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SELF-FORGIVENESS IN ROMANTIC RELATIONSHIPS: THE IMPACT ON THE
PERPETRATOR AND THE RELATIONSHIP

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of
Philosophy at Virginia Commonwealth University.

by

Jaclyn Mary Moloney
Bachelor of Science, Loyola University Chicago, 2012
Master of Science, Virginia Commonwealth University, 2014

Director: Jeffrey D. Green, Ph.D.
Associate Professor of Psychology
Department of Psychology

Virginia Commonwealth University
Richmond, Virginia
July, 2017

Acknowledgements

I would like to thank everyone who participated in my study and all the research assistants that helped me during recruitment and data collection. I am grateful for my mentor, Dr. Jeffrey Green for all of his guidance through this project and during the last four years. I am also very grateful for the advice and support from my committee members, Dr. Jennifer Joy-Gaba, Dr. Jody Davis, Dr. Ev Worthington, Jr., and Dr. Shelby McDonald.

I would also like to thank my wonderful friends, partner, and family for their support throughout this journey. A special thanks to my friends Dr. Megan Sutter and Dr. Brandon Griffin who helped with various stages of the project.

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Abstract

SELF-FORGIVENESS IN ROMANTIC RELATIONSHIPS: THE IMPACT ON THE PERPETRATOR AND THE RELATIONSHIP

By Jaclyn Mary Moloney, M.S.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University

Major Director: Jeffrey D. Green, Associate Professor, Department of Psychology

Two studies were conducted to determine how self-forgiveness and other perpetrator reactions influence the perpetrator and the victim after a romantic relationship transgression. Study 1 used a longitudinal design to determine how guilt and shame predicted the trajectory of self-forgiveness, self-excusing, and self-punishing in participants who had recently been the perpetrator of a romantic relationship transgression.

Those experiencing higher guilt at baseline had higher self-forgiveness starting out and those lower on guilt starting out had a greater change in self-forgiveness. Those experiencing more guilt at baseline experienced less change in self-forgiveness over time. Shame was not significantly related to self-forgiveness over time. Those experiencing higher shame at baseline were higher in self-excusing starting out. Those lower on shame starting out had a greater increase in self-excusing over time and those experiencing more shame at baseline experienced

less increase in self-excusing over time. Guilt was not significantly related to self-excusing over time. Neither guilt nor shame predicted change in self-punishment over time.

In Study 2, couples came into the lab and wrote about the same offense. One participant wrote from the perspective of the perpetrator and the other from the perspective of the victim. Victims reported their forgiveness and perception of their partners' reactions to wrongdoing. Perpetrators reported their perception of their partners' feelings of forgiveness and their feelings of self-forgiveness, self-excusing, and self-punishing. Both members reported their relationship satisfaction and commitment.

Overall, self-forgiveness by the perpetrator was not a strong predictor of perpetrator satisfaction or commitment. Victims were more satisfied and committed when perceiving self-forgiveness from their partner, even though their partners' self-forgiveness did not have an effect. Self-forgiveness only positively predicted perpetrators' satisfaction and commitment when participants reported decisional self-forgiveness.

Victims' perceptions of the perpetrators' self-excusing and perpetrators' self-punishing negatively predicted victim commitment and satisfaction. Victims' perceived perpetrator self-punishing positively predicted perpetrators' commitment. Perpetrator perceived victim forgiveness and victim forgiveness both positively predicted satisfaction for the perpetrator and the victim. This suggests that perpetrators' perceptions of victim forgiveness may be more important for the perpetrator than the victim actually forgiving them.

Self-Forgiveness in Romantic Relationships: The Impact on the Perpetrator and the Relationship

Forgiveness is a virtue – this well-known proverb resonates among people because it is difficult to forgive others, but confers many benefits. After an interpersonal transgression, victims feel negatively towards their transgressor. They may feel bitter, motivated to seek revenge, or motivated to avoid their transgressor. Forgiveness helps attenuate these negative thoughts, feelings, and behaviors (McCullough, Worthington, & Rachal, 1997). When two strangers are involved in a transgression, forgiveness may not be important if they are never going to interact again.

But what happens when the victim and the transgressor are involved in a romantic relationship? If the relationship is maintained, forgiveness is important for the victim of a transgression, but it is also important for the perpetrator to self-forgive. Many researchers have looked at how to facilitate forgiveness within victims of interpersonal transgressions in romantic relationships, but there continues to be a lack of empirical understanding surrounding the processes that lead to perpetrators forgiving themselves and the problems that might occur when they cannot. Consequently, the influence of self-forgiveness on romantic relationships is unclear.

The focus of this dissertation is on perpetrator and victim reactions to interpersonal transgressions in romantic relationships. First, I will explain relevant research and theory on self-forgiveness, forgiveness, moral emotions, and interpersonal transgressions in romantic relationships. Next, I will examine how feelings of guilt and shame predict perpetrators' trajectories of self-forgiveness, self-punishment, and self-excusing over time after committing a transgression against a romantic partner. Then, I will discuss findings from a couples study where both the victim and the perpetrator of a transgression wrote about the same event and

reported forgiveness, guilt, shame, commitment, and satisfaction. Finally, limitations and directions for future research will be discussed.

What is Self-Forgiveness?

Self-forgiveness is a highly intrapersonal process that is a perpetrator's reaction to wrongdoing. It is a unique process and distinct from interpersonal forgiveness since from a forgiveness standpoint the victim and the perpetrator are the same person. Reconciliation with the offender is not necessary for interpersonal forgiveness, but reconciliation with the self is needed for self-forgiveness (Hall & Fincham, 2005). The pace of research on self-forgiveness has been relatively slow to develop relative to other-forgiveness (Hall & Fincham, 2005). Since the lack of research was made apparent, the research on self-forgiveness has increased over the last decade or less (Fehr, Gelfand, & Nag, 2010).

A consequence of this area of research being relatively new is that there is not one universally agreed-upon definition of self-forgiveness. One good definition is "a set of motivational changes whereby one becomes decreasingly motivated to avoid stimuli associated with the offense, decreasingly motivated to retaliate against the self (e.g. punish the self, engage in self-destructive behaviors), and increasingly motivated to act benevolently toward the self" (Hall & Fincham, 2005, p. 622). Another conceptually similar definition is: an emotion-focused coping strategy that involves reducing negative, and increasing positive thoughts, emotions, motivations, and behaviors regarding oneself (Hall & Fincham, 2008; Worthington & Langberg, 2012). Griffin and colleagues (2015) proposed a two-factor model of self-forgiveness that states that in addition to replacing self-condemning emotions with positive emotions (*emotional* factor), self-forgiveness occurs when the perpetrator makes a decision to affirm the sociomoral values that were violated (*decisional* factor). Both definitions are describing genuine self-

forgiveness, but in the context of this study I will be conceptualizing self-forgiveness as a coping strategy because it is only one of the reactions that perpetrators of interpersonal transgressions in romantic relationships may experience after wrongdoing.

When studying self-forgiveness, it is necessary to identify and distinguish it from the other perpetrator reactions to wrongdoing. Self-excusing, or pseudo self-forgiveness, and self-punitiveness have also been identified as perpetrator reactions to wrongdoing (Woodyatt & Wenzel, 2013b). Self-excusing refers to an offender claiming to have forgiven him or herself when in reality he or she denies having done anything wrong. For this reason, some researchers specify that they are interested in *genuine* self-forgiveness in order to differentiate between self-forgiveness and self-excusing. When self-excusing, the offender reduces guilt by minimizing responsibility, downplaying the consequences of his or her actions, and possibly defaming the victim (Fisher & Exline, 2006; Hall & Fincham, 2005). By failing to truly acknowledge the transgression, the offender reduces the likelihood of changing in the future (Woodyatt & Wenzel, 2013b). The benefits of self-forgiveness are moderated by the belief that one is responsible for the negative outcome (Peterson et al., 2017). By self-excusing and denying blame offenders may feel better, but they are not experiencing genuine self-forgiveness (McConnell, 2015). I will use the terms self-forgiveness and genuine self-forgiveness synonymously for the sake of simplicity, but it is important to note that these differ from self-excusing, even though prior research may have not differentiated between the two.

A third possible perpetrator reaction following a transgression is a self-punitive response (Fisher & Exline, 2006). When this happens, the perpetrator internalizes the shame of the transgression, feels guilt, and desires to punish the self (Fisher & Exline, 2006; Woodyatt & Wenzel, 2013a). For example, perpetrators may abstain from pleasurable activities or derogate

themselves as a way to atone for their behaviors (Fisher & Exline, 2010; Nelissen & Zeelenberg, 2009). Just because the offender feels bad about the offense does not mean those feelings are associated with responsibility or effort to change. Self-punitive responses are positively associated with negative relational outcomes, avoidance, and an egocentric focus (Woodyatt & Wenzel, 2013a). However, self-punitiveness is positively correlated with genuine self-forgiveness and negatively correlated with self-excusing (Woodyatt & Wenzel, 2013a). The negative focus is on the self, and shame-related responses tend to be better conceptualized as self-condemnation compared to guilt-related responses. This study takes all three perpetrator reactions into account by examining how people cope with feelings of guilt and shame after an interpersonal transgression with their romantic partner. Specifically, I examined how guilt and shame explain transgressor trajectories over time and how these different reactions to wrongdoing predict relationship satisfaction and commitment for the perpetrator and the victim.

Correlates of Self-Forgiveness

Self-forgiveness is an important construct to study because it is linked to benefits for the self beyond coping with negative feelings. While the focus of this project is to approach self-forgiveness from the perspective of social psychology, researchers have begun to demonstrate the effects that self-forgiveness has on physiological and psychological well-being (Webb, Hirsch, Visser, & Brewer, 2013; Nsamenang, Webb, Curkowicz, & Hirsch, 2013; Davis et al. 2015). Self-forgiveness is associated with positive relationship outcomes such as perceived social support, relationship satisfaction, and closeness (Davis et al., 2015).

There is evidence of a negative relation between self-forgiveness and suicidal behavior and depressive symptoms (Nsamenang et al., 2013). Self-forgiveness is positively related to life satisfaction (Thompson et al., 2005) and may be even stronger than other-forgiveness in

negatively predicting physical health, somatic symptoms, mental health status, and psychological distress (Webb et al., 2013). In a recent meta-analysis, self-forgiveness accounted for approximately 20% of the variance in psychological well-being (e.g. depression, anxiety, life satisfaction), suggesting that self-forgiveness may be more closely related to mental health outcomes than forgiveness of others (Davis et al., 2015).

In addition to being related to physiological and psychological well-being, self-forgiveness is also related to personality and individual differences. People higher on neuroticism are less likely to forgive themselves (Maltby, Macaskil, & Day, 2011). Strelan (2007) extended the work on self-forgiveness and found that narcissists are more likely to forgive themselves, but that the guilt-prone are less likely to forgive themselves. Specifically, individuals with high positive self-regard and/or a low sense of guilt are more likely to forgive themselves. It may be that those who appear to be forgiving themselves are really just maintaining their positive self-regard through other mechanisms, like self-excusing, to avoid culpability which is why they do not feel more guilt. It is possible that those higher in narcissism tend to experience more self-excusing as a way to reduce threats to the self (Woodyatt & Wenzel, 2013a). The negative relation between self-forgiveness and guilt can also be explained by self-forgiveness being confounded by other perpetrator reactions in the measure used, since many early studies did not measure self-excusing and self-forgiveness separately. The current study helps resolve these inconsistencies by using a validated measure that captures self-forgiveness, self-excusing, and self-punitiveness.

Shame and Guilt

Perpetrators tend to feel shame and guilt after wrongdoing and these emotions can predict how they will react (Griffin et al., 2016). An aim of the current study is to understand how shame

and guilt predict perpetrator reactions in romantic relationships. Shame and guilt have a lot in common since they are both self-conscious moral emotions. Self-conscious emotions require self-awareness and occur when people engage in self-reflection, but they can also come from an individual assessing a situation from a real or imagined person's point of view (Leary, 2007). In the context of this study, perpetrators may be assessing the situation from their partners' point of view. Although shame and guilt are similar, they typically have different effects on the self and others that have implications for self-forgiveness (Tangney & Dearing, 2002; Kugler & Jones, 1992).

There are a few ways to conceptualize shame and guilt that highlight the distinctions between the two self-conscious emotions. One interpretation is to describe shame as the evaluation that *oneself* is bad as a result of the bad thing the person did, it is related to avoidance tendencies, negative self-evaluations, feeling distressed, and is not seen as adaptive (Wolf, Cohen, Panter, & Insko, 2010). Guilt is an evaluation that the *behavior* performed was bad, rather than the self (Tracy & Robins, 2004). It is related to approach tendencies, making amends, and is seen as beneficial in repairing relationships after wrongdoing (Tracy, Robins, & Tangney, 2007; Wolf et al. 2010). For example, after experiencing guilt people report wanting to confess or apologize (Tangney, 1993). Alternatively, Sheikh and Janoff-Bulman (2010) conceptualize shame as a proscriptive moral emotion based on avoidance motivations that restrain immoral conduct. They conceptualize guilt as a prescriptive moral emotion based on approach motivations that promote moral behaviors. Shame is activated when we do something immoral and guilt is activated when we fail to do something moral (Sheikh & Janoff-Bulman, 2010). Guilt and shame are very similar, but they have unique effects. For a sample of participants receiving treatment for substance abuse, shame-proneness was negatively associated with self-forgiveness

after controlling for guilt proneness (McGaffin, Lyons, & Deane, 2013). Alternatively, guilt proneness was positively associated with self-forgiveness when controlling for shame proneness.

As a result of the different targets of the negative thoughts, the experience of feeling guilt versus shame is very different. Guilt is a negative emotion, but since it has some positive motivational implications, it has a less negative impact on the self. For example, feeling guilt is related to hoping for forgiveness, a desire for reconciliation, and wishing actions could be undone (Wolf et al., 2010). However, shame is a negative emotion that is more harmful to the self. Feeling shame is related to feeling self-conscious, small, and experiencing higher distress (Roseman, West, & Swartz, 1994). Consequently, shame does not motivate the individual to reconcile with and make amends to the victim to the extent that guilt does. The extent to which one feels shame versus guilt after an interpersonal transgression in a romantic relationship may determine whether the focus will be on mending the relationship or recovering from negative feelings towards the self.

It is important to note that shame and guilt may be felt differently across cultures and types of self-construal. The western individualistic perspective suggests shame and guilt are responses to an individual's moral wrongdoing, but from the collectivist perspective they can come from the wrongdoing of in-group member's failure to act morally. Western cultures, such as the United States, often encourage a more independent self-construal that values individuality; however, Eastern cultures tend to encourage an interdependent self-construal that defines the self through relationships with other people and values things such as social harmony over individuality (Markus & Kitayama, 1991). This suggests someone with an independent self-construal deals with feelings of shame at the individual level, whereas someone with an interdependent self-construal may feel shame as something that could negatively affect his or her

in-group. Collective shame can be felt when an in-group member's wrongdoing threatens the group's public image (Brown & Cehajic, 2008). On the other hand, collective guilt is a victim-focused concern that arises when the in-group's behavior seemingly harms another group. This way of conceptualizing guilt and shame is distinct from the individualist view. Because the focus of the present study is romantic relationships in the United States, it is more appropriate to study guilt and shame from a western perspective.

A recent meta-analysis (Leach & Cidam, 2015) supported a newer model of shame that identifies the reparable nature of the offense as a moderator of the positive association between shame and an approach orientation. Shame has a positive link to approach orientation when the offense was more reparable but had a negative link when the offense was less reparable. For example, if someone steals from a stranger then that offense may be perceived as less reparable since they will not see the stranger again. Lying to a romantic partner may be perceived as more reparable since there are presumably many opportunities to apologize to a romantic partner. This suggests that shame may be linked to a more constructive approach to moral failure if the perpetrator feels they can make amends with the victim or that they can change their negative behavior.

Research suggests that guilt and shame have different outcomes (Leith & Baumeister, 1998). For example, global empathy is correlated with guilt-proneness (i.e., dispositional guilt), but not shame-proneness (i.e., dispositional shame). Guilt-proneness is strongly positively correlated with perspective taking and shame proneness positively predicts personal distress (Leith & Baumeister, 1998). Other researchers found that after describing a personal shame or guilt experience, participants counterfactualized the event differently based on the type of experience (Niedenthal, Tangney, & Gavanski, 1994). For example, participants listing factors

about a shame experience were more likely to want to undo aspects of the self. Participants listing factors about a guilt experience were more likely to want to undo aspects of the behavior. Priming an approach orientation leads to increased guilt, whereas priming an avoidance orientation leads to increased shame (Sheikh & Janoff-Bulman, 2010). According to Fisher and Exline (2010), appraisals of oneself as blameworthy often provoke negative emotion directed at oneself (i.e., shame) and at one's behavior (i.e., guilt) (Lewis, 1971), but these emotions also have implications regarding appraisals of one's relationship and one's behavior in the relationship. Shame and guilt both have intrapersonal and interpersonal consequences, especially in close relationships. All of these differences and findings highlight why it is important to research how guilt and shame predict perpetrator's reactions to wrongdoing in romantic relationships, especially since the self and the relationship are presumably important to the perpetrator.

Moral Injury

Understanding perpetrators emotional responses to a transgression is just one way to begin to understand perpetrators' responses to committing an offense. Falling short of personal standards damages one's self-concept and elicits self-blame (Wohl, DeShea, & Wahkinney, 2008). Moral injury is an internal conflict due to doing or witnessing acts not in line with one's morals (Worthington & Langberg, 2012). Guilt and shame come from the self-awareness of moral injury (Tangney, Stuewig, & Mashek, 2007), such as lying to a romantic partner. Self-forgiveness is important when a person experiences self-condemnation as the result of a moral injury. Worthington and Langberg (2012) define self-condemnation as criticism and condemnation of oneself (along with accompanying moral emotions such as guilt and shame) due to perceived (a) moral wrongdoing (including omission of doing one's duty or acting in

accord with one's conscience), (b) failure at living up to one's standards or (c) failure to live up to one's expectations.

Research has examined whether self-condemnation would predict prosocial responses to transgressions (Fisher & Exline, 2006). Participants were asked to recall a situation in which they committed a fairly serious offense against another person. They were then asked to complete individual difference measures and answer a series of questions about their thoughts, emotions, and behaviors in response to the situation they described. Participants higher on shame proneness and self-forgiveness had higher self-condemnation and remorse. Self-condemnation was also negatively correlated with well-being. Guilt proneness was positively linked to remorse, but was not related to self-condemnation or lower well-being. These findings suggest that guilt-prone people may be experiencing remorse and accepting responsibility without falling into a state of self-condemnation. Shame-prone people are experiencing greater remorse, which is then related to self-condemnation and lower well-being.

Experiencing an internal moral conflict requires self-regulatory resources, so it is important to consider what influence it could have on a romantic relationship. If someone is unable to self-forgive, he or she may be using up resources dealing with moral conflict that would normally be used to engage in pro-relationship behaviors such as accommodation or sacrificing for the partner. Following this logic, having less self-forgiveness after hurting a romantic partner could lead to decreases in relationship satisfaction or commitment if the perpetrator is struggling to maintain positive self-regard. Self-excusing and self-punishing may also negatively affect the relationship. If the perpetrator excuses himself or herself of blame or minimizes the offense, the victim may feel further victimized and disregarded. If the perpetrator is self-punishing he or she may be too focused on the self to work towards interpersonal

restoration (Woodyatt & Wenzel, 2013a). This study will address how relationship satisfaction and commitment are influenced when one member of the relationship experiences moral injury after a transgression.

Interpersonal Transgressions

Self-forgiveness is needed to cope with moral injury. Interpersonal transgressions with close others, such as family members or romantic partners, may evoke strong feelings of self-condemnation when one is the perpetrator. A common scenario in romantic relationships is when one partner does something to hurt the other such as cheating, causing an argument, or saying something upsetting. The victim feels hurt by the perpetrator's transgression and the perpetrator may experience moral injury by feeling emotions such as sadness, and shame and/or guilt.

