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In the wake of betrayal: Amends, forgiveness, and the resolution of betrayal

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Abstract

The present work advances a dyadic model of victim and perpetrator interactions following betrayals, and the effect of their interactions on betrayal resolution and relationship quality. The authors propose that perpetrator amends promotes victim forgiveness and that both amends and forgiveness contribute to betrayal resolution. In Study 1, married couples discussed unresolved betrayal incidents, and their behavior was rated by partners and trained observers. In Study 2, dating individuals used interaction records to describe betrayal incidents perpetrated by themselves or the partner over a 2-week period. In Study 3, dating partners both provided retrospective descriptions of prior betrayal incidents. All studies yielded good support for model predictions, revealing parallel findings from the point of view of victims, perpetrators, and external observers.

Close relationships are the origin of many positive experiences. We feel exhilarated when we develop new interdependencies, celebrate positive interpersonal events in our own and others' lives, and are deeply gratified by relationships that are healthy, vital, and enduring. Paradoxically, it is in romantic relationships that we also find ourselves most vulnerable to suffering. At some point in

most relationships, one partner will betray the other, violating relationship-relevant norms by engaging in acts of deception or disloyalty. How do we manage to sustain relationships in which we suffer such harm, and what are the consequences of forgiving versus failing to forgive a partner's act of betrayal?

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The past two decades have witnessed a dramatic increase in the study of forgiveness. Early research in this tradition was largely victim centered, examining the personality traits that are associated with forgiveness, the cognitive and affective events that predict forgiveness, and the personal values that promote forgiveness (for a review, see Worthington, 2005). In recent years, scientists have turned their attention to interpersonal elements of the forgiveness process, examining properties of partners and relationships that make forgiveness more versus less probable. The present work contributes to this emerging literature in two respects. First, we advance a dyadic model of forgiveness in the context of close relationships, exploring the interplay between perpetrator amends and victim forgiveness and the associations of each variable

with betrayal resolution and its relational consequences. Second, we test our model by examining both victim and perpetrator perspectives in real couples confronted with real betrayal incidents. Few studies have examined perpetrators' perceptions of the forgiveness process, and fewer still have explored perpetrator perspectives in the context of actual betrayals (as opposed to hypothetical betrayals or stranger betrayals).

Our dyadic model rests on the principles of interdependence theory (Kelley et al., 2003; Rusbult & Van Lange, 2003) and suggests that perpetrator amends enhances victim motivation to forgive. Moreover, we propose that both perpetrator amends and victim forgiveness play key roles in the successful resolution of betrayal incidents and that betrayal resolution is beneficial to relationships from the perspective of both victims and perpetrators. As initial tests of our model, we report the results of three studies of betrayal, amends, and forgiveness in ongoing romantic relationships. The studies employ diverse methods, including the observation of couple interactions regarding unresolved betrayals, interaction diary reports of relational betrayals during a 2-week period, and retrospective accounts of betrayals.

Perpetrator betrayal and victim forgiveness

We define betrayal as the perceived violation of an implicit or explicit relationship-relevant norm (Finkel, Rusbult, Kumashiro, & Hannon, 2002). Individuals experience betrayal when they believe that a partner has knowingly departed from the norms of decency and fairness that are assumed to govern a relationship, thereby causing harm. Given that betrayals are harmful to victims and violate morality-based expectations, victims typically experience righteous indignation, believe that the perpetrator has incurred an interpersonal debt, and perceive that such incidents bode poorly for their relationships (Leary, Springer, Negel, Ansell, & Evans, 1998). Whether a couple can survive and recover from such an incident rests on how betrayals are resolved.

Previous work has defined forgiveness as "the set of motivational changes whereby one

becomes decreasingly motivated to retaliate against an [offender], decreasingly motivated to maintain estrangement from the offender, and increasingly motivated by conciliation and goodwill for the offender" (McCullough, Worthington, & Rachal, 1997, pp. 321–322). Our definition is consistent with this tradition yet represents forgiveness as both a psychological *and* behavioral event. We define *forgiveness* as the victim's willingness to (a) forego vengeance and demands for retribution and (b) react to the betrayal in a constructive, less judgmental manner (Finkel et al., 2002).

