University Faculty Publications   University Faculty Scholarship

9-1-2014

Transgressors' guilt and shame: A longitudinal examination of forgiveness seeking

Blake M. Riek
Calvin University

Lindsey M. Root Luna
Hope College

Chelsea A. Schnabelrauch
Kansas State University

Transgressors' guilt and shame: A longitudinal examination of forgiveness seeking

Blake M. Riek[1]**, Lindsey M. Root Luna**[2]**, and Chelsea A. Schnabelrauch**[3]

Abstract

The current study examines forgiveness from the perspective of the transgressor, an often overlooked aspect of interpersonal forgiveness and a model of forgiveness seeking is proposed. Using a 2-wave longitudinal design, 166 participants completed measures of the characteristics of their transgressions, their feelings of guilt and shame, and their forgiveness-seeking behaviors. Cross-lagged correlational analysis indicated that guilt at time 1 was related to forgiveness seeking at time 2, but the opposite was not true. Path analyses revealed that guilt mediated the impact of transgression and relationship factors (i.e., transgression severity, responsibility, rumination, and relationship commitment) on forgiveness-seeking behavior over time. Shame, however, did not demonstrate any unique relationship with forgiveness-seeking behaviors. These findings suggest that guilt serves as a primary motivator for forgiveness seeking, indicating that it is a particularly important element to consider when working with transgressors. Overall, this study provides a conceptual model of the antecedents of forgiveness-seeking behaviors by transgressors, similar to those available for the antecedents of forgiveness seeking by victims.

Keywords

Forgiveness, forgiveness seeking, guilt, interpersonal relationships, shame, transgressions

[1] Calvin College, USA
[2] Hope College, USA
[3] Kansas State University, USA

Corresponding author:
Blake M. Riek, Department of Psychology, Calvin College, 3201 Burton Street SE, Grand Rapids, MI 49546, USA.
Email: bmr2@calvin.edu

While once seen as a more theological or philosophical issue, forgiveness has begun to receive a great deal of attention in psychology. A number of reviews (McCullough, Root, Tabak, & Witvliet, 2009; Worthington, 2005) and meta-analyses (Fehr, Gelfand, & Nag, 2010; Riek & Mania, 2012) have been published on the topic and forgiveness is associated with a number of positive benefits. For example, granting forgiveness has been shown to be associated with better health and well-being (Friedberg, Suchday, & Shelov, 2007; Lawler et al., 2005), lower levels of stress (Friedberg, Adonis, Von Bergen, & Suchday, 2005; Harris et al., 2006), more positive emotions (Little, Simmons, & Nelson, 2007; Takaku, 2001), and increased relationship satisfaction, commitment, and trust between the victim and the transgressor (Gordon, Hughes, Tomcik, Dixon, & Litzinger, 2009; McCullough et al., 1998). However, the vast majority of the psychological work on forgiveness has focused on the forgiveness process from the point of view of the victim and ignored the perspective of the perpetrator. This is a significant shortcoming since by its very nature, forgiveness is an interpersonal process; an understanding of when and why perpetrators seek forgiveness may be just as important for the health and well-being of the individuals involved in the relationship as when and why victims grant forgiveness. The goal of the current article is to examine forgiveness from the perspective of an offender by studying the factors that influence the forgiveness-seeking behaviors of perpetrators toward their victims over time.

Psychological research has not completely ignored the topic of seeking forgiveness. Sandage, Worthington, Hight, and Berry (2000) demonstrated that narcissism and self-monitoring are negatively related to forgiveness seeking. Witvliet, Ludwig, and Bauer (2002) found that imagining being forgiven led to more positive emotional reactions than imagining unforgiveness. Other researchers have focused on the consequences of the transgressor's behavior following the offense by examining the effect of apologies. While apologies are only one form of forgiveness seeking, evidence indicates that the presence of an apology increases the likelihood that a victim will grant forgiveness (Bachman & Guerrero, 2006; McCullough, Worthington, & Rachal, 1997). Furthermore, conciliatory gestures, like apologies, increase forgiveness by increasing victims' perceptions of transgressors agreeableness (Tabak, McCullough, Root Luna, Bono, & Berry, 2012). Yet, the majority of the work on apologies has been focused on victims' reactions to apologies, which cannot tell us when and why a person would offer an apology or engage in conciliatory behaviors. One study that did examine apology from the perpetrator's perspective found that perpetrators are more likely to regret not apologizing to a victim than regret apologizing (Exline, Deshea, & Holeman, 2007), suggesting that apologies can offer some emotional relief to offenders. Kelley (1998) analyzed retrospective narratives regarding forgiveness and found that offenders often cited improving well-being for the self or the other, or a desire to restore the relationship, as motivation for their actions.

Determinants of forgiveness seeking

We believe that many of the determinants of forgiveness seeking will overlap with the variables associated with the *granting* of forgiveness. Since interpersonal transgressions involve both a victim and a transgressor, the conflict factors that impact the decision to

forgive (e.g., relationship closeness, responsibility, and severity) may simultaneously be impacting the decision to seek forgiveness. We have utilized a framework similar to McCullough et al. (1998), which conceptually organized the determinants of granting forgiveness into several categories including: (a) social–cognitive (or affective) variables; (b) offense-related variables; and (c) relational variables. We expect that forgiveness seeking will also be driven by these categories of antecedents.

Social–cognitive determinants of forgiveness seeking

Numerous social–cognitive variables have been shown to relate to interpersonal forgiveness, including rumination, attributions about the offense, and judgments of responsibility and blame (Riek & Mania, 2012). Perhaps none of these variables is as strong of a predictor as empathy. Research has shown that empathy increases the desire to ease another's pain (Batson, Ahmad, & Tsang, 2002) and that people more readily forgive when they feel empathy for their transgressor (e.g., Berry, Worthington, Wade, Witvliet, & Keifer, 2005; Eaton & Struthers, 2006; McCullough et al., 1997, 1998; Zechmeister & Romero, 2002). We believe that similar social–cognitive and emotional factors may influence the forgiveness-seeking process. Specifically, perceptions of responsibility, rumination, and guilt are thought to act as social–cognitive/emotional antecedents of forgiveness seeking, with guilt acting as the primary motivator and mediator of forgiveness-seeking behavior, similar to empathy's role in granting forgiveness.

Guilt. Guilt is often negatively arousing, but it can serve an important role in maintaining and restoring interpersonal relationships (Baumeister, Stillwell, & Heatherton, 1994). Feelings of guilt may actually be a proper response when one has caused offense to another and may then serve as an important motivation for seeking forgiveness. Supporting this idea, Baumeister, Stillwell, and Heatherton (1995) found that when participants recalled and wrote about an instance where they had angered someone, those who reported feeling guilty about the event were also the most likely to report apologizing to the victim. Other work has demonstrated a link between guilt and motivation to repair a relationship (Berscheid & Walster, 1967). While this past research begins to uncover the interplay between guilt and seeking forgiveness, a fuller model of forgiveness seeking requires an examination of situational factors that may lead to guilt as well as an assessment of the causal direction of the relationship between guilt and forgiveness seeking. Does feeling guilty lead a person to seek forgiveness or does seeking forgiveness make a person feel less guilty?