Most forgiveness research focuses on studying how forgiveness of the perpetrator by the victim influences the relationship. An immense amount of research exists on other-forgiveness after interpersonal transgression (see Worthington & Sandage, 2015; Fehr et al., 2010 for a review). Much less research has focused on how the perpetrator is affected as a result of committing a transgression (Hall & Fincham, 2005). As the amount of research on self-forgiveness increases (McConnell, 2015) one way to integrate research on other-forgiveness and self-forgiveness is in the context of romantic relationships. It is important to study interpersonal transgressions between romantic relationship partners because romantic relationships are one way that people can fulfill their fundamental need to belong (Baumeister & Leary, 1985).

Determinants of Perpetrator Reactions

Griffin and colleagues (2015) suggest a dual-process model of self-forgiveness in which the perpetrator must first make a decision to affirm the violated socio-moral values then replace self-condemning emotions with self-affirming emotions. According to the dual-process model,

someone experiencing self-forgiveness makes a cognitive shift to accept the responsibility for his or her actions. This is approach-oriented, whereas self-excusing after an offense is avoidance-oriented. As previously discussed, shame tends to motivate avoidance orientations and guilt tends to motivate approach orientations. Shame-proneness is negatively related to self-forgiveness when controlling for guilt-proneness, whereas guilt proneness is positively related to self-forgiveness when controlling for shame-proneness (McGaffin, Lyons, & Deane, 2013). Since higher feelings of guilt and guilt proneness seem to be related to self-forgiveness, this may help explain how approach orientations are influencing the reaction to self-forgive rather than self-excuse.

Threats to self-esteem motivate coping attempts by which perpetrators of the perceived offense may seek to resolve dissonance between their self-concept and behavior by adjusting their values and/or behavior to promote congruity. For example, scholars argue that perpetrators of interpersonal harm might seek to align their values and behavior through a variety of methods (Exline, Root, Yadavalli, Martin, & Fisher, 2011; Woodyatt & Wenzel, 2013b; Hall & Fincham, 2005). My collaborators and I categorized responses to perceived wrongdoing (i.e., self-forgiveness, self-punishment, pseudo self-forgiveness) among perpetrators of interpersonal harm into transformative and conservative methods of coping (Griffin et al., 2016). Transformative methods of coping, like forgiving oneself, acknowledge one's culpability and personal worth to promote a new self-concept in the aftermath of behaving in a way that violates one's values. Conservative methods of coping including excusing oneself of blame or punishing oneself to atone for an offense. These conservative methods are intended to maintain one's pre-offense self-concept by failing to acknowledge either one's culpability or personal worth, respectively.

In order to better understand the connections among guilt, shame, and different perpetrator reactions, my colleagues and I (2016) conducted a study assessing how feelings of guilt and shame are related to self-forgiveness, self-excusing, and self-punishment (Griffin et al. 2016). Participants completed an online study where they wrote about a time they were a perpetrator in an interpersonal offense. The reported victims included parents, friends, romantic partners, family members, and classmates. Participants then completed measures of state guilt and shame, differentiated processes of self-forgiveness, and offense severity.

Perceived transgression severity positively predicted guilt, forgiving oneself, and punishing oneself. Time since the offense also positively predicted punishing oneself, negatively predicted self-excusing, and was unrelated to self-forgiveness. Consistent with previous work, guilt and shame were highly positively correlated. Simply looking at the bivariate correlations between the two emotions and among other variables can be misleading as a result of their shared variance. A path analysis was run in order to estimate covariation between guilt and shame, along with all the combinations of forgiving, punishing, and excusing oneself. This way we were able to examine the unique variance accounted for by guilt and shame in our dependent variables. Results from a path analysis showed that guilt positively predicted self-forgiveness and self-punishment, and negatively predicted self-excusing. Shame negatively predicted self-forgiveness and positively predicted self-punishment and self-excusing. Stated another way, though shame and guilt (i.e., the unique variance of each) both predict self-punishment, they have opposite associations with self-forgiveness and self-excusing. This was the first study to identify these links and show how guilt and shame are differentially related to perpetrator reactions. Our findings provide further evidence of the approach-oriented features of self-forgiveness and the avoidance-oriented features of self-excusing.

These findings help further define self-forgiveness by presenting distinctions among the different reactions. Guilt and shame can be conceptualized as stress responses to interpersonal offenses (Lazarus, 1999). The differences in the amount of guilt and shame felt as a response predicted the type of reaction to the offense. These responses may ultimately impact the relationship between the perpetrator and the victim. This model serves as a framework for the current study. I built upon this work by examining how guilt and shame predicted these reactions over time and after romantic relationship conflict. I also expanded this work by getting responses from the perpetrator and the victim in reaction to the same transgression.

Other-Forgiveness in Romantic Relationships

While the topic of self-forgiveness in relationships is understudied, there is a lot of research that describes the benefits of other-forgiveness after an interpersonal transgression between romantic partners. In the context of interpersonal transgressions, other-forgiveness is defined as transforming negative thoughts, feelings, and behaviors towards a perpetrator into more positive thoughts, feelings, and behavior (McCullough, Fincham, & Tsang, 2003). If the perpetrator were a stranger or acquaintance, the victim may feel less need to forgive. However, if the perpetrator is a romantic partner then forgiveness by the victim may be vital to the relationship. Romantic relationships are one of the best ways to fulfill the need to belong (Baumeister & Leary, 1995). When someone commits a transgression, his or her need for belonging is heightened (Ahmed & Braithwaite, 2006; Ahmed, Harris, Braithwaite, & Braithwaite, 2001; Shnabel & Nadler, 2008). Reconciliation between partners is one way to ensure that the need to belong is met by both members of the couple.

Research on victim forgiveness in romantic relationships has focused mostly on satisfaction and commitment. Forgiveness of transgressions predicts both commitment and

satisfaction (Braithwaite, Selby, & Fincham, 2011; Tsang, McCullough, & Fincham, 2006; Wieselquist, 2009; Ysseldyk & Wohl, 2012). In one study, romantic partners with greater levels of trait forgiveness reported greater relationship satisfaction through putting forth more relational effort and decreased negative communication (Braithwaite et al., 2011). In a longitudinal study, forgiveness mediated the negative relation between transgression severity and commitment such that greater forgiveness was related to lower reduction in commitment (Ysseldyk & Wohl, 2012). Perceived victim forgiveness predicted greater relationship satisfaction and commitment for the perpetrator after describing a transgression (Wieselquist, 2009). Other findings suggest that forgiveness is a consequence of commitment (Finkel, Rusbult, Kumashiro, & Hannon, 2002). Applying the principles of interdependence theory, being strongly committed to a partner promotes a pro-relationship transformation of motivation which stops victims from more impulsive self-oriented reactions (e.g. seeking vengeance) and promotes pro-relationship reactions such as forgiveness. Together these findings suggest there is a positive cycle between forgiveness and commitment in romantic relationships.

Self-Forgiveness in Romantic Relationships

Previous research suggests self-forgiveness is crucial to help attenuate the sting of a romantic relationship transgression. When a person is able to genuinely self-forgive, there appears to be interpersonal and intrapersonal restoration. Through self-forgiveness, a person is able to admit responsibility, express shame and guilt, and show repentance, which leads to the offender acknowledging their violation and reaffirming their values (Wenzel, Woodyatt, & Hedrick, 2012). This serves the purpose of affirming one's moral identity to the victim, community, and themselves. Because the research discussed suggests self-forgiveness is the

most adaptive response to wrongdoing, it has a meaningful role in the literature on romantic relationships and interpersonal transgressions.

Self-forgiveness in romantic relationships has been surprisingly understudied. Pelucchi, Paleari, Regalia, and Fincham (2013) conducted the first study of self-forgiveness in married heterosexual dyads. Another novel aspect of their study was they only included perpetrators that accepted responsibility for the offense against their romantic partner. Upon coming into the lab, one member of the dyad was randomly assigned to write about a wrongdoing committed against his or her partner that he or she felt responsible for. Both members of the dyad then answered questions about relationship satisfaction. Perpetrators felt higher relationship satisfaction when they had more positive and fewer negative feelings towards themselves. Victims also felt higher relationship satisfaction when perpetrators had less negative feelings towards themselves. However, the victims did not feel more satisfied when the perpetrators had more positive feelings towards themselves. This suggests that self-forgiveness is related to higher relationship satisfaction for both the perpetrator and the victim, as long as the victim does not perceive the perpetrator as feeling positively about himself or herself as a result of the transgression. This could be an example of the victim not wanting the perpetrator to self-excuse his or her bad behavior.

Pelucchi and colleagues (2015) followed up with another set of studies to further understand self-forgiveness in romantic relationships. In hypothetical situations, partners were more likely to forgive the perpetrator if they had previously forgiven themselves after a transgression. The researchers speculated that self-forgiving people may be more empathic and consequently more forgiving in a romantic relationship compared to other relationships. In a second study, members of cohabitating couples both wrote about a time when they were the

perpetrator of an offense. They then evaluated their level of self-forgiveness for the transgression they committed and wrote about and their level of other-forgiveness for the offense their partner wrote about when they were the victim.

Data were analyzed at the intrapersonal (within-subjects) level. Other-forgiveness was a partial mediator of the relation between self-forgiveness and relationship satisfaction with within-subjects data when partners reported on real offenses. Specifically, the positive relation between self-forgiveness and relationship satisfaction was partly mediated by how forgiving the participants were towards their partner when they were the victim. The current study will attempt to replicate their findings and expand on them in a number of ways. Pelucchi and colleagues (2015) only included participants in analyses who felt moderately responsible for the transgression as a way to only focus on genuine self-forgiveness. I included all participants without screening for responsibility as a way to understand how self-excusing and self-punitiveness also affect relationship outcomes. I also included commitment as an outcome and it was not a requirement for couples to be cohabitating.

Previous Methodology

There is a limited understanding of the time course of self-forgiveness, as a result it is unclear how guilt and shame are related to forgiveness over time. One methodology that can be utilized to contribute to our knowledge about how moral emotions and self-forgiveness are connected is through longitudinal design. As previously mentioned, longitudinal designs have been successful in improving the understanding of how victim forgiveness unfolds between romantic partners. Participants responded to questionnaires 1, 3, 5, 7, and 9 weeks after a transgression (Tsang et al., 2006). Over time, victims' forgiveness appeared to facilitate restoration of closeness and commitment towards romantic partners. Alternatively, results from a

recent meta-analysis looking at forgiveness and its correlates revealed that time was unrelated to forgiveness (Fehr et al., 2010). However, most of the studies included were between-subjects designs so the effect of time may have been lessened due to recall bias. These findings further highlight the need for within-subjects designs when studying all types of forgiveness to better understand the effect of time.

To the best of my knowledge, only one study has looked at the time course of self-forgiveness. The development of the empirical study of self-forgiveness started off mainly theoretically and through cross-sectional studies, so longitudinal studies are a way to gain a broader understanding of self-forgiveness. Hall and Fincham (2008) developed a model of self-forgiveness as a motivational transformation. They proposed to show how self-forgiveness unfolds over time and understand some of the emotional, socio-cognitive, behavioral, and offense related variables associated with self-forgiveness. Participants reported doing something hurtful and regrettable to another person in the previous three days. They then completed follow-up surveys for the next seven weeks. At Time 1, participants showed a negative association between self-forgiveness and guilt, forgiveness-inhibiting attributions, and transgression severity. They also showed a positive association with self-forgiveness and perceived forgiveness from the victim and a higher power. Based on the longitudinal data, overall participant self-forgiveness increased linearly over time.

The researchers also examined whether guilt, shame, empathy, attributions, perceived forgiveness, conciliatory behaviors, and transgression severity were time-dependent covariates that could help predict forgiveness above what was expected based on participant's initial levels and linear change. All variables except shame, empathy, and attributions covaried with participant's self-forgiveness (Hall & Fincham, 2008). To be specific, increases in guilt were

associated with decreases in self-forgiveness when controlling for those accounted for by the self-forgiveness trajectory. Increases in perceived forgiveness were related to increases in self-forgiveness, which suggests that the more a person feels forgiven by others the more he or she may be able to transform negative thoughts about the self into positive ones. It is important to note that while these analyses were conducted with longitudinal data, the design of the study does not allow for causal claims. Increases in conciliatory behavior towards the victim were associated with increases in self-forgiveness. Increases in perceived transgression severity were associated with decreases in self-forgiveness when controlling for those accounted for by the self-forgiveness trajectory. The finding that some variables may be related to self-forgiveness at Time 1, but not with changes over time suggests that it is important to use cross-sectional and longitudinal methods in a complementary manner in order to understand what may be causing self-forgiveness and what may be covarying with it.

One limitation to Hall and Fincham's (2008) study was that they used a single-item measure of self-forgiveness which may conflate self-forgiveness and self-excusing; my studies improved upon their study by using a well validated and reliable scale that captures genuine self-forgiveness as well as self-excusing and self-punishing. Similarly, this could be why guilt was associated with decreases in self-forgiveness. This is inconsistent with recent findings by Griffin and colleagues (2016) in which guilt was positively associated with self-forgiveness.

In this project, by using a different statistical technique, I was able to look specifically at how baseline levels of guilt and shame predicted self-forgiveness trajectories over time. Another way I improved upon previous research was by specifying the type of interpersonal relationship. Most forgiveness and self-forgiveness research on interpersonal relationships does not focus on one type of relationship. Studying self-forgiveness in the context of romantic relationships

highlights what processes are the same or different when the offender is presumably invested in making amends after he or she has wronged their partner. It was also previously unknown if the trajectory of self-forgiveness over time is different when the transgression involves romantic partners. Because romantic relationships are one means by which people fill fundamental needs, it is possible that perpetrators cope with wrongdoing in a different way when the victim is their romantic partner.

Correlational study designs are used primarily in research on self-forgiveness and romantic relationships. In previous forgiveness research, self-forgiveness has not been a main focus and as a result most of the data on self-forgiveness and romantic relationships has been acquired through self-report measures of general forgiveness tendencies with between-subjects data. The strength of this approach is that researchers did preliminary studies in order to discover what relationship outcomes are related to self-forgiveness. For example, a recent meta-analysis (Davis et al., 2015) suggests there is a positive relation between self-forgiveness and relationship commitment, satisfaction, and closeness across studies. However, now these constructs must be studied with more sophisticated approaches. Despite a growing foundation, self-forgiveness over time and self-forgiveness in romantic relationships are not well understood. It is important to continue to improve upon previous methodology. For this reason, I used methodology that varies from most previous research. I used a longitudinal design as well as data from each partner to gain a fuller understanding of the process of self-forgiveness in romantic relationships. I also included measures of self-excusing and self-punitiveness, which have never been measured longitudinally or in couples.

Measurement Concerns

The most common measure used to assess self-forgiveness is a subscale of the Heartland Forgiveness Scale (Thompson et al., 2005). This scale can also be used as a general measure of forgiveness if all the subscales are combined. Another commonly used scale is the Forgiveness of Self subscale of Mauger and colleagues' (1992) general forgiveness measure. Many studies use these and as a result it is unclear how much past research may have included self-forgiveness in predictions and did not report non-significant findings. It is also less common to examine self-forgiveness in regards to a specific offense, which was the goal of this project (Davis et al., 2015).

Accurately measuring self-forgiveness (versus self-excusing) is important since previous research failed to do so. Wenzel, Woodyatt, and Hedrick (2012) provided evidence for this. Participants were asked to imagine themselves as the offender in a hypothetical situation where they called in sick to work when they were not. As a result, their coworker had to work late and ended up failing an exam she had the next day. Participants were randomly assigned to imagine telling their coworker the truth and writing why, deciding not to confess and writing why, or a control where they were given no instructions before continuing. Participants reported greater levels of self-forgiveness via a particular self-forgiveness scale (Wohl et al., 2008) when they were explicitly instructed not to confess they had lied. This suggests those who justified not telling the truth were maintaining self-regard after lying without accepting responsibility. Wenzel and colleagues (2012) concluded that this state self-forgiveness scale (Wohl et al., 2008) likely confounded self-excusing with genuine self-forgiveness. New measures of self-forgiveness and perpetrator reactions to wrongdoing have been created to ensure that genuine self-forgiveness is being measured rather than self-excusing.

Recent studies have used the Differentiated Process Scale of Self-Forgiveness (DPSSF; Woodyatt & Wenzel, 2013), which measures self-forgiveness, self-excusing, and self-punishing and the Two-Factor Self-Forgiveness Scale (Griffin, 2016). Since the conceptualization of self-forgiveness has changed as more research is conducted it is important to ensure the measurement of self-forgiveness is valid. This project will use these two recently created measures of self-forgiveness.

Overview of Study 1

Research on self-forgiveness continues to grow. Forgiveness after a transgression between romantic partners is important for the self and the couple. By studying how self-conscious emotions influence reactions to wrongdoing after conflict in a romantic relationship the understanding of self-forgiveness and close relationships will be improved. To the best of my knowledge, no previous research has studied self-excusing or self-punishing over time and no other research has studied how emotions predict self-forgiveness, self-excusing, or self-punishing over time. Study 1 addressed how guilt and shame predict trajectories of perpetrator reactions over time after an interpersonal transgression in a romantic relationship.

Hypotheses

Hypothesis 1. Baseline guilt and shame will predict the trajectories of self-forgiveness over time. Specifically, higher guilt will be related to higher self-forgiveness at Time 1 and will predict change in self-forgiveness over time. Higher shame will be related to lower self-forgiveness at Time 1 and will predict change in self-forgiveness over time.

Hypothesis 2. Baseline guilt and shame will predict the trajectories of self-excusing over time. Higher guilt will be related to lower self-excusing at Time 1 and will predict change in self-

excusing over time. Higher shame will be related to higher self-excusing at Time 1 and will predict change in self-excusing over time.

Hypothesis 3. Baseline guilt and shame will predict the trajectories of self-forgiveness, self-excusing, and self-punishment over time. Higher guilt will be related to lower self-punishment at Time 1 and will predict change in self-punishment over time. Higher shame will be related to higher self-punishment at Time 1 and will predict change in self-punishment over time.

Method

Participants

Eighty-three participants participated in a longitudinal study through the REDcap system at Virginia Commonwealth University (VCU). In order to be eligible to participate, participants must have been at least 18 years old. They also were either in a monogamous romantic relationship for two months or more or had just recently ended a romantic relationship that lasted two months or more. They were recruited through undergraduate courses and were compensated with course credit. Participants were 20.45 years of age on average ($SD = 3.27$). The sample was 78.3% female and race and ethnicity were varied (38.6% Caucasian, 21.7% African American, 20.5% Asian American, 10.8% Latino/Hispanic, 8.4% Other). 83.1% of the sample reported being in a monogamous romantic relationship.

Materials

State Shame and Guilt. All participants completed the State Shame and Guilt Scale (Marschall, Sanftner, & Tangney, 1994; Appendix C) at all three time points. This consists of 15 items assessing in-the-moment feelings of shame and guilt. High estimated inter-item reliability was found at each time point for each subscale: at T1, State shame $\alpha = .88$; State guilt $\alpha = .89$; at

T2, state shame $\alpha = .85$; state guilt $\alpha = .91$; at T3, state shame $\alpha = .93$, state guilt $\alpha = .89$.

Respondents answered how they were feeling at that moment using five-point response options (1 = *not feeling this way at all*, 5 = *feeling this way very strongly*), such that higher numbers reflected greater guilt and shame. An example item of guilt is, “I feel like apologizing, confessing.” An example item of shame is, “I want to sink into the floor and disappear.”

Differentiated Process Scale of Self-Forgiveness. Participants’ reactions to wrongdoing were measured using the Differentiated Process Scale of Self-Forgiveness (Woodyatt & Wenzel, 2013b; Appendix D). This measure differentiates between perpetrators’ reactions to wrongdoing using three subscales. Participants were instructed to indicate how much they agreed with each statement (1 = *do not agree at all*, 7 = *strongly agree*). Excusing oneself of blame was measured using 6 items such as, “I wasn’t the only one to blame for what happened.” This subscale had adequate estimated reliability at all time points (alphas = .81 - .84). Punishing oneself was measured using 7 items such as, “I deserve to suffer for what I have done.” This subscale had adequate estimated reliability at all time points (alphas = .90 - .91). Genuine self-forgiveness was measured using 7 items such as, “Since committing the offense I have tried to change.” This subscale had adequate estimated reliability at all time points (alphas = .87 - .89).