Given that victims' immediate, gut-level impulses frequently include desire for grudge or vengeance, how do victims find their way to forgiveness? Interdependence theory describes immediate, gut-level reactions as given preferences, in that they are selforiented, asocial, and focus on the here and now (Kelley et al., 2003). People depart from self-oriented, given preferences as a result of transformation of motivation, a psychological process whereby victims take into account considerations extending beyond direct self-interest, including long-term goals, social dispositions and values, or concern for a partner's well-being. The modified preferences resulting from transformation are termed effective preferences; these preferences guide behavior.

In betrayal situations, the victims' transformation from vengeful impulses to prorelationship motives may not be effortless, uncomplicated, or automatic. The impulse toward negative reciprocity is strong—people are inclined to fight fire with fire, responding in kind to a partner's real or imagined negativity (Gottman, 1998; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991; Yovetich & Rusbult, 1994). Moreover, betrayal-inspired moral outrage and perceived debt may keep such incidents alive and feed the flamesvictims may ruminate about a betrayal and its implications, such that vengeful impulses may linger for a considerable period of time (Fincham, 2000; McCullough, Bono, & Root, 2007). How are the flames of righteous indignation quelled?

Perpetrator amends and victim forgiveness

We suggest that although forgiveness ultimately rests in the hands of victims, perpetrator actions affect both the probability of forgiveness and the likelihood that a betrayal will be successfully resolved (Human Development Study Group, 1991). Interdependence theory proposes that to understand the resolution of interdependence dilemmas, interaction is the name of the game; that is, both partners' actions matter (Kelley et al., 2003; Rusbult & Van Lange, 2003). Given that most extant work regarding forgiveness has focused on victims, we know relatively little about the processes by which couples achieve forgiveness and resolve betrayals. We know even less about how perpetrators in romantic relationships perceive this process and their role in it.

We define perpetrator *amends* as accepting responsibility for an act of betrayal, offering genuine atonement for one's actions. We employ this broad definition of amends to acknowledge our belief that in the context of close relationships, perpetrator amends may not always include an explicit, verbal apology. Importantly, amends must be sincere—perpetrator acts that are perceived as insincere tend to backfire, such that disingenuous amends is likely to inhibit forgiveness and betrayal resolution (e.g., Exline, DeShea, & Holeman, 2007; Risen & Gilovich, 2007; Zechmeister, Garcia, Romero, & Vas, 2004).

How does amends work its magic? In interdependence terms, amends serves as a form of situation selection, moving a couple toward interaction opportunities with superior behavioral options and outcomes (Kelley, 1984; Kelley et al., 2003). When John communicates that he feels betrayed, Mary may calmly discuss the incident with him. Recognizing that her actions hurt him, she may offer amends, apologizing for her actions or making things right by atoning for the harm she has caused. In turn, John may find it easier to let go of his hurt and anger. John's gradual movement toward forgiveness may also make it easier for Mary to offer further amends, continuing to respond in a loving and benevolent manner. Thus, perpetrator amends and victim

forgiveness may be mutually reinforcing over the course of extended interaction.

Of course, perpetrators may not find it easy to offer amends. In the wake of betrayal, Mary may suffer sadness, shame, or guilt (Baumeister, Stillwell, & Heatherton, 1995). If John dwells on the incident or is reproachful, Mary may exhibit defensive cognitive maneuvers, seeking to justify her behavior not only to John but also to herself (Baumeister, Stillwell, & Wotman, 1990). And perpetrators may not be willing to suffer extended blame—if John is persistently hostile or vengeful, Mary may react with reciprocal hostility, refusing to make amends (Hodgins & Liebeskind, 2003; Hodgins, Liebeskind, & Schwartz, 1996). Thus, just as it is difficult for victims to find their way to forgiveness, it is also difficult for perpetrators to find their way to amends. If Mary reacts defensively to John's anger, claiming that she committed no offense and that he has no right to feel upset, forgiveness and betrayal resolution become unlikely.