When considering guilt, a related but distinct concept that must be examined is shame (Tangney, Miller, Flicker, & Barlow, 1996). While guilt is characterized by a negative view of one's behavior (i.e., "I did a bad thing"), shame is characterized by a negative view of one's global self (i.e., "I'm a bad person") (Lewis, 1971; Tangney & Dearing, 2002; Wolf, Cohen, Panter, & Insko, 2010). Research has consistently shown that these concepts are associated with unique antecedents and consequences. While there is some evidence that shame may prompt pro-social behavior in specific situations (De Hooge, Breugelmans, & Zeelenberg, 2008) shame is often associated with negative consequences. Specifically, compared to guilt, shame is typically rated as being more distressing and painful (Tangney,

1991; Tangney & Dearing, 2002), is more strongly associated with depressive symptoms (Kim, Thibodeau, & Jorgensen, 2011), and is linked with increases in anger and externalization of blame (Tangney, Wagner, Fletcher, & Gramzow, 1992). Guilt proneness (the tendency to experience guilt) is positively related to constructive response intentions, perspective taking, and empathic concern, while shame proneness (the tendency to experience shame) is associated with increases in malevolent intentions, personal distress, and neuroticism (Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996; Wolf et al., 2010). Relatedly, Covert, Tangney, Maddux, and Heleno (2003) found that shame proneness was negatively related to interpersonal problem solving, while guilt proneness displayed the opposite relationship.

Based on the research on the distinction between guilt and shame, we believe that these two constructs will have different effects on forgiveness seeking. Shame is associated with maladaptive responses (Tangney et al., 1996) and less empathy toward others (Tangney, 1991). Therefore, it seems that feelings of shame may decrease the likelihood of a transgressor seeking forgiveness. Conversely, guilt is associated with increases in empathy toward others (Tangney, 1991) and perceptions of personal responsibility (Tangney, 1990), which we expect will lead transgressors to engage in forgiveness-seeking behaviors.

An earlier cross-sectional study by Riek (2010) found that guilt did indeed serve as a mediator of the relationship between various other antecedents (e.g., event severity and rumination) and intentions to seek forgiveness. However, in that study, guilt was not distinguished from shame and the cross-sectional nature created difficulties in assessing the direction of causality. Both of these issues are addressed in the current longitudinal study. In the same way that empathy acts as a mediator between the social–cognitive, offense-related, and relational, antecedents and forgiveness, we posit that guilt will mediate the relationship between the majority of the other predicted determinants of forgiveness-seeking behavior (e.g., rumination, responsibility, and severity). While it is possible that forgiveness seeking may result in changes in guilt rather than guilt increasing forgiveness seeking, we believe that the latter is more likely than the former since guilt has previously been demonstrated to be causally related to other pro-social outcomes (see Miller, 2010).

Rumination. Rumination makes forgiveness more difficult. Dwelling on the offense and playing it over and over in one's mind are associated with decreases in forgiveness (Berry, Worthington, Parrott, O'Connor, & Wade, 2001; Kachadourian, Fincham, & Davila, 2005; McCullough et al., 1998). Rumination is also related to transgression severity, such that more rumination occurs as the severity of the transgression increases (Kachadourian et al., 2005). Less work has focused on rumination from the perspective of the perpetrator. However, while rumination negatively relates to granting forgiveness, we predict that it may positively relate to seeking forgiveness. Dwelling on one's transgression, with a focus on the specifics of the offense itself, may increase feelings of guilt, which then may also increase the likelihood that the transgressor will seek forgiveness. However, if by drawing attention to one's flaws (global evaluation) rather than a specific offense (specific behavior), rumination increases shame, the likelihood of seeking forgiveness would decrease. The current study will allow us to examine exactly how rumination about an offense impacts feelings about the transgression and the self.

Additionally, while rumination may increase forgiveness seeking, it is also possible that seeking forgiveness may result in less rumination, as forgiveness seeking may be used as a way to move past rumination. Using a longitudinal design allows one to examine the potential directionality of this relationship.

Responsibility. Research on granting forgiveness has shown that when the victim perceives that the offender had control (and hence responsibility) of their actions, forgiveness is less likely (Betancourt & Blair, 1992). Similarly, when victims perceive that the transgressor was intentional in their offense, resulting relationships are judged to be more distant, less satisfying, and less close (Vangelisti & Young, 2000). From the perspective of the offender, perceptions of responsibility may cause individuals to believe that since it is their fault, the onus is on them to begin to seeking forgiveness. This is not to say that people will only seek forgiveness when they feel responsible, but that perceptions of responsibility may make forgiveness seeking more likely. Previous work has demonstrated a positive correlation between considering one's responsibility and role in an offense and feelings of guilt (Tangney et al., 1996). Guilt, therefore, may act as a mediator between feelings of responsibility and forgiveness-seeking behavior.

Offense-related determinants of forgiveness seeking

Variables related to the specific offense have been shown to relate to granting forgiveness (McCullough et al., 1998), and we expect a similar pattern with forgiveness-seeking behaviors. In the forgiveness-granting literature, the perception of the severity of the transgression as well as the behavior of the transgressor (e.g., apologizing) has been shown to impact whether the victim forgives (e.g., Carlisle et al., 2012; Hoyt, Fincham, McCullough, Maio, & Davila, 2005). Severity has also been shown to influence the conditions forgiveness is offered in (e.g., forgiveness may be offered as long as the offense never happens again), or the way it is communicated (e.g., nonverbally or explicitly) (Waldron & Kelley, 2005). In our model, we expect that the severity of the transgression to increase the likelihood of forgiveness seeking via increases in guilt. In support of this idea, past research has found a positive relationship between the severity of the offense and the experience of guilt and shame (Hall & Fincham, 2008). However, the possibility remains that if the severity of the offense produces high levels of shame, rather than guilt, perceptions of severity could decrease forgiveness seeking.

Relational determinants of forgiveness seeking

Finally, the relational context that surrounds the offense has been shown to impact the granting of forgiveness. Interdependence theory has heavily shaped research and theorizing regarding the effect a relationship has on interpersonal forgiveness (e.g., Finkel, Rusbult, Kumashiro, & Hannon, 2002; Karremans & Van Lange, 2008; McCullough et al., 1998; Rusbult, Kumashiro, Finkel, & Wildschut, 2002). The level of commitment the victim and offender have toward one another is clearly an important factor in interpersonal conflict. Previous research has also examined constructs similar to commitment. For example, victims are more likely to forgive an offender when they are in a

close relationship with the offender (Finkel et al., 2002; Karremans & Aarts, 2006) or when they identify the relationship to be of high quality prior to the transgression (Guerrero & Bachman, 2010). For the perspective of the perpetrator, we believe that offenders will be more likely to seek forgiveness when they are committed and close to the victim. Since they have invested more into the relationship, they most likely have a higher motivation to repair that relationship after an offense has occurred. Some support for this was found by Exline et al. (2007), when they had perpetrators recall an offense for which they either did or did not apologize. Participants were more likely to recall an offense with a close-other when they thought about a time they had apologized compared to when they thought about a time they did not. Also, the closer the relationship, the more willing people are to sacrifice for the sake of that relationship (Van Lange et al., 1997), and seeking forgiveness may be a form of sacrifice. It involves admitting one's faults and wrongdoing, which goes against many of our self-serving biases (see Campbell & Sedikides, 1999). Finally, since guilt is thought to function as a motivation to maintain and repair relationships (Baumeister et al., 1994) and committed relationships hold more value, transgressions in these relationships may evoke higher levels of guilt. Additionally, committed and close relationship partners likely have intimate knowledge of one another's desires, feelings, strengths, and weaknesses, which may lead to more guilt when one injures his or her partner. This increase in guilt is then expected to lead to more forgiveness-seeking behaviors. However, it is conceivable that seeking (and perhaps receiving) forgiveness may increase the level of commitment to the offender, and the current study will bring us closer to understanding which relationship is more likely.

A model of forgiveness seeking

The goal of the current study is to longitudinally examine the forgiveness-seeking process. Participants who have recently offended someone will be assessed at two time points, allowing us to begin to look at directionality in a way that is not possible in a cross-sectional study. Based on previous research, we predict that guilt about an offense at Time 1 will lead to an increase in forgiveness-seeking behavior (e.g., apology, atonement, and explanation) at Time 2, while shame stemming from the offense will decrease the likelihood that the perpetrator will seek forgiveness. This will be examined in both cross-lagged correlations and a fuller path model. Furthermore, we will be assessing a number of situational factors of the offense (social–cognitive, offense-related, and relational) and predict that these factors will act as antecedents to forgiveness seeking, with guilt acting as the primary mediator of this relationship. While these antecedents may also show similar relationships with shame due to the correlation between guilt and shame, we expect guilt to be the primary mediator of their relationship with forgiveness seeking. Specifically, we will be examining the offender's perceptions of the severity of the offense, rumination about the offense, felt responsibility for the offense, and their closeness–commitment toward their relationship with the victim. As severity, rumination, responsibility, and commitment increase, we predict that guilt will also increase, which in turn will increase the likelihood of forgiveness-seeking behavior.

Method

Participants

Participants were recruited out of undergraduate psychology classes at three institutions. The first two institutions were Midwest liberal arts Christian colleges and the third institution was a Midwest state university. In order to be in the study, participants had to meet three criteria: (1) they had to be able to recall a time within the previous month when they offended, hurt, were in conflict, or seriously upset someone; (2) the incident had to be one that was not yet fully resolved; and (3) the participant needed to feel that he or she was at least partially at fault in the incident. These criteria ensured that our sample would be in a position to possibly seek forgiveness during the time frame of the study.

Initially 192 participants were admitted to the study; however, 26 participants had to be dropped from the study because they either misunderstood the instructions and/or did not give us enough information about the incident to confirm whether they met the required criteria (17 participants) or did not complete the second time point (9 participants). This left us with 166 participants (106 from the first Christian college, 24 from the second Christian college, and 36 from the state university). The mean age of participants was 19.4 years (SD = 3.76) and the sample contained 107 females and 59 males. In terms of race/ethnicity, 128 participants were White, 12 were Black, 13 were Asian, 1 was American Indian, and 6 identified as "Other" or did not indicate their race. In exchange for their participation, participants were given credit toward the fulfillment of a research requirement in their introductory psychology class or were given extra credit.

Procedure

After being recruited for the study, participants were given a questionnaire designed to assess their reactions and behaviors in response to their transgressions. This questionnaire was distributed to participants to complete on their own time and return within a week. First, they were asked to write a description of the incident. Then they completed the measures described below. Participants could write about a transgression against any type of person, and in the current sample, the transgressions written about were against the following: friendships (51.2%), romantic or ex-romantic partners (27.1%), family members (10.8%), acquaintances (6.6%), work/team members (1.2%), and other/unspecified (3%). Participants described several different types of transgressions ranging from minor disagreements to betrayals of trust and infidelity. The gender and race of the victim in each transgression was not recorded. After approximately 1 month, participants completed a second questionnaire with the same measures and procedure.

Antecedents of guilt and shame. At each time point, participants completed measures designed to assess the antecedents of guilt and forgiveness seeking.[1] Commitment to the relationship with the person who the participants hurt or were in conflict with was measured using a four-item scale (α =.89) adapted from Rusbult (1983) (e.g., "To what extent do you feel 'attached' to the person you hurt?"). Perceived responsibility was measured with a single-item measure ("How much of the incident you wrote about do you think was

YOUR fault?"). Rumination was measured using an eight-item scale (α =.95) adapted from McCullough, Bono, and Root (2007) to address the perspective of the offender (e.g., "I keep playing the offenses over and over in my mind"; and "I find it difficult not to think about the hurt I caused"). Perceived severity of the offense was measured with a single-item measure ("How serious do you think your offense was?"). All items were answered on a 1–7 scale, with higher numbers indicating higher degrees of each variable.

Guilt, shame, and forgiveness seeking. Participants' guilt and shame about the incident was measured using state guilt and shame scales developed by Tangney and colleagues (Marschall, Sanftner, & Tangney, 1994; Tangney & Dearing, 2002). The state guilt scale (α =.84) consists of five items focused on negative feelings about one's actions (e.g., I feel bad about what I did; I feel remorse, regret). The state shame scale (α =.86) consists of five items focused on negative feelings about one's self in relation to the incident (e.g., I want to sink into the floor and disappear; I feel worthless, powerless). Participants were asked how much they agreed with each statement when they thought about the offense they had committed. Forgiveness-seeking behavior was measured using a six-item scale (α =.91) designed to assess multiple ways that a person may seek forgiveness. Participants were asked to rate how much they had attempted the following: apologizing, reconciliation, making amends, drawn attention to their faults or weaknesses, admitted to the victim that they were wrong, and tried to explain their behavior. Some of these items were adapted from Tabak et al. (2012). All of the guilt, shame, and forgiveness-seeking items were completed on seven-point scales with higher numbers indicating higher levels of each variable.

Results

The means and correlations between the variables of interest[2] are presented in Table 1. Interestingly, there were no significant changes in mean levels of forgiveness seeking across time. However, there was a significant reduction in guilt over time (Time 1: $M = 4.11$; Time 2: $M = 3.16$; $t(165) = 9.98, p <.01$) and a significant reduction in shame over time (Time 1: $M = 2.92$; Time 2: $M = 2.30$; $t(165) = -7.00, p <.01$). The only antecedent that showed significant changes across time was rumination (Time 1: $M = 3.18$; Time 2: $M = 2.08$; $t(165) = -11.12, p <.01$). The antecedent variables were also significantly correlated with forgiveness seeking at both time points. As expected, the antecedents were also significantly related to guilt and shame. Guilt and shame were highly correlated at Time 1 ($r =.73$) and at Time 2 ($r =.81$). Both guilt and shame at Time 1 were associated with forgiveness seeking at Time 2; however, a different pattern emerges when examining the unique relationships of guilt and shame with the other variables of interest.

Next, we examined how the unique effects of guilt and shame related to both the antecedents of forgiveness seeking and forgiveness seeking itself. Tangney and colleagues have utilized partial correlations to examine "shame-free guilt" and "guilt-free shame," which deals with the fact that guilt and shame are at least moderately correlated (see Tangney et al., 1996). As can be seen in Table 2, even when controlling for the effects of shame (i.e., shame-free guilt), there were still significant positive relationships between guilt and forgiveness seeking, as well as the antecedents to forgiveness seeking. However, when controlling for the effect of guilt (i.e., guilt-free shame), none of the

Table 1. Intercorrelations of variables included within the forgiveness-seeking model.

	Variable	Mean (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Responsibility T1	4.43 (1.57)	1													
2	Severity T1	3.87 (1.48)	.32**	1												
3	Rumination T1	3.18 (1.57)	.20**	.48**	1											
4	Commitment T1	4.69 (1.87)	.13†	−.08	.23**	1										
5	Guilt T1	4.11 (1.49)	.43**	.53**	.73**	.30**	1									
6	Shame T1	2.29 (1.51)	.30**	.45**	.71**	.18*	.73**	1								
7	forgiveness seeking T1	3.84 (1.76)	.34**	.28**	.32**	.23**	.44**	.36**	1							
8	Responsibility T2	4.55 (1.66)	.62**	.31**	.29**	.20*	.47**	.34**	.30**	1						
9	Severity T2	3.87 (1.55)	.34**	.74**	.49**	.00	.49**	.42**	.30**	.42**	1					
10	Rumination T2	2.08 (1.25)	.10	.26**	.61**	.05	.28**	.35**	.32**	.15*	.32**	1				
11	Commitment T2	4.73 (1.97)	.20*	.00	.30**	.83**	.38**	.23**	.22**	.28**	.07	.13m	1			
12	Guilt T2	3.16 (1.51)	.33**	.49**	.70**	.17*	.67**	.73**	.30**	.48**	.49**	.67**	.24**	1		
13	Shame T2	2.30 (1.36)	.20**	.36**	.63**	.08	.54**	.69**	.25**	.39**	.35**	.63**	.16*	.81**	1	
14	forgiveness seeking T2	3.94 (1.92)	.26**	.30**	.41**	.35**	.52**	.42**	.69**	.37**	.34**	.14†	.33**	.40**	.32**	1

T1: Time 1; T2: Time 2.
**p < .01; *p < .05; †p < .10.

759

Table 2. Partial correlations of offense variables with guilt and shame.

	Time 1		Time 2	
	Shame-free guilt	Guilt-free shame	Shame-free guilt	Guilt-free shame
Responsibility	.32**	−.02	.29**	.02
Severity	.33**	.11	.38**	−.09
Rumination	.43**	.38**	.35**	.21**
Commitment	.25*	−.06	.19*	−.06
Forgiveness seeking	.28**	−.06	.25**	.00

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

relationships expect for rumination were significantly related to shame. This offers partial support to our original hypothesis that guilt would be related to increases in forgiveness seeking, while shame would be negatively related to it. While the unique effect of guilt on forgiveness seeking was found, shame appears to have no unique relationship with the process.
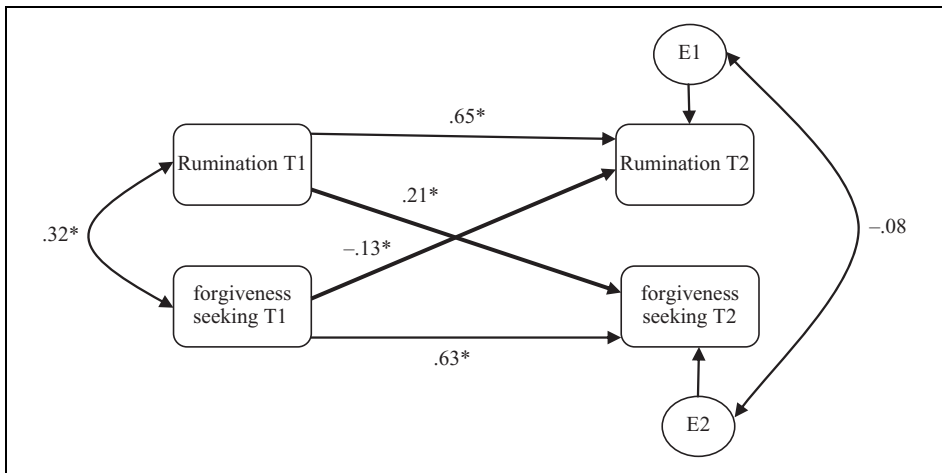
Cross-lagged analysis

In order to better assess the causal relationship between guilt and forgiveness seeking, a cross-lagged analysis was run using AMOS. While not as effective as experimental work at determining causal relationships, a cross-lagged analysis allows one to examine longitudinal correlational data (Kenny, 1975). In examining the relationship between variables A and B across time, if the relationship between A at Time 1 and B at Time 2 is stronger than the relationship between B at Time 1 and A at Time 2, it can be taken as tentative support for an A → B relationship. As seen in Figure 1, the path between guilt at Time 1 and forgiveness seeking at Time 2 was significant, while the path between forgiveness seeking at Time 1 and guilt at Time 2 was not, indicating that guilt is likely leading for forgiveness-seeking behavior rather than forgiveness-seeking behavior causing individuals to feel less guilty.

Additional cross-lagged models were run to examine the relationships between commitment and rumination with forgiveness-seeking behaviors across time. As previously mentioned, it may be that people are more likely to seek forgiveness in close relationships, but it is also possible that engaging (and perhaps receiving) forgiveness creates a higher commitment level. Similarly, rumination is predicted to increase forgiveness-seeking, but it may also be reduced by the forgiveness-seeking process. As seen in Figure 2, the relationship between rumination and forgiveness seeking appears to be bidirectional. Rumination at Time 1 appears to be related to increases in forgiveness seeking at Time 2, but forgiveness-seeking at Time 1 is also significantly related to decreases in rumination at Time 2. The results for the model with commitment (Figure 3) indicate that while commitment at Time 1 is related to forgiveness seeking at Time 2, the reverse relationship is not significant. Since there is less theoretical reasons to expect that perceived responsibility and severity would be impacted by forgiveness seeking rather than influencing it, those models are not presented.
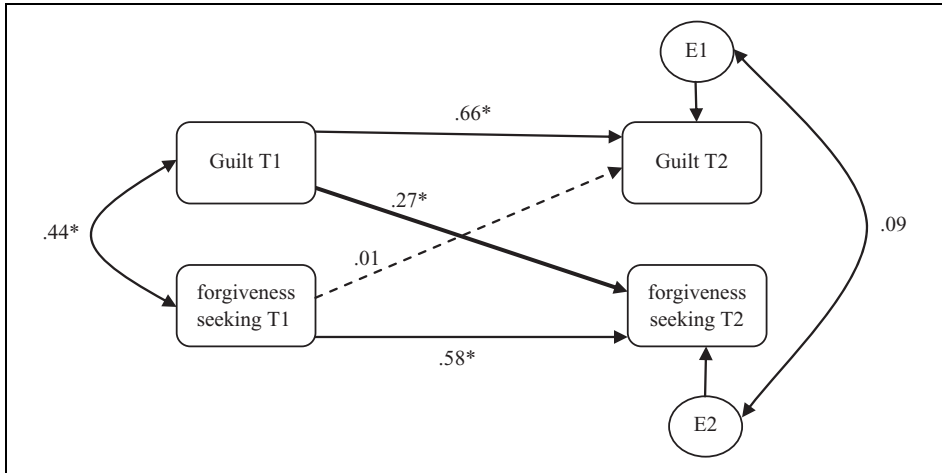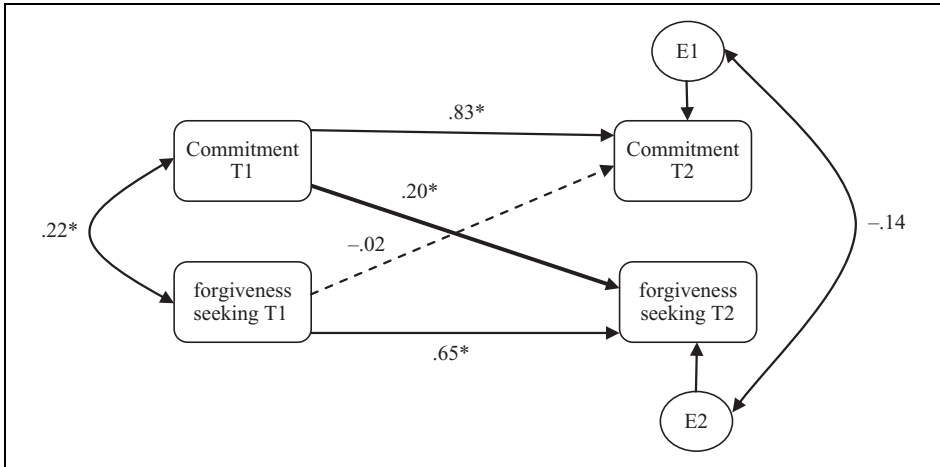
Figure 1. Cross-lagged correlations of guilt and forgiveness seeking.
Note. *indicates *p* < .05.

Figure 2. Cross-lagged correlations of rumination and forgiveness seeking.
Note. *indicates *p* < .05.

Path model analysis

Next, a path model based on our predictions was run using observed variables rather than latent ones due to our sample size. While a somewhat larger sample size would have been desirable based on the guidelines of Tabachnick and Fidel (2001), small sample sizes have been used effectively for path analyses in previous studies (e.g., Kessler & Mummendey, 2002; Lemay & Clark, 2008; Turner, Hewstone, & Voci, 2007), and we decided to use the comparative fit index (CFI) as a measure of model fit since it is less

**Figure 3.** Cross-lagged correlations of commitment and forgiveness seeking.
Note. *indicates $p < .05$.

impacted by sample size issues (see Bentler, 1990). Responsibility, severity, rumination, and commitment at Time 1 were used to predict guilt and shame at Time 1. Guilt and shame were then used to predict forgiveness-seeking behavior at Time 2. In order to fully assess the unique effects of guilt and shame, forgiveness seeking at Time 1 was included in the model to control for its effect on forgiveness seeking at Time 2. Also, based on previous findings demonstrating that commitment impacts forgiveness seeking beyond just increasing guilt (Riek, 2010), a direct path between commitment and forgiveness seeking at both time points was added. Finally, the error variances of guilt and shame were correlated due to their significant relationship.

The resulting path model can be seen in Figure 4. Various fit indices suggest good fit for the model ($\chi^2(6, N = 166) = 8.88, p = .18$; *CFI* $=.99$; *RMSEA* $=.05$). Perceived responsibility, severity, rumination, and commitment were all significantly related to increase in guilt, while only rumination and perceived responsibility were significantly related to shame. Looking at the longitudinal effects, guilt at Time 1 predicted forgiveness-seeking behavior at Time 2, even when controlling for the effects of both shame and forgiveness seeking at Time 1. This suggests that the guilt that participants were experiencing at Time 1 served as a motivation to seek forgiveness in some fashion from their victims during the examined time frame. Echoing the partial correlation findings, shame showed no significant unique relationship with forgiveness seeking.

Mediational analyses

As seen in Figure 4, the antecedents all displayed significant, unique relationships with guilt at Time 1 and guilt significantly predicted forgiveness seeking at Time 2, but to more directly test whether guilt acts as a mediator between the antecedent factors and forgiveness seeking, additional mediation analyses were run using a multiple regression model in two steps. First, the four antecedent variables were used to predict
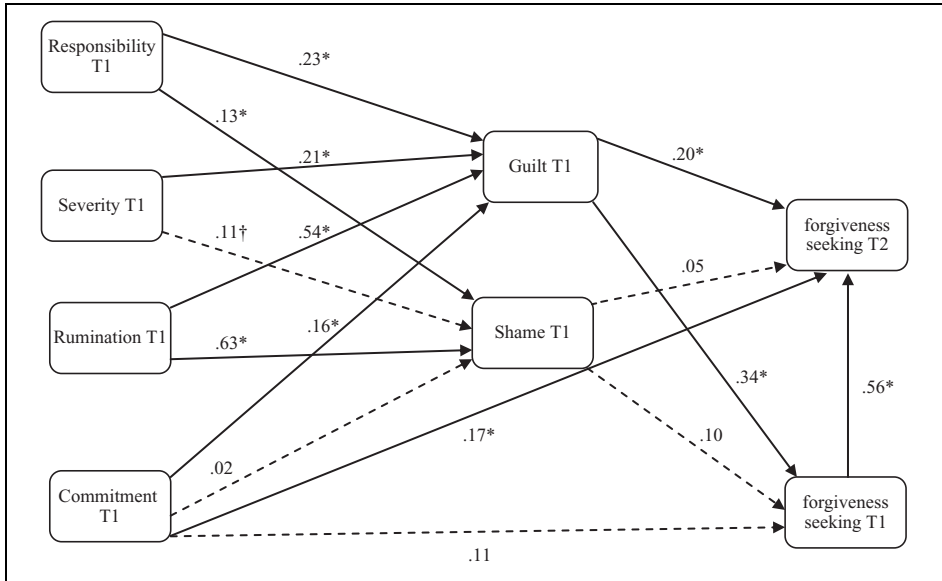
Figure 4. Longitudinal model of forgiveness seeking.
Note. *p < .05; †p < .10.

forgiveness seeking at Time 2. In the second step, guilt at Time 1 was entered as an additional predictor variable (based on the results of the previous path model, shame was not included). Additionally, as recommended by Preacher and Hayes (2008), the indirect effects of the antecedent variables and the 95% confidence intervals for these effects were calculated using a bias-corrected bootstrapping method (with 5000 boot-strap resamples) in the second step. Significant indirect effects would suggest that guilt mediated the relationship between the antecedents and forgiveness seeking. Further-more, two different measures of forgiveness seeking were used. In the first analysis, forgiveness seeking at Time 2 was used to examine whether guilt mediated the general relationship between the antecedents and forgiveness seeking. In the second analysis, a residualized variable for forgiveness seeking at Time 2 was used with forgiveness seeking at Time 1 partialed out. This allowed us to examine whether guilt mediated the relationships between the antecedent variables and the variance in forgiveness seeking at Time 2 that was not accounted for by forgiveness seeking at Time 1, capturing an aspect of forgiveness seeking across time.

As can be seen in Table 3, when forgiveness seeking at Time 2 is used as the dependent variable, the four antecedents display significant, unique relationships with forgiveness seeking (Step 1). The one exception is that responsibility only has a marginally significant relationship. When guilt was entered into the analysis (Step 2), the direct effects of the ante-cedents were reduced to nonsignificance, with the exception of commitment which still maintained a significant direct relationship with forgiveness seeking. Furthermore, the indi-rect effects of the antecedent variables were all significant. Overall, this suggests that guilt serves as a mediator of the effect that the situational factors of a transgression have on

Table 3. Multiple regression analyses examining guilt as a mediator.

	Step 1	Step 2	Step 2 indirect effects	95% CI
DV: Forgiveness seeking at Time 2				
Responsibility	.13†	.05	.08*	.03;.15
Severity	.16*	.09	.07*	.03;.14
Rumination	.24*	.06	.19*	.09;.30
Commitment	.29*	.23*	.06*	.02;.11
Guilt		.34*		
DV: Residualized forgiveness seeking at Time 2				
Responsibility	−.06	−.11	.05†	.00;.11
Severity	.10	.05	.04†	.00;.10
Rumination	.18*	.06	.11†	.00;.23
Commitment	.24*	.21*	.03*	.01;.09
Guilt		.21*		

CI: confidence interval.
Note. All reported coefficients are standardized. 95% Bias-corrected CIs for indirect effects were obtained using 5000 bootstrap resamples.
*p < .05; †p < .10

forgiveness-seeking behavior, although there still is a direct effect of commitment on forgiveness seeking at Time 2 as has been found previously (Riek, 2010). Also seen in Table 3, when the residualized forgiveness-seeking variable (with Time 1 forgiveness seeking partialed out) is used as the dependent variable, some of these relationships change. In Step 1, only rumination and commitment have significant effects with forgiveness seeking and in Step 2, the indirect effects of responsibility, severity, and rumination were reduced to marginal significance (p <.10). However, while the effects are weaker, this suggests that guilt mediates the relationships between the antecedent variables and forgiveness seeking across time, even when initial levels of forgiveness seeking are controlled for.

Discussion

The experience of being wronged by another is ubiquitous and has many consequences, as has been demonstrated by a variety of research focusing on the forgiveness process (McCullough et al., 2009; Worthington, 2005). However, the experience of harming another person, be it intentionally or accidentally, is no less universal. The data from this study confirm that there are a variety of factors that impact whether a transgressor engages in forgiveness-seeking behaviors. These variables can be grouped in similar categories utilized by models of granting forgiveness (McCullough et al., 1998). Specifically, the situation-specific factors of perceived responsibility, transgression severity, rumination, and commitment all significantly influenced guilt, and consequently forgiveness seeking both concurrently and in the future. These results give insight into ways of encouraging forgiveness seeking. For example, getting people to see their own responsibility and the severity of their transgressions may encourage forgiveness seeking, which may then facilitate relationship repair.

The results of the cross-lagged correlations also revealed some interesting information about the possible causal direction between commitment and rumination with forgiveness seeking. While commitment at Time 1 was predictive of forgiveness seeking at Time 2, forgiveness seeking at Time 1 did not predict any changes in commitment at Time 2. This at least suggests that while commitment increases the likelihood of seeking forgiveness, the act of seeking forgiveness does not change how committed the transgressor is to the victim. This does not necessarily mean that seeking forgiveness will never result in increased commitment. If seeking forgiveness leads to a higher likelihood of receiving forgiveness, this received forgiveness may increase felt commitment, but the mere act of seeking forgiveness itself does not appear to impact relational commitment. As for the relationship between rumination and forgiveness seeking, it appears that it may be bidirectional. Rumination was associated with later forgiveness seeking, but forgiveness seeking was also related to later decreases in rumination. Dwelling on the offense may drive one to ask for forgiveness, but that very act of seeking forgiveness may be cathartic in some way, which allows the transgressor to move on.

Guilt appears to act as a primary motivator of forgiveness seeking, similar to the way empathy acts as a motivator of granting forgiveness. Although we did not find shame to be negatively related to forgiveness seeking as predicted, it was clearly not positively related to seeking forgiveness. Furthermore, while this research suggests shame does not negatively impact forgiveness seeking, shame has been associated with a variety of negative outcomes and attributes, such as painful and distressing feelings, symptoms of depression, and hostility (Tangney & Dearing, 2002) and therefore does not seem to be a desirable emotion to foster when dealing with transgressions.

Understanding the factors that influence forgiveness seeking can have far-reaching implications. Just as the research on the factors that influence the granting of forgiveness have spurred on the development of interventions (see Baskin & Enright, 2004 and Lundahl, Taylor, Stevenson, & Roberts, 2008 for a review and meta-analysis), understanding the factors that promote forgiveness seeking and ultimately, the factors that promote relationship reconciliation, has the potential for furthering interventions for increasing forgiveness seeking. Research has revealed significant mental, emotional, and physical costs to unresolved stress and interpersonal conflict (e.g., Lawler et al., 2003; Witvliet, Ludwig, & Vander Lann, 2001), so understanding how to help individuals resolve conflicts they have caused could have rich ramifications.

Interestingly, out of all the antecedent factors, only rumination was significantly related to shame in both the partial correlations and the path model. So, rumination appears to be related to increases in both shame and guilt, but only guilt is related to forgiveness seeking. Therefore, encouraging rumination, which is defined above as the act of dwelling on the offense and playing it over and over in one's mind, appears to be one way to help transgressors consider their actions. However, since rumination also increased shame, it is possible that rumination acts as a double-edged sword: dwelling on the offense may easily lead to dwelling on one's own incompetence or negative qualities. Therefore, it will be important to encourage transgressors to accept responsibility for their actions (i.e., feel guilty) without making global negative attributions about the self.

Only recently have publications begun to emerge in the psychological literature on dealing with shame, while still allowing for guilt and a moral conscience (e.g., Tangney & Dearing, 2002; Dearing & Tangney, 2011). Related to this issue, some researchers have argued for a distinction between self-rumination and self-reflection, with self-rumination clearly correlated with shame, and self-reflection sometimes correlated with guilt and empathy (Joireman, 2004; Joireman, Parrott, Hammersla, 2002). It may be that the rumination scale used in this study was not specific enough to distinguish between rumination and reflection; future work that differentiates between rumination and reflection may allow further clarification the role of rumination in guilt and shame and ultimately in forgiveness-seeking behaviors.

Another relevant issue concerns the measurement of guilt and shame. The current study used a measure of state guilt and shame that is consistent with Tangney and colleagues view of guilt and shame (Marschall et al., 1994), but some research has recently begun to distinguish between evaluative and behavioral aspects of guilt and shame (see Cohen, Wolf, Panter, & Insko, 2011). Evaluative aspects involve offenders' perceptions of either their guilt ("I did a bad thing") or shame ("I am a bad person"), while the behavioral aspects focus on behavioral tendencies that follow these emotions (guilt: "I would try to change my behavior"; shame: "I would stop spending time with the victim."). Cohen and colleagues found that while there were no predictive differences between evaluative and behavioral measures of guilt, differences did exist between evaluative and behavioral measure of shame. In general, behavioral aspects of shame seem to be related to more maladaptive behavior than evaluative aspects. The measure in the current study focuses mostly on evaluative components and therefore did not allow us to parse apart the potentially different effects of evaluative versus behavioral manifestations of guilt and shame. Future work should consider this distinction and one possibility is that behavioral aspects of shame will indeed reduce the likelihood of seeking forgiveness (as per our original prediction).

Another limitation of the current study revolves around the time points measured. We have assessed only two time points, which is an improvement over a single data collection, but this does not address fully the inherently longitudinal aspect of forgiveness (see McCullough, Fincham, & Tsang, 2003; and McCullough & Root, 2005, for a full description of this issue). Other work examining forgiveness granting, however, has found that the majority of forgiveness granting occurs within the first 3 months of a transgression (McCullough, Root Luna, Berry, Tabak, & Bono, 2010). It stands to reason, therefore, given that the majority of forgiveness-seeking behavior likely occurs prior to forgiveness seeking (although not necessarily) that we have captured a large amount of the likely forgiveness-seeking behavior in this 2-month time frame (time point 1 was completed within 1 month of the offense). By using only these two time points, we also hope to avoid issues related to practice effects in repeated measures designs.

We do recognize that there is a possibility that by asking participants about their transgressions and feelings of guilt and shame, we may have prompted them to seek forgiveness more than they normally would have. This is an unfortunate necessity in examining an ongoing conflict. However, there was not a significant increase in forgiveness seeking from Time 1 ($M = 3.84$) to Time 2 ($M = 3.94$) indicating that there was not an overall effect of our measurements prompting more forgiveness-seeking

behavior. So, while some individuals increased in forgiveness seeking over the month of the study, others decreased. The path model, however, revealed which factors (e.g., responsibility, severity, commitment, and guilt) impacted these changes. Furthermore, even if the current study drew additional attention to the unresolved transgressions, there are many real-world circumstances that often do the same thing. For example, a friend may point out one's responsibility or help one see the severity of his or her transgression, which may prompt the person to seek forgiveness. What is important is that even once attention was drawn to the unresolved transgression, it was the situational factors of the offense and the emotional reactions that predicted the degree of forgiveness seeking.

While this model has looked at the direct and indirect effects of various antecedents on forgiveness seeking, future work could begin to investigate possible interactions among the antecedents. For example, the severity of an offense may have a larger impact on forgiveness seeking when commitment is high rather than low. Since the relationship is more important, transgressors may be more sensitive to severity. Perhaps, rumination's impact on guilt and forgiveness seeking is moderated by perceived responsibility. Questions like these offer a more nuanced way of examining the complex issues that are often parts of interpersonal conflict.

Another area that could be examined is whether the act of merely seeking forgiveness is enough to alleviate feelings of guilt or if forgiveness needs to be granted in order for this to occur. It is possible that simply attempting to obtain forgiveness from a victim would help satisfy the motivations arising from one's guilty feelings. In a sense, even if the victim refuses to forgive, the transgressor may feel that he or she has at least attempted to rectify the situation which could then lower guilt perceptions. On the other hand, perhaps when one's attempt at seeking forgiveness is rebuffed, it could result in an increase in guilt now that it is clear how upset the victim still is. Obviously, there are still a number of unknowns about the outcomes of forgiveness seeking.