Writing Task. Similar to the prompt used by Griffin et al. (2016), participants were instructed to reflect on the most substantial offense or betrayal that they committed against their romantic partner in the past month (See Appendix A). They were given the following prompt:

Please take a moment to reflect on the most substantial offense or betrayal that you committed against your current/most recent romantic partner in the past month. Write 5-10 sentences giving a brief description of what you did to hurt or offend your partner (Note: if you have done many things, it is important to recall one specific event on which to focus.)

Try to imagine yourself back in that situation. Write down the key details of the offense, as well as your thoughts and feelings about it on the lines below. Be sure to write about

what you did, your partner's reaction to your behavior, and how the offense has affected your relationship with your partner.

Participants were also informed that if they wrote about a time where they were in danger or someone else they knew was in danger the researcher would be required to notify the proper authorities. After reviewing all the writing responses, it was determined that no one indicated any serious harm to themselves or others.

Procedure

The participants came into the lab for the initial session lasting up to an hour. Up to four participants completed the study at once. Participants were sitting at their own computer station in their own cubicle in order to avoid distractions from other participants. All tasks and measures were completed on the computer through REDCap, a secure web application used to build and manage online surveys and databases supported by VCU. Participants completed a brief writing task where they were asked to think and write about a time in which they had hurt or offended their romantic partner in some way. After writing about their experience they completed measures of state guilt, shame, and perpetrator reaction (self-punitive, self-excusing, and self-forgiving). After the initial lab session, they completed two online follow-up surveys two weeks and four weeks from the first session in which they completed questions about the writing task, reported their levels of self-forgiveness, self-punitiveness, and self-excusing, state shame and guilt, and answered questions about their relationship (Appendix E).

Data Analyses

The current study aims to build upon past studies by using latent growth curves to examine the four-week trajectory of perpetrators' reactions to wrongdoing and how guilt and shame predict those trajectories. Latent growth curve analysis was utilized to examine the change in perpetrators' reactions to wrongdoing over time as a function of guilt and shame. Data were

analyzed using Version 7.4 of Mplus (Muthén & Muthén, 2015). Maximum likelihood estimation procedures used all observations in the data set, regardless of missing data at one or more time points, reducing sampling bias. The Comparative Fit Index (CFI; .95 or greater; Bentler, 1990), the Tucker Lewis Index (TLI; .95 or greater), and the root-mean-square error of approximation (RMSEA; .08 or less; Browne & Cudeck 1993) were used as criteria for good model fit. Fit indices refer to how close the model corresponds to the data, rather than assessing what may be sampling error or relying on a decision to accept or reject a null hypothesis (Kline, 2011). Three separate sets of models were run for each of the three reactions to wrongdoing: self-forgiveness, self-excusing, and self-punitiveness.

Results

Data Preparation and Preliminary Analyses

The dataset including responses by 83 participants was checked for assumptions of univariate and multivariate normality, linearity, and normally distributed errors. The shame variables were found to be abnormal due to three extreme outliers (z-scores larger than +/- 3.29 SDs from the mean). Winsorizing was used to allow these scales to meet the assumptions needed to conduct analyses. The average reported seriousness of the offense was 2.59 ($SD = 1.41$) on a scale from 1 (*not very serious at all*) to 5 (*extremely serious*). The average time since the transgression was 4.20 weeks ($SD = 3.54$). The average relationship length was 22.55 months ($SD = 7.58$). Descriptive statistics were computed to examine the mean for all variables at each time point (see Table 1).

Curran (2000) recommends looking at more traditional analytic methods before creating growth models. I ran preliminary bivariate correlations to look at the association between all variables at each time point (see Table 2-4). To assess if there were differences across the three

time points on guilt, shame, self-forgiveness, self-excusing, and self-punishing I ran a series of Repeated Measures Multivariate Analyses of Variance (RMANOVA) with time as my within-subjects factor. The overall omnibus RMANOVA for self-forgiveness revealed there was not a statistically significant main effect for time on self-forgiveness, Wilk's lambda = .94, $F(2, 78) = 2.47$, $p = .09$, $\eta^2 = .06$. The overall omnibus RMANOVA for self-excusing revealed there was a statistically significant main effect for time on self-excusing, Wilk's lambda = .88 $F(2, 78) = 5.24$, $p = .01$, $\eta^2 = .12$. The overall omnibus RMANOVA for self-punitiveness revealed there was not a statistically significant main effect for time on self-punitiveness, Wilk's lambda = .95, $F(2, 78) = 1.97$, $p = .15$, $\eta^2 = .05$.

Table 1

Mean scores for state measures at each time point

	Time 1	Time 2	Time 3
Genuine Self-Forgiveness	4.32 ($SD = 1.53$)	4.54 ($SD = 1.34$)	4.61 ($SD = 1.48$)
Self-Excusing	2.64 ($SD = 1.28$)	3.02 ($SD = 1.35$)	3.07 ($SD = 1.40$)
Self-Punitive Self-Forgiveness	1.77 ($SD = .95$)	2.04 ($SD = 1.18$)	1.86 ($SD = 1.07$)
State Shame	1.61 ($SD = .68$)	1.63 ($SD = .77$)	1.59 ($SD = .84$)
State Guilt	2.20 ($SD = 1.09$)	1.76 ($SD = .92$)	1.73 ($SD = .90$)

Table 2

Time 1 Bivariate Correlations among Guilt, Shame, and Perpetrator Reactions

	1.	2.	3.	4.	5.
1. Guilt SR T1	-				
2. Shame SR T1	-.68**	-			
3. Pseudo SF	-.13	.14	-		
4. Self-Punitive SF	.35**	.25*	-.07	-	
5. Genuine SF	.53**	-.14	-.29**	.54**	-

Note. Time 1 bivariate associations among study variables using standardized residuals for guilt and shame ($N = 83$). Scales represented include State Shame and Guilt Scale and the Differentiated Process Scales of Self-Forgiveness (i.e., Self-Forgiveness, Self-Punitiveness, Self-Excusing). Bivariate associations for guilt and shame were computed using the standardized residuals after statistically controlling for the effect of shame on guilt and the effect of guilt on shame. * $p < .05$; ** $p < .01$

Table 3

Time 2 Bivariate Correlations among Guilt, Shame, and Perpetrator Reactions

	1.	2.	3.	4.	5.
1. Guilt SR T2	-				
2. Shame SR T2	-.66**	-			
3. Self-Punitive SF	.32**	.25**	-		
4. Pseudo SF	.04	.06	.24*	-	
5. Genuine SF	.10	-.04	.16	-.39**	-

Note. Time 2 bivariate associations among study variables using standardized residuals for guilt and shame ($N = 83$). Scales represented include State Shame and Guilt Scale and the Differentiated Process Scales of Self-Forgiveness. Bivariate associations for guilt and shame were computed using the standardized residuals after statistically controlling for the effect of shame on guilt and the effect of guilt on shame. * $p < .05$; ** $p < .01$

Table 4

Time 3 Bivariate Correlations among Guilt, Shame, and Perpetrator Reactions

	1.	2.	3.	4.	5.
1. Guilt T3	-				
2. Shame T3	.80**	-			
3. Self-Punitive SF	.28*	.19	-		
4. Pseudo SF	.05	.05	.20	-	
5. Genuine SF	.38**	-.31**	.15	-.11	-

Note. Time 3 bivariate associations among study variables using standardized residuals for guilt and shame ($N = 83$). Scales represented include State Shame and Guilt Scale and the Differentiated Process Scales of Self-Forgiveness. Bivariate associations for guilt and shame were computed using the standardized residuals after statistically controlling for the effect of shame on guilt and the effect of guilt on shame. * $p < .05$; ** $p < .01$

Time since the transgression is frequently used when analyzing interpersonal transgressions. To decide whether it should be included in the models, I looked at how it was related to the main study variables. Time since the transgression was only positively correlated to self-punitiveness at Time 2 ($r = .24$). Based on these preliminary analyses time since the transgression was not included in any of the latent growth curve models.

Table 4

Mean scores for state measures at each time point

	Time 1	Time 2	Time 3
Genuine Self-Forgiveness	4.32 (<i>SD</i> = 1.53)	4.54 (<i>SD</i> = 1.34)	4.61 (<i>SD</i> = 1.48)
Self-Excusing	2.64 (<i>SD</i> = 1.28)	3.02 (<i>SD</i> = 1.35)	3.07 (<i>SD</i> = 1.40)
Self-Punitive Self-Forgiveness	1.77 (<i>SD</i> = .95)	2.04 (<i>SD</i> = 1.18)	1.86 (<i>SD</i> = 1.07)
State Shame	1.61 (<i>SD</i> = .68)	1.63 (<i>SD</i> = .77)	1.59 (<i>SD</i> = .84)
State Guilt	2.20 (<i>SD</i> = 1.09)	1.76 (<i>SD</i> = .92)	1.73 (<i>SD</i> = .90)

Growth Curves for Perpetrators' Reactions to Wrong Doing

Analyses were conducted to determine how self-forgiveness, self-excusing, and self-punitiveness change over time as a function of Time 1 feelings of guilt and shame. In these models, total scores of self-forgiveness, self-excusing, and self-punitiveness for each participant are used as the manifest or observed variable at each time point. There was little change across time when merely looking at the sample means. However, latent growth curve modeling allowed me to look at the more important question of whether or not there was change over time within each participant or not for these important variables. More traditional data analysis techniques, such as multiple regression or cross-lagged panel designs, can be used on longitudinal data but latent growth curve analysis allowed me examine whether between-person differences are related to within-person change over time (Curran, 2000).

Similar to analyses such as hierarchical linear modeling, latent growth curve models are built logically in multiple steps. The first step is to run the unconditional model. This model

calculates a mean starting point (intercept) and mean rate of change (slope) for the variable that is measured over time. The trajectory used in future analyses is characterized by the latent intercept and slope factors from the unconditional model. This model does not attempt to predict any differences (Curran, 2010). If the unconditional model describes the data well, then it makes logical sense to create a conditional model to allow prediction of individual differences as a function of explanatory variables. The variables added to the conditional model are hypothesized to predict the individual difference in the starting point and rate of change in the variable measured over time. If the estimates of the regression parameters linking the explanatory variables to the intercept and slope are significant, that means those variables predict the starting point and rate of change. This should also improve the overall model fit. The general set up of each model was the same. The unconditional model had indicators (self-forgiveness, self-excusing, and self-punitiveness) explain my two correlated latent variables, the intercept and the slope of the growth curve.

Self-Forgiveness. First, I ran an unconditional model to determine the model fit of self-forgiveness across three time points. Initially, it had a non-positive definite matrix with the slope's residual variance having a negative residual value. Because the residual for the slope was not significant ($b = -.09$, $p = .55$), I set the residual to zero and reran the model as suggested by the software creator (Muthén, 2003). The model resulted in good model fit based on the aforementioned criteria, $\chi^2 = 3.54$, $p = .31$ (CFI = .99; TLI = .99; RMSEA = .05, 90% CI = .00, .20). At all time-points self-forgiveness significantly mapped onto the latent intercept variable (Time 1, $b = .80$; Time 2, $b = .85$; Time 3, $b = .75$). The model accounted for an average of 64% of the variance in the slope and intercept of self-forgiveness.

Then, I ran the conditional model adding in Time 1 feelings of guilt and shame as predictors of the slope and intercept (See Figure 1). The model fit the data well, $\chi^2 = 5.56, p = .35$ (CFI = 1.00; TLI = .99; RMSEA = .04, 90% CI = .00, .16). Guilt positively predicted the intercept ($b = .76, p < .01$), indicating that those experiencing higher guilt at Time 1 had higher self-forgiveness starting out. Shame was not significantly related to the intercept ($b = -.17, p = .16$). There was a significant negative association between guilt and the slope latent factor ($b = -1.15, p < .01$). This means as guilt scores decreased, the rate of change in self-forgiveness increased or as guilt scores increased, the rate of change decreased. For example, those who felt less initial guilt had a greater change in self-forgiveness over time and those experiencing more guilt at Time 1 experienced less change in self-forgiveness over time. The slope for shame was not significant ($b = .27, p = .28$). After adding guilt and shame as predictors, the model accounted for an average of 68% of the variance in the slope and intercept of self-forgiveness.

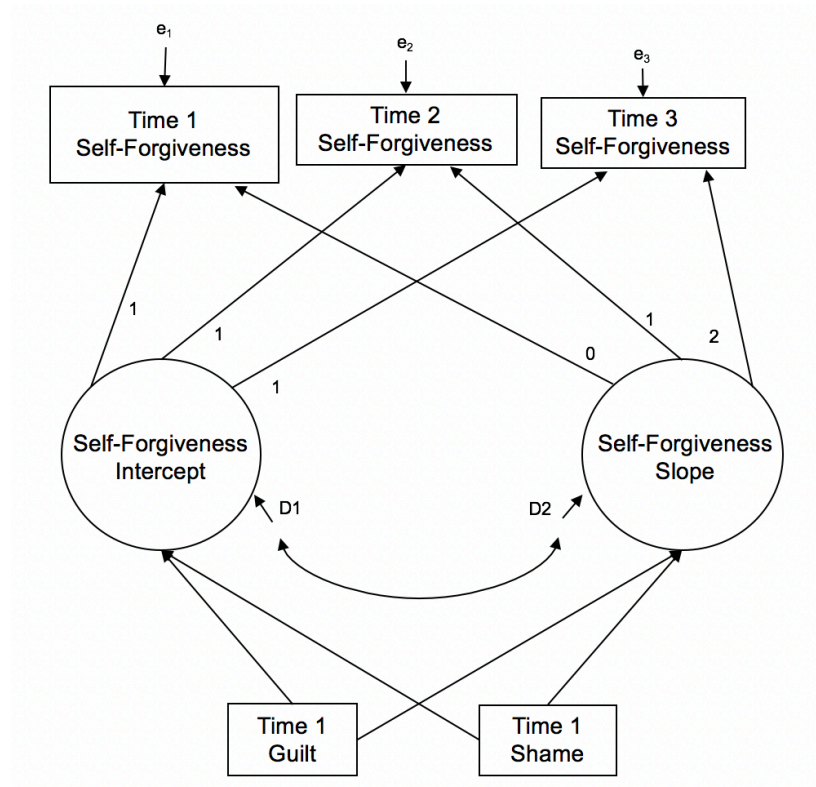


Figure 1. Conditional latent growth curve model using shame and guilt as the predictors of the intercept and slope of the trajectory of self-forgiveness over time.

Self-Excusing. The unconditional model was run to determine the model fit of self-excusing across three time points. The model fit the data reasonably well, $\chi^2 = 3.09$, $p = .08$ (CFI = .98; TLI = .95; RMSEA = .16, 90% CI = .00, .38), although the RMSEA did not support adequate fit. At all time-points, self-excusing significantly mapped onto the latent intercept variable (Time 1, $b = .85$; Time 2, $b = .84$; Time 3, $b = .85$). The model accounted for an average of 75% of the variance in the slope and intercept of self-excusing.

Then, I ran the conditional model adding in Time 1 feelings of guilt and shame as predictors of the slope and intercept (See Figure 2). The model fit the data reasonably well, $\chi^2 = 5.37$, $p = .15$ (CFI = .98; TLI = .94; RMSEA = .10, 90% CI = .00, .23), with the exception of RMSEA being higher than desirable. There was a significant positive association between the intercept and shame ($b = .41$, $p < .01$) indicating that those experiencing higher shame at Time 1

were higher at self-excusing starting out. The relation between the intercept and guilt was not significant ($b = -.07, p = .52$). There was a significant negative association between shame and the slope latent factor ($b = -.81, p = .04$). This means as shame scores decreased, the rate of change in self-excusing increased or as shame scores increased the rate of change decreased. For example, those that were lower on shame starting out had a greater increase in self-excusing over time and those that had a higher score on shame starting out experienced less change in self-excusing over time. The slope for guilt was not significant ($b = .05, p = .65$). Slope with the intercept was not significant ($b = -.11, p = .75$). After adding guilt and shame as predictors, the model accounted for an average of 77% of the variance in the slope and intercept of self-excusing.

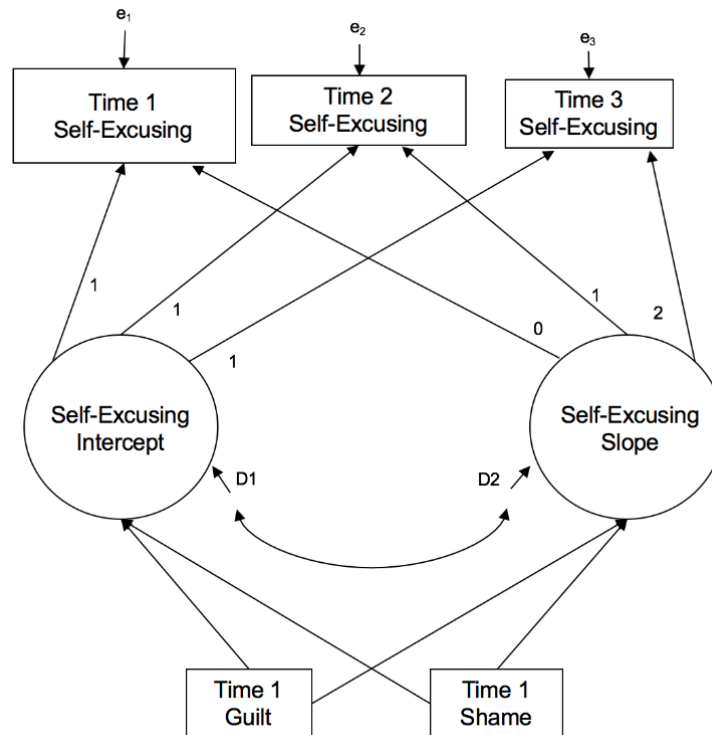


Figure 2. Conditional latent growth curve model using shame and guilt as the predictors of the intercept and slope of the trajectory of self-excusing over time.

Self-Punitiveness. The unconditional model was run to determine the model fit of self-punitiveness across three time points. The means for the three time points indicated that self-punitiveness was highest at Time 2, so I attempted to run the model with a quadratic trajectory. Results suggested a linear trajectory was more appropriate, so I reran the model using a linear trajectory (See Figure 3). The linear model fit the data better but did not adequately fit the data according to consensus criteria, $\chi^2 = 17.39, p < .01$ (CFI = .87; TLI = .87; RMSEA = .24, 90% CI = .14, .36). Because the unconditional model did not fit the data, I was not justified in adding guilt, shame, or transgression severity as predictors.

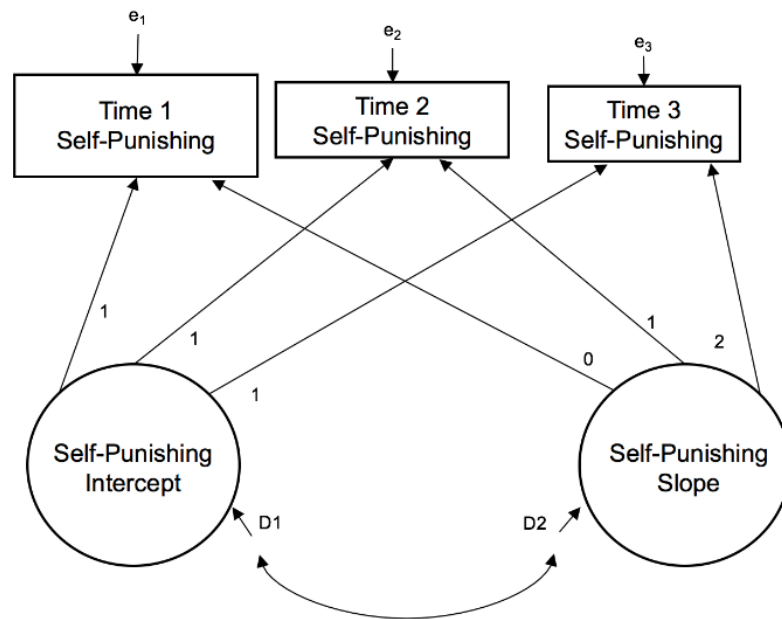


Figure 3. Conditional latent growth curve model using shame and guilt and the predictors of the intercept and slope of the trajectory of self-punishing over time.

