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**Forgive Them for I Have Sinned:
The Relationship Between Guilt and Forgiveness of Others' Transgressions**

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Abstract

Across four studies, guilt led to forgiveness of others' transgressions. In Study 1, people prone to experience guilt (but not shame) were also prone to forgive others for past misdeeds. In Study 2, we manipulated harm- and inequity-based guilt; both increased forgiveness of others' transgressions. Further, the effect of guilt on forgiveness was mediated by identification with the transgressor. In Study 3, we replicated the guilt-forgiveness relationship and examined three other plausible mediators: capability for similar wrongdoing, empathic understanding, and general identification; only identification with the transgressor satisfied the criteria for mediation. In Study 4, we induced guilt by asking participants to harm a friend or stranger. Guilt induced by harming a friend led to greater forgiveness of third-party transgressors, and again, identification with the transgressor mediated the effect. We discuss the implications of these results for understanding how the prosocial effects of guilt extend beyond the boundaries of a single interpersonal relationship.

Keywords: Guilt; Forgiveness; Identification; Transgressions; Incidental Emotions

Forgive Them for I Have Sinned:

The Relationship Between Guilt and Forgiveness of Others' Transgressions

According to past research, guilt motivates transgressors to make amends to people they have offended, thereby earning forgiveness (Baumeister, Stillwell, & Heatherton, 1994; Giner-Sorolla, 2012; Tangney, 1991). In the present research, we suggest that guilt not only motivates transgressors to earn forgiveness, but also to *grant* it. That is, we suggest that guilty feelings triggered by one transgression can prompt forgiveness of another, unrelated transgression, a type of guilt we refer to as 'incidental' because the source of the emotion is unrelated to the target of forgiveness (see Agrawal & Duhachek, 2010; Hofmann & Fisher, 2012). We propose that identification with the transgressor mediates this effect; guilty feelings prompt the focal transgressor to identify with, and subsequently forgive, other transgressors. In short, feeling guilty can lead someone to feel more forgiving toward a fellow wrongdoer.

Guilt has been defined as an “unpleasant emotional state associated with possible objections to [an individual’s] actions, inactions, circumstances, or intentions” (Baumeister et al., 1994, p. 245). Once considered an intrapersonal emotion (Lewis, 1971; Piers & Singer, 1971), guilt is now conceptualized as a “social” emotion, which means that it fosters functional, communal behavior. A wide variety of theoretical perspectives, including evolutionary (e.g., Trivers, 1985), behaviorist (e.g. Mosher, 1965), and developmental (Kohlberg, 1994), claim that the affective experience of guilt is integral to the development of relationships and the strengthening of social bonds (Baumeister et al., 1994; Haidt, 2003; Tangney, 1991; Tangney & Dearing, 2002). Indeed, individuals who experience guilt are motivated to act in constructive ways toward their relationship partners, especially those whom they have transgressed against in the past (Friedman, 1985; Hoffman, 1982; Lewis, 1971).¹

Forgiveness can be defined as a simultaneous decrease in desire for punishment and increase in desire for goodwill toward a perpetrator (McCullough, Pargament, & Thoresen, 2000; McCullough, Worthington Jr., & Rachal, 1997). That is, forgiveness changes a person's motivation from retaliation to reconciliation (McCullough, Fincham, & Tsang, 2003; McCullough, Pargament, & Thoresen, 2001; McCullough et al., 1997). So, why might guilt influence a person's willingness to forgive others' transgressions? We propose that guilt facilitates feelings of identification with fellow transgressors. To identify with another person is to feel a connection with that individual, often because one feels similar to him or her (Deaux, 1996; Freud, Strachey, & Dickson, 1985). When identification is strong, it can lead to an "emotional merging of oneself and another" (Allport, 1954, p. 293), and motivate people to view the target of identification in favorable terms (Ellemers, Kortekaas, & Ouwerkerk, 1999; Ellemers, Spears, & Doosje, 2002; Tajfel, 1978). Targets of identification are not arbitrary but rather are those individuals who share similar attributes or experiences. We reason that people who are feeling guilty feel that they share similar attributes with other transgressors. Guilt leads people to focus on their own moral fallibilities (Eisenberg, 2000), allowing the guilty party to see a connection between themselves and others who have also made mistakes—viewing the "self" and "other" as sharing a common quality.²

Although the relationship between guilt and identification has not been directly studied before, existing research suggests the existence of such a link. First, the affective foundation of guilt lies in human relatedness – the ability to see another's unfavorable condition reflected in oneself (Baumeister et al., 1994). Second, guilt promotes social attachment and the development of communal bonds (Hoffman, 1982; Zahn-Waxler & Kochanska, 1990). Third, guilt is associated with fears of social exclusion, suggesting that it can strengthen identification with the

current ingroup (Katz, Glass, & Cohen, 1973), even if those individuals were recently considered part of one's outgroup. For example, Wohl and Branscombe (2005) found that when reframing a focal person as being a fellow member of a guilty party (rather than framing him/her as distinct), the focal person was more likely to forgive the guilty party for their transgressions. Specifically, the investigators instructed Jewish individuals to think about the Holocaust as either an event perpetrated by the Germans toward the Jews or an event perpetrated by "humans toward other humans." The latter framing, in which people were led to think about themselves as sharing a connection with the guilty party, elicited greater forgiveness of the Germans.

As for the identification to forgiveness link, research suggests that people are motivated to view the target of their identification in more favorable terms (Ellemers et al., 1999, 2002; Tajfel, 1978). Zechmeister and Romero (2002), for example, found that people expressed a greater focus on the transgressor in their writing when describing a situation that resulted in forgiveness compared with one that did not. Similarly, Exline, Baumeister, Zell, Kraft, and Witvliet (2008) found that participants instructed to evaluate a transgression were more likely to excuse the transgression if they were asked to imagine they were capable of the same behavior. In perhaps the most direct test of this link, McCullough and colleagues (1997) found that participants who were dealing with an unforgiven offense were more likely to forgive the offender if they were encouraged to recall times in their own lives when they too needed to be forgiven and to think about the current offender as experiencing similar feelings. As the authors explain, forgiving becomes particularly relevant in interpersonal situations where two parties perceive a shared history.

In sum, we propose that guilt can motivate forgiveness, even for someone who was not involved in the original guilt-inducing incident. Specifically, we predict a decrease in negative

thoughts, feelings, and actions toward a perpetrator following the experience of incidental guilt (cf. Dunn & Schweitzer, 2005). We propose that identification with the transgressor underlies this relationship.

Across four studies we examine the relationship between guilt and forgiveness of third parties not connected with the circumstances surrounding the focal party's original feelings of guilt. In Study 1, we measure individual differences and demonstrate that people more prone to feeling guilty for wrongdoing are also more prone to forgive others. In Study 2, we manipulate guilt by having participants recall guilt from different sources. We show that guilty feelings induced by these recollections (compared to recollections unrelated to guilt) lead participants to be more forgiving of others, and we show that identification with the transgressor mediates the relationship between guilt and forgiveness of that transgressor. Study 3 builds on the previous study by replicating our results and ruling out other potential mediators. Specifically, we pit identification with the transgressor against three other plausible mediators (capability for similar wrongdoing, empathic understanding, and generalized identification) and find that these other variables do not explain the guilt-to-forgiveness link. Lastly, in Study 4, we demonstrate that guilt induced in the laboratory leads to greater cognitive and behavioral forgiveness of individuals who have transgressed against the participant. Moreover, Study 4 confirms that the guilt to forgiveness relationship is mediated by identification with the transgressor.

Study 1

In Study 1, we investigated whether people prone to experience guilt are also prone to forgive others. Although we focus on state-based guilt in our theorizing (and in the studies that follow), we felt it was important to examine trait-based guilt for two reasons. First, these two forms of guilt are distinct constructs that might result in different empirical effects (e.g.,

Branscombe, Slugoski, & Knappen, 2004). Second, if our reasoning is correct—that people who feel guilty are motivated to forgive other people—then we should find that people who are prone to feel guilty forgive others more often. Thus, we should observe positive correlations between individual difference measures of guilt proneness and forgiveness.

We assessed individual differences in guilt proneness with the Guilt and Shame Proneness scale (GASP; Cohen, Wolf, Panter, & Insko, 2011) and the Test of Self Conscious Affect-3 (TOSCA-3; Tangney, Dearing, Wagner, & Gramzow, 2000). These scales measured individuals' anticipated responses to personal transgressions. We captured individual differences in forgiveness with an adapted version of the Transgression-Related Interpersonal Motivation scale (TRIM-18; McCullough et al., 1997) and the Heartland Forgiveness scale (Thompson et al., 2005).