The extant literature offers some support for our claims, demonstrating that apology is positively associated with forgiveness (most prior work has studied explicit apology rather than overall amends; Frantz & Bennigson, 2005; McCullough et al., 1997; McCullough et al., 1998; Mullet, Houdbine, Laumonier, & Girard, 1998; Zechmeister et al., 2004). However, recent studies have revealed that the association between apology and forgiveness can also be negative. For example, in situations where the perpetrator's offense was perceived as intentional (Struthers, Eaton, Santelli, Uchiyama, & Shirvani, 2008) or where the victim has low implicit self-esteem (Eaton, Struthers, Shomrony, & Santelli, 2007), apology is associated with decreased forgiveness. Especially in the context of close, ongoing relationships, there is more to be discovered regarding the association of amends with forgiveness:1 First, it is unclear whether

^{1.} In a recent PsychInfo (an online database of articles, book chapters, and other scholarly publications in psychology and related disciplines) search wherein we combined all variants of forgiveness with all variants of amends, apology, and atonement, we uncovered 31 studies of forgiveness in dyads. Of these, only 5 studies examined perpetrator perspectives on betrayal

perpetrators perceive the positive effects of amends on victim forgiveness, at least to the same extent that victims do. If these positive effects are not apparent to perpetrators, perpetrators may not be motivated to make amends—even in the context of a committed relationship—especially given that amends may not be an automatic or effortless response. Second, most research has represented apology as a discrete event, examining a causal sequence wherein apology promotes victim forgiveness, and forgiveness is the endpoint-most work has not examined what transpires following victim forgiveness. It is important to demonstrate not only that amends promotes forgiveness but also that both variables—from the perspective of both partners—contribute to successful betrayal resolution.

Betrayal resolution and postbetrayal relationship quality

Thus, rather than representing forgiveness as the endpoint of betrayal incidents, we adopt a broadened time frame, examining not only amends and forgiveness but also reconciliation (cf. Freedman, 1998). Why so? There is no guarantee that amends and forgiveness will necessarily yield successful betrayal resolution and the recovery of couple functioning. Even when a perpetrator offers sincere amends and a victim genuinely forgives, partners may find that they cannot forget the incident or fully relegate it to the past. For example, even though Mary offers heartfelt amends and John genuinely forgives her for her betrayal, they may continue to review betrayal-relevant events ("whose fault was that, really?"), surreptitiously monitor one another's actions ("is she sufficiently repentant?" "does he still feel hurt?"), suffer reduced trust ("could that happen again?"), or otherwise interact in an unnatural manner.

incidents; 4 of these examined hypothetical or staged betrayals in nonintimate relationships and 1 examined real betrayals in relationships of unspecified types. We located no studies that examined victim and perpetrator perspectives on specific, shared betrayal incidents, and we located no studies that examined perspectives on betrayal resolution.

Thus, a betrayal may be forgiven yet still be very much alive.

To further our understanding of the aftermath of betrayal, it is important to examine *betrayal resolution*, or the perception—by each partner—that a betrayal incident has been successfully closed, such that it no longer colors interaction. Moreover, it is important to recognize that broader relationship quality may be influenced by betrayal resolution: Navigating a potentially harmful betrayal may affect partners' relationship expectations, influence their sense of commitment, or yield other cognitive or affective consequences. In the present work, we examine how partners experience relationship quality in light of a specific betrayal incident and its resolution, thereby extending prior research that has examined the association of global forgiveness tendencies with global satisfaction or adjustment (e.g., Paleari, Regalia, & Fincham, 2005; Thompson et al., 2005).

Victim versus perