0. Two participants were more than three standard deviations above the mean on the Time 1 DASS Anxiety scale with values of 2.29 and 2.71, and 2 participants were more than three standard deviations above the mean on the Time 2 DASS Anxiety scale with values of 1.86 and 2.43. After examining the responses of these participants to all the variables of interest and determining that the outlying data points were potentially valid responses, and to maintain the largest possible sample for our structural model, I truncated values greater than three standard deviations above the mean at three standard deviations above the mean.

The frequency distribution for the offense severity item was examined. Sixty-three participants indicated experiencing a great deal of hurt from the transgression, 48 participants indicated much hurt, 40 participants indicated some hurt, 23 participants indicated a little hurt, and 6 participants indicated no hurt. The 6 participants indicating experiencing no hurt from the transgression were deleted from any further analyses, leaving a final sample size of 176.

Means, standard deviations, and correlation matrix for forgiveness subscales, psychological distress symptoms, offense severity, time since offense, race, and length of reinterview interval are presented in Table 1. Race and length of reinterview interval and age at Time 1 were examined as possible covariates; none of these variables were significantly correlated with forgiveness or psychological distress symptoms at Time 1 and 2 and, thus, were not included as covariates in the analyses.

Test of Hypothesized Relationship Between Forgiveness and Psychological Distress Symptoms

The relationship of offense-specific forgiveness at Time 1 to psychological distress symptoms at Time 1 and Time 2 was examined with structural equation modeling. Analyses were conducted in AMOS (Arbuckle & Wothke, 1999) by use of maximum likelihood estimation. Parameters were estimated with all available data (incomplete data were assumed to be missing at random and thus included in the parameter estimates). Forgiveness was modeled as a latent variable with three manifest indicators (affect, cognitions, and behaviors). Psychological distress symptoms at Time 1 was modeled as a latent variable with three manifest

indicators (depression, anxiety, and stress); a similar structure was used for psychological distress symptoms at Time 2.

Measurement model. The initial measurement model was estimated with covariances among all three latent variables (i.e., forgiveness at Time 1, psychological distress symptoms at Time 1 and Time 2) freely estimated; paths between manifest indicators and error terms were constrained to 1, and error variances were freely estimated. As can be seen in Table 2, manifest variables loaded strongly on the latent variables. The model fit was good, $\chi^2(24, N = 176) = 45.40$, $p < .01$, root-mean-square error of approximation = .07, 90% CI = .04–.10, comparative fit index = .99, Tucker Lewis index = .99.

Structural model. As an examination of the relationship of forgiveness at Time 1 to psychological distress symptoms at Time 1 and Time 2, the model depicted in Figure 1 was estimated. Because this model is equivalent to the measurement model described above, the fit indices are identical. According to the logic of the cross-lagged panel design (e.g., Finkel, 1995), by including the stability coefficient of Time 1 psychological distress symptoms predicting Time 2 psychological distress symptoms, we can interpret the path between Time 1 forgiveness and Time 2 psychological distress symptoms as the effect of Time 1 levels of forgiveness on change in psychological distress symptoms at Time 2.[3] Said another way, the path between forgiveness at Time 1 and psychological distress at Time 2 represents the partial association between forgiveness at Time 1 and psychological distress at Time 2, residualized for psychological distress at Time 1 (Cohen & Cohen, 1983). In these models, it is assumed that any deviation in Time 2 psychological distress beyond what is predicted from levels of Time 1 psychological distress represents change in psychological distress from Time 1 to Time 2.

The stability coefficient between Time 1 and Time 2 psychological distress symptoms ($\beta = .57$, $z = 7.30$, $p < .05$) was significant. Forgiveness at Time 1 was significantly negatively associated with psychological distress at Time 1 ($\beta = -.29$, $z = 3.58$, $p < .05$). Forgiveness at Time 1 was positively associated with improvement in distress represented as residualized Time 2 distress ($\beta = -.19$, $z = 2.70$, $p < .05$).