To address the concern that any dysphoric moral emotion might stimulate forgiveness, we contrasted guilt with a similar, albeit distinct emotion: shame. Both are self-conscious emotions involving self-reflection and self-evaluation, however, guilt tends to arise when people think about how their behavior has harmed or burdened others, whereas shame tends to arise when people think about how their behavior will elicit negative evaluations from others. And whereas guilt is considered a social emotion (Baumeister et al., 1994), shame is more self-focused (Cohen et al., 2011; Tangney & Dearing, 2002). We predicted that guilt (and not shame) would be related to individuals' tendencies to forgive others.

Method

Participants and procedure. We recruited participants ($N = 102$; 78% female; $M_{age} = 41.71$, $SD = 12.84$) from an online subject pool of American adults. In exchange for participating, they were entered in a drawing for a gift certificate to an online retailer. One participant left more

than 95 percent of the questions blank, and thus was excluded from the analyses, leaving us with 101 participants.

Participants logged on to the study website and were instructed to complete the GASP, TOSCA-3, TRIM-18, and Heartland scales. We counterbalanced the order of the measures both within and between constructs, so that some participants completed the guilt and shame measures first and some completed the forgiveness measures first. We also randomized the order in which the items appeared within each measure.

Measures

Guilt and Shame Proneness Scale (GASP). The GASP includes a four-item guilt proneness subscale (Guilt Negative Behavior-evaluation) and a four-item shame proneness subscale (Shame Negative Self-evaluation) (Cohen et al., 2011). Respondents are asked to imagine themselves in different situations involving personal transgressions and indicate the likelihood they would respond in the way described (1 = *very unlikely*; 7 = *very likely*). Guilt items describe feeling bad about one's behavior following a private transgression; shame items describe feeling bad about oneself following a public transgression.³

Test of Self Conscious Affect-3 (TOSCA-3). Similar to the GASP, the TOSCA-3 (Tangney et al., 2000) presents respondents with a series of transgressions and corresponding guilt and shame items and asks them to report the likelihood they would respond in the way described (1 = *not likely*; 5 = *very likely*). Guilt items describe feeling bad about one's behavior and shame items describe feeling bad about oneself. Whereas the GASP assesses guilt with private transgressions and shame with public transgressions, the TOSCA-3 uses the same transgressions to measure both guilt and shame.

Transgression-Related Interpersonal Motivation (TRIM-18). In the TRIM-18 (McCullough et al., 1997), respondents are asked to first recall a situation where someone has harmed them and they have not forgiven this person. Across 18 items comprising three subscales, respondents are then asked about their desire to avoid the wrongdoer (Avoidance), enact revenge against the wrongdoer (Revenge), and the degree to which they feel benevolence toward the wrongdoer (Benevolence). We modified the scale so that instead of asking about forgiveness of specific harm-doers, we asked about respondents' general forgiveness tendencies. We altered the introduction to the scale so that it read, "Other people sometimes do things that are hurtful or offensive toward you. Using the following items, please assess how you normally, that is, on average, respond to people who have done something that hurt or offended you" (1 = *strongly disagree*; 5 = *strongly agree*). The Avoidance and Revenge subscales were reverse-scored so that a higher score indicated greater forgiveness tendencies. We predicted that guilt (but not shame) proneness would be positively related to the TRIM-18 (both the overall and subscale scores).

Heartland Forgiveness Scale. The Heartland Forgiveness Scale measures respondents' tendencies to forgive oneself, others, and situations following a transgression (Thompson et al., 2005). The scale contains three six-item subscales: Self, Others, and Situations. Participants read a series of statements and indicated how much each statement applied to them (1 = *almost always false of me*; 7 = *almost always true of me*). As guilt is a social, other-directed emotion (Baumeister et al., 1994), we predicted that guilt proneness would be correlated with greater forgiveness of others and situations, but not forgiveness of oneself.

Results and Discussion

Table 1 shows the descriptive statistics and correlations among the individual-difference measures of guilt, shame, and forgiveness. As predicted, guilt proneness (measured via both the

GASP and TOSCA) was positively related to general forgiveness, as measured by the TRIM-18. It was positively and significantly related to greater forgiveness of other people and situations, as indicated by significant positive correlations between the GASP Guilt and TOSCA-3 Guilt subscales and the TRIM-Revenge, TRIM-Benevolence, Heartland-Other, and Heartland-Situations subscales. The TRIM-Avoid subscale had positive, but non-significant, relationships with both the GASP Guilt and TOSCA-3 Guilt subscales.

In support of the prediction that guilt proneness is unrelated to self-forgiveness, neither the GASP Guilt nor TOSCA-3 Guilt subscales were correlated with the Heartland-Self subscale. These non-significant relationships suggest that guilt facilitates forgiveness of others but this forgiveness may not extend to forgiveness of oneself.

In contrast to guilt proneness, shame proneness was uncorrelated or negatively correlated with forgiveness. This finding may seem surprising because guilt proneness and shame proneness are moderately correlated with each other; however, this asymmetric pattern of guilt and shame correlations is consistent with prior research (e.g., Cohen et al., 2011; Tangney & Dearing, 2002; Wolf, Cohen, Panter, & Insko, 2010), providing further evidence that guilt and shame proneness are distinct traits.

Study 1 provides initial evidence of the positive relationship between guilt and forgiveness; however, the study is correlational in nature and thus does not establish a causal link between feeling guilty for one's own transgressions and forgiving others for their (unrelated) transgressions. Moreover, Study 1 focused on people's *proneness* to feeling guilty for misdeeds (a trait-based tendency to feel guilty for bad behavior) rather than actual feelings of guilt in response to a particular incident (state-based guilty feelings in response to a specific situation). The studies that follow build on Study 1 by examining the causal relationship between feelings of (state-

based) guilt and forgiveness. In these studies, we manipulate feelings of guilt and examine their effect on forgiveness of a third-party transgressor. We reason that when people are feeling guilty for wrongdoing (compared to when they are not feeling guilty) they will be more likely to identify with other transgressors and forgive them for their unrelated sins.

Study 2

Baumeister and colleagues (1994) proposed that guilt is divided into two categories: guilt resulting from harm done to others and guilt resulting from receiving a disproportionately large outcome relative to others. We refer to the first type as “harm-based guilt”; we refer to the second type as “inequity-based guilt”. Both forms of guilt can occur regardless of whether the outcome was intentionally or unintentionally caused (Austin, McGinn, & Susmilch, 1980; Baumeister et al., 1994; Hassebrauck, 1986). If guilt leads to forgiveness of others’ transgressions, then guilt from any source should lead to greater forgiveness of others’ transgressions. However, if it is the salience of personal wrongdoing accompanied by guilt that is responsible for increased forgiveness (viz., Exline et al., 2008), we should see forgiveness of a third-party only in situations where one person feels guilty for doing harm to another. To further disentangle the effects of guilt from mere harm-doing, we test whether harm that is unaccompanied by guilt increases forgiveness. We propose that it is not the salience of harm-doing in and of itself (cf. Exline et al., 2008), but rather the feelings of guilt that often accompany harm-doing, that lead to greater forgiveness. That is, the emotional component of guilt is necessary to enact forgiveness (Baumeister et al., 1994).

Finally, we propose that a sense of identification with other transgressors mediates the relationship between guilt and forgiveness. As described earlier, we propose that guilt leads people to identify with other wrongdoers and this identification motivates their forgiveness.

In sum, we test three key hypotheses in Study 2. First, we predict that guilt increases forgiveness of others regardless of whether guilt is induced through situations related or unrelated to harm. Second, we predict that guilt plays a key role in eliciting forgiveness, so harm leads to forgiveness when, and only when, it is accompanied by guilt (i.e., harm without guilt will not increase forgiveness). Third, we predict that identification with the transgressor mediates the effect of guilt on forgiveness.

Method

Participants and design. We recruited participants ($N = 134$; 65% women; $M_{age} = 35.69$, $SD = 10.87$) from a private online subject pool of American adults; they received \$5 for participating and were randomly assigned to one of four conditions in a 2 (no guilt/guilt) \times 2 (no harm/harm) between-subjects design.

Procedure. Participants were informed that the study was divided into two sections. In the first section they would be asked to write about a personal event. In the second, they would be asked some questions about others' behaviors.