Study 1 Discussion

The main findings from Study 1 are that those experiencing higher guilt at Time 1 had higher self-forgiveness starting out. In looking at change over time, those that were lower on guilt starting out had a greater change in self-forgiveness. Those experiencing more guilt at Time 1 experienced less change in self-forgiveness over time, presumably because they were already

high on self-forgiveness at Time 1. Shame was not significantly related to self-forgiveness over time. This is inconsistent with Hall and Fincham's (2008) longitudinal study where guilt was negatively related to self-forgiveness.

In the current study, it seems as though people already experiencing higher guilt were also experiencing higher self-forgiveness so they had no need to increase even more. However, those that were not experiencing very much guilt at the beginning started to feel more as they worked towards self-forgiveness. This is consistent with the previous findings from Griffin and colleagues (2016) where they found that guilt positively predicted self-forgiveness. Guilt is an approach-oriented emotion and self-forgiveness involves a decision to change feelings towards the self, both of which are not easy to process. It seems as though guilt may be needed on the path to self-forgiveness. The inconsistencies between the current findings and those of Hall and Fincham (2008) could be due to the difference in how I measured self-forgiveness.

Those experiencing higher shame at Time 1 were higher in self-excusing starting out. In looking at change over time, those who were lower on shame starting out had a greater increase in self-excusing over time and those experiencing more shame at Time 1 experienced less increase in self-excusing over time. It is possible that those experiencing higher amounts of shame were also higher on self-excusing at baseline as a way to cope with the negative self-evaluations coming from feelings of shame. Feeling lower amounts of shame may have predicted a greater increase in self-excusing over time because the perpetrator did not initially feel that bad about what he or she did. If a person does not experience high amounts of shame after a transgression, he or she may increase their self-excusing over time as a way to cope with the tension experienced in their relationship.

These findings are, to some extent, inconsistent with Griffin and colleagues (2016) who found that shame was positively associated with self-excusing. However, Griffin and colleagues' path model was not able to account for change over time or within-subjects differences. The current study supports the previous notion that longitudinal designs may be able to capture nuances in perpetrators' reactions over time (Hall & Fincham, 2008). Guilt was not significantly related to self-excusing over time. Neither guilt nor shame predicted the change in self-punishment over time. However, because guilt and shame were correlated with self-punitiveness I do not think my results suggests there is not a relationship among them. It seems as though more time points may be needed to accurately assess what type trajectory to model.

These findings add further support to research that suggests guilt and shame have different outcomes. Consistent with previous research, the current study supports that guilt is positively related to self-forgiveness and helps in predicting change in self-forgiveness over time. However, the results suggest that shame is positively related to self-excusing and helps in predicting self-excusing over time and not self-forgiveness. This could be due to the way guilt and shame affect the self-concept differently. Because guilt is approach-oriented (Sheikh & Janoff-Bulman, 2010), it makes sense that it would help facilitate self-forgiveness. Analogously, because shame is avoidance-oriented, it may encourage self-excusing as a way to reduce painful thoughts about the self. It also suggests that in order to predict how guilt and shame influence perpetrators' reactions it is important to know where they are at baseline.

Limitations

The findings from Study 1 provide a better understanding for how perpetrators react after committing a transgression against their romantic partner. Feelings of guilt and shame predict

trajectories of reactions over time and predict where people start at baseline. There were a few limitations in Study 1 that can be addressed by Study 2.

In Study 1, participants were asked to recall an offense from the previous month. Depending on the offense severity it is possible that some participants were not feeling the same amounts of guilt and shame that they were immediately after the offense. Study 2 will improve on this by asking about more recent offenses.

Another limitation to Study 1 is that I only asked one member of the dyad about the transgression. In Study 2, I improved upon Study 1 by having *both* partners participate and write about the same offense. The perpetrator and the victim responses were both considered, whereas majority of the research on self-forgiveness has only the perpetrator's responses and the perpetrator's perceived responses of the victim. Finally, in Study 1, I did not assess relationship commitment or satisfaction. After gaining a better understanding of how perpetrators in romantic relationships are responding to transgressions it is important to look at how their reactions influence relationship commitment and satisfaction. By having both partners participate I gained a better understanding of how these variables are predicting commitment and satisfaction than if I had only asked the perpetrator or the victim. Self-forgiveness by definition is an intraindividual process, but victim forgiveness can also be conceptualized as an intraindividual prosocial change toward a perpetrator (McCullough, Pargament, & Thoresen, 2000). Therefore, to fully understand self-forgiveness it is necessary to understand the role victim forgiveness has by also studying the victim's response.

Overview of Study 2

As a result of the research on self-forgiveness being in its early stages, it is still unclear what relation self-forgiveness has with romantic relationship satisfaction and commitment.

General forgiveness has been shown to improve romantic relationship quality, but self-forgiveness may act in different ways. It is unclear whether victims will perceive perpetrator self-forgiveness as a positive thing or as the perpetrator excusing themselves of blame. Perpetrators of wrongdoing experience feelings of shame and guilt, which can lead to different reactions (Griffin et al., 2016). It is unclear what effect the negative emotions that accompany the process of coping with wrongdoing will have on feelings of satisfaction and commitment in the relationship for the perpetrator or the victim. Research also suggests the victim's perception of the perpetrator's reaction may affect relationship quality (Pelucchi et al., 2013). If the victim perceives the perpetrator to be excusing himself or herself of blame or feeling positively about himself or herself after the transgression the relationship may suffer. Early studies have shown self-forgiveness it to be positively associated with positive relationship outcomes (Pelucchi et al., 2013; Pelucchi et al., 2015), but most studies do not differentiate between self-excusing and self-forgiveness or explain what is predicting self-forgiveness. Self-forgiveness may be beneficial to have in a relationship because it could lead to resolution after a transgression. But it may be detrimental if a transgressor forgives himself or herself for a transgression more readily than the victim forgives him or her. Similarly, if the perpetrator's response is to self-excuse and externalize the blame rather than genuinely self-forgive, the relationship may suffer even more.

Hypotheses

Hypothesis 1. Guilt will positively predict self-forgiveness and self-punitiveness and negatively predict self-excusing.

Hypothesis 2. Shame will positively predict self-excusing and self-punitiveness and negatively predict self-forgiveness.

Hypothesis 3. Self-forgiveness will positively predict satisfaction and commitment for both the perpetrator and the victim.

Hypothesis 4. Self-excusing will positively predict satisfaction and commitment for the perpetrator, but negatively predict them for the victim.

Hypothesis 5. Self-punitiveness will negatively predict satisfaction and commitment for the perpetrator and the victim.

Hypothesis 6. Perceived forgiveness by the victim will predict commitment and satisfaction for the perpetrator and the victim.

Hypothesis 7. Actual forgiveness by the victim will predict commitment and satisfaction for the perpetrator and the victim.

Method

Participants

Eighty-three couples ($N = 166$) were recruited at VCU through the undergraduate psychology research pool and through undergraduate psychology courses. Participants were at least 18 years old and were in a monogamous romantic relationship of two months or longer. Majority of participants signed up through the online SONA website. It was not a requirement to be in the SONA system to participate. Non-SONA participants were either asked to participate by their SONA romantic partner or learned about the study in an undergraduate course. SONA participants were compensated with one credit and one entry into a raffle to win a \$20 gift card and an entry into the grand prize drawing of \$80. Non-SONA participants were compensated with two raffle entries. Participants were 21.04 years of age on average ($SD = 3.31$). Couples reported an average relationship length of 19.48 months ($SD = 8.62$). The sample was 53.3% female, 45.3 % male, and 1.5% did not identify. The sample was not restricted to straight

couples. The majority of the couples identified as having a different gender identify than their partner (54.3%), 34.5% of couples had the same gender identity, and 11.3% did not respond. Ethnicity and race were varied. The sample was 12.6% Hispanic or Latino. Fifty-seven percent identified as white, 15.5% African American, 9.9% multiracial, 5.6% South Asian, 3.5% East Asian, 2.1 % Native Hawaiian/Pacific Islander, .7% American Indian/Alaska Native, and 5.6% other or unknown. The majority of the sample were interracial couples (58.8%), meaning they did not identify as having the same race as their partner. The majority of the participants were in college, either at VCU or elsewhere (85.3%).

Materials

Study 1 Measures. Perpetrator reactions and state guilt and shame were measured using the State Shame and Guilt Scale (shame, $\alpha = .88$; guilt, $\alpha = .91$ Marschall et al., 1994) and the DPSSF (self-forgiveness $\alpha = .92$, self-punitive $\alpha = .86$, self-excusing $\alpha = .54$ – low but likely due to outliers; Woodyatt & Wenzel, 2013). The writing task for both partners was a modified version of the task from Study 1 (See Appendix B). Participants wrote about the specific offense that was selected and the prompt was worded differently for the victim and the perpetrator.

Self-Forgiveness. In addition to using the DPSSF (Woodyatt & Wenzel, 2013) to measure self-forgiveness, I also used the Two-Factor Self-Forgiveness Scale (Griffin, 2016; Appendix K) which assesses both decisional (5 items, $\alpha = .92$) and emotional (5 items, $\alpha = .93$) facets of self-forgiveness. Participants answering the questionnaire from the perpetrator perspective were instructed to indicate the extent to which each item described their current thoughts and feelings about the target offense they described with a 7-point response scale: 1 (*Strongly disagree*), 7 (*Strongly agree*). An example decisional self-forgiveness item is, “I

acknowledge that I am to blame for my actions.” An example emotional self-forgiveness item is, “I feel like a valuable person despite my wrongdoing.”

Relationship Commitment. Relationship commitment was measured using the 7-item measure from the Investment Model Scale (Rusbult, Martz, & Agnew, 1998; Appendix F). Participants were instructed to indicate how much they agreed with each statement with a 7-point response scale: 1 (*do not agree at all*), 4 (*agree somewhat*), 7 (*agree completely*). An example item is, “I am committed to maintaining my relationship with my partner.” $\alpha = .83$

Relationship Satisfaction. Relationship satisfaction was measured using the 5-item subscale from the Investment Model Scale (Rusbult et al., 1998; Appendix H). Participants indicated how much they agree with each statement with a 7-point response scale: 1 (*do not agree at all*), 4 (*agree somewhat*), 7 (*agree completely*). An example item is “I feel satisfied with our relationship.” $\alpha = .93$

Other Forgiveness. Forgiveness of the perpetrator by the victim was measured using the 18-item Transgression-Related Interpersonal Motivations inventory (TRIM; McCullough, Root, & Cohen, 2006; Appendix J). Respondents indicated their level of agreement with each statement on a scale from 1 (*disagree strongly*) to 5 (*agree strongly*). The inventory is divided into three subscales – Avoidance Motivations, Benevolence Motivations, and Revenge Motivations. The Avoidance Motivations subscale consisted of 7 items ($\alpha = .80$) such as “I keep as much distance between us as possible.” The Revenge subscales consisted of 5 items ($\alpha = .52$) such as “I’ll make him/her pay.” Higher scores indicate greater unforgiveness on the Avoidance and Revenge subscales. The Benevolence Motivations subscale consisted of 6 items ($\alpha = .63$) such as “Even though his/her actions hurt me, I have goodwill for him/her.” Higher scores on the Benevolence Motivations subscale indicate greater forgiveness.

Additional Relationship Information. Participants were also asked more general questions about their relationship and the event as a way to check for quality of the data and to have an understanding of what types of relationships were in the sample. Both members of the dyad rated the transgression event severity and answered other questions about the event. They also answered questions about how their relationship had been going recently, for example how often they see their partner.

Procedure

Couples came to a set of lab rooms on VCU's campus to participate. If one member of the couple was in SONA and the other was not, then the SONA participant was chosen to complete the experiment from the perspective of the perpetrator since the questionnaire contained additional measures compared to the victim's questionnaire. If both were SONA or Non-SONA the research assistant randomly decided which perspective the participants would take.

After completing the informed consent together with the experimenter, the experimenter showed each participant to his or her own study room. The perpetrator was shown to a room that had the REDCap survey pulled up on a computer screen and he or she began the first part of the questionnaire. The participant was told that they would be prompted to stop and wait for the experimenter to return before completing the whole questionnaire. The victim was shown to a room where there was a piece of paper on the desk asking him or her to identify the four most recent transgressions in their relationship where he or she was the victim and his or her partner was the perpetrator (See Appendix L). Participants also ranked the transgressions by severity. Once the victim completed the transgression list, the experimenter asked if her or she was willing to let the experimenter share one of the events with his or her partner. After getting consent, the

experimenter told the victim to wait and went out into the hallway and identified the most severe event from the list. At this point, the perpetrator was done with the first part of the questionnaire. The experimenter then asked the perpetrator if he or she remembered the selected event and if he or she would feel comfortable writing and answering questions about it. Upon consenting, the perpetrator then began the writing task and subsequent measures. Then, the experimenter returned to the victim's room and told him or her the event that had been agreed up by both of them and he or she was instructed to begin the REDCap questionnaire on the computer. All perpetrators and victims consented to the writing task; however, there were five times when the perpetrator could not remember the specific event the victim was referring to. In these cases, the next most severe event was discussed. There were also three instances where the victim felt uncomfortable sharing the most severe event he or she wrote down, so a less severe event from their list was selected to be shared with the perpetrator. The average event severity was 2.55 ($SD = 1.20$) and ranged from 1 to 4 out of a possible 5 points.

Results

Data Preparation and Preliminary Analyses

The final dataset included responses from 83 couples ($N = 166$). It was checked for assumptions of univariate and multivariate normality, linearity, and normally distributed errors. The three subscales of the TRIM-18 and the satisfaction scale all contained extreme outlier variables (z -scores larger than ± 3.29 SDs from the mean). Winsorizing was used to allow these scales to meet the assumptions needed to conduct analyses. The average reported seriousness of the offense was 2.55 ($SD = 1.19$) on a scale from 1 (*not very serious at all*) to 5 (*extremely serious*). This is somewhat low, although participants varied quite a bit in what they were writing about. For example, some couples wrote about communication issues while others wrote about

infidelity. The average time since the transgression was 9.06 weeks ($SD = 18.58$). The average relationship length was 19.48 months ($SD = 8.62$). Majority of the perpetrators reported apologizing for their transgression at the time of the study (81.9%). Descriptive statistics were computed to examine the mean for all variables for both partners (See Table 5).

The average level of self-forgiveness was similar to other studies. Previous research found between approximately 3.5-4.5 units on a 7-point scale, and the current study was 4.42 ($SD = 1.56$) (Wenzel et al., 2012; Pelucchi et al., 2013). This is also similar to the average for Time 1 in Study 1 ($M = 4.32$, $SD = 1.53$). Twenty-nine of the perpetrators reported the transgression occurred one week or less from the day they participated. There was no significant difference in the amount of self-forgiveness or emotional self-forgiveness felt by those who reported an event from two weeks before or longer. There was a significant difference for decisional self-forgiveness ($t(80) = 2.80$, $p = .03$). Perpetrators who wrote about an event that occurred in the week before participation reported significantly less decisional self-forgiveness ($M = 4.17$, $SD = 1.95$) compared to those who reported the event took place two weeks or more before participating ($M = 5.27$, $SD = 1.54$). Emotional self-forgiveness was higher for both groups, implying that emotional self-forgiveness may happen more quickly than decisional (See Table 5). Bivariate correlations were calculated for all major study variables included in the analyses (See Table 6, 7, & 8).

Table 5

Mean Scores for all Measures

	Perpetrator	Victim
Commitment	7.92 (<i>SD</i> = 1.39)	8.07 (<i>SD</i> = 1.19)
Satisfaction	5.94 (<i>SD</i> = 1.06)	6.00 (<i>SD</i> = .98)
Transgression Severity	2.53 (<i>SD</i> = 1.20)	2.57 (<i>SD</i> = 1.20)
TRIM – Benevolence	4.01 (<i>SD</i> = .73)	4.26 (<i>SD</i> = .60)
TRIM - Avoidance	1.47 (<i>SD</i> = .53)	1.27 (<i>SD</i> = .36)
TRIM – Revenge	1.40 (<i>SD</i> = .47)	1.25 (<i>SD</i> = .39)
Self-Forgiveness	4.42 (<i>SD</i> = 1.56)	5.35 (<i>SD</i> = 1.67)
Self-Excusing	2.91 (<i>SD</i> = .96)	3.48 (<i>SD</i> = 1.83)
Self-Punitiveness	5.87 (<i>SD</i> = 1.04)	2.87 (<i>SD</i> = 1.82)
State Shame	1.85 (<i>SD</i> = .92)	—
State Guilt	2.48 (<i>SD</i> = 1.19)	—
Emotional Self-Forgiveness	5.34 (<i>SD</i> = 1.73)	—
Decisional Self-Forgiveness	4.93 (<i>SD</i> = 1.21)	—

Note. TRIM scores for the perpetrators represent the perpetrators perceived victim forgiveness. Self-forgiveness, self-excusing, and self-punitiveness for the victims represent the victims' perceived perpetrator reaction. *N* = 83

Table 6

Bivariate Correlations among Satisfaction, Commitment, and Perpetrator Reactions

	PSAT	PCOM	SF	SE	SP	VSF	VSE	VSP	VSAT	VCOM
PSAT	—	.68**	.03	-.35**	-.09	.27*	-.18	-.06	.36**	.24*
PCOM		—	.15	-.15	-.05	.16	-.09	-.06	.11	.25*
SF			—	-.19	.51**	-.06	-.14	.17	-.18	-.05
SE				—	-.12	-.06	.22*	.01	-.16	-.04
SP					—	-.36**	.11	.12	-.19	-.15
VSF						—	.02	-.14	.29**	.25*
VSE							—	-.21	-.35**	-.27*
VSP								—	-.01	-.17
VSAT									—	.60**
VCOM										—

Note. Bivariate associations among study variables. Variable names are perpetrator satisfaction (PSAT), perpetrator commitment (PCOM), self-forgiving (SF), self-excusing (SE), self-punishing (SP), victim perceived perpetrator self-forgiveness (VSF), victim perceived perpetrator self-excusing (VSE), victim perceived perpetrator self-punitiveness (VSP), victim satisfaction (VSAT), victim commitment (VCOM). $N = 83$.

Table 7

Bivariate Correlations among Satisfaction, Commitment, and Transgression-Related Interpersonal Motivations

	PSAT	PCOM	BEN	AV	RVN	PBEN	PAV	PRVN	VSAT	VCOM
PSAT	—	.68**	.05	-.25 **	-.14	.22*	-.64*	-.43**	.36**	.24*
PCOM		—	.07	-.22*	-.07	.20	-.44**	-.31*	.18	.25*
BEN			—	-.32*	-.28*	-.12	-.22*	-.18	.38**	.42**
AV				—	.35**	-.15	.37**	.19	-.48**	-.39**
RVN					—	.14	.07	.12	-.26*	-.26*
PBEN						—	-.39*	-.28*	.20	.18
PAV							—	-.53**	-.32**	-.17
PRVN								—	-.22*	-.10
VSAT									—	.60**
VCOM										—

Note. Bivariate associations among study variables. Variable names are perpetrator satisfaction (PSAT), perpetrator commitment (PCOM), victim forgiveness (BEN), victim unforgiveness - avoidance (AV), victim unforgiveness - revenge (RVN), perpetrator perceived victim forgiveness (PBEN), perpetrator perceived victim unforgiveness - avoid (PAV), perpetrator perceived victim unforgiveness – revenge (PRVN), victim satisfaction (VSAT), victim commitment (VCOM). $N = 83$.

Table 8

Bivariate Correlations among Perpetrator Reactions and Victim Transgression-Related Interpersonal Motivations

	SF	SE	SP
BEN	-.16	.00	-.13
AV	.05	.16	.04
RVN	-.01	.20	-.04

Note. Bivariate associations among study variables. Variable names are victim forgiveness (BEN), victim unforgiveness - avoidance (AV), victim unforgiveness - revenge (RVN), self-forgiving (SF), self-excusing (SE), and self-punishing (SP), $N = 83$. The correlation between self-excusing and victim unforgiveness – revenge could be considered marginally significant ($p = .08$).

Dyadic data was analyzed using the Actor-Partner Interdependence Modeling (APIM). APIM is a specialized form of Multi-Level Linear Regression used to model data from two partners (Kashy & Cook, 1999; Kenny, Kashy, & Cook, 2006). Compared to non-dyadic analyses, APIM allowed me to examine the simultaneous effects of both the perpetrator and victim's predictors on ratings of commitment and satisfaction. APIM models two types of effects: actor effects and partner effects. Actor effects provide information about the individual's own predictor variable predicting their own outcomes. Partner effects provide information about partner's predictor variables predicting the other individual's outcomes. To use an example from this project, an actor effect would be how perpetrators' responses influenced perpetrators' outcomes, such as their self-forgiveness affecting their relationship satisfaction. A partner effect would be how perpetrators' responses influenced victims' outcomes, such as the perpetrators' self-forgiveness affecting the victims' relationship satisfaction. APIM is an ideal analytic technique to use because commitment and satisfaction may be experienced differently for the

victim and the perpetrator. Also, variables such as perpetrators' self-forgiveness and victims' *perception* of perpetrators' self-forgiveness were both included in the models. I ran separate sets of models. One set treated victim and perpetrator commitment as the outcomes and the other treated victim and perpetrator satisfaction as the outcomes.

When using APIM, the couple is treated as the unit of analysis, so I altered the structure of the data from an individual data-set structure to a pairwise data-set structure. Because one partner was writing from the perspective of the victim and one from the perspective of the perpetrator, I ran the models as distinguishable. If there was not a way to distinguish between partners, then I would have had to indicate that in the model. I used the R-based web application created by David A. Kenny (2015) to run APIM analyses.

Table 9

Standardized Path Coefficients for Perpetrator Reaction APIM Models

	Perpetrator	Victim	Perpetrator to Victim	Victim to Perpetrator
Self-Forgiveness and Commitment	$\beta = .18, p = .13$	$\beta = .22, p = .05$	$\beta = -.02, p = .83$	$\beta = .18, p = .10$
Self-Forgiveness and Satisfaction	$\beta = 0.08, p = .50$	$\beta = .29, p < .01$	$\beta = -.15, p = .21$	$\beta = .30, p < .01^*$
Self-Forgiveness/Forgiveness and Commitment	$\beta = .15, p = .14$	$\beta = .12, p = .13$	$\beta = .16, p = .23$	$\beta = .06, p = .74$
Self-Forgiveness/Forgiveness and Satisfaction	$\beta = .07, p = .48$	$\beta = .18, p = .03$	$\beta = .15, p = .24$	$\beta = -.12, p = .48$
Emotional Self-Forgiveness/Forgiveness and Commitment	$\beta = .12, p = .27$	$\beta = .38, p < .01$	$\beta = .11, p = .19$	$\beta = .02, p = .89$
Emotional Self-Forgiveness/Forgiveness and Satisfaction	$\beta = .12, p = .25$	$\beta = .38, p < .01$	$\beta = .11, p = .45$	$\beta = .02, p = .21$
Decisional Self-Forgiveness/Forgiveness and Satisfaction	$\beta = .17, p = .06$	$\beta = .50, p < .01$	$\beta = .01, p = .85$	$\beta = .11, p = .24$

Decisional Self-Forgiveness/Forgiveness and Commitment	$\beta = .21, p < .01$	$\beta = .52, p < .01$	$\beta = .01, p = .83$	$\beta = .06, p = .40$
Self-Excusing and Commitment	$\beta = -.26, p = .16$	$\beta = -.21, p = .01$	$\beta = .03, p = .83$	$\beta = -.04, p = .66$
Self-Excusing and Satisfaction	$\beta = -.09, p = .42$	$\beta = -.25, p < .01$	$\beta = .14, p = .27$	$\beta = -.10, p = .28$
Self-Punishing and Commitment	$\beta = -.08, p = .64$	$\beta = -.07, p = .40$	$\beta = -.18, p = .23$	$\beta = .30, p < .01$
Self-Punishing and Satisfaction	$\beta = -.11, p = .51$	$\beta = .03, p = .77$	$\beta = -.27, p = .09$	$\beta = -.03, p = .75$

Note. Standardized path coefficients for all actor and partner effects in separate actor partner interdependence models. Each row represents a different APIM with actor effects for the perpetrator and victim and the two partner effects (perpetrator to victim & victim to perpetrator). Significant effects are bolded and italicized. $N = 166$ (83 couples)

Perpetrator Reactions to Wrongdoing

Self-Forgiveness. An APIM was run to test my hypothesis that self-forgiveness would positively predict satisfaction for the partner and the victim (See Table 9 & 10 for all path coefficients). This model tested the effect of perpetrators' self-forgiveness and victims' perceived partner self-forgiveness on relationship satisfaction (See Figure 4). The actor effect for victims was statistically significant ($\beta = .29, p < .01$). The partner effect from victims to perpetrators was also statistically significant ($\beta = .30, p < .01$). This means that the more victims perceived the perpetrator forgiving themselves, the more relationship satisfaction both the victim and the perpetrator felt. The actor effect for perpetrators was not significant ($\beta = 0.08, p = .50$) and the partner effect for perpetrators to victims was not significant ($\beta = -.15, p = .21$). This means that perpetrator self-forgiveness did not predict relationship satisfaction for the perpetrator or the victim.

An APIM was run to test my hypothesis that self-forgiveness would positively predict commitment for the partner and the victim (See Figure 5). I tested the effect of perpetrators' self-

forgiveness and victims' perceptions of partner self-forgiveness on commitment. The actor effect for victims was marginally statistically significant ($\beta = .22, p = .05$). The partner effect from victims to perpetrators was not statistically significant ($\beta = .18, p = .10$). This means that the more victims perceived the perpetrator forgiving themselves, the more commitment the victim felt, but greater perceptions of self-forgiveness did not predict perpetrator commitment. The actor effect for perpetrators was not significant ($\beta = .18, p = .13$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = -.02, p = .83$). This means that perpetrator self-forgiveness did not predict commitment for the perpetrator or the victim.

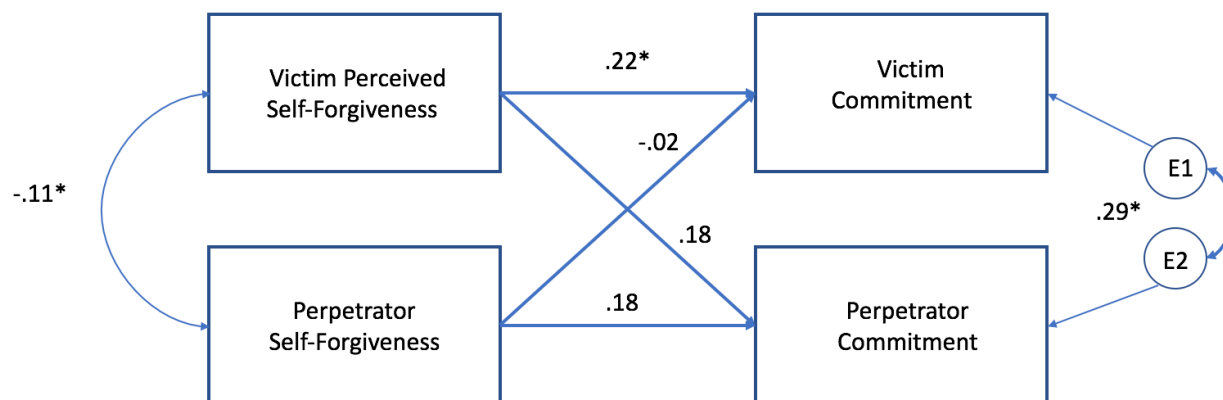


Figure 4. APIM measuring actor and partner effects for forgiveness on relationship commitment

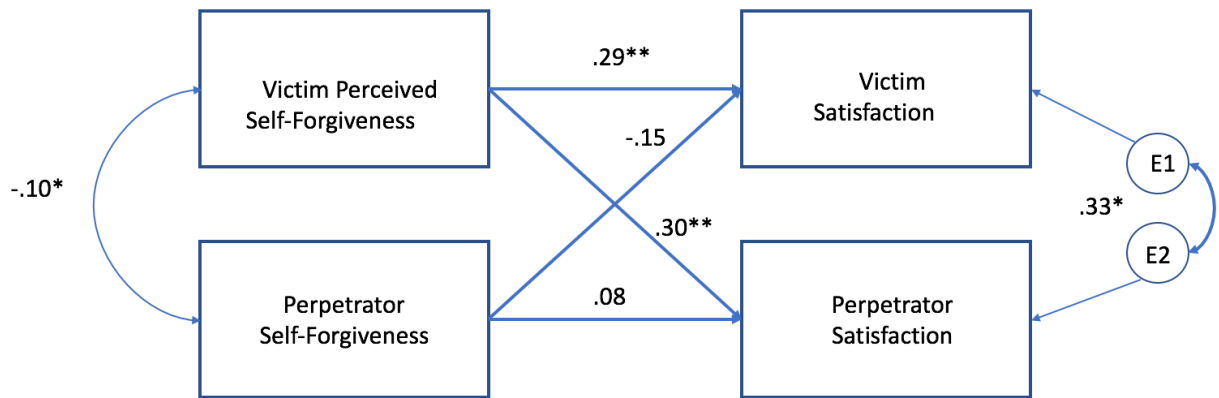


Figure 5. APIM measuring actor and partner effects for forgiveness on relationship satisfaction.

Self-Forgiveness and Other-Forgiveness. Models were run to test my hypotheses that perpetrator self-forgiveness would predict commitment and satisfaction for the perpetrator and the victim and actual forgiveness by the victim would predict commitment and satisfaction for the perpetrator and the victim (Figures 6-10). An APIM was run to test the effect of perpetrators' self-forgiveness and victim's forgiveness on relationship satisfaction. The actor effect for victims was statistically significant ($\beta = .18, p = .03$). The partner effect from victims to perpetrators was not statistically significant ($\beta = -.12, p = .48$). This means that the more victims forgave the perpetrator, the more relationship satisfaction the victim felt, but victim forgiveness did not predict satisfaction for the perpetrator. The actor effect for perpetrators was not significant ($\beta = 0.07, p = .48$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = .15, p = .24$). This means that perpetrator self-forgiveness did not predict relationship satisfaction for the perpetrator or the victim. When using the Emotional Self-Forgiveness subscale from the Two-Factor Self-Forgiveness Scale to measure self-forgiveness the only significant effect was the actor effect for the victim ($\beta = .38, p < .01$). When using the Decisional

Self-Forgiveness subscale, the actor effects for the victim ($\beta = .50, p < .01$) and the perpetrator ($\beta = .17, p = .06$) were significant. This means that higher feelings of self-forgiveness related to the decision to affirm socio-moral values predicted higher satisfaction.

An APIM was run to test the effect of perpetrators' self-forgiveness and victims' forgiveness on commitment. Neither the actor effect for victims ($\beta = .12, p = .13$) nor the partner effect from victims to perpetrators was statistically significant ($\beta = .06, p = .74$). The actor effect for perpetrators was not significant ($\beta = .15, p = .14$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = .16, p = .23$). However, when using the Two-Factor Self-Forgiveness Scale, there was a significant actor effect for victims when using the emotional self-forgiveness factor ($\beta = .38, p < .01$) and the decisional factor ($\beta = .52, p < .01$). When using the decisional self-forgiveness factor there was also a significant actor effect for perpetrators ($\beta = .21, p = .03$). This means that when self-forgiveness is separated into two factors, it predicts perpetrator commitment, but not victim commitment. However, including it in the model revealed a significant effect for victim forgiveness predicting victim commitment.

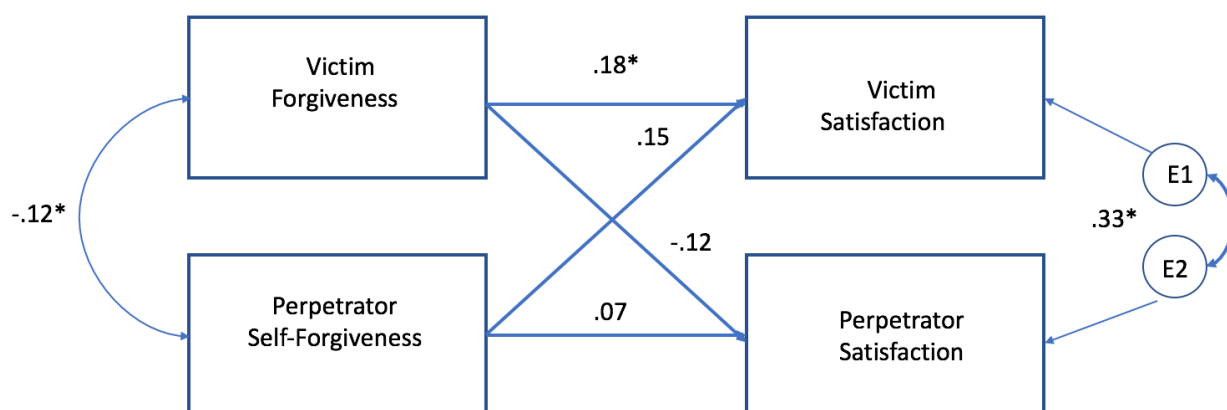


Figure 6. APIM measuring actor and partner effects for forgiveness on relationship satisfaction.

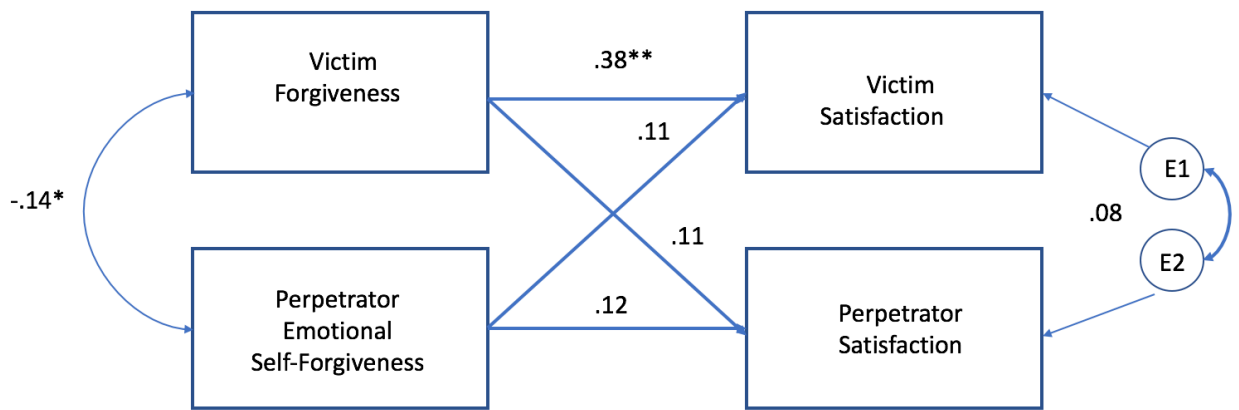


Figure 7. APIM measuring actor and partner effects for forgiveness on relationship commitment.

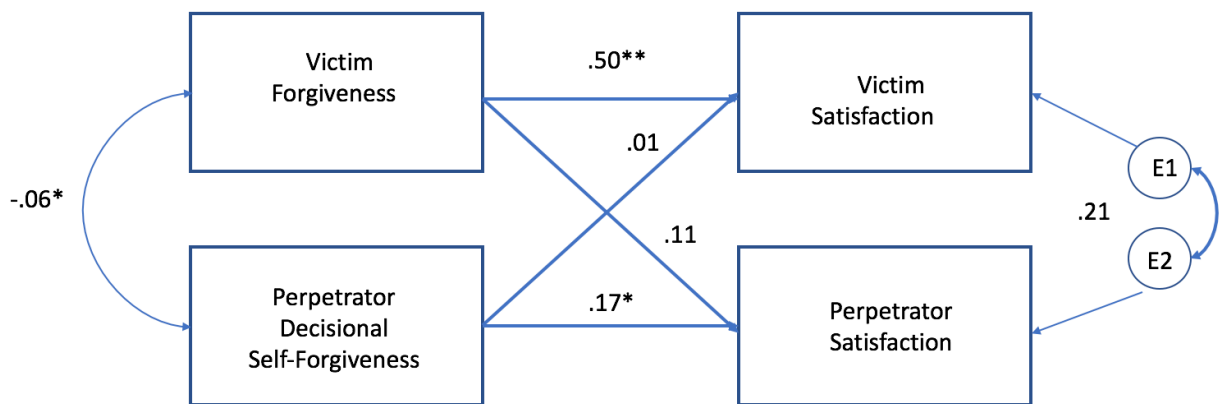


Figure 8. APIM measuring actor and partner effects for forgiveness on relationship satisfaction.

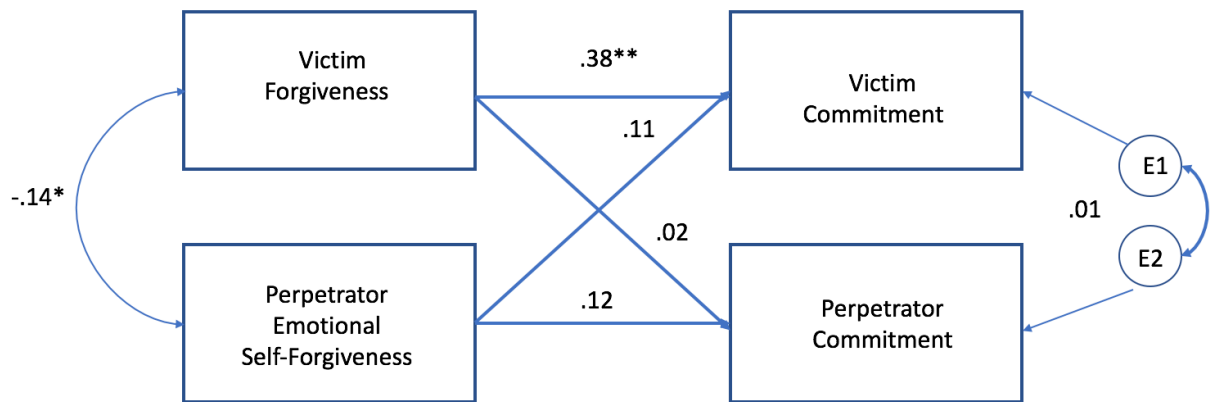


Figure 9. APIM measuring actor and partner effects for forgiveness on relationship Commitment.

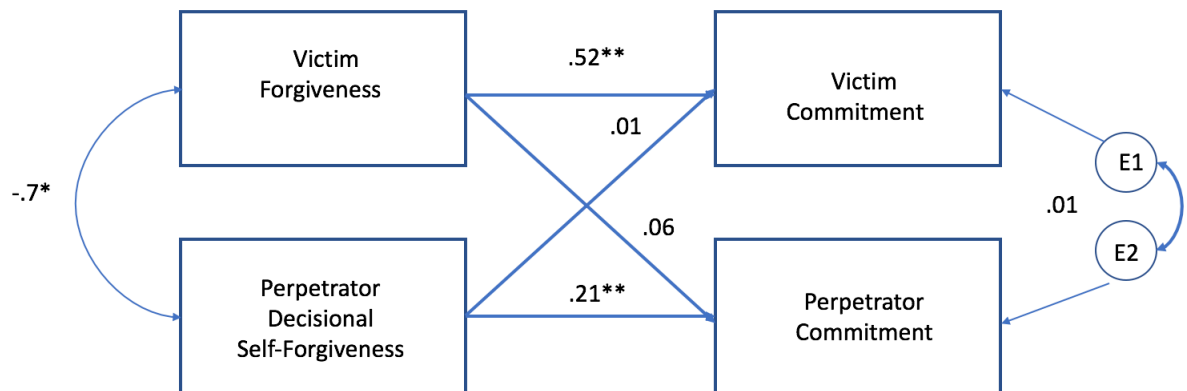


Figure 10. APIM measuring actor and partner effects for forgiveness on relationship commitment.

Self-Excusing. I hypothesized self-excusing would positively predict satisfaction and commitment for the perpetrator, but negatively predict them for the victim. An APIM was run to test the effect of perpetrators' self-excusing and victims' perceived self-excusing on relationship satisfaction (Figure 11). The actor effect for victims was statistically significant ($\beta = -.25, p < .01$). The partner effect from victims to perpetrators was not statistically significant ($\beta = -.10, p =$

.28). This means that the more victims perceived the perpetrators excusing themselves of blame, the less relationship satisfaction the victims felt. The actor effect for perpetrators was not significant ($\beta = -.09, p = .42$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = .14, p = .27$). This means that perpetrators' self-excusing did not predict relationship satisfaction for the perpetrators or the victims.

An APIM model was run to test the effect of perpetrators' self-excusing and victims' perceived self-excusing on commitment (Figure 12). The actor effect for victims was statistically significant ($\beta = -.21, p = .01$). The partner effect from victims to perpetrators was not statistically significant ($\beta = -.04, p = .66$). This means that the more victims perceived the perpetrator excusing themselves of blame, the less commitment the victim felt. The actor effect for perpetrators was not significant ($\beta = -.26, p = .16$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = .03, p = .83$). This means that perpetrator self-excusing did not predict commitment for the perpetrator or the victim.

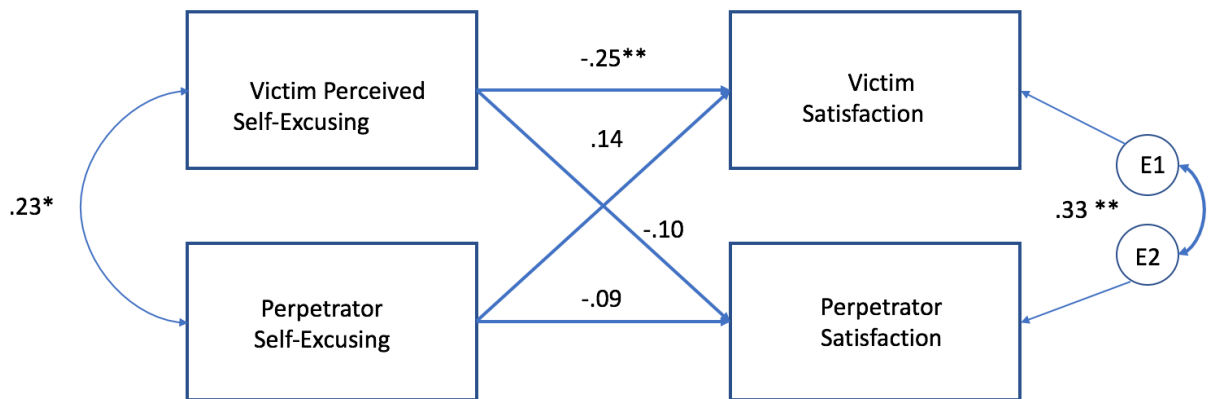


Figure 11. APIM measuring actor and partner effects for self-excusing on relationship satisfaction.

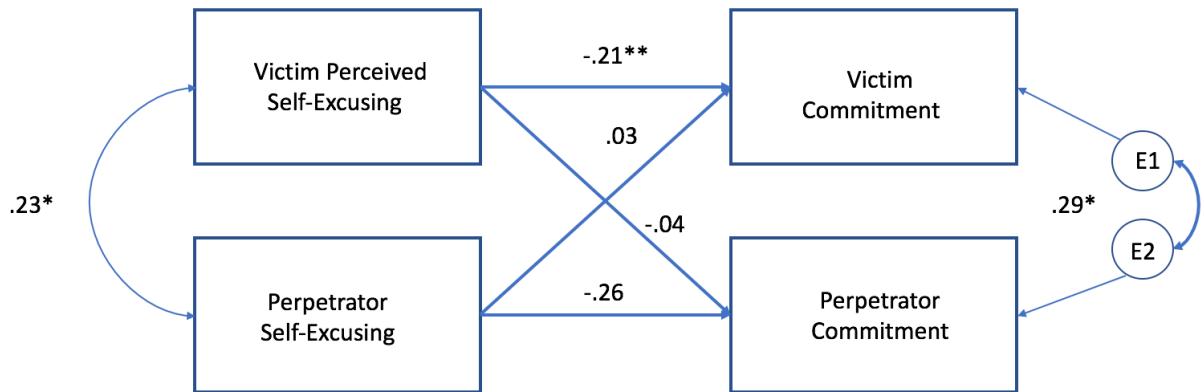


Figure 12. APIM measuring actor and partner effects for self-excusing on relationship commitment.

Self-Punitiveness. I hypothesized self-punitiveness would negatively predict satisfaction and commitment for the perpetrator and the victim. An APIM was run to test the effect of perpetrators' self-punitiveness and victims' perceived partner self-punitiveness on satisfaction (Figure 13). The actor effect for victims was not statistically significant ($\beta = .03, p = .77$). The partner effect from victims to perpetrators was also not statistically significant ($\beta = -.03, p = .75$). This means that victims' perceived perpetrator self-punitiveness did not affect the satisfaction the victim or the perpetrator felt. The actor effect for perpetrators was not significant ($\beta = -0.11, p = .51$) and the partner effect for perpetrators to victims was marginally statistically significant ($\beta = -.27, p = .09$). This means that perpetrator self-punitiveness did not predict satisfaction for the perpetrator, but the more self-punishing the perpetrator was, the somewhat less satisfied the victim was.

An APIM model was run to test the effect of perpetrators' self-punitiveness and victims' perceived partner self-punitiveness on commitment (Figure 14). The actor effect for victims was not statistically significant ($\beta = -.07, p = .40$). However, the partner effect from victims to perpetrators was statistically significant ($\beta = .30, p < .01$). This means that the more victims

perceived the perpetrator punishing themselves, the more commitment the perpetrator felt. The actor effect for perpetrators was not significant ($\beta = -0.08, p = .64$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = -.18, p = .23$). This means that perpetrator self-punitiveness did not predict relationship commitment for the perpetrator or the victim.

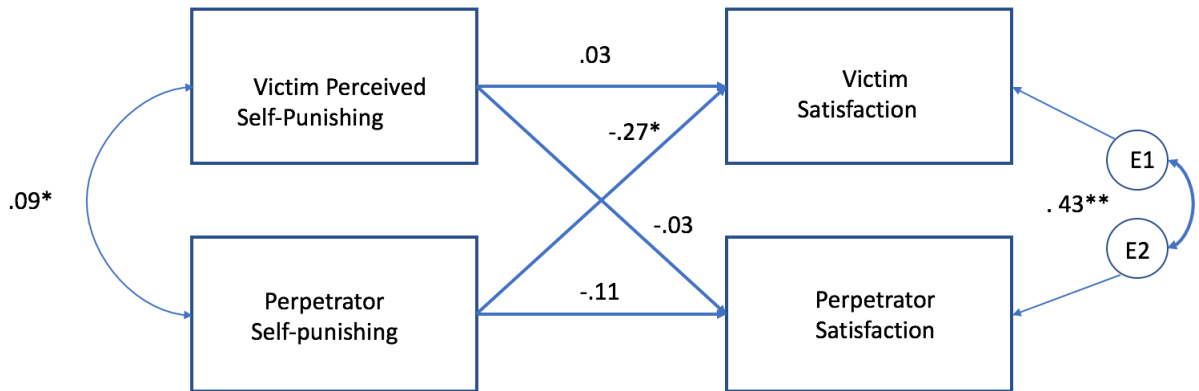


Figure 13. APIM measuring actor and partner effects for self-punishing on relationship satisfaction.

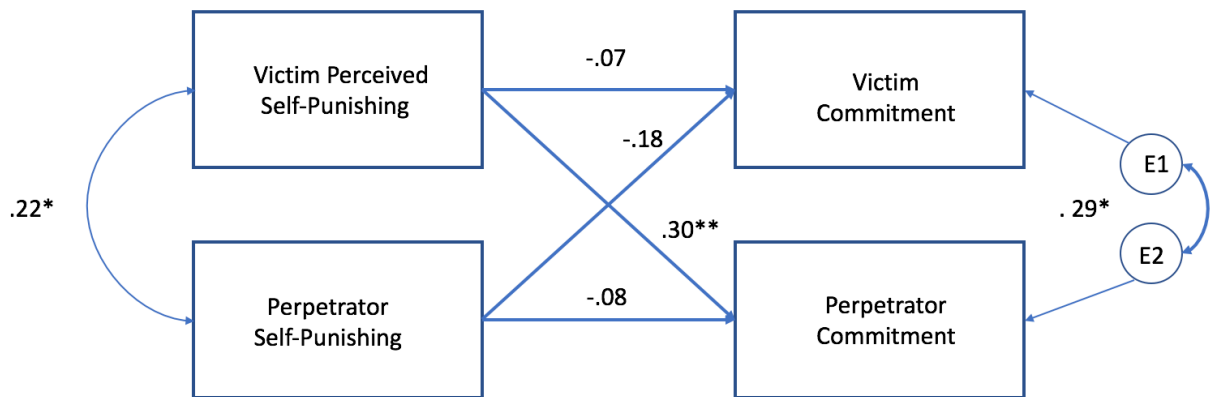


Figure 14. APIM measuring actor and partner effects for self-excusing on relationship satisfaction.

Table 10

Standardized Path Coefficients for Transgression-Related Interpersonal Motivations APIM Models

	Perpetrator	Victim	Perpetrator to Victim	Victim to Perpetrator
Forgiveness and Commitment	$\beta = .18, p = .11$	$\beta = .38, p < .01$	$\beta = .11, p = .23$	$\beta = .04, p = .77$
Forgiveness and Satisfaction	$\beta = .19, p = .08$	$\beta = .43, p < .01$	$\beta = .13, p = .17$	$\beta = -.01, p = .92$
Unforgiveness-Revenge and Commitment	$\beta = -.30, p < .01$	$\beta = -.26, p = .03$	$\beta = -.06, p = .53$	$\beta = -.04, p = .79$
Unforgiveness-Revenge and Satisfaction	$\beta = -.40, p < .01$	$\beta = -.26, p = .03$	$\beta = -.16, p = .09$	$\beta = -.10, p = .38$
Unforgiveness-Avoidance and Commitment	$\beta = -.38, p < .01$	$\beta = -.42, p < .01$	$\beta = -.06, p = .51$	$\beta = -.08, p = .58$
Unforgiveness- Avoidance and satisfaction	$\beta = -.38, p < .01$	$\beta = -.42, p < .01$	$\beta = -.06, p = .51$	$\beta = -.01, p = .58$

Note. Standardized path coefficients for all actor and partner effect in separate actor partner interdependence models. Significant effects are bolded. $N = 166$ (83 couples)

Ancillary Analyses: Other-Forgiveness

Benevolence Motivations. I hypothesized victim forgiveness would predict commitment and satisfaction for the perpetrator and the victim. An APIM was run to test the effect of victims' forgiveness and perpetrators' perceived forgiveness on relationship satisfaction (Figure 15). The actor effect for victims was statistically significant ($\beta = .43, p < .01$). The partner effect from victims to perpetrators was not statistically significant ($\beta = -.01, p = .92$). This means that the more the victim forgave their partner, the more relationship satisfaction the victim felt, but their forgiveness did not significantly increase the relationship satisfaction of their partner. The actor effect for perpetrators was marginally significant ($\beta = .19, p = .08$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = .13, p = .17$). This means that

perpetrator perceived forgiveness did (somewhat) positively predict relationship satisfaction for the perpetrator, but not for the victim.

An APIM was run to test the effect of victims' forgiveness and perpetrators' perceived forgiveness on commitment (Figure 16). The actor effect for victims was statistically significant ($\beta = .38, p < .01$). The partner effect from victims to perpetrators was not statistically significant ($\beta = .04, p = .77$). This means that the more victims forgave their partner, the more commitment the victim felt, however victim forgiveness did not affect perpetrator commitment. The actor effect for perpetrators was not significant ($\beta = .18, p = .11$) and the partner effect for perpetrators to victims was not significant ($\beta = .11, p = .23$). This means that perpetrator perceived forgiveness did not predict commitment for the perpetrator or the victim.

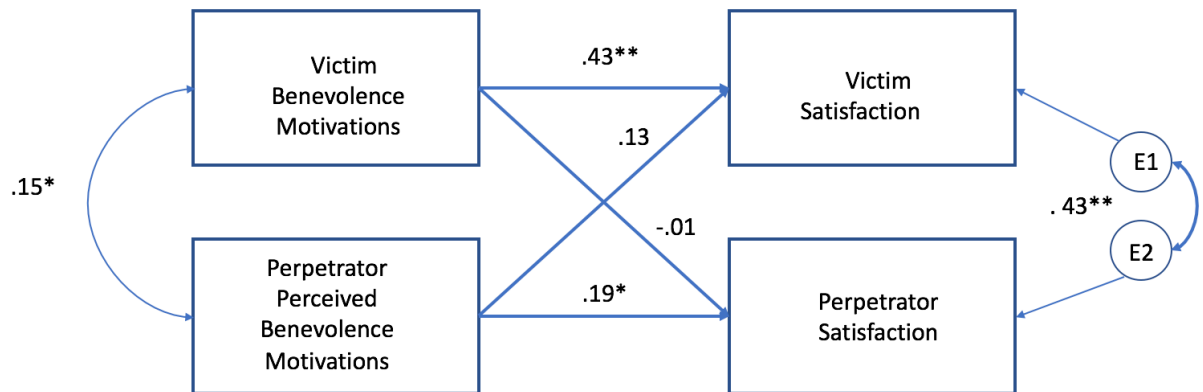


Figure 15. APIM measuring actor and partner effects for victim forgiveness on relationship satisfaction.

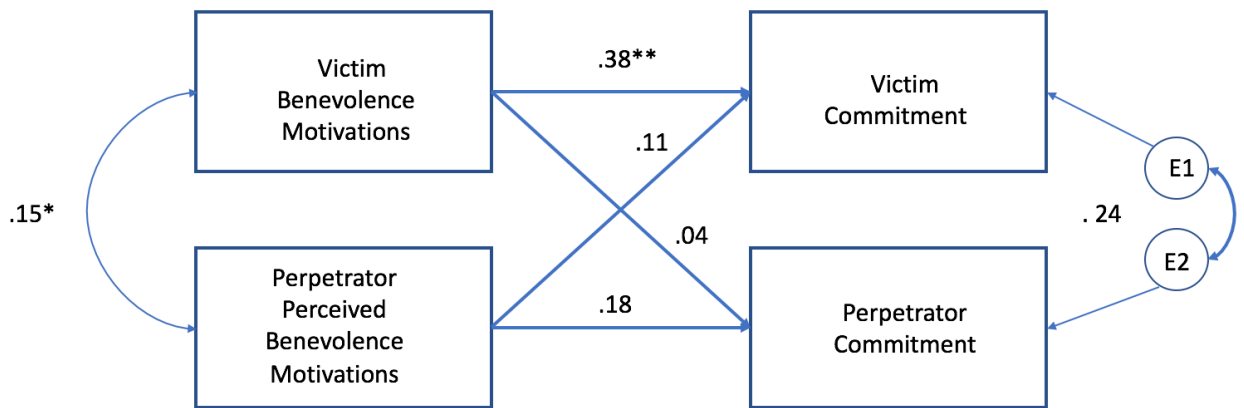


Figure 16. APIM measuring actor and partner effects for victim forgiveness on relationship commitment.

Unforgiveness - Avoidance Motivations. An APIM was run to test the effect of victims' avoidance motivations and perpetrators' perceived unforgiveness on relationship satisfaction (Figure 17). The actor effect for victims was statistically significant ($\beta = -.42, p < .01$). The partner effect from victims to perpetrators was not statistically significant ($\beta = -.01, p = .58$). This means that the more unforgiving victims were, the less satisfied the victims felt. The actor effect for perpetrators was significant ($\beta = -0.38, p < .01$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = -.06, p = .51$). This means that the more perpetrators perceived unforgiveness in their partner the less satisfied they were (but not their partner).

An APIM was run to test the effect of victims' avoidance motivations and perpetrators' perceived unforgiveness on commitment (Figure 18). The actor effect for victims was statistically significant ($\beta = -.42, p < .01$). The partner effect from victims to perpetrators was not statistically significant ($\beta = -.08, p = .58$). This means that the more victims were unforgiving, the less commitment the victim felt. The actor effect for perpetrators was significant ($\beta = -0.38, p$

< .01) and the partner effect for perpetrators to victims was not statistically significant ($\beta = -.06$, $p = .51$). This means that higher perpetrator perceived unforgiveness predict less commitment for the perpetrator.

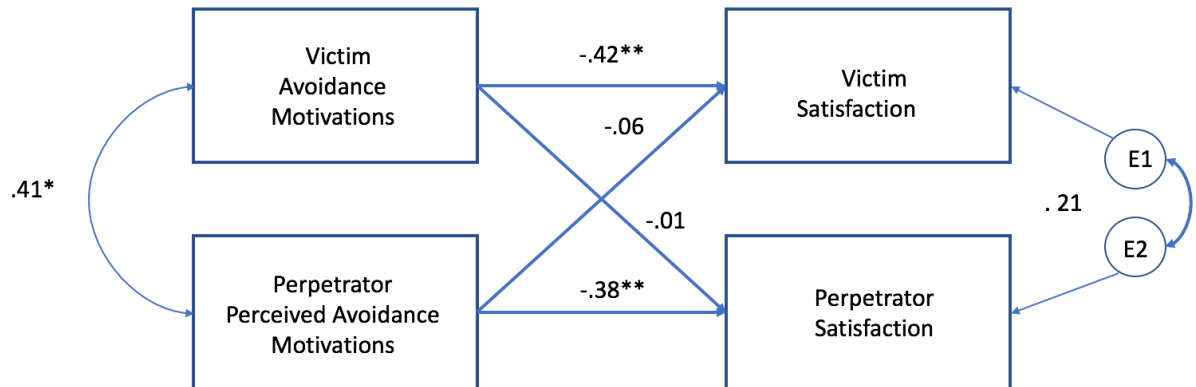


Figure 17. APIM measuring actor and partner effects for unforgiveness on relationship satisfaction.

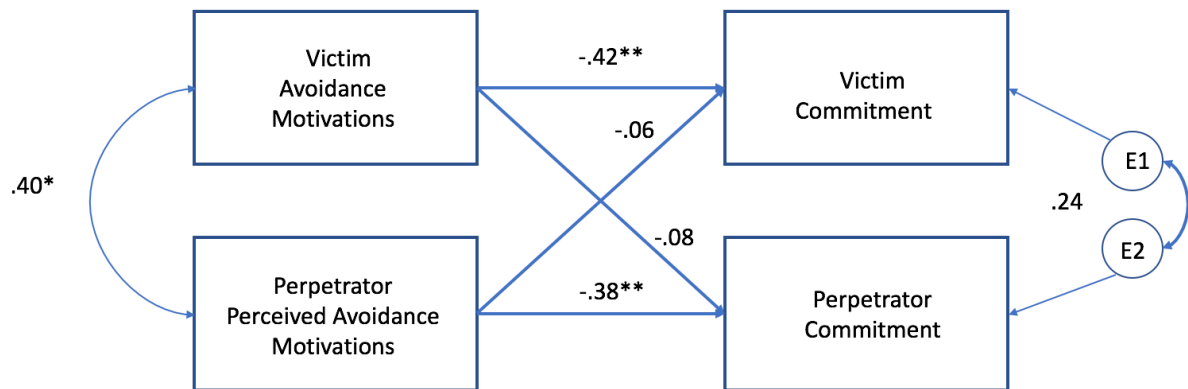


Figure 18. APIM measuring actor and partner effects for forgiveness on relationship commitment.

Unforgiveness - Revenge Motivations. An APIM was run to test the effect of victims' revenge motivations and perpetrators' perceived unforgiveness on relationship satisfaction (Figure 19). The actor effect for victims was statistically significant ($\beta = -.26$, $p = .03$). The

partner effect from victims to perpetrators was not statistically significant ($\beta = -.10, p = .38$). This means that the more victims were unforgiving, the less relationship satisfaction the victim felt, but their unforgiveness did not influence the partner's relationship satisfaction. The actor effect for perpetrators was significant ($\beta = -0.40, p < .01$) and the partner effect for perpetrators to victims was marginally statistically significant ($\beta = -.16, p = .09$). This means that higher perpetrator perceived unforgiveness predicted less relationship satisfaction for the perpetrator and (somewhat) for the victim.

An APIM was run to test the effect of victims' revenge motivations and perpetrators' perceived unforgiveness on commitment (Figure 20). The actor effect for victims was statistically significant ($\beta = -.26, p = .03$). The partner effect from victims to perpetrators was not statistically significant ($\beta = -.04, p = .79$). This means that the more unforgiving the victims were, the less commitment the victim felt. The actor effect for perpetrators was significant ($\beta = -0.30, p < .01$) and the partner effect for perpetrators to victims was not statistically significant ($\beta = -.06, p = .53$). This means that high perpetrator perceived unforgiveness predicted less commitment for the perpetrator.

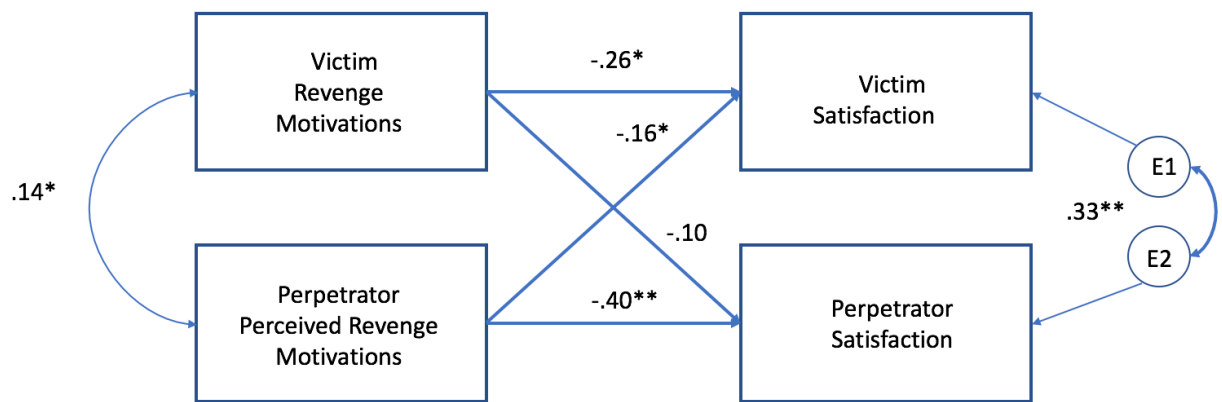


Figure 19. APIM measuring actor and partner effects for unforgiveness on relationship satisfaction.

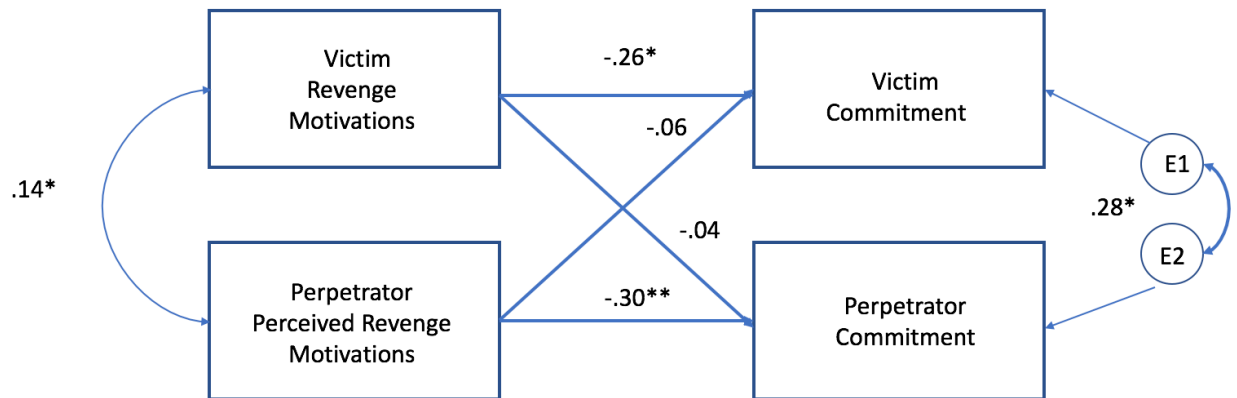


Figure 20. APIM measuring actor and partner effects for forgiveness on relationship commitment.

Guilt and Shame on Perpetrator Reactions

Two path models were developed using AMOS 24.0 to test the relation between guilt and shame and perpetrator reactions to wrongdoing (Figures 21 & 22). I hypothesized that shame and guilt would directly predict self-excusing, self-punitiveness, and self-forgiving. Because shame and guilt are highly correlated, I used the standardized residuals of shame and guilt as my predictors. Due to my small sample size ($N = 83$ perpetrators) I was not able to accurately run a

model including both predictors, so I ran them separately. The following criteria were used to assess goodness of fit for the models: CFI, normed fit index (NFI), incremental fit index (IFI), and TLI, higher than .90 which would indicate adequate fit (Byrne, 1994; Hu & Bentler, 1999); and a RMSEA of .08 or less (Browne & Cudeck, 1993).

The overall fit for the model in which guilt predicted self-excusing, self-punishing and self-forgiving was poor, CFI = .64, NFI = .65, IFI = .67, TLI = -.21 and RMSEA = .26. However, all the path coefficients were significant. Guilt positively predicted self-forgiveness ($\beta = .45, p < .01$) and self-punishing ($\beta = .23, p = .04$). Guilt negatively predicted self-excusing ($\beta = -.44, p < .01$). Self-punishing had a coefficient under .30 and has conceptual differences compared to self-forgiveness and self-excusing, so I trimmed the model and tested the model using only self-forgiveness and self-excusing as outcomes. This improved the model fit, CFI = 1.00, NFI = 1.00, IFI = 1.03, TLI = 1.24 and RMSEA = .00. Guilt still positively predicted self-forgiveness ($\beta = .43, p < .01$) and self-excusing ($\beta = .44, p < .01$). This suggests that the model excluding self-punishing fit the data better.

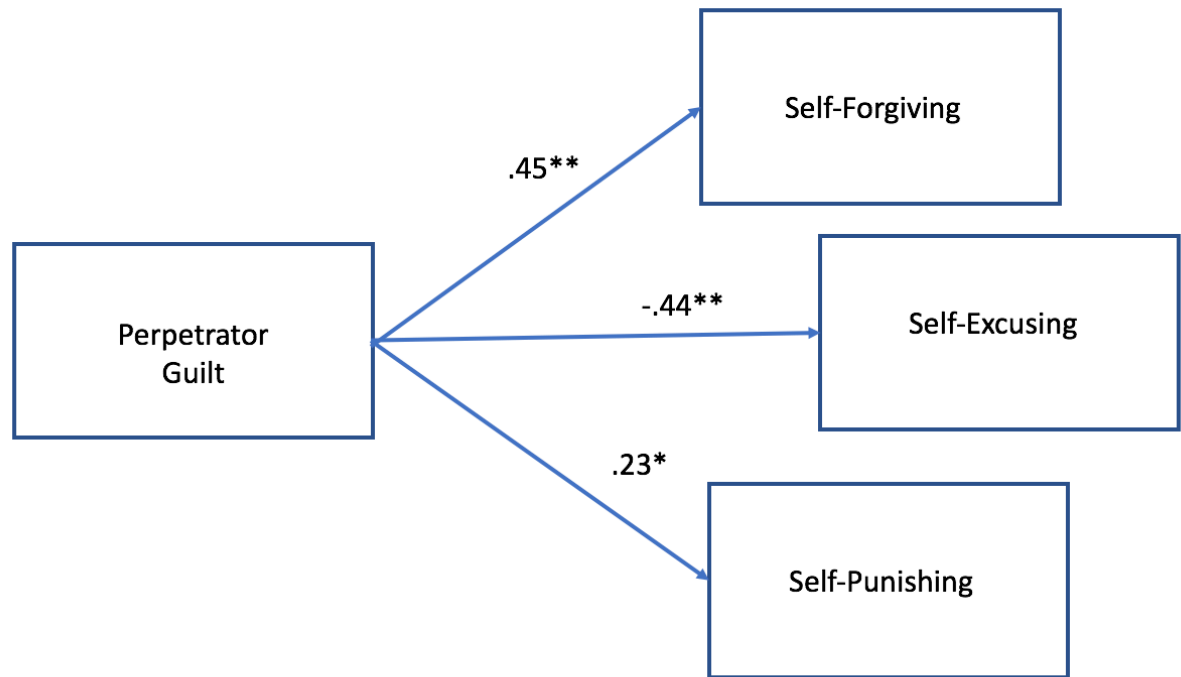


Figure 21. A path analysis modeling how guilt predicts different perpetrator reactions.

The overall fit for the model in which shame predicted self-excusing, self-punishing and self-forgiving was poor, CFI = .16, NFI = .28, IFI = .30, TLI = -1.80 and RMSEA = .34.

However, the path coefficients for self-excusing and self-punishing were significant. Shame positively predicted self-excusing ($\beta = .28, p = .01$) and self-punishing ($\beta = .27, p = .02$). Shame was unrelated to self-forgiveness ($\beta = -.03, p = .77$). Self-forgiveness was not a significant predictor, so I trimmed the model and tested the model using only self-punitiveness and self-excusing as outcomes to compare models. This slightly improved the model fit, CFI = .75, NFI = .78, IFI = .84, TLI = -.48 and RMSEA = .17. However, it still did not indicate the model fit the data well. When looking at the coefficients, shame still positively predicted self-punishing ($\beta = .27, p = .02$) and self-excusing ($\beta = .28, p = .01$). Because even the significant coefficients are not very strong and the model still does not fit well after trimming the nonsignificant path it is

likely that the model is underpowered. Previous research has around 400 participants (Griffin et al. 2016), while this model included only 83.

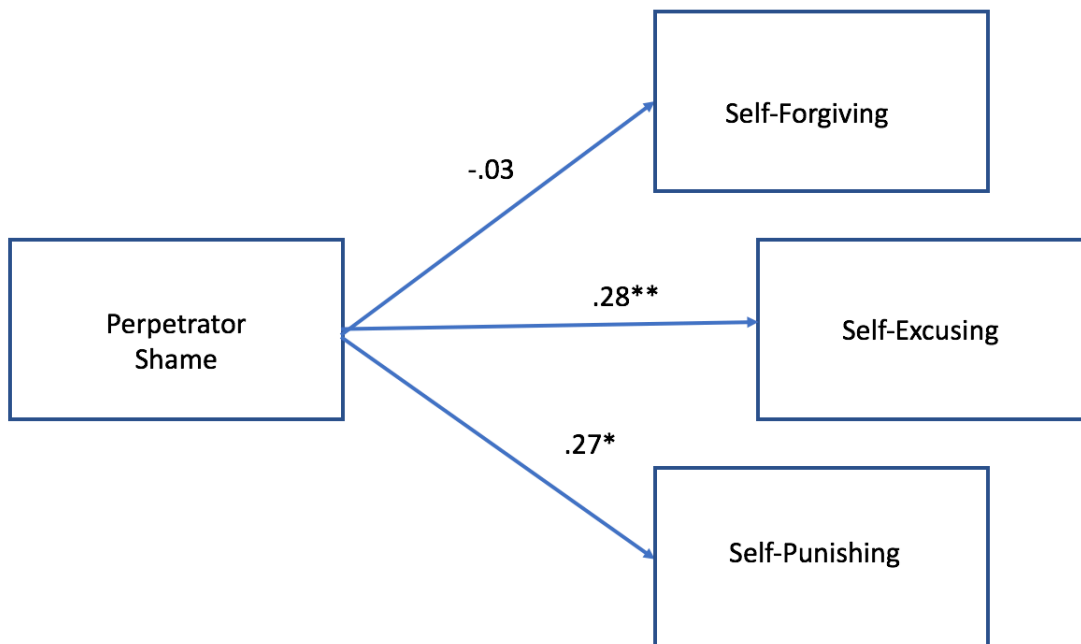


Figure 22. A path analysis modeling how guilt predicts different perpetrator reactions.

Ancillary Models. By running the models with “shame-free” guilt and “guilt-free” shame, I was able to examine the unique variance of each predictor. The disadvantage to this analysis strategy is that there is not very much variance left over. I ran two ancillary models including guilt and shame without controlling for the influence of one on the other. The overall fit for the model in which guilt predicted self-excusing, self-punishing and self-forgiving was good, CFI = .98, NFI = .95, IFI = .99, TLI = .95, RMSEA = .07. All the path coefficients were significant. Guilt positively predicted self-forgiveness ($\beta = .60, p < .01$) and self-punishing ($\beta = .66, p < .01$). Guilt negatively predicted self-excusing ($\beta = -.33, p < .01$).

The overall fit for the model in which shame predicted self-excusing, self-punishing and self-forgiving was not adequate. It was adequate for the CFI = .90 and IFI = .91, but not for the

NFI = .87, TLI = .66, and RMSEA = .17. There were two significant path coefficients. Shame positively predicted self-forgiveness ($\beta = .47, p < .01$) and self-punishing ($\beta = .68, p < .01$); however, the path coefficient between shame and self-excusing was not significant ($\beta = -.09, p = .44$). Trimming the self-excusing path did not improve model fit.

Study 2 Discussion

The aims of Study 2 were to understand how different perpetrator reactions to wrongdoing predicted commitment and satisfaction for the perpetrator and the victim. Previous research using couples in self-forgiveness research is scarce (Pelucchi et al., 2015) and only included one reaction to wrongdoing. Most studies on self-forgiveness also have only included satisfaction as an outcome, even though there is previous research showing a positive relationship with commitment and theoretically commitment is a better predictor of investment and pro-relationship behaviors. A series of dyadic models were run using victim and perpetrator commitment and satisfaction as outcomes that yielded a number of interesting findings.

Self-Forgiveness

Overall self-forgiveness by the perpetrator was not a strong predictor of perpetrator satisfaction or commitment. Instead, victims' perceptions of perpetrator self-forgiveness may be more important. This only partially supports my hypothesis that self-forgiveness would positively predict satisfaction and commitment for both the perpetrator and the victim. Self-forgiveness only positively predicted perpetrators' satisfaction and commitment when participants reported decisional self-forgiveness. This suggests that the decision to reaffirm values, rather than to replace negative emotions with positive ones, may be more important to the relationship than an overall feeling of self-forgiveness. Future research should continue to use the Two-Factor Self-Forgiveness Scale (Griffin, 2016) along with other self-forgiveness

measures as a way to further understand self-forgiveness and ensure that all aspects of self-forgiveness are being measured and accounted for.

Victims' perceived partner self-forgiveness positively predicted victims' satisfaction and commitment and positively predicted perpetrators' satisfaction as well. As stated in the results, the correlation between self-forgiveness and perceived self-forgiveness was not significant ($r = -.14$). Victim forgiveness was also marginally correlated with perceived self-forgiveness ($r = .21$). These findings suggest that self-forgiveness may be important to the relationship as a way for victims to feel better after an interpersonal transgression. Victims were more satisfied and committed when perceiving self-forgiveness from their partner, even though their partner's actual self-forgiveness did not have an effect. It appears that a perpetrator showing self-reconciliation is perceived positively by the victim and implies some level of self-forgiveness. It could be that when victims feel as though their partner has forgiven themselves they act in ways towards their partner to improve the relationship as a way to move beyond the transgression. Future research should study the difference among self-forgiveness, victims' perceived partner self-forgiveness, and victims' forgiveness to determine what is driving different effects. The absence of significant or strong effects also suggests that self-forgiveness may not be visible to the victim. A perpetrator may be going through the process of self-forgiveness, but perhaps there are ways perpetrators can show the victims they are self-forgiving. Future research could benefit from studying dyads in more detail and potentially manipulating whether or not a victim is aware that the perpetrator is working on self-forgiveness.

Self-Excusing and Self-Punishing

The hypothesis that self-excusing would negatively predict satisfaction and commitment for victim, but positively for the perpetrator was partially supported. Victims' perceptions of the

perpetrators' self-excusing negatively predicted victim commitment and satisfaction. This is in line with previous research and theory. If victims believe that their partner is self-excusing and denying blame, then they will feel less committed and satisfied. This adds more support to previous findings suggesting that self-excusing and self-forgiving need to be measured separately (Woodyatt & Wenzel, 2013a) since previous measures conflated self-excusing and self-forgiveness (Wohl et al., 2008). However, self-excusing was not related to perpetrator commitment or satisfaction as hypothesized.

I hypothesized self-punitiveness would negatively predict satisfaction and commitment for the perpetrator and the victim. With self-punishing, it was less about perception. Perpetrators' actual self-punishing negatively predicted victims' satisfaction. This suggests that when perpetrators punish themselves as a way to atone for wrongdoing, it has a negative effect on the relationship. For example, the perpetrator may be focusing more on themselves than on making amends with the victim. This is problematic since it is opposite of the perpetrators' goal to restore the self and the relationship after the transgression. Interestingly, victims' perceived perpetrator self-punishing positively predicted perpetrators' commitment. This suggests that victims' perceptions of partner self-punishment and partner self-punishment are acting differently. For the perpetrator, it is good if the victim perceives them as punishing themselves. This could be a way for the perpetrator to elicit empathy or gain forgiveness. Although for the victim it is bad if the perpetrator is actually punishing himself or herself. The hypotheses for self-punishing were partially supported.

Victim Forgiveness

Ancillary analyses looked at victim forgiveness using dyadic models as well. I hypothesized that victim forgiveness and perceived victim forgiveness would positively predict

commitment and satisfaction for the perpetrator and the victim. The results partially supported the hypothesis. Victim forgiveness positively predicted victim commitment and satisfaction when included in all models. This supports the findings of previous research and supports the idea that forgiveness can be a predictor as well as an outcome (Finkel et al., 2002). Perpetrator perceived victim forgiveness and victim forgiveness both positively predicted satisfaction for the perpetrator and the victim independently. However, no partner effects were significant. This suggests that perpetrators' perceptions of victim forgiveness may be more important for the perpetrator than the victim actually forgiving them. It also suggests that for the victims, they are more committed and satisfied knowing they have forgiven their partner and it is less important if their partner perceives them as having been forgiven.

For both measures of unforgiveness (avoidance and revenge motivations), perpetrator perceived victim unforgiveness and victim unforgiveness negatively predicted commitment and satisfaction for the perpetrator and the victim. In other words, it is bad for the perpetrator's feelings towards the relationship if the perpetrator believes his or her partner is unforgiving. It is also bad for the victim's feelings towards the relationship if the victim is actually unforgiving. Only one partner effect was marginally significant. Perpetrators perceived victim unforgiveness negatively predicted victim satisfaction. This means that victims are less satisfied when the perpetrator believes the victim is unforgiving.

Commitment and Satisfaction

There were a few instances in which models predicted commitment, but not satisfaction and vice versa. Victims' perceived partner self-punishing positively predicted perpetrators' commitment, not satisfaction. Victims' perceived partner self-forgiveness, perpetrators' perceived victim forgiveness, and victims' forgiveness positively predicted satisfaction for the

perpetrator, but not commitment. Perpetrators' perceived victim unforgiveness and perpetrators' self-punishing negatively predicted victims' satisfaction, but not commitment. Victims' perceived perpetrator self-forgiveness positively predicted perpetrators' satisfaction, but not commitment. These findings suggest that there may be reactions to wrongdoing by the victim and perpetrator that affect the relationship in different ways. For the current study, it is most likely a power issue causing there to be a few differences between satisfaction and commitment. However, future research should replicate these models with more participants and then further explore why one outcome may be influenced but not the other.

Guilt and Shame

Another goal of the study was to replicate the findings from Griffin and colleagues (2016). Guilt positively predicted self-forgiveness and self-punishing, but negatively predicted self-excusing. This replicates the findings from Griffin and colleagues (2016). Shame positively predicted self-excusing and self-punishing, which also is consistent with previous research. Shame was unrelated to self-forgiveness, though Griffin and colleagues (2016) found that shame negatively predicted self-forgiveness. The current study had a smaller sample size, so this inconsistency could be due to the current study's model being underpowered. It is also possible that shame and self-forgiveness have a different relationship when the transgression is against a romantic partner. Future research on romantic relationship transgressions should test the model with a higher sample size.

Due to the size of my sample, I was also unable to allow all the outcome variables to covary. This could also be affecting the null relationship between shame and self-forgiveness. Future research could also place this model in combination with an APIM component to understand how guilt and shame influence perpetrator reactions and relationship outcomes

together. The main conclusion, however, is that, consistent with Griffin and colleagues (2016), guilt seems to be a negative emotion that is leading to positive outcomes, like self-forgiveness. In combination with the dyadic results, this can lead to higher relationship satisfaction and commitment for perpetrators and victims. Although previous research (Leach & Cidam, 2015) suggests shame may be beneficial at times, the main conclusion for shame is consistent with Griffin and colleagues (2016) which suggests shame leads to negative outcomes for perpetrators like self-excusing.

Limitations

Sample size was the significant potential limitation to Study 2. Due to the sample size, larger, more complex models were not feasible. I initially proposed to collect 100 couples because previous researchers conducted similar analyses with between 70-100 couples. Because I ended up running multiple tests, there is an increased chance of Type I error. However, because many of these variables have never been studied using APIM analyses, the current findings may be used as a guide for future research. By gaining knowledge about the significant and nonsignificant effects in the current study, future researchers can recruit larger samples and use this study's findings as a guide to what models might fit together.

Another potential limitation is that all couples were initially recruited from a college sample. At least one member of the couple was a student at VCU. It is possible that there may be characteristics about college students at VCU that may be influencing the results. Future research should attempt to replicate my findings with more variety in the type of couples such as dating couples from the community, cohabitating couples, and married couples. Future research should also explore potential differences in interracial, racial minority, and same-sex couples to

determine if there is any difference in forgiveness or self-forgiveness based on these individual differences.

General Discussion

A set of studies provided evidence for how self-forgiveness and other perpetrator reactions unfold after an interpersonal transgression between monogamous romantic partners. Specifically, Study 1 provided longitudinal evidence for how guilt and shame predict the trajectories of self-forgiveness, self-excusing, and self-punishment for perpetrators over the first few weeks after committing an interpersonal transgression against a romantic partner. Study 2 provided evidence for how self-forgiveness, self-excusing, self-punishing, and forgiveness predict relationship outcomes for both the perpetrator and the victim.

The findings from both of these studies further highlight the importance of using diverse methodology when studying self-forgiveness. By using a longitudinal design, I found that the changes in self-forgiveness and self-excusing over time may depend on how much guilt and shame is felt about the transgression initially. If perpetrators are low on guilt after a transgression, as they work through the self-forgiving process, their guilt may increase. If perpetrators are low on shame after a transgression, they may self-excuse more as feelings of shame increase as a way to cope.

By studying perpetrator reactions at the dyadic level in Study 2, it is more apparent that perpetrators and victims may interpret the aftermath of a transgression differently and have different reactions. Sometimes a victim's perceptions of the way the perpetrator reacts can have different effects on the relationship than what the perpetrator is actually doing. The number of findings at the individual level suggests that future researchers should continue to study victim and perpetrator responses separately along with the dyad. For example, victims' forgiveness was

still a strong predictor for victims' satisfaction and commitment even when including the perpetrators' responses in the model. Overall, self-forgiveness did not have a straightforward effect on victim and perpetrator relationship outcomes. Self-forgiveness only positively affected perpetrator commitment and satisfaction when it was looked at separately as decisional self-forgiveness. However, victims' perceived partner self-forgiveness positively predicted victims' commitment and satisfaction and perpetrators satisfaction.

Specific limitations for Study 1 and 2 have already been discussed, but one limitation that is relevant to both studies is sample size. Both longitudinal analyses and path analyses can be improved by a large sample. This would have increased power for all analyses and allowed me to include more variables in the model at one time. I do not believe the results would change drastically, but there are some weak effects that could be stronger with more power and the chance of Type I error for the models in Study 2 could be decreased by combining models. However, that had to be balanced by the difficulty of recruiting couples and identifying real offenses that both remembered and were willing to write about.

Another potential limitation to both studies is the time since the offense. McCullough, Root Luna, Berry, Tabak, and Bono (2010) proposed that forgiveness is a logarithmic function of time since the transgression. One implication of this is that as time passes, the rate of change in forgiveness becomes smaller. This is potentially relevant to these studies since some participants were describing events that happened weeks or months prior to completing the studies. McCullough and colleagues (2010) suggest that there is a substantial amount of forgiving that takes place within the first three months after a transgression and after that the rate of change is quite small. In Study 1, the time since the transgression was approximately four weeks and for Study 2 it was approximately nine. While this is inside the three-month timeframe, it is possible

that less of the variance in self-forgiveness is systematic compared to if I were able to measure self-forgiveness immediately after the transgression. Future research could improve the current studies by capturing self-forgiveness and forgiveness as it starts and replicating McCullough and colleagues' (2010) findings with self-forgiveness.

Both studies focused on the individualistic view of shame that is the focus of most research in Western cultures (Sheikh, 2014). Most psychology research has focused on the dichotomy that guilt is good and shame is bad, but anthropology and cross-cultural research supports theories describing times where shame can promote self-improvement and prosociality. Knowing how shame motivates specific behaviors after wrongdoing will be an important next step in the literature. Future research on shame and how it predicts perpetrator reactions to wrongdoing should consider measuring collective, or vicarious, shame as well. Smith, Webster, Parrott and Eyre (2002) support a conceptualization of shame that it comes from people feeling a sense of public scrutiny over their actions. For example, the offense committed by the perpetrator may threaten the public image of the perpetrators in-group in some way. This could motivate a perpetrator to act in ways that protect his or her in-group that are different than the ways an individual would protect the self.

Future research should continue to study self-forgiveness and other perpetrator reactions longitudinally and in dyads to add to and improve upon this set of studies. The context of romantic relationships has a number of clinical applications for forgiveness research and should continue to be a focus of self-forgiveness research. The findings from these studies should also be replicated within different types of dyads to determine if these emotions and processes are different for other types of relationships such as close others or strangers. As the area of self-forgiveness research continues to grow, the continued use of multiple methods is a way to

discover novel findings to contribute to the understanding of the intrapersonal and interpersonal effects of the self-forgiveness process.

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Appendix A

Recall Task – Study 1

Instructions: Please take a moment to reflect on the most substantial offense or betrayal that you committed against your current/most recent romantic partner in the past month. Write 5-10 sentences giving a brief description of what you did to hurt or offend your partner (Note: if you have done many things, it is important to recall one specific event on which to focus.)

Try to imagine yourself back in that situation. Write down the key details of the offense, as well as your thoughts and feelings about it on the lines below. Be sure to write about what you did, your partner's reaction to your behavior, and how the offense has affected your relationship with your partner.

What you choose to write about is confidential. But, if you choose to write that you or someone else are in danger, or if you choose to write about an event that must be reported by law (i.e., hurting a child or an elderly person), the researcher may be required to notify the appropriate legal authorities.

How many weeks ago did the specific transgression take place? _____

How serious of an offense or a betrayal was the situation that you just described?

1	2	3	4	5
Not very serious at all				Extremely serious

Have you apologized to your partner?

____ yes ____ no

Have you tried to make up with your partner?

1	2	3	4	5
Not at All				Very Much

Appendix B

Recall Task – Study 2

Instructions: Please take a moment to reflect on the offense or betrayal that you committed that the researcher instructed you to think and write about. Write 5-10 sentences giving a brief description of what you did to hurt or offend your partner (Note: if you have done many things, it is important to recall one specific event on which to focus.)

Try to imagine yourself back in that situation. Write down the key details of the offense, as well as your thoughts and feelings about it on the lines below. Be sure to write about what you did, your partner's reaction to your behavior, and how the offense has affected your relationship with your partner.

What you choose to write about is confidential. But, if you choose to write that you or someone else are in danger, or if you choose to write about an event that must be reported by law (i.e., hurting a child or an elderly person), the researcher may be required to notify the appropriate legal authorities

How many weeks ago did the specific transgression take place? _____

How serious of an offense or a betrayal was the situation that you just described?

1 2 3 4 5
Not very serious at all Extremely serious

Have you apologized to your partner?

yes no

Have you tried to make up with your partner?

1 2 3 4 5
Not at All Very Much

Appendix C

State Shame and Guilt Scale

The following are some statements which may or may not describe how you are feeling right now. Please rate each statement using the 5-point scale below. Remember to rate each statement based on how you are feeling right at this moment.

Not feeling this way at all	Feeling this way somewhat	Feeling this way very strongly
-----------------------------------	---------------------------------	--------------------------------------

1. I feel good about myself. 1 ----- 2 ----- 3 ----- 4 ----- 5
2. I want to sink into the floor and disappear. 1 ----- 2 ----- 3 ----- 4 ----- 5
3. I feel remorse, regret. 1 ----- 2 ----- 3 ----- 4 ----- 5
4. I feel worthwhile, valuable. 1 ----- 2 ----- 3 ----- 4 ----- 5
5. I feel small. 1 ----- 2 ----- 3 ----- 4 ----- 5
6. I feel tension about something I have done. 1 ----- 2 ----- 3 ----- 4 ----- 5
7. I feel capable, useful. 1 ----- 2 ----- 3 ----- 4 ----- 5
8. I feel like I am a bad person. 1 ----- 2 ----- 3 ----- 4 ----- 5
9. I cannot stop thinking about something bad I have done. 1 ----- 2 ----- 3 ----- 4 ----- 5
10. I feel proud. 1 ----- 2 ----- 3 ----- 4 ----- 5
11. I feel humiliated, disgraced. 1 ----- 2 ----- 3 ----- 4 ----- 5
12. I feel like apologizing, confessing. 1 ----- 2 ----- 3 ----- 4 ----- 5
13. I feel pleased about something I have done. 1 ----- 2 ----- 3 ----- 4 ----- 5
14. I feel worthless, powerless. 1 ----- 2 ----- 3 ----- 4 ----- 5
15. I feel bad about something I have done. 1 ----- 2 ----- 3 ----- 4 ----- 5

Appendix D

Differentiated Process Scale of Self-Forgiveness

While thinking about what you wrote about please indicate how much you agree with each statement.

1	2	3	4	5	6	7
Do Not			neither agree			Strongly
Agree at all			nor disagree			Agree

1. I feel the other person got what they deserved (PS1)
2. I wasn't the only one to blame for what happened (PS2)
3. I think the other person was really to blame for what I did (PS3)
4. I feel what happened was my fault (Reverse coded PS4)
5. I feel angry about the way I have been treated (PS5)
6. I'm not really sure whether what I did was wrong (PS6)
7. What I have done is unforgiveable (SP1)
8. I can't seem to get over what I have done (SP2)
9. I deserve to suffer for what I have done (SP3)
10. I feel like I can't look myself in the eye (SP4)
11. I want to punish myself for what I have done (SP5) I keep going over what I
12. have done in my head (SP6)
13. I don't understand why I behaved as I did (SP7)
14. I have tried to think through why I did what I did (GS1)
15. I am trying to learn from my wrongdoing (GS2)
16. I have spent time working through my guilt (GS3)
17. I have put energy into processing my wrongdoing (GS4)
18. I am trying to accept myself even with my failures (GS5)
19. Since committing the offense I have tried to change (GS6)
20. I don't take what I have done lightly (GS7)

Appendix E

Relationship Questions

1. What is the gender of your romantic partner? (Circle one)

1. Male

2. Female

How old are they?

In the space below, please indicate the number of **YEARS** you have been dating your current romantic partner. For example, if you have been dating for 5 years and 6 months, you would indicate “5” years in the space below.

In the space below, please indicate the number of **MONTHS** you have been dating your romantic partner. For example, if you have been dating for 5 years and 6 months, you would indicate “6” months in the space below.

Is your current romantic relationship monogamous? (Circle one)

1. Yes

2. No

Is your current romantic relationship a long-distance relationship? (Circle one)

1. Yes

2. No

Are you and your romantic partner: (Circle one)

1. dating and not living together

2. dating and living together

3. married and living together

For each question below, please circle the number that best corresponds to your choice based on the scale provided.

How often do you see your romantic partner?

1	2	3	4	5	6	7
Not at						All the
All						Time

How often do you talk to your romantic partner?

1	2	3	4	5	6	7
Not at						All the
All						Time

How often do you see your romantic partner?

1	2	3	4	5	6	7
Not at						All the
All						Time

How often do you talk to your romantic partner?

1	2	3	4	5	6	7
Not at						All the
All						Time

9. Please report how your relationship has been going for the past week.

1	2	3	4	5	6	7
Much						Much
Worse than						Better than
Usual						Usual

Appendix F

Commitment Measure

Please rate how YOU feel about each of the following statements regarding your romantic relationship. Based on the scale provided, please circle the number that best corresponds to your choice for each of the questions below.

1	2	3	4	5	6	7	8	9
Do Not				Agree				Agree
Agree				Somewhat				Completely
At All								

1. I want our relationship to last for a very long time.
2. I am committed to maintaining my relationship with my partner.
3. I would not feel very upset if our relationship were to end in the near future.
4. It is likely that I will date someone other than my partner within the next year.
5. I feel very attached to our relationship- very strongly linked to my partner.
6. I want our relationship to last forever.
7. I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now).

Appendix G

Demographic Information

1) Your sex (please check one): _____ Male _____ Female

2) Your age (please fill in): _____

3) Your race (please check one):

_____ African American
_____ Asian American
_____ Caucasian

_____ Latino/Hispanic
_____ Other (specify): _____

4) Your year in school (please check one):

_____ Freshman
_____ Sophomore

_____ Junior
_____ Senior
_____ Other

5) What is your religious affiliation (check one):

_____ Christian – Protestant
_____ Christian – Catholic
_____ Hindu
_____ Buddhist
_____ Not religious

_____ Muslim
_____ Jewish
_____ Atheist
_____ Agnostic
Other – Please list: _____

6) If you ARE religious, how committed are you to your religion currently?

1	2	3	4	5	6	7
Not at all						Very
Much						
Committed						
committed						

7) How would you characterize your political orientation?

1	2	3	4	5	6	7
Conservative						Liberal

What's your email?

Appendix H

Satisfaction – Investment Model Scale

Please indicate the degree to which you agree with each of the following statements regarding your current relationship.

1. I feel satisfied with our relationship.

1	2	3	4	5	6	7
Do not agree at all						Agree completely

2. My relationship is much better than others' relationships.

1	2	3	4	5	6	7
Do not agree at all						Agree completely

3. My relationship is close to ideal.

1	2	3	4	5	6	7
Do not agree at all						Agree completely

4. My relationship makes me very happy.

1	2	3	4	5	6	7
Do not agree at all						Agree completely

5. My relationship does a good job of fulfilling my needs for intimacy, companionship, etc.

1	2	3	4	5	6	7
Do not agree at all						Agree completely

Appendix I

Relationship Survey – Study 2

What is the gender of your romantic partner? (Circle one)

1. Male 2. Female 3. Male to Female 4. Female to Male 5. Does not identify

What is their age? _____

What is their ethnicity?

- _____ Hispanic or Latino
_____ Not Hispanic or Latino
_____ Unknown

What is their race?

- _____ American Indian/Alaska Native
_____ East Asian
_____ South Asian
_____ Native Hawaiian/Pacific Islander
_____ Black or African American
_____ White
_____ More than one race – Black and White
_____ More than one race – Other
_____ Other or Unknown

In the space below, please indicate the number of **YEARS** you have been dating your current romantic partner. For example, if you have been dating for 5 years and 6 months, you would indicate “5” years in the space below.

In the space below, please indicate the number of **MONTHS** you have been dating your romantic partner. For example, if you have been dating for 5 years and 6 months, you would indicate “6” months in the space below.

Is your current romantic relationship monogamous? (Circle one)

1. Yes 2. No

Is your current romantic relationship a long-distance relationship? (Circle one)

1. Yes

2. No

Are you and your romantic partner: (Circle one)

1. dating and not living together

2. dating and living together

3. married and living together

For each question below, please circle the number that best corresponds to your choice based on the scale provided.

How often do you see your romantic partner?

1	2	3	4	5	6	7
Not at						All the
All						Time

How often do you talk to your romantic partner?

1	2	3	4	5	6	7
Not at						All the
All						Time

Please report how your relationship has been going for the past week.

1	2	3	4	5	6	7
Much						Much
Worse than						Better than
Usual						Usual

Appendix J

Trim-18 (McCullough, Root, & Cohen, 2006)

For the following questions, please indicate your current thoughts and feelings about the person who hurt you; that is, we want to know how you feel about that person **right now**. Next to each item, circle the number that best describes your current thoughts and feelings.

1 = Disagree Strongly 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

1. I'll make him/her pay.
2. I am trying to keep as much distance between us as possible.
3. Even though his/her actions hurt me, I have goodwill for him/her.
4. I wish that something bad would happen to him/her.
5. I am living as if he/she doesn't exist, isn't around.
6. I want us to bury the hatchet and move forward with our relationship.
7. I don't trust him/her.
8. Despite what he/she did, I want us to have a positive relationship again.
9. I want him/her to get what he/she deserves.
10. I am finding it difficult to act warmly toward him/her.
11. I am avoiding him/her.
12. Although he/she hurt me, I am putting the hurts aside so we can resume our relationship.
13. I'm going to get even.
14. I have given up my hurt and resentment.
15. I cut off the relationship with him/her.
16. I have released my anger so I can work on restoring our relationship to health.
17. I want to see him/her hurt and miserable.
18. I withdraw from him/her.

Appendix K

Two Factor Self-Forgiveness Scale

1. I will try not to repeat my offense in the future.
2. I acknowledge that I am to blame for my actions.
3. I would take back what I've done if I could.
4. I regret that my past actions violated my values.
5. My actions violated something that is important to me.
6. Even though I did something wrong, I feel a sense of self-acceptance.
7. I feel like a valuable person despite my wrongdoing.
8. I still love myself even though I did wrong.
9. I respect myself even though I did wrong.
10. I feel compassion toward myself.

Appendix L

Demographic Information – Study 2

What is your gender?

- ☐ Male
- ☐ Female
- ☐ Male to Female
- ☐ Female to Male
- ☐ Does not identify

What is your age? _____

What is your ethnicity?

- ☐ Hispanic or Latino
- ☐ Not Hispanic or Latino
- ☐ Unknown

What is your race?

- ☐ American Indian/Alaska Native
- ☐ East Asian
- ☐ South Asian
- ☐ Native Hawaiian/Pacific Islander
- ☐ Black or African American
- ☐ White
- ☐ More than one race – Black and White
- ☐ More than one race – Other
- ☐ Other or Unknown

Appendix M

Transgression List

Participant ID Number _____

Please list the four most recent transgressions in your relationship where you were the victim and your partner was the perpetrator.

1.

2.

3.

4.

Now rank them in severity from 1 (most severe) to 4 (least severe):

1.

2.

3.

4.

Are you okay with the researcher sharing these topics with your partner?

YES OR NO