As mentioned previously, forgiveness seeking is an understudied area of research. This is the first longitudinal study in poorly understood area, revealing unique insights into the behaviors and motivations involved in the forgiveness-seeking process. Given that an interpersonal transgression always involves two parties, it stands to reason that a fuller treatment of the experience of both parties involved is warranted. Indeed, exploring the dynamics of the relationship itself, as well as the experience of each individual, would greatly add to our current understanding. Nevertheless, we now have a clearer understanding of a variety of the precursors to forgiveness seeking. The severity of the offense and feelings of responsibility significantly impacted feelings of guilt and seeking forgiveness from the person who has been wronged. While the characteristics of the offense did not impact shame, suggesting that it may be more stable, rumination about the offense was a significant predictor of shame. So, obviously, feelings of shame are malleable, as are feelings of guilt. Higher levels of commitment are associated with increased guilt and ultimately forgiveness-seeking behaviors, as well as independently influencing forgiveness seeking. Clearly, how committed one is to a relationship partner may prompt attempts to reconcile apart from feelings of responsibility or guilt (compare McCullough et al., 1998; Riek, 2010). This work, along with future endeavors, offers the opportunity to further comprehend how transgressions and forgiveness affect both our private and collective experiences.

Notes

1. In addition to the variables described here, participants also completed a series of personality measures (e.g., extraversion, neuroticism, openness, etc.), a measure of victim's reactions, and a measure of religiosity. However, these variables did not significantly relate to forgiveness-seeking behavior and in the interest of space, these variables will not be discussed.
2. The samples from the Christian colleges and the state university were examined together since analyses revealed that there were no significant differences between the two samples on the variables of interest with the exception of offense severity. For this variable, the state university sample reported more severe offenses ($M = 4.33$) than the Christian college samples ($M = 3.75$), $t(164) = 2.13$, $p < .05$. Further analyses revealed no significant differences in the average age between the samples or the distribution of gender between the samples.

References

Bachman, G. F., & Guerrero, L. K. (2006). Forgiveness, apology, and communicative responses to hurtful events. *Communication Reports*, *19*, 45–56.

Baskin, T. W., & Enright, R. D. (2004). Intervention studies on forgiveness: A meta-analysis. *Journal of Counseling & Development*, *82*, 79–90.

Batson, C. D., Ahmad, N., & Tsang, J. (2002). Four motives for community involvement. *Journal of Social Issues*, *58*, 429–445.

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, *115*, 243–267.

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1995). Personal narratives about guilt: Role in action control and interpersonal relationships. *Basic and Applied Social Psychology*, *17*, 173–198.

Bentler, P. M.(1990). Comparative fit indexes in structural models. *Psychological Bulletin*, *107*, 238–446.

Berry, J. W., Worthington, E. L., Parrott, L., O'Connor, L. E., & Wade, N. G. (2001). Dispositional forgivingness: Development and construct validity of the Transgression Narrative Test of Forgivingness (TNTF). *Personality and Social Psychology Bulletin*, *27*, 1277–1290.

Berry, J. W., Worthington, E. L., Jr., Wade, N. G., Witvliet, C. V. O., & Kiefer, R. (2005). Forgiveness, moral identity, and perceived justice in crime victims and their supporters. *Humboldt Journal of Social Relations*, *29*, 137–163.

Berscheid, E., & Walster, E. (1967). When does a harm-doer compensate a victim? *Journal of Personality and Social Psychology*, *6*, 435–441.

Betancourt, H., & Blair, I. (1992). A cognition (attribution)-emotion model of violence in conflict situations. *Personality and Social Psychology Bulletin*, *18*, 343–350.

Campbell, W. K., & Sedikides, C.(1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of General Psychology*, *3*, 23–43.

Carlisle, R. D., Tsang, J-A., Ahmad, N. Y., Worthington, E. L., Jr., Witvliet, C. V. O., & Wade, N. (2012). Do actions speak louder than words? Differential effects of apology and restitution on behavioral and self-report measures of forgiveness. *The Journal of Positive Psychology*, *7*, 294–305.

Cohen, T. R., Wolf, S. T., Panter, A. T., & Insko, C. A. (2011). Introducing the GASP scale: A new measure of guilt and shame proneness. *Journal of Personality and Social Psychology*, *100*, 947–966.

Covert, M. V., Tangney, J. P., Maddux, J. E., & Heleno, N. M. (2003). Shame proneness, guilt proneness, and interpersonal problem solving: A social cognitive analysis. *Journal of Social and Clinical Psychology*, *22*, 1–12.

Dearing, R. L., & Tangney, J. P. (Eds.) (2011). *Shame in the therapy hour*. Washington, DC: APA Books.

De Hooge, I. E., Breugelmans, S. M., & Zeelenberg, M. (2008). Not so ugly at all: When shame acts as a commitment device. *Journal of Personality and Social Psychology*, *95*, 933–943.

Eaton, J., & Struthers, C. W. (2006). The reduction of psychological aggression across varied interpersonal contexts through repentance and forgiveness. *Aggressive Behavior*, *32*, 195–206.

Exline, J. J., DeShea, L., & Holeman, V. T. (2007). Is apology worth the risk? Predictors, outcomes, and ways to avoid regret. *Journal of Social and Clinical Psychology*, *26*, 479–504.

Fehr, R., Gelfand, M., & Nag, M. (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin*, *5*, 894–914.

Finkel, E. J., Rusbult, C. E., Kumashiro, M., & Hannon, P. A. (2002). Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal of Personality and Social Psychology*, *82*, 956–974.

Friedberg, J. P., Adonis, M. N., Von Bergen, H. A., & Suchday, S. (2005). September 11th related stress and trauma in New Yorkers. *Stress and Health*, *21*, 53–60.

Friedberg, J. P., Suchday, S., & Shelov, D. V. (2007). The impact of forgiveness on cardiovascular reactivity and recovery. *International Journal of Psychophysiology*, *65*, 87–94.

Gordon, K. C., Hughes, F. M, Tomcik, N. D., Dixon, L. J., & Litzinger, S. (2009). Widening spheres of impact: The role of forgiveness in marital and family functioning. *Journal of Family Psychology*, *23*, 1–13.

Guerrero, L. K., & Bachman, G. F. (2010). Forgiveness and forgiving communication in dating relationships: An expectancy-investment explanation. *Journal of Social and Personal Relationships*, *27*, 801–823.

Harris, A. H., Luskin, F., Norman, S. B., Standard, S., Bruning, J., Evans, S., & Thoresen, C. E. (2006). Effects of a group forgiveness intervention on forgiveness, perceived stress, and trait-anger. *Journal of Clinical Psychology*, *62*, 715–733.

Hall, J. H., & Fincham, F. D. (2008). The temporal course of self-forgiveness. *Journal of Social and Clinical Psychology*, *27*, 171–198.

Hoyt, W. T., Fincham, F. D., McCullough, M. E., Maio, G., & Davila, J. (2005). Responses to interpersonal transgressions in families: Forgivingness, forgivability, and relationship-specific effects. *Journal of Personality and Social Psychology*, *89*, 375–394.

Joireman, J. (2004). Empathy and the self-absorption paradox II: Self-rumination and self-reflection as mediators between shame, guilt, and empathy. *Self and Identity*, *3*, 225–238.

Joireman, J. A., Parrott, L. P., & Hammersla, J. (2002). Empathy and the self-absorption paradox: Support for the distinction between self-rumination and self-reflection. *Self and Identity*, *1*, 53–65.

Kachadourian, L. K., Fincham, F., & Davila, J. (2005). Attitudinal ambivalence, rumination, and forgiveness of partner transgressions in marriage. *Personality and Social Psychology Bulletin*, *31*, 334–342.

Karasawa, K., & Mitani, N. (2006). Perception of unfairness and intergroup support provision: The role of guilt feelings and attribution of responsibility. *Japanese Journal of Experimental Social Psychology*, *45*, 158–165.

Karremans, J. C., & Aarts, H. (2006). The role of automaticity in determining the inclination to forgive close others. *Journal of Experimental Social Psychology*, *43*, 902–917.

Karremans, J. C., & Van Lange, P. A. M. (2008). The role of forgiveness in shifting from "me" to "we." *Self and Identity*, *7*, 75–88.

Kelley, D. L. (1998). The communication of forgiveness. *Communication Studies*, *49*, 1–17.

Kenny, D. A. (1975). Cross-lagged panel correlation: A test for spuriousness. *Psychological Bulletin*, *82*, 887–903.

Kessler, T., & Mummendey, A. (2002). Sequential or parallel processes? A longitudinal field study concerning determinants of identity management strategies. *Journal of Personality and Social Psychology*, *82*, 75–88.

Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*, *137*, 68–96.

Lawler, K. A., Younger, J. W., Piferi, R. L., Billington, E., Jobe, R., Edmondson, K., & Jones, W. H. (2003). A change of heart: Cardiovascular correlates of forgiveness in response to interpersonal conflict. *Journal of Behavioral Medicine*, *26*, 373–393.

Lawler, K. A., Younger, J. W., Piferi, R. L., Jobe, R., Edmondson, K., & Jones, W. H. (2005). The unique effects of forgiveness on health: An exploration of pathways. *Journal of Behavioral Medicine*, *28*, 157–167.

Lemay, E. P., Jr., & Clark, M. S. (2008). "Walking on eggshells": How expressing relationship insecurities perpetuates them. *Journal of Personality and Social Psychology*, *95*, 420–441.

Lewis, H. B. (1971) *Shame and guilt in neurosis*. New York, NY: International Universities Press.

Little, L. M., Simmons, B. L., & Nelson, D. L. (2007). Health among leaders: Positive and negative affect, engagement and burnout, forgiveness and revenge. *Journal of Management Studies*, *44*, 243–260.

Lundahl, B. W., Taylor, M. J., Stevenson, R., & Roberts, K. D. (2008). Process-based forgiveness interventions: A meta-analytical review. *Research on Social Work Practice*, *18*, 465–478.

Marschall, D., Sanftner, J., & Tangney, J. P. (1994). *The state shame and guilt scale*. Fairfax, VA: George Mason University.

McCullough, M. E., Bono, G., & Root, L. M. (2007). Rumination, emotion, and forgiveness: Three longitudinal studies. *Journal of Personality and Social Psychology*, *92*, 490–505.

McCullough, M. E., Fincham, F. D., & Tsang, J. (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., Luna, L. R., Berry, J. W., Tabak, B. A., & Bono, G. (2010). On the form and function of forgiving: Modeling the time-forgiveness relationship and testing the valuable relationships hypothesis. *Emotion*, *10*, 358–376.

McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Jr., 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., & Root, L. M. (2005). Forgiveness as change. In E.L. Worthington, Jr. (Ed.), *Handbook of Forgiveness* (pp. 91–108). New York: Brunner-Routledge.

McCullough, M. E., Root, L. M., Tabak, B., & Witvliet, C. V. O. (2009). Forgiveness. In S. J. Lopez (Ed.), *Handbook of positive psychology* (2nd ed., pp. 427–435). New York, NY: Oxford.

McCullough, M. E., Worthington, E. L, Jr., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology*, *73*, 321–336.

Miller, C. (2010). Guilt and helping. In A. Columbis (Ed.) *Advances in psychology research* (*Vol. 68*, pp. 117–138). New York, NY: Nova Science Publishers.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879–891.

Riek, B. M. (2010). Transgressions, guilt, and forgiveness: A model of seeking forgiveness. *Journal of Psychology and Theology*, *38*, 246–254.

Riek, B. M., & Mania, E. W. (2012). The antecedents and consequences of interpersonal forgiveness: A meta-analytic review. *Personal Relationships*, *19*, 304–325.

Rusbult, C. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology*, *45*, 172–186.

Rusbult, C. E., Kumashiro, M., Finkel, E. J., & Wildschut, T. (2002). The war of the roses: An interdependence analysis of betrayal and forgiveness. In P. Noller & J. A. Feeney (Eds.), *Understanding marriage: Developments in the study of couple interaction* (pp. 251–281). New York, NY: Cambridge University Press.

Sandage, S. J., Worthington, E. L., Hight, T. L., & Berry, J. W. (2000). Seeking forgiveness: Theoretical context and an initial empirical study. *Journal of Psychology and Theology*, *28*, 21–35.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston, MA: Allyn & Bacon.

Tabak, B. A., McCullough, M. E., Root Luna, L., Bono, G., & Berry, J. W. (2012). Conciliatory gestures facilitate forgiveness and feelings of friendship by making transgressors seem more agreeable. *Journal of Personality*, *80*, 503–536.

Takaku, S. (2001). Reducing road rage: An application of the dissonance-attribution model of interpersonal forgiveness. *Journal of Applied Social Psychology*, *36*, 2362–2378.

Tangney, J. P. (1990). Assessing individual differences in proneness to shame and guilt: Development of the self-conscious affect and attribution inventory. *Journal of Personality and Social Psychology*, *59*, 102–111.

Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. *Journal of Personality and Social Psychology 61*, 598–607.

Tangney, J. P., & Dearing, R. L. (2002). *Shame and guilt*. New York, NY: Guilford Press.

Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, *70*, 1256–1269.

Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology*, *62*, 669–675.

Tangney, J. P., Wagner, P. E., Hill-Barlow, D., Marschall, D. E., & Gramzow, R. (1996). Relation of shame and guilt to constructive versus destructive responses to anger across the lifespan. *Journal of Personality and Social Psychology*, *70*, 797–809.

Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, *93*, 369–388.

Van Lange, P. A. M., Rusbult, C. E., Drigotas, S. M., Arriaga, X. B., Witcher, B. S., & Cox, C. L. (1997). Willingness to sacrifice in close relationships. *Journal of Personality and Social Psychology*, *72*, 1373–1395.

Vangelisti, A. L., & Young, S. L. (2000). When words hurt: The effects of perceived intentionality on interpersonal relationships. *Journal of Social and Personal Relationships*, *17*, 393–424.

Waldron, V. R., & Kelley, D. L. (2005). Forgiving communication as a response to relational transgressions. *Journal of Social and Personal Relationships*, *22*, 723–742.

Witvliet, C. V., Ludwig, T. E., & Bauer, D. J. (2002). Please forgive me: Transgressors' emotions and physiology during imagery of seeking forgiveness and victim responses. *Journal of Psychology and Christianity*, *21*, 219–233.

Witvliet, C. V., Ludwig, T. E., & Vander Lann, K. L. (2001). Granting forgiveness of harboring grudges: Implications for emotion, physiology, and health. *Psychological Science*, *12*, 117–123.

Wolf, S. T., Cohen, T. R., Panter, A. T., & Insko, C. A. (2010). Shame proneness and guilt proneness: Toward the further understanding of reactions to public and private transgressions. *Self & Identity*, *9*, 337–362.

Worthington, E. L. (2005). Initial questions about the art and science of forgiving. In E.L. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 185–205). New York, NY: Brunner-Routledge.

Zechmeister, J. S., & Romero, C. (2002). Victim and offender accounts of interpersonal conflict: Autobiographical narratives of forgiveness and unforgiveness. *Journal of Personality and Social Psychology*, *82*, 675–686.