Table 2
Factor Loadings for the Measurement Model

Latent variable and indicator	Unstandardized factor loading	SE	Z	Standardized factor loading
Forgiveness at Time 1				
Affect	1.00			.95
Cognition	.88	.03	26.78**	.95
Behavior	.93	.03	31.07**	.98
Psychological distress at Time 1				
Depression	1.00			.88
Anxiety	.61	.06	10.29**	.70
Stress	.96	.07	13.59**	.89
Psychological distress at Time 2				
Depression	.88	.07	13.61**	.82
Anxiety	.64	.05	13.32**	.81
Stress	1.00			.91

Note. N = 176.
** p < .01.

Offense Severity and Time Since Offense

It was of interest to examine whether the relationship between forgiveness at Time 1 and change in psychological distress symptoms between Time 1 and Time 2 was moderated by offense severity or time elapsed since the offense. I conducted two hierarchical ordinary least squares regression analyses to test for moderation. All continuous predictor variables were mean centered to reduce multicollinearity. In the first analysis, offense severity was examined as a moderator, and psychological distress symptoms at Time 2 was the criterion variable ($n = 174$). As can be seen in Table 3, psychological distress symptoms at Time 1 were a significant predictor of psychological distress at Time 2. In the second step, forgiveness (computed as a total score) and offense severity were entered. As would be expected on the basis of the structural models, forgiveness significantly predicted change in psychological distress symptoms, and the relationship between offense severity and change in psychological distress symptoms was not significant. In the third and final step, the product term of forgiveness and offense severity was entered and was not significant. Thus, offense severity did not appear to moderate the relationship between forgiveness at Time 1 and change in psychological distress symptoms between Time 1 and Time 2.

In the second analysis, time since offense was examined as a moderator, and psychological distress symptoms at Time 2 was the criterion variable ($n = 142$). Psychological distress symptoms at Time 1 was entered on the first step. In the second step, as a control for differences in reinterview interval, weeks between Time 1 and Time 2 was entered and was not significantly related to change in psychological distress symptoms. In the third step, forgiveness and weeks since the offense at Time 1 were entered. Again, forgiveness significantly predicted change in psychological distress symptoms, and time since offense was not significantly related to change in psychological distress symptoms. In the fourth and final step, the product term of forgiveness and time since offense was entered and was significantly related to change in psychological distress symptoms. As illustrated in Figure 2, simple slopes analysis (Aiken & West, 1991) revealed that counter to prediction, among those reporting more recent events, forgiveness at Time 1 did not appear to be significantly related to change in psychological distress symptoms between Time 1 and Time 2 (b = −.02, ns). Among those reporting older events, however, those reporting lower levels of forgiveness reported a significantly greater increase in psychological distress symptoms than those reporting higher levels of forgiveness at Time 1 (b = −.14, p < .05).

Discussion

The present study examined whether forgiveness at Time 1 was predictive of psychological distress symptoms (i.e., depression, anxiety and stress symptoms) at Time 2, above and beyond psychological distress symptoms at Time 1. It was hypothesized that forgiveness at Time 1 would be negatively related to psychological