In the *guilt-harm* condition, we asked participants to recall and describe “a situation where you harmed or hurt another person whom you are close to—and in which you felt guilty afterward” (adapted from Baumeister, Stillwell, & Heatherton, 1995). In the *guilt-no harm* (inequity-based guilt) condition, we asked participants to describe “a situation where you received more than you deserved at the expense of someone whom you are close to, and in which you felt guilty afterward.” In the *no-guilt-harm* condition, we asked participants to recall and describe “a situation where you harmed or hurt someone and did not feel guilty afterward.” And in the *no-guilt-no harm* (control) condition, we asked participants to recall and describe “a time when you interacted with someone whom you are close to.” We excluded the “close other” portion of the

prompt in the *no-guilt-harm* condition because, according to the literature, harming someone close will elicit greater guilt in the perpetrator (Baumeister et al., 1994; Vangelisti, Daly, & Rudnick, 1991).

We asked all participants to select a particularly important and memorable event. Thirty-three participants (4 in the *guilt-harm* condition, 9 in the *guilt-no-harm condition*, 18 in the *no-guilt-harm* condition, and 2 in the *no-guilt-no-harm condition*) did not conform to the writing prompt instructions and thus were eliminated from the analyses. This left us with a sample of 101 individuals. The majority of the missing responses were from the *no-guilt-harm* condition, which underscores the uniqueness of this condition; most people feel guilty when they harm others and it is difficult to recall incidents where harm is unaccompanied by guilt. We return to this issue in the General Discussion.

In the second part of the study, we presented participants with two dilemmas in which an individual engages in immoral behavior by either harming his employer (Scenario 1) or his former officemate (Scenario 2) (adapted from Zhong, Ku, Lount, & Murnighan, 2010). In Scenario 1, the protagonist steals gift certificates worth hundreds of dollars from his employer, knowing that he is unlikely to be caught. In Scenario 2, the protagonist leaves town without paying rent to his officemate. Participants were asked questions regarding their forgiveness of the protagonist (*To what extent do you feel like [the protagonist] should be forgiven for his behavior?*, *To what extent do you find this behavior acceptable?*, *To what extent do you find this behavior justifiable?*) and identification with the protagonist (*How much do you identify with [the protagonist]?*, *How similar do you feel to [the protagonist]?*). Participants responded to each item on a 5-point scale (1 = *not at all*; 5 = *very much*). We averaged the three forgiveness items

($\alpha = .75$) and the two identification items ($\alpha = .87$) across both scenarios to form separate forgiveness and identification composites.

To check the success of our guilt manipulation, we asked participants to think about the scenario they had recalled at the beginning of the session and rate the extent to which they *feel guilty about* the behavior they recalled.⁴ We also asked them to provide demographic information. We then debriefed them about the actual purpose of the study.

Results

Table 2 contains the study results.

Self-reported guilt. As predicted, we observed a main effect of guilt on self-reported guilt, with participants in the guilt conditions reporting more felt guilt than those in the no-guilt conditions. There was also an interaction between guilt and harm, such that participants in the *guilt-harm* condition reported feeling greater guilt than did those in the *guilt-no-harm condition*. However, the two no-guilt conditions did not differ from one another in their self-reported guilt. There was no main effect of harm.

Forgiveness. As predicted, there was a main effect of guilt on forgiveness, with the guilt conditions reporting greater forgiveness than the no-guilt conditions. The two guilt and the two no-guilt conditions did not significantly differ from one another. There was no main effect of harm, nor a guilt \times harm interaction.

Identification. As predicted, there was a main effect of guilt on identification, with the guilt conditions reporting greater forgiveness than the no-guilt conditions. The two guilt and the two no-guilt conditions did not significantly differ from one another. There was no main effect of harm nor a guilt \times harm interaction.

As the two guilt conditions and the two no-guilt conditions did not significantly differ from one another on forgiveness nor identification, we tested for mediation by combining the two guilt conditions and two no-guilt conditions and then using Preacher and Hayes' (2008) bias-corrected bootstrapping method (comparing the guilt to the no-guilt conditions).

Guilt increased forgiveness, $B = .19$, $SE = .06$, $t(101) = 3.42$, $p = .001$, and identification with the transgressor, $B = .16$, $SE = .07$, $t(101) = 2.31$, $p = .02$. Further, identification was positively related to forgiveness, $B = .54$, $SE = .06$, $t(100) = 8.53$, $p < .001$. The indirect effect of guilt on forgiveness via identification was significant ($z = 2.20$, $p = .02$, $CI\ 95\% = .007, .184$; $N = 101$; 10,000 re-samples). These results are consistent with our hypothesis that identification mediates the effect of guilt on forgiveness of others' transgressions.

Discussion

Study 2 demonstrates that an increase in guilt leads to an increase in forgiveness of third-party transgressors. The results also show that guilt increases forgiveness, regardless of whether guilt is induced through harm or without direct harm (i.e., via inequity-based guilt). Third, we find that harm (when guilt is absent) does not promote forgiveness, suggesting that previous studies linking one's capability for harm-doing and forgiveness (cf., Exline et al., 2008) may have been tapping into participants' guilt and hence, their identification with fellow harm-doers. Finally, the results highlight identification as a mediator in the guilt-to-forgiveness relationship, suggesting that guilt increases forgiveness of third-parties because it causes people to identify with fellow transgressors.

Study 3

In Study 2, we find evidence that identification acts as an underlying mechanism in the guilt-forgiveness relationship. In Study 3, we examine three other plausible mechanisms that

could explain this relationship. Exline and colleagues (2008) find that believing one is capable of a similar transgression leads people to forgive others through a confluence of two variables: perceived similarity to the offender and empathic understanding of the offender. The similarity variable Exline et al. use is very close to our identification variable (i.e., one of the two items that comprise the current identification subscale is, “I feel similar to this person.”), so we limit our exploration to Exline et al.’s other two variables (perceived capability for similar harm-doing and empathy) as potential alternative mediators. We also explore a third potential mediator, general identification. We have argued that guilt leads people to identify with other transgressors; however, it is possible that guilt leads people to identify with others *in general*. In other words, because of the broad prosocial nature of guilt, people may be more likely to identify with other people in general and not just other transgressors.

In addition to exploring alternative mediators, we acknowledge a potential confound in our Study 2 essay prompts. Because guilty feelings are more intense when they follow a transgression against a close but not a distant other (Baumeister et al., 1994), in both guilt conditions and the *no-guilt-no-harm condition* we included the instruction to think about a transgression *against a close other*. However, because guilt is purportedly elicited whenever one harms a close other, we eliminated this instruction from the *no-guilt-harm* condition. Recalling a transgression against a close other (rather than guilt in and of itself) could explain the differences in forgiveness found in Study 2 (however, the results from the control condition cast doubt on this alternative explanation). To address this, we eliminated the “close other” clause in our Study 3 prompts.

Finally, while we examined forgiveness of a hypothetical other in Study 2, in Study 3 we examine the effects of guilt on real-life forgiveness.

Participants and Design

We recruited participants ($N = 238$; 65% women; $M_{age} = 36.28$, $SD = 11.62$) from a private online subject pool of American adults; in exchange for their participation each received a gift certificate for an online retailer. As in Study 2, participants were randomly assigned to one of four conditions in a 2 (no guilt/guilt) \times 2 (no harm/harm) design.

Procedure

After logging in to the study website, participants were informed that the study was divided into two sections; the first section examined life events and the second examined how they dealt with interpersonal relationships.

The essay prompts were identical to those used in Study 2 except for the deletion of the “close other” instructions in the two guilt conditions and the *no-guilt-no-harm condition*. We again asked all participants to select a particularly important and memorable event. Twenty-nine participants (8 in the *guilt-harm* condition, 8 in the *guilt-no-harm condition*, 12 in the *no-guilt-harm condition*, and 1 in the *no guilt-no-harm condition*) did not conform to the instructions and therefore were eliminated from the analyses.

After writing the first essay, participants completed the portion of the study that was purportedly about interpersonal relationships. Specifically, we instructed participants to recall a personal situation where someone harmed them and they had not yet forgiven this person. They then wrote about the situation in detail. Thirty-one people did not conform to the writing prompt instructions and thus were excluded from the analyses, giving us a total of 185 participants on which to perform the analyses.⁵ To assess forgiveness, participants then completed the TRIM-18 (McCullough et al., 1997), answering the items regarding this unforgiven person (1 = *not at all*; 7

= *extremely*). They then responded to a single item explicitly measuring forgiveness: “I intend to forgive this person.”

Next, participants completed the four potential mediator scales (presented in randomized order). We used the same two items described in Study 2 ($\alpha = .94$) to measure identification with the transgressor. We adopted the same items used by Exline et al. (2008) to measure capability for similar wrongdoing (4 items, e.g., “To what extent can you believe that given the right circumstances, you could be just as capable of doing something just as bad as what this person did?”, $\alpha = .93$) and empathic understanding (4 items, e.g., “To what extent can you see the situation from his/her perspective?”, $\alpha = .92$). Finally, we used the 11-item ($\alpha = .87$) Relational-Interdependent Self-Construal Scale (RISCS, Cross, Bacon, & Morris, 2000) to measure general identification (e.g., “When I establish a close friendship with someone, I usually develop a strong sense of identification with that person.”).

Before finishing the study, participants completed a self-report measure of guilt. These five items, adopted from de Hooge, Nelissen, Breugelmans, and Zeelenberg (2011), included “How much do you feel guilty for your behavior in this situation?,” and, “How much do you feel like what you did to the other person was wrong?” ($\alpha = .84$).

Results

Table 3 reports the correlations among the study variables and Table 4 reports the results and descriptive statistics.

Self-reported guilt. As in Study 2, participants in the guilt conditions reported more felt guilt than did participants in the no-guilt conditions. There was also a main effect of harm, such that participants in the harm conditions reported more guilt than did participants in the no-harm conditions. There was again an interaction between guilt and harm, such that in the guilt

conditions, participants in the *guilt-harm* condition reported feeling greater guilt than did those in the *no-guilt-harm* condition. However, the two no-guilt conditions did not differ from each other.

Forgiveness. We examined the effect of our guilt manipulation on forgiveness, first looking at the overall TRIM-18 and then examining the TRIM by subscale. We also looked at the single *intent to forgive* item.

Results revealed a main effect of guilt on the TRIM-18 (marginal), the TRIM-Benevolence subscale, and the *intent to forgive* item. For all variables, those in the guilt conditions reported greater forgiveness than those in the no-guilt conditions. The two guilt and the two no-guilt conditions did not differ from one another. We also found marginal guilt \times harm interactions on the TRIM-18, TRIM-Avoid, and TRIM-Revenge subscales such that when harm was present, the guilt condition elicited greater forgiveness than the no-guilt condition.⁶ However, when harm was absent, the guilt and no-guilt conditions did not differ from each other. No main effect of harm emerged for any of the forgiveness variables.

Identification. We found a main effect of guilt on identification with the guilt conditions reporting greater identification than the no-guilt conditions. The two guilt and the two no-guilt conditions did not significantly differ from each other. We did not find a main effect of harm, nor a guilt \times harm interaction.

Alternative mediators.

General identification. For general identification (as measured by the RISCs, Cross et al., 2000), there was no main effect of guilt, $F(1, 181) = 0.56, p = .46$, harm, $F(1, 181) = 0.28, p = .59$, nor a guilt \times harm interaction, $F(1, 181) = 0.02, p = .87$.

Capability for similar wrongdoing. For capability for similar wrongdoing, there was no main effect of guilt, $F(1, 181) = 1.11, p = .29$, harm, $F(1, 181) = 0.13, p = .72$, nor a guilt \times harm interaction, $F(1, 181) = 0.28, p = .60$.

Empathic understanding. For empathic understanding, we found a marginal main effect of guilt, $F(1, 181) = 3.30, p = .07, \eta^2 = .02$, with the guilt conditions reporting greater empathic understanding for the transgressor than the no-guilt conditions. The two guilt, $t(181) = -0.04, p = .97$, and the two no-guilt conditions, $t(181) = 0.04, p = .97$, did not differ from each other. We found no main effect of harm, $F(1, 181) = 0.00, p = 1.00$, nor a guilt \times harm interaction, $F(1, 181) = 0.003, p = .96$.

Mediation of forgiveness by identification with transgressor. As in Study 2, we combined the two guilt conditions and the two non-guilt conditions in order to conduct mediation analyses. We looked at the three forgiveness variables that had a significant or marginal main effect of guilt on forgiveness: the TRIM-18, the TRIM-Benevolence subscale, and the *intent to forgive* item. We used the Preacher and Hayes (2004) bootstrapping method to examine mediation of the guilt to forgiveness relationship by identification. For the TRIM-18, the indirect effect of guilt on forgiveness via identification was significant ($z = -2.21, p = .03, CI\ 95\% = -.32, -.03; N = 185; 10,000$ re-samples). A similar pattern emerged for the TRIM-benevolence subscale: the indirect effect of guilt on forgiveness via identification was significant ($z = -2.32, p = .02, CI\ 95\% = -.49, -.05; N = 185; 10,000$ re-samples). Similarly, for the single *intent to forgive* item, the indirect effect of guilt recall on forgiveness via identification was significant ($z = -2.16, p = .03; CI\ 95\% = -.45, -.04; N = 185; 10,000$ re-samples). These results are consistent with our hypothesis that identification mediates the effect of guilt on forgiveness of others' transgressions.

Mediation of forgiveness by empathic understanding with transgressor. We again used the Preacher and Hayes (2004) bootstrapping method to test for mediation but in this case used empathic understanding as our potential mediator because this was the only other alternative mediator in which we found a (marginal) main effect of guilt. For all mediation analyses, the indirect effect of guilt on forgiveness via empathic understanding was not significant (TRIM-18: $z = 1.61$, $p = .11$, CI 95% = $-.003$, $.10$; $N = 185$; 10,000 re-samples; TRIM-Benevolence: $z = 1.73$, $p = .08$, CI 95% = $-.003$, $.17$; $N = 185$; 10,000 re-samples; *intent to forgive*: $z = 1.60$, $p = .11$, CI 95% = $-.004$, $.16$; $N = 185$; 10,000 re-samples), casting doubt on its role as an alternative mediator.

Discussion

In Study 3, we found additional evidence that guilt leads people to express greater forgiveness of others. However, unlike Study 2, the forgiveness was that of a real other who had actually transgressed against the participant in the past. Once again, we sought to disentangle the effects of guilt from that of harm-doing on forgiveness. For at least two measures of forgiveness, we found that it was guilt, and not harm-doing, that precipitated forgiveness of the transgressor.

We looked at several dimensions of forgiveness, including that related to a reduced avoidance of the other person, reduced desire for revenge, greater willingness to wish the other person well, and a question explicitly aimed at gauging people's general intentions to forgive the transgressor. We found a significant effect of guilt on both forgiveness related to wishing the person well (i.e., TRIM-Benevolence), and on people's explicit intentions to forgive the other person (i.e., the *intent to forgive* item). There was also a marginal effect of guilt on overall forgiveness as measured by the full TRIM-18. Guilt was unrelated to reduced avoidance or revenge intentions.

A possible reason for the somewhat modest strength of the effect is that the absence of the “close other” instructions in the guilt conditions meant that the situations participants recalled evoked less potent feelings of guilt than did those induced in the previous experiment—particularly for the *guilt-no-harm condition*. This presumption is supported by participants’ self-ratings of guilt in the *guilt-harm* versus the *guilt-no-harm condition* (see Table 4). Reviewing participants’ guilt-inducing situations suggested that in the *guilt-harm* condition, participants wrote about interactions with close others (e.g., children or partners), whereas in the *guilt-no-harm condition*, participants wrote about more distant others (e.g., co-workers or classmates). As Baumeister et al. (1994) discuss, guilt manifests itself more often when we harm close versus distant others.

To explore this possibility, we had two coders blind to the purpose of the study and our hypotheses rate the essays on how close the writer (i.e., the participant) was to the other person (ICC = .95). As suspected, there was an interaction between guilt and harm, $F(1,180) = 33.88, p < .001, \eta_p^2 = .16$, such that participants in the *guilt-harm* condition recalled transgressing against a more close other compared to those in the *guilt-no-harm condition*, $t(180) = -5.95, p < .001$. This was also the case for the no-guilt conditions, with those in the *no-guilt-harm* condition recalling more close others than did those in the *no-guilt-no-harm condition*; however, at a much smaller magnitude than the guilt conditions, $t(180) = 2.28, p = .02$. There was also a main effect of harm, $F(1,180) = 6.78, p = .01, \eta_p^2 = .04$, such that those asked to recall a situation where they harmed another person, recalled transgressing against a closer other than did those not asked to recall a situation in which they harmed the other; however, judging by the mean values, this effect was driven solely by the *guilt-harm* condition. Specifically, participants wrote about close others most often in the *guilt-harm* condition ($M = 4.15, SD = 1.16$), followed by the *no-guilt-no-harm*

condition ($M = 3.64$, $SD = 1.24$), the *no-guilt-harm* condition ($M = 3.01$, $SD = 1.50$), and lastly the *guilt-no-harm* condition ($M = 2.50$, $SD = 1.37$). We found no main effect of guilt, $F(1,180) = 0.00$, $p = 1.00$.

These supplementary analyses suggest that in the absence of instructions to recall harm done to a close other, the target who people recalled transgressing against in the *guilt-harm* condition was closer to the participant than the target who people recalled transgressing against in the *guilt-no-harm* condition, and that the closeness of the target had implications for the amount of guilt experienced. These differences may have influenced the resulting magnitude of forgiveness, as well, but these are post hoc suppositions. There could have been some third, unaccounted for variable responsible for these differences. In Study 4, to further explore the possibility that transgressing against a close (rather than a distant) other results in greater guilt and hence, greater forgiveness, we explicitly manipulated closeness of the person whom one transgressed against and examined both the resulting guilt and the resulting forgiveness. In addition, rather than relying on retrospective guilt, as we did in the previous two studies, we elicited guilt in real-time.

Study 4

Our results suggest that guilt prompts forgiveness of third-party transgressors; however, we have yet to demonstrate this effect when guilt is elicited in real-time (vs. from recollection). Thus, in Study 4, we induce guilt in real-time and examine individuals' real acts of forgiveness toward someone who directly harmed them.

As guilt is most pronounced in close relationships (Baumeister et al., 1995; Giner-Sorolla, 2012; Karremans & Aarts, 2007; Vangelisti et al., 1991), we induce guilt by having participants transgress against close others (i.e., friends) versus distant others (i.e., strangers) and compare

these conditions to parallel conditions absent of a transgression. We predict an interaction, such that participants who experience guilt (via transgressing against a friend) will experience greater identification and forgiveness compared to participants who do not (via transgressing against a stranger or not transgressing at all).⁷

Method

Participants and design. Participants ($N = 84$; 69% women; $M_{age} = 21.81$, $SD = 2.27$) were students at a university in The Netherlands, who participated either in exchange for course credit or €6. Four participants were eliminated from the analyses due to their insufficient English language skills, leaving 80 participants with which to conduct the analyses. Participants were randomly assigned to one of four conditions in a 2 (*harm*: harm/no harm) \times 2 (*relationship*: friend/stranger) between-subjects design.

Procedure. Participants came to the lab with a friend for a study about “learning and evaluating.” We ran each session with two pairs of friends (staggered 5 minutes apart to ensure they did not meet each other) who were sent to separate workrooms. We informed participants that the laboratory task involved viewing a series of 15 matrices, with a total of 25 cells in each matrix containing a number rounded to the first decimal place. In the exercise, participants would be randomly assigned to either the role of the Learner or Evaluator. The Learner’s job would be to indicate how many 4-celled groups in the matrices added up to a total of 10. The Evaluator’s job would be to determine whether the Learner correctly solved the matrix; in fact, all participants were assigned to the Evaluator role.

To manipulate the closeness of the relationship (friend vs. stranger), we told participants they were paired with either the person they came into the lab with (their friend) or the other person’s friend (a stranger). To emphasize this pairing we instructed participants to either confirm

they were paired with the friend with whom they entered the lab (friend condition) or to confirm they were paired with the other person's friend and did not know the identity of this person (stranger condition).

To manipulate harm, all evaluators indicated via the press of a button whether their partner incorrectly answered a problem in the matrix task. We informed those in the harm condition that every time they marked a question as 'incorrect' their partner would be sent an unpleasant 90-decibel noise blast (Meier, Wilkowski, & Robinson, 2008). To provide an incentive for sending the noise blast (as well as to increase feelings of responsibility), we gave participants €0.50 for each matrix they correctly assessed. The participant then experienced a sample blast. We told participants in the no-harm conditions that nothing happened to their partner when they marked a question as 'incorrect.' The interaction was pre-programmed so that 'the Learner' always answered 13/15 problems incorrectly.

Following the task, the experimenter told participants they had finished before the session was over and asked them if they were willing to complete an unrelated study with another experimenter. All participants agreed. Another experimenter, whom they had not yet met, then escorted them to a separate workroom.

Participants were told that the second study was about interpersonal relationships. The experimenter instructed them to recall a personal situation in which someone harmed them and they had not yet forgiven this person. Participants then wrote about the situation in detail. Participants also completed the TRIM-18 (McCullough et al., 1997) and an item explicitly assessing their intent to forgive, answering the questions regarding the person about whom they wrote and the same two items used in Studies 2 and 3 to assess identification.

Participants were asked to write a letter to the person whom they described (i.e., the person who had harmed them in the past), which we purportedly would send to this person. If the participant did not have this person's address, the experimenter told the participant that the letter would be held until the participant could e-mail the address to the experimenter. Participants could express anything they wished in this letter; if they wished to forgive this person, they could use the letter to communicate such forgiveness. Participants were given the option not to have their forgiveness letters read nor content-coded; five participants chose this option. Four participants wrote no letter.

At the end of the session, the experimenter fully debriefed participants on an individual basis, which included telling them that their letter would not be sent. No participants reported adverse psychological effects from the study.

Forgiveness letters. Two coders blind to the study hypotheses and experimental conditions content-coded the letters on the following three dimensions: extent to which the writer expressed a willingness to forgive the transgressor, a willingness to pardon the transgressor, and a desire to reconcile with the transgressor (1 = *not at all*; 5 = *extremely so*). The coders showed high agreement in their ratings (all ICCs > .85); the coders' ratings on these three items were averaged to form an overall forgiveness score.

Guilt manipulation pre-test. We conducted a pre-test to ensure that our guilt-inducing paradigm led to greater guilt in the *friend-harm* condition compared to the other three conditions. We predicted that, of the four conditions, those who sent a noise blast to their friend would experience the greatest guilt. We did not ask for guilt self-reports within Study 4 itself because we were concerned that asking about people's guilt after the forgiveness experience might lead to reduced levels of guilt and during an initial pilot test with 12 participants, asking about guilt prior

to the forgiveness task led to high levels of disbelief regarding our cover story and suggested a connection between the transgression task and the subsequent forgiveness task. Thus, the pre-test procedures were identical to those used in Study 4 except that participants completed the same five items from the de Hooze et al. (2011) guilt self-report scale used in Study 3 ($\alpha = .61$) instead of recalling and describing an unforgiven transgression.

Table 5 contains the study results. The pre-test ($N = 69$) demonstrated a main effect of harm-doing and a marginal harm \times relationship interaction. The harm-friend condition elicited greater guilt than did the harm-stranger condition, and greater guilt than the other three conditions combined, $t(65) = 4.11, p < .001$. Participants in the no-harm conditions did not differ from each other.

Results

Table 6 reports the correlations among the study variables and Table 7 reports the results and descriptive statistics.⁸

TRIM-18. The TRIM-18 scores revealed an effect of relationship, which was qualified by the predicted harm \times relationship interaction. As hypothesized, individuals induced to feel guilt via harming a friend were more forgiving of a person who had transgressed against them in the past than were those who harmed a stranger. The no-harm conditions did not differ. The main effect of harm was not significant.

We also looked at responses on the three separate subscales for the TRIM-18: desire to avoid this person (Avoid), desire to inflict revenge on this person (Revenge), and benevolence toward this person (Benevolence). The interaction found on the TRIM-18 was replicated for all subscales except revenge, which demonstrated only a main effect of relationship (those paired with friends reported lesser revenge intentions than those paired with strangers). Specifically,

there was an interaction between harm and relationship on participants' reduced desire for avoidance. As predicted, individuals who harmed their friends expressed lesser desire to avoid their past transgressor than did those who harmed a stranger. However, there was no difference in avoidance by relationship for those who did not harm anyone. We also found a main effect of relationship, such that being paired with a friend led to lesser avoidance intentions than being paired with a stranger. As with the TRIM-18, there was no main effect of harm.

We also found an interaction between harm and relationship on participants' benevolent forgiveness. As predicted, individuals who harmed their friend expressed greater benevolence toward their past transgressor than did those who harmed a stranger. However, there was no difference in benevolent forgiveness by relationship for those who did not harm someone. There were no main effects of relationship or harm on benevolent forgiveness.

Intent to forgive. People's explicit intentions to forgive their past transgressor revealed the predicted harm \times relationship interaction. As hypothesized, individuals induced to feel guilt via harming a friend were more forgiving of their past transgressor than were those who harmed a stranger. The no-harm conditions did not differ. The main effects of relationship and harm were not significant.

Coded letters. Examining the forgiveness that individuals expressed in their letters revealed a significant harm \times relationship interaction. As hypothesized, individuals induced to feel guilt via harming a friend were more forgiving of their past transgressor than were those who harmed a stranger. The no-harm conditions did not differ. There was also a marginal effect of relationship: people paired with friends showed marginally more forgiveness than did those paired with strangers. The main effect of harm was not significant.

Identification. Examining the effects on identification revealed the predicted harm \times relationship interaction. As hypothesized, participants induced to feel guilt via harming a friend identified more with their past transgressor than did participants who harmed a stranger. Those in the no-harm conditions did not differ. The main effects of relationship and harm were not significant.

Moderated mediation of forgiveness via identification. We predicted that the harm \times relationship interaction on forgiveness would be mediated by identification with the transgressor. Here we include the results for the full TRIM-18 scale and forgiveness as coded in the letters; however, when examined in similar analyses, identification also mediated the results for the TRIM-Avoid and -Benevolence subscales, and the *intent to forgive* item. Tables 8 and 9 present the results from the TRIM-18 moderated mediation analysis (Preacher, Rucker, & Hayes, 2007).

As discussed above, the harm \times relationship effect was significant for forgiveness and identification, meeting the first two requirements for moderated mediation. In addition, identification predicted forgiveness in the hypothesized direction, TRIM-18: $B = .37$, $SE = .08$, $t(79) = 4.52$, $p < .001$; Coded Forgiveness from Letters: $B = .26$, $SE = .07$, $t(70) = 3.63$, $p = .001$.

We examined the conditional indirect effects of relationship on forgiveness (both with the TRIM-18 and the letter codings) via identification when harm did and did not occur; we predicted that the effect of identification would be significant only when harm occurred. Our results supported this prediction. The conditional indirect effect of relationship on forgiveness when one person harmed another was mediated by identification with the transgressor. In contrast, there was no evidence of mediation when no harm was delivered.

Discussion

Study 4 built upon the previous two studies by demonstrating that (1) guilt, and not mere harm-doing, resulted in greater forgiveness of others (we found no main effect of harm on forgiveness), (2) this effect motivated forgiveness toward those who had harmed the participant in the past, (3) this effect extended to behavioral manifestations of forgiveness, and (4) this effect was not exclusive to memories of one's own guilt but applied to cases in which one felt guilt for recently harming another. We also replicated the mediation by identification found in Studies 2 and 3; that is, we found that the interaction between relationship closeness and harm had an indirect effect on forgiveness via increasing participants' identification with someone who personally transgressed against them.

Our third contribution mentioned above is especially noteworthy. Like Study 3, the forgiveness experienced in this study was not that of a hypothetical other or a stranger. It was real forgiveness directed toward an individual who had transgressed against the participant. Participants' stories of being transgressed against and their accompanying letters were powerful; they described relationship infidelity, betrayal by close friends, and being let-down by parents. Thus, these results provide support for our hypothesis that guilt can elicit forgiveness of transgressors via increased identification with these same transgressors, as demonstrated by a meaningful act of reconciliation.

General Discussion

Past theorizing about guilt describes how guilt motivates transgressors to atone for their mistakes—to reconcile with the victims of their transgressions. In the present research, we take an important step forward in suggesting that the prosocial effects of guilt may extend beyond the boundaries of a single interpersonal relationship. Indeed, we found that the experience of incidental guilt led to forgiveness of third-party transgressors. Regardless of whether participants

were asked to recall a guilt-eliciting situation or were prompted to feel guilt, guilt increased forgiveness toward hypothetical individuals who had committed moral transgressions and a real person who had previously transgressed against them. Across a variety of contexts, using a diverse array of operationalizations, greater guilt led to greater forgiveness.

The effect of guilt on forgiveness differed somewhat based on the dimension of forgiveness being measured. In Studies 1, 3, and 4, in addition to forgiveness in general, we measured specific forms of forgiveness based on no longer avoiding the person, no longer seeking revenge, and having benevolent intentions toward this person (McCullough et al., 1997). Across the three studies, we found effects on general forgiveness (i.e., the TRIM-18) (with marginal effects in Study 3). However, the only TRIM subscale that showed consistently significant results was the Benevolence subscale. That is, guilt was consistently associated with cognitions such as *wishing goodwill* to the transgressor, *want[ing] to have a positive relationship again*, and *releasing [one's] anger so that [one] can work on restoring [the] relationship back to health*.

While guilt was consistently related to wanting to be close again to the other person, we found less consistent relationships between guilt and the TRIM-Avoidance and -Revenge subscales. Specifically, in Study 1 we found a relationship between guilt proneness (as measured by both the GASP, Cohen et al., 2011, and TOSCA, Tangney et al., 2000) and general tendencies for less revenge-seeking (e.g., *wishing something bad would happen to the other*), but revenge-related forgiveness showed no relationship with guilt in the two studies that followed. In Study 4, we found that guilt led to lesser avoidance-related forgiveness (e.g., *keeping distance between self and transgressor*), but showed no relationships with guilt in the prior two studies.

What might these disparate effects suggest? One possibility is that, at least for the Revenge items, their severe nature (e.g., *I'll make him/her pay; I want to see him/her hurt and*

miserable.) created ceiling effects and limited the variance in people's responses. In support of this explanation, across all three studies that used the TRIM, the Revenge subscale (reversed) showed the highest means of all three subscales.

In addition to establishing the guilt-to-forgiveness link, individuals who experienced guilt were more likely to identify with other transgressors; that is, they tended to see themselves as similar to the people whom they were asked to forgive. It was this psychological experience of identification with the transgressor that mediated the effects of guilt on forgiveness, even forgiveness for a third-party who directly harmed the participant in the past (Studies 3 & 4). In short, guilt triggered a motivation to repair a relationship, and not just the relationship in which the feelings of guilt had originated.

Strengths, Limitations, & Future Directions

Although the current results support our hypotheses, they also have limitations. For example, despite our attempts to disentangle the effects of guilt from mere harm, it was difficult for us to get individuals to recall times when they harmed others but did not experience guilt (Studies 2 and 3). The attrition in the no guilt-harm condition suggests the possibility that those who were able to recall a time when they harmed another and did not experience guilt were somehow unique—perhaps they are less prone to experiencing guilt, and thus, as we show in Study 1, less likely to grant forgiveness. The attrition likely reflects the inherent difficulty in distinguishing the experience of harm-doing from the experience of guilt. However, as we show in Studies 2 and 3, the distinction is indeed possible and when it does occur, can lead to different forgiveness outcomes.

In support of the link between guilt and harm-doing, we found in Study 4 that even though harming a stranger (vs. a friend) led to lesser guilt (and hence, lesser forgiveness), harming a

stranger was not entirely void of guilt; those who harmed a stranger felt less guilt than did those who harmed a friend, but guilt was still present. Consistent with this finding, Baumeister and colleagues (1994) found that when asking people to recall guilt-inducing versus non-guilt-inducing situations, 93% of guilt-inducing situations involved a close other. In contrast, significantly fewer non-guilt-inducing situations (only 69%) involved close others.

Related to our studies' limitations, there are several potentially fruitful directions for future research. First, researchers might explore whether the process of forgiving third parties can reduce one's original feelings of guilt. This would imply that the prosocial "spillover" effects of guilt, at least from the focal party's perspective, are functional for the self. Given that individuals are strongly motivated to reduce feelings of guilt (Baumeister et al., 1994), identifying with, and then forgiving, a third-party may be just what people need to reduce their own feelings of guilt for a previous mistake. In other words, as guilt results from actions (or inactions) that cause distress to others, identifying with other wrongdoers might help to reduce the perceived gravity of one's own actions (Deaux, 1996; Hogg & Abrams, 1990; Hogg & Abrams, 1993), thereby reducing one's own guilt. Future studies should examine whether forgiveness of a third-party leads to such changes in the focal party's guilt. Similarly, it is plausible that guilt leads to forgiveness through some mechanism besides identification (or empathy, capability for similar wrongdoing, or general identification) and that identification is actually a consequence of forgiving one's transgressor. That is, via the forgiveness process a person may come to feel more like the transgressor (Karremans & Van Lange, 2008; Wenzel, Turner, & Okimoto, 2010). If true, this leaves the mechanism question unanswered, begging for further research on this relationship.

Conclusions

According to an oft-quoted proverb, people in glass houses should not throw stones. According to our research, many of them do not, particularly those who feel guilty for their own transgressions. Across four studies, we found that trait- and state-based guilt led transgressors to forgive unrelated third-party transgressors through their heightened sense of identification with these transgressors. Together, these results suggest that guilt may be more than just a force that leads us to make amends for our own past transgressions—it may also lead us to forgive others for their transgressions.

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Footnotes

¹This reparative function of guilt has also been found for collective guilt (e.g., Iyer, Leach, & Crosby, 2003), which are negative feelings related to the belief or knowledge that one's ingroup is responsible for negative actions toward another group (Wohl, Branscombe, & Klar, 2006). However, as collective guilt is beyond the scope of the current investigation, we do not discuss it further.

²We use the term "identification" in a way that departs somewhat from its use by social identity theorists. However, we do assume that such identification provides some social significance for the individual (Tajfel & Turner, 1979; Tajfel, 1981) and that it can exist without the precondition of actual or close physical contact with the identified party (cf., Diehl, 1990; Gagnon & Bourhis, 1996; Lemyre & Smith, 1985).

³The GASP also contains subscales measuring repair and withdrawal responses to transgressions but we do not explore those relationships here given that our interest was on guilt and shame rather than on repair and withdraw behavioral tendencies (information about the repair and withdrawal subscales is available from the authors).

⁴For exploratory purposes, in Studies 2, 3, and the Study 4 pre-test, we included other questions about the situation they recalled; these are available from the first author upon request.

⁵We also excluded one participant who took over two days to complete the online study and three people for being multivariate outliers (identified for having multivariate standardized residuals greater than ± 2).

⁶For the revenge subscale, the contrast between the guilt conditions was marginal, $p = .07$.

⁷Collective guilt operates differently than individual-level guilt, as it can result at a high magnitude even when one has had no contact with the victim (e.g., see Iyer, Schmader, & Lickel, 2007; Wohl et al., 2006).

⁸We ran the analyses examining the effects of harm and relationship on forgiveness and identification both with and without accounting for the dyad-level effects. Accounting for variance from dyad membership did not alter the significance of any of our results. Due to the fact that dyad membership accounted for between 0 to 4.7 percent of the variance, we choose to report the results without accounting for dyad membership.

Table 1*Study 1: Descriptive Statistics, Reliabilities, and Correlations among the Guilt, Shame, and Forgiveness Items*

	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>
1. GASP Guilt	5.83	0.91	<i>.80</i>										
2. GASP Shame	4.44	0.94	<i>.34***</i>	<i>.83</i>									
3. TOSCA-3 Guilt	4.18	0.55	<i>.74***</i>	<i>.21*</i>	<i>.85</i>								
4. TOSCA-3 Shame	3.20	0.67	<i>.39***</i>	<i>.72***</i>	<i>.36**</i>	<i>.83</i>							
5. TRIM-18	2.90	0.68	<i>.32***</i>	<i>-.17†</i>	<i>.27**</i>	<i>-.13</i>	<i>.92</i>						
6. TRIM-Avoid	2.44	0.75	<i>.16</i>	<i>-.21*</i>	<i>.09</i>	<i>-.16</i>	<i>.87***</i>	<i>.88</i>					
7. TRIM-Revenge	3.41	1.03	<i>.36***</i>	<i>-.19†</i>	<i>.38**</i>	<i>-.18†</i>	<i>.79***</i>	<i>.56**</i>	<i>.92</i>				
8. TRIM-Benevolence	3.01	0.81	<i>.24*</i>	<i>-.02</i>	<i>.19†</i>	<i>.03</i>	<i>.75***</i>	<i>.51**</i>	<i>.31**</i>	<i>.91</i>			
9. Heartland Self	4.68	1.18	<i>.05</i>	<i>-.31**</i>	<i>.17</i>	<i>-.40**</i>	<i>.29**</i>	<i>.19†</i>	<i>.31**</i>	<i>.19†</i>	<i>.82</i>		
10. Heartland Others	4.39	1.15	<i>.33***</i>	<i>-.20*</i>	<i>.41**</i>	<i>-.15</i>	<i>.75***</i>	<i>.54**</i>	<i>.68***</i>	<i>.59***</i>	<i>.43***</i>	<i>.87</i>	
11. Heartland Situations	4.67	1.17	<i>.30**</i>	<i>-.28**</i>	<i>.43**</i>	<i>-.29**</i>	<i>.52***</i>	<i>.31**</i>	<i>.57***</i>	<i>.36***</i>	<i>.66***</i>	<i>.70***</i>	<i>.86</i>

Notes. N ranged from 99-101. For all scales, higher scores indicated more endorsement of the guilt, shame, or forgiveness response; thus, both the TRIM-Revenge and -Avoid subscales are reverse-scored. Zero-order correlations are presented with Cronbach alpha reliabilities *italicized* in the diagonal. † $p < .10$, * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Table 2*Study 2: Descriptive statistics and F-test Statistics for Self-reported Guilt, Forgiveness, and Identification by Guilt and Harm*

	No Guilt	Guilt	Variable	F-value	p-value	η_p^2
Self-reported Guilt						
No Harm	1.38 _c (0.88)	2.81 _b (0.87)				
Harm	1.23 _c (0.59)	3.54 _a (1.11)				
			Guilt	109.17	<.001	.54
			Harm	2.64	.11	.03
			Guilt × Harm	5.92	.02	.06
Forgiveness						
No Harm	1.38 _a (0.30)	1.81 _b (0.68)				
Harm	1.41 _a (0.53)	1.74 _b (0.65)				
			Guilt	11.69	.001	.11
			Harm	0.03	.88	<.001
			Guilt × Harm	0.22	.64	.002
Identification						
No Harm	1.28 _a (0.39)	1.69 _{b,c} (0.66)				
Harm	1.50 _{a,c} (0.88)	1.72 _{b,c} (0.71)				
			Guilt	5.31	.02	.05
			Harm	0.82	.37	.01
			Guilt × Harm	0.46	.46	.01

Notes: Values ranged from 1 (*not at all*) to 5 (*very much*). Standard deviations are provided in parentheses. Means with different subscripts within each row or column significantly differ at $p < .05$. The degrees of freedom total is 97 for all analyses, except for the self-reported guilt, which is 95 due to missing values.

Table 3*Study 3: Means, Standard Deviations, Correlations, and Reliabilities*

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10
1. Self-reported Guilt	3.63	1.67	.84									
2. TRIM-18	3.60	1.17	.12 [†]	.91								
3. TRIM-Avoid	2.90	1.44	.05	.85 ^{***}	.88							
4. TRIM-Revenge	5.37	1.63	.05	.67 ^{***}	.30 ^{***}	.90						
5. TRIM-Benevolence	2.95	1.40	.20 ^{**}	.83 ^{***}	.63 ^{***}	.35 ^{***}	.90					
6. Intent to Forgive	3.22	1.85	.19 ^{**}	.66 ^{***}	.44	.39 ^{***}	.74 ^{***}	--				
7. Transgressor Identification	1.90	1.27	.29 ^{***}	.42 ^{***}	.37 [*]	.04	.57 ^{***}	.38 ^{***}	.90			
8. Capability for Wrongdoing	2.33	1.52	.16 [*]	.26 ^{***}	.23 ^{**}	-.04	.42 ^{***}	.37 ^{***}	.49 ^{***}	.93		
9. Empathic Understanding	2.26	1.46	.20 ^{**}	.29 ^{**}	.25 ^{***}	-.01	.43 ^{***}	.28 ^{***}	.49 ^{***}	.59 ^{***}	.92	
10. General Identification	5.19	0.89	.01	-.07	-.11	.06	-.12	-.07	-.14 [†]	-.09	-.09	.87

Notes. N = 185. The TRIM-Revenge and -Avoid subscales were reverse-scored such that higher scores indicated greater forgiveness. Cronbach alpha reliabilities in the diagonal, with exception of the variable identification, which due to its two-item composition is a correlation coefficient. [†] $p < .10$, ^{*} $p \leq .05$, ^{**} $p \leq .01$, ^{***} $p \leq .001$

Table 4*Study 3: Descriptive Statistics and F-test Statistics for Self-reported Guilt, Forgiveness, and Identification by Guilt and Harm*

	No Guilt	Guilt	Variable	F-value	p-value	η_p^2
Self-reported Guilt						
No Harm	2.26 _a (1.26)	3.77 _b (1.56)				
Harm	2.53 _a (1.31)	5.12 _c (1.37)				
			Guilt	91.90	<.001	.34
			Harm	4.32	<.001	.08
			Guilt × Harm	9.35	.003	.05
TRIM-18						
No Harm	3.61 _a (1.12)	3.58 _{a,b} (1.19)				
Harm	3.31 _b (1.16)	3.91 _a (1.15)				
			Guilt	2.82	.095	.02
			Harm	0.004	.95	<.001
			Guilt × Harm	3.46	.06	.02
TRIM-avoid (rs)						
No Harm	2.95 _{a,b} (1.51)	2.79 _{a,c} (1.32)				
Harm	2.66 _{b,c} (1.39)	3.21 _a (1.51)				
			Guilt	0.84	.36	.01
			Harm	0.09	.76	.001
			Guilt × Harm	2.75	.099	.02
TRIM-revenge (rs)						
No Harm	5.50 _{a,c} (1.57)	5.29 _{a,b} (1.72)				

	Harm	5.04 _a (1.74)	5.66 _{b,c} (1.45)				
				Guilt	0.76	.38	.004
				Harm	0.03	.86	<.001
				Guilt × Harm	3.09	.085	.02
TRIM-benevolence							
	No Harm	2.82 _a (1.38)	3.09 _b (1.47)				
	Harm	2.62 _a (1.26)	3.27 _b (1.43)				
				Guilt	5.03	.026	.03
				Harm	0.001	.97	<.001
				Guilt × Harm	0.92	.34	.01
<i>I intend to forgive.</i>							
	No Harm	2.98 _{a,c} (1.76)	3.53 _b (1.97)				
	Harm	2.85 _a (1.87)	3.50 _{b,c} (1.72)				
				Guilt	4.97	.027	.03
				Harm	0.09	.77	<.001
				Guilt × Harm	0.03	.85	<.001
Identification							
	No Harm	1.64 _a (1.07)	2.02 _{b,c} (1.34)				
	Harm	1.71 _{a,c} (1.12)	2.23 _b (1.46)				
				Guilt	5.92	.02	.03
				Harm	0.54	.46	.003
				Guilt × Harm	0.15	.70	.001

Notes. Values ranged from 1 (*not at all*) to 7 (*very much so or extremely*). Standard deviations are provided in parentheses. Means with different subscripts within each row or column significantly differ at $p < .10$. The *Revenge* and *Avoid* subscales were reverse-scored such that higher scores indicated greater forgiveness. The degrees of freedom total is 181 for all analyses.

Table 5*Study 4 Pre-test: Descriptive Statistics and F-test Statistics for Self-reported Guilt by Harm and Relationship*

	Stranger	Friend	Variable	F-value	p-value	η_p^2
No Harm	1.92 _a (0.66)	1.87 _a (0.68)				
Harm	2.25 _a (0.74)	2.88 _b (0.85)				
			Harm	14.13	<.001	.18
			Relationship	2.63	.11	.04
			Harm × Relationship	3.58	.063	.05

Notes: Values ranged from 1 (*not at all or very slightly*) to 7 (*extremely*). Standard deviations are provided in parentheses. Means with different subscripts within each row or column significantly differ at $p < .05$. The degrees of freedom total is 65 for all analyses.

Table 6*Study 4: Means, Standard Deviations, Correlations, and Reliabilities*

Variable	Mean	SD	1	2	3	4	5	6	7
1. TRIM-18	4.46	1.28	.93						
2. TRIM-Avoid	4.16	1.63	.91***	.89					
3. TRIM-Revenge	5.56	1.24	.63***	.36***	.81				
4. TRIM-Benevolence	3.88	1.63	.91***	.75***	.44***	.91			
5. Intent to Forgive	4.46	1.93	.67***	.51***	.38***	.74***	--		
6. Identification	3.09	1.59	.46***	.46***	.08	.49***	.43***	.57	
7. Forgiveness Expressed in Letter	2.15	1.08	.52***	.44***	.21 [†]	.59***	.56***	.40**	.93

Notes. N = 80, except for correlations with *Expressed Forgiveness in Letter*, where N = 71 (Pairwise). Cronbach alpha reliabilities in the diagonal, with exception of the variable identification, which due to its two-item composition is a correlation coefficient. [†] $p < .10$, $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Table 7*Descriptive Statistics and F-test Statistics for Forgiveness as a Function of Harm and Relationship*

		Stranger	Friend	Variable	F-value	p-value	η_p^2
TRIM-18	No harm	4.63 _a (1.27)	4.40 _a (1.15)				
	Harm	3.68 _b (1.32)	5.05 _c (1.10)				
				Harm	0.30	.58	.004
				Relationship	4.49	.04	.06
				Harm × Relationship	8.81	.004	.10
TRIM Avoid	No harm	4.28 _a (1.60)	4.14 _{a,c} (1.53)				
	Harm	3.22 _b (1.70)	4.90 _c (1.37)				
				Harm	0.20	.66	.003
				Relationship	4.94	.03	.06
				Harm × Relationship	6.82	.01	.08
TRIM Revenge	No harm	5.71 _a (1.30)	5.81 _a (0.90)				
	Harm	4.91 _b (1.51)	5.77 _a (1.07)				
				Harm	2.44	.12	.03
				Relationship	3.21	.08	.04
				Harm × Relationship	2.03	.16	.03

TRIM Benevolence			
No harm	4.13 _a (1.40)	3.52 _{a,b} (1.61)	
Harm	3.18 _b (1.69)	4.63 _c (1.49)	

Harm	0.06	.81	.001
Relationship	1.42	.24	.02
Harm × Relationship	8.72	.004	.10

Intent to Forgive			
No harm	4.76 _a (1.68)	3.71 _b (2.05)	
Harm	4.00 _{a,b} (2.08)	5.32 _c (1.56)	

Harm	1.00	.32	.01
Relationship	0.10	.75	.001
Harm × Relationship	7.97	.01	.10

Forgiveness from Letter			
No harm	2.24 _{a,c} (0.94)	2.03 _a (1.23)	
Harm	1.67 _a (0.96)	2.71 _c (0.96)	

Harm	0.04	.83	.001
Relationship	2.86	.096	.04
Harm × Relationship	6.28	.02	.09

Identification			
No harm	3.33 _a (1.68)	3.00 _a (1.57)	
Harm	2.26 _b (1.21)	3.68 _{a,c} (1.61)	

Harm	.32	.57	.004
Relationship	2.50	.12	.03
Harm × Relationship	6.51	.01	.08

Notes. Degrees of freedom are (1,76) for all *F* statistics, with the exception of the *intent to forgive* variable (1,75) and the *forgiveness from letter* (1,67). Standard deviations are provided in parentheses. Means with different subscripts within the same row or column for each dependent measure significantly differ from each other, $p < .10$. The response scales ranged from 1 (*not at all*) to 7 (*very much so*) for all scores except for the letter codings, which ranged from 1 to 5.

Table 8

Study 4: Regression Results for Indirect Effect of Harm × Relationship via Identification on TRIM-18 Forgiveness Score

TRIM-18 average						
Predictor	<i>B</i>	<i>SE</i>		<i>t</i>		<i>p</i>
Constant	4.50	.19		23.75		.000
Identification	0.39	.11		3.67		.001
Relationship	0.28	.16		1.70		.092
Harm	-0.04	.16		-0.24		.813
Harm × Relationship	0.28	.17		1.67		.098
Harm Condition	Bootstrapped indirect effect of identification	95% CI Lower Limit	95% CI Upper Limit	Bootstrapped <i>SE</i>	Bootstrapped <i>z</i>	Bootstrapped <i>p</i>
Harm Absent (-1)	-.07	-.31	.12	.11	-0.63	.53
Harm Present (+1)	.28	.10	.60	.12	2.29	.02

Notes. Unstandardized regression coefficients are reported. Bootstrapped re-samples = 10,000. CI = confidence interval.

Table 9

Study 4: Regression Results for Indirect Effect of Harm × Relationship via Identification on Forgiveness as Coded in the Letters

Forgiveness from Letter						
Predictor	<i>B</i>	<i>SE</i>		<i>t</i>		<i>p</i>
Constant	2.35	.14		16.92		.000
Identification	0.21	.08		2.66		.010
Relationship	0.14	.12		1.13		.263
Harm	0.05	.12		0.39		.699
Harm × Relationship	0.19	.13		1.53		.131
Harm Condition	Bootstrapped indirect effect of identification	95% CI Lower Limit	95% CI Upper Limit	Bootstrapped <i>SE</i>	Bootstrapped <i>Z</i>	Bootstrapped <i>p</i>
Harm Absent (-1)	-.05	-.21	.05	.06	-0.74	.46
Harm Present (+1)	.19	.05	.39	.09	2.19	.03

Notes. Unstandardized regression coefficients are reported. Bootstrapped re-samples = 10,000. CI = confidence interval.