---

[3] Although the current analyses use the logic of the cross-lagged panel design, it should be noted that because forgiveness was assessed on only one occasion (Time 1), the current design is not a true cross-lagged panel analysis.
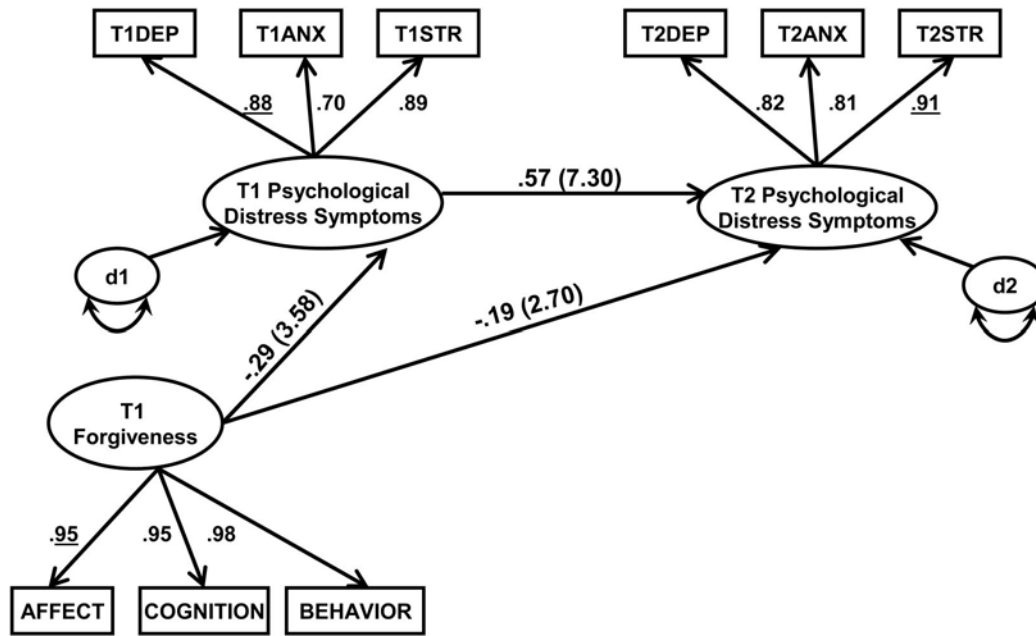
Figure 1. Structural model examining forgiveness at Time 1 as a predictor of psychological distress symptoms at Time 1 and Time 2 ($N = 176$). Obtained values (zs) are included in parentheses; values greater than 1.96 are significant at the $p < .05$ level. For each latent variable, the underlined factor loading was set to 1 for identification purposes. $\chi^2(24, N = 176) = 45.40$, $p < .01$, root-mean-square error of approximation $= .07$, comparative fit index $= .99$, Tucker–Lewis Index $= .99$. T1 = Time 1; T2 = Time 2; DEP = depression; ANX = anxiety; STR = stress; d1 = Disturbance 1; d2 = Disturbance 2.

distress symptoms at both Time 1 and Time 2 (controlling for Time 1 levels), and indeed, this prediction was supported by the present data.

The interpretation of the relation of forgiveness to psychological distress symptoms is strengthened by the longitudinal design; however, there are still a number of plausible alternative models that might account for the findings of the present study. For example, it may be that psychological distress reduces generally over time and that this reduction allows interpersonal forgiveness to increase. Thus, it would be premature to conclude that forgiving decreases psychological distress. That said, however, the present findings provide support for the potential benefits of forgiveness.

In addition, perceived severity of the offense and time since the offense at Time 1 were examined as potential moderators of the relationship between forgiveness at Time 1 and change in psychological distress symptoms between Time 1 and Time 2. Although offense severity was significantly related at the zero-order level to forgiveness (higher level of forgiveness reported for less severe offenses) and to psychological distress symptoms at both times (higher symptoms reported for more severe offenses), offense severity did not significantly moderate the relationship between forgiveness at Time 1 and change in psychological distress symptoms between Time 1 and Time 2. Time since offense at Time 1 (with weeks elapsed between Time 1 and Time 2 controlled for), however, did significantly moderate the relationship between forgiveness and change in psychological distress. Counter to prediction, forgiveness was more strongly related to change in psychological distress for older as opposed to more recent events. Specifically, forgiveness had a stronger linear relationship to psy-

chological distress when the offense was older as opposed to more recent.

It was hypothesized that the relationship between forgiveness and psychological distress would be stronger for more recent events as opposed to older events. McCullough et al. (2003) examined changes in forgiveness across time following a recent interpersonal transgression and found that forgiveness levels increased as time elapsed. It is important to note that participants in the McCullough study must have experienced an interpersonal transgression within the 16 weeks prior to the first measurement occasion, and the mean length of time elapsed was just under 5 weeks. In the present study, participants were asked to "think of the most recent experience of someone hurting you unfairly and deeply," and the average length of time at Time 1 elapsed since the self-selected incident was much longer than the McCullough et al. study and extremely variable (the average was 30 weeks with a standard deviation of 63 weeks, median of 7 weeks, and a range of 0.43–416 weeks).

The variability in time since offense raises interesting questions about the nature of the older events reported. Consistent with forgiveness theory, if the older events represent transgressions that a person is holding on to and ruminating about, it would not be surprising that these older events are more strongly related to distress symptoms than recent events. Examining the zero-order relationships in the present study, forgiveness was significantly negatively related to time since offense at Time 1. Further, offense severity is positively and significantly correlated with elapsed time since the offense. Together, these findings suggest that, in the present study, the older events are perceived as more severe and

Table 3
Hierarchical Regression Analysis of Offense Severity and Time Since Offense as Moderators of the Relation Between Forgiveness and Psychological Distress

Step and variables added	R^2	Adj. R^2	ΔR^2	ΔF	df	B	SE	β
Analysis A, criterion variable: Time 2 psychological distress								
1. Time 1 psychological distress	.31	.30	.31	75.97**	(1, 172)	.52	.06	.55***
2a. Forgiveness	.35	.34	.04	5.61**	(2, 170)	−.06	.02	−.17*
2b. Offense severity	.35	.34	.04	5.61**	(2, 170)	.05	.03	.10
3. Offense Severity × Forgiveness	.35	.33	.00	0.07	(1, 169)	−.01	.02	−.02
Analysis B, criterion variable: Time 2 psychological distress								
1. Time 1 psychological distress	.26	.26	.26	49.39***	(1, 140)	.49	.07	.51***
2. Reinterview interval in weeks	.26	.25	.00	0.53	(1, 139)	.00	.00	.05
3a. Forgiveness	.32	.30	.06	6.12**	(2, 137)	−.09	.03	−.23**
3b. Time since offense	.32	.30	.06	6.12**	(2, 137)	.04	.04	.08
4. Time Since Offense × Forgiveness	.35	.32	.02	4.99*	(1, 136)	−.06	.03	−.16*

Note. Adj. = adjusted.
* $p < .05$.   ** $p < .01$.   *** $p < .001$.

are associated with lower levels of forgiveness, analogous perhaps to an older wound that hasn't healed properly.

The finding that older events in the present study were perceived as more severe suggests that operationalizing the perceived potency of the transgression is an important direction for future research. In the present study, the single item measure of offense severity was likely insufficient to assess potency. Future research might productively expand assessments of potency to include relational variables such as importance of the relationship, frequency of contact, level of commitment, and closeness. Thus, to understand the impact of forgiveness on psychological distress, it will be fruitful to examine this association in the context of the individual's relationship with the perpetrator (at the time of the event and ongoingly).

Although forgiveness was significantly negatively associated with an increase in psychological distress symptoms between Time

Figure 2. Forgiveness at Time 1 × Time Since Offense predicting residualized gain in psychological distress symptoms from Time 1 to Time 2. Psychological distress at Time 2 controlling for Time 1 level of symptoms and weeks between Time 1 and Time 2. $N = 142$.

1 and Time 2, the present study can offer no insight into the potential mechanisms for this process (i.e., how does low forgiveness increase psychological distress). Recent work by McCullough et al. (2003) offers a potential model for examining how forgiveness might impact mental health. Using sophisticated statistical modeling, McCullough et al. examined changes in forgiveness, through revenge/avoidance motivations and benevolent motivations, across time following a recent interpersonal transgression. A limitation of the present study is the measurement of forgiveness (and perceived severity of offense) at only one point in time, thus limiting the ability to track potential changes in forgiveness in relation to psychological distress symptoms. Because forgiveness is a process that unfolds over time, an important extension of the present study would involve tracking the trajectories of both offense-specific forgiveness (for a recent event) and psychological distress symptoms.

The present study used an offense-specific, as opposed to dispositional, measure of forgiveness. Thus, participants were asked to report on affect, cognitions, and behaviors toward the perpetrator of their most recent interpersonal transgression in which they were hurt unfairly and deeply. Dispositional measures of forgiveness are usually either scenario-based measurements in which participants are asked to read vignettes and indicate how likely they would be to respond in a forgiving manner (e.g., DeShea, 2003) or people's ratings of their own forgivingness (e.g., "I tend to get over it quickly when someone hurts my feelings"; Brown, 2003). Little is known about the correspondence between offense-specific and dispositional measures of forgiveness, although Brown and Philips (2005) found that these two types of measures may correlate significantly when the offense is more severe. The use of an offense-specific measure in the present study could be argued to represent a more conservative test of the relation between forgiveness and psychological distress symptoms. That is, theoretically, one might predict a stronger relationship between dispositional measures of forgiveness and psychological distress symptoms across time given that the offense-specific measurement represented responses to a single transgression. It is important to acknowledge that because people identified unique and personal
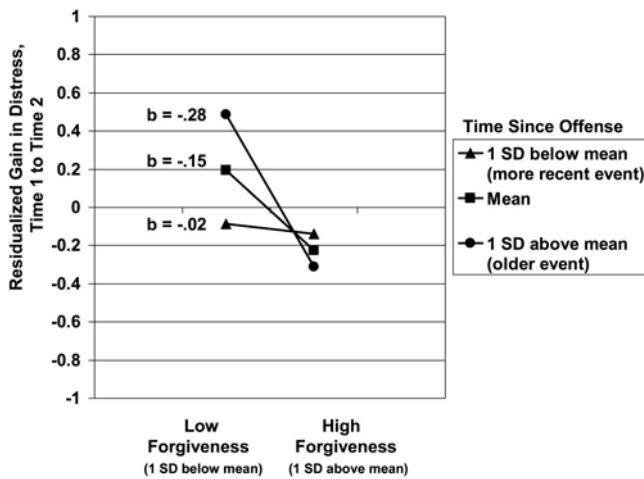
transgressions, one person may be responding to a sexual assault, whereas another may be responding to cross words between friends. The variability in transgressions may impact the generalizability of the present findings. Clearly, additional research examining the relative relations of offense-specific versus dispositional measures of forgiveness to psychological distress symptoms is needed.

The finding that offense-specific forgiveness was significantly negatively associated with psychological distress symptoms at a later time point is supportive of the potential benefit of forgiveness-based interventions in reducing psychopathology. Further, the present findings can be viewed as part of the growing body of literature exploring the use of approach-based interventions as opposed to traditional control-based interventions. Acceptance-based psychotherapeutic interventions such as Dialectical Behavior Therapy (Linehan, 1993) and Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999) as well as mindfulness-based approaches (Teasdale et al., 2000) are becoming increasingly visible as alternatives to traditional control-based psychotherapeutic interventions (e.g., cognitive restructuring). Control-based interventions have the goal of helping clients to master (or control) their symptoms (i.e., thoughts and emotional experiences) by "giving clients more and 'better' thought and emotional regulation strategies, and by replacing 'dysfunctional' thoughts with more 'functional' ones" (Eifert & Forsyth, 2005, p. 38). Such techniques communicate the message to clients that anxiety or depression must be regulated for psychological health to be achieved. In contrast, acceptance-based strategies encourage clients to be fully in contact with their emotional experience (and any pain inherent in this experience) and stay present in this experience on a moment-to-moment basis without judgment or attempts to alter or avoid their experience. Mindfulness is one example of an acceptance-based approach and involves training in meditation techniques so that one's mind may be kept in the present moment without judgment. Dialectical Behavior Therapy includes mindfulness training as an important component (Linehan, 1993). ACT is considered a third-wave behavior therapy (Hayes, 2004) and is based on the assumption that control techniques (such as those used in cognitive restructuring) are actually part of the problem rather than the solution to client's concerns (Hayes et al., 1999). ACT focuses on helping clients accept unwanted thoughts and feelings while simultaneously supporting clients in living a life that is consistent with their commitments and values (e.g., being a loving spouse).

Forgiveness interventions are consistent with an acceptance-based therapeutic stance, and indeed, elements of forgiveness are included within approaches such as ACT (Hayes et al., 1999). Several recent books (e.g., Enright, 2001; Worthington, 2001) have described process-model forgiveness interventions, and both models articulate that the first step in the process toward forgiveness is fully experiencing the negative emotions and pain associated with the offense. The ability to be present with a painful experience without altering or denying the pain is a key component of acceptance-based approaches.

Relatedly, future research might productively examine the impact of forgiving responses on mental health outcomes, particularly posttraumatic stress disorder, following trauma exposure. Indeed, forgiveness-based approaches share some potentially important overlap with exposure-based treatments for trauma in that both treatments begin with approaching (as opposed to avoiding) painful experiences. Thus, engaging in the process of forgiveness following interpersonal trauma exposure may have a potentially protective effect on the development of posttraumatic stress disorder.

Several additional limitations of the present study should be noted. Related to the issue of using a nonclinical sample, the present study used a female undergraduate sample, and questions of generalizability remain unanswered. Although gender differences were not specifically predicted, future research should investigate any moderating impact of gender. The sample was generally young, and it is unclear what role personal and interpersonal maturity may play in the relationship between forgiveness and interpersonal distress. In addition, the present sample was predominantly White; a larger and more diverse sample would allow for examination of any moderating effects of race and ethnicity. In sum, these findings must be extended to a more distressed, larger, and representative population.

It is important to note that although longitudinal data were used, the existence of third variables (e.g., negative affectivity) that may be related to both forgiveness reports and psychological distress symptoms cannot be ruled out. It should also be highlighted that 33 participants were omitted from the moderation analysis examining time since offense because of missing data. It cannot be determined whether the missing data are biased in a manner that may alter the form of the interaction reported here. Finally, with regard to the effect sizes in the present study, although some of the effects may be considered small effects (Cohen, 1988), Ahadi and Diener (1989) argued that when an outcome is determined by multiple factors, as is likely to be the case in the present study, a relatively low ceiling (e.g., an r of .45) exists on the maximum effect size that can be observed between a given outcome and any single determinant.

The present study examined depression, anxiety, and stress symptoms rather than mental health diagnoses proper. Overall, the level of psychological distress symptomatology is not comparable with a treatment-seeking sample. The measure used in the present study is particularly appropriate for examining symptomatology in a nonclinical sample, and there is good evidence suggesting the factor structure and performance of the DASS-21 items are comparable across clinical and nonclinical samples (Lovibond & Lovibond, 1995b). However, additional research is needed to replicate the present findings with more severe symptomatology. It would also be potentially quite useful to examine whether forgiveness is more strongly related to particular types of symptomatology (e.g., internalizing vs. externalizing disorders). In addition, future studies should examine trajectories of both forgiveness and psychological distress symptoms (e.g., anxiety, depression, posttraumatic stress disorder) across time in a variety of populations. Thus, although the present findings are promising with regard to the potential benefit of forgiveness on mental health symptoms, much additional research is needed to address this important question.

References

Ahadi, S., & Diener, E. (1989). Multiple determinants and effect size. *Journal of Personality and Social Psychology, 56,* 398–406.

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Thousand Oaks, CA: Sage.

Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric properties of the 42-item and 21-item versions of the Depression Anxiety Stress Scales in clinical groups and a community sample. *Psychological Assessment, 10,* 176–181.

Arbuckle, J. L., & Wothke, W. (1999). *Amos 4.0 user's guide.* Chicago: Smallwaters.

Baskin, T. W., & Enright, R. D. (2004). Intervention studies on forgiveness: A meta-analysis. *Journal of Counseling and Development, 82,* 79–82.

Beck, A. T., & Steer, R. A. (1990). *Beck Anxiety Inventory manual*. San Antonio, TX: Psychological Corporation.

Beck, A. T., Ward, C., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4,* 561–571.

Berry, J. W., & Worthington, E. L. (2001). Forgivingness, relationship quality, stress while imagining relationship events, and physical and mental health. *Journal of Counseling Psychology, 48,* 447–455.

Blom, G. (1958). *Statistical estimates and transformed beta-variables.* New York: Wiley.

Boon, S. D., & Slusky, L. M. (1997). Attributions of blame and forgiveness in romantic relationships: A policy-capturing study. *Journal of Social Behavior and Personality, 12,* 19–44.

Brown, R. P. (2003). Measuring individual differences in the tendency to forgive: Construct validity and links with depression. *Personality and Social Psychology Bulletin, 29,* 759–771.

Brown, T. A., Chorpita, B. F., Korotitsch, W., & Barlow, D. H. (1997). Psychometric properties of the Depression Anxiety Stress Scales (DASS) in clinical samples. *Behaviour Research and Therapy, 35,* 79–89.

Brown, R. B., & Philips, A. (2005). Letting bygones be bygones: Further evidence for the validity of the Tendency to Forgive Scale. *Personality and Individual Differences, 38,* 627–638.

Clara, I. P., Cox, B. J., & Enns, M. W. (2001). Confirmatory factor analysis of the Depression-Anxiety-Stress Scales in depressed and anxious patients. *Journal of Psychopathology and Behavioral Assessment, 23,* 61–67.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Crawford, J. R., & Henry, J. D. (2003). The Depression Anxiety Stress Scales (DASS): Normative data and latent structure in a large non-clinical sample. *British Journal of Clinical Psychology, 42,* 111–131.

DeShea, L. (2003). A scenario-based scale of willingness to forgive. *Individual Differences Research, 1,* 201–217.

Eifert, G. H., & Forsyth, J. P. (2005). *Acceptance and commitment therapy for anxiety disorders: A practitioner's treatment guide to using mindfulness, acceptance, and values-based behavior change strategies.* Oakland, CA: New Harbinger Publications.

Ekman, P., Davidson, R. J., Ricard, M., & Wallace, B. A. (2005). Buddhist and psychological perspectives on emotions and well-being. *Current Directions in Psychological Science, 14,* 59–63.

Enright, R. D. (2001). *Forgiveness is a choice: A step by step process for resolving anger and restoring hope.* Washington, DC: American Psychological Association.

Enright, R. D., & Coyle, C. T. (1998). Researching the process model of forgiveness within psychological interventions. In E. L. Worthington Jr. (Ed.), *Dimensions of forgiveness: Psychological research and theological perspectives* (pp. 139–161). Philadelphia: Templeton Foundation Press.

Enright, R. D., & Fitzgibbons, R. P. (2000). *Helping clients forgive: An empirical guide to resolving anger and restoring hope.* Washington, DC: American Psychological Association.

Enright, R. D., & Rique, J. (2004). *The Enright Forgiveness Inventory (EFI) user's manual.* Palo Alto, CA: Mind Garden Press.

Exline, J. J., Worthington, E. L., Hill, P., & McCullough, M. E. (2003). Forgiveness and justice: A research agenda for social and personality psychology. *Personality and Social Psychology Review, 7,* 337–348.

Eysenck, H. J., & Eysenck, S. B. G. (1975). *Manual of the Eysenck Personality Questionnaire*. London: Hodder & Stoughton.

Fincham, F. D. (2000). The kiss of the porcupines: From attributing responsibility to forgiving. *Personal Relationships, 7,* 1–23.

Fincham, F. D., & Kashdan, T. B. (2004). Facilitating forgiveness. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 617–637). Hoboken, NJ: Wiley.

Finkel, S. (1995). *Causal analysis with panel data.* Newbury Park, CA: Sage.

Goldberg, D., & Williams, P. (1991). *A user's guide to the General Health Questionnaire.* London: NFER Nelson.

Hargrave, T. D., & Sells, J. N. (1997). The development of a forgiveness scale. *Journal of Marital and Family Therapy, 23,* 41–62.

Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy, 35,* 639–665.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and commitment therapy.* New York: Guilford Press.

Kearns, J. N., & Fincham, F. D. (2005). A prototype analysis of forgiveness. *Personality and Social Psychology Bulletin, 30,* 838–855.

Kendler, K. S., Liu, X., Gardner, C. O., McCullough, M. E., Larson, D., & Prescott, C. A. (2003). Dimensions of religiosity and their relationship to lifetime psychiatric and substance use disorders. *American Journal of Psychiatry, 160,* 496–503.

Krause, N., & Ellison, C. G. (2003). Forgiveness by God, forgiveness of others, and psychological well-being in late life. *Journal of the Scientific Study of Religion, 42,* 77–93.

Linehan, M. M. (1993). *Cognitive-behavioral treatment of borderline personality disorder.* New York: Guilford Press.

Lovibond, S. H., & Lovibond, P. F. (1995a). *Depression Anxiety Stress Scales–21* [Electronic version]. Retrieved April 28, 2006, from http://www.psy.unsw.edu.au/Groups/Dass/.

Lovibond, P. F., & Lovibond, S. H. (1995b). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy, 33,* 335–343.

Luskin, F. (2003). *Forgive for good: A proven prescription for health and happiness.* San Francisco: Harper.

Macaskill, A. (2005). Defining forgiveness: Christian clergy and general population perspectives. *Journal of Personality, 73,* 1237–1265.

Maltby, J., Macaskill, A., & Day, L. (2001). Failure to forgive self and others: A replication and extension of the relationship between forgiveness, personality, social desirability and general health. *Personality and Individual Differences, 30,* 881–885.

Mauger, P. A., Perry, J. E., Freeman, T., Grove, D. C., McBride, A. G., & McKinney, K. E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity, 11,* 170–180.

McCullough, M. E., Fincham, F. D., & Tsang, J. A. (2003). Forgiveness, forbearance, and time: The temporal unfolding of transgression-related interpersonal motivations. *Journal of Personality and Social Psychology, 84,* 540–557.

McCullough, M. E., Hoyt, W. T., & Rachal, K. C. (2000). What we know (and need to know) about assessing forgiveness constructs. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 65–88). New York: Guilford Press.

McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (Eds.). (2000). *Forgiveness: Theory, research, and practice.* New York: Guilford Press.

McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close

relationships: II. Theoretical elaboration and measurement. *Journal of Personality and Social Psychology, 75,* 1586–1603.

McCullough, M. E., & Witvliet, C. V. O. (2002). The psychology of forgiveness. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 446–458). London: Oxford University Press.

Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1,* 385–401.

Seybold, K. S., Hill, P. C., Neumann, J. K., & Chi, D. S. (2001). Physiological and psychological correlates of forgivingness. *Journal of Psychology and Christianity, 20,* 250–259.

Spielberger, C. D., Gorsuch, R. L., & Lushene, P. E. (1970). *Manual for the State-Trait Anxiety Inventory.* Palo Alto, CA: Consulting Psychologists Press.

Spring, J. A. (2004). *How can I forgive you? The courage to forgive, the freedom not to.* Harper: New York.

Teasdale, J. D., Segal, Z. V., Williams, J. M. G., Ridgeway, V. A., Soulsby, J. M., & Lau, M. A. (2000). Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy. *Journal of Counseling and Clinical Psychology, 68,* 615–623.

Touissant, L. L., Williams, D. R., Musick, M. A., & Everson, S. A. (2001). Forgiveness and health: Age differences in a U.S. population sample. *Journal of Adult Development, 8,* 249–257.

Tryon, W. W. (2001). Evaluating statistical difference, equivalence, and indeterminacy using inferential confidence intervals: An integrated alternative method of conducting null hypothesis statistical tests. *Psychological Methods, 6,* 371–386.

Wade, N. G., & Worthington, E. L. (2003). Overcoming interpersonal offenses: Is forgiveness the only way to deal with unforgiveness? *Journal of Counseling and Development, 81,* 343–353.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of a brief measure of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54,* 1063–1070.

Witvliet, C. V. O., Phipps, K. A., Feldman, M. E., & Beckham, J. C. (2004). Posttraumatic mental and physical health correlates of forgiveness and religious coping in military veterans. *Journal of Traumatic Stress, 17,* 269–273.

Worthington, E. L. (1988). Understanding the values of religious clients: A model and its application to counseling. *Journal of Counseling Psychology, 35,* 166–174.

Worthington, E. L. (2001). *Five steps to forgiveness: The art and science of forgiving.* New York: Crown Publishers.

Worthington, E. L., Berry, J. W., & Parrott, L. (2001). Unforgiveness, forgiveness, religion, and health. In T. Plante & A. Sherman (Eds.), *Faith and health: Psychological perspectives* (pp. 107–138). New York: Guilford Press.

Worthington, E. L., & Wade, N. G. (1999). The psychology of unforgiveness and forgiveness and implications for clinical practice. *Journal of Social and Clinical Psychology, 18,* 385–418.

Younger, J. W., Piferi, R. L., Jobe, R. L., & Lawler, K. A. (2004). Dimensions of forgiveness: The views of laypersons. *Journal of Social and Personal Relationships, 21,* 837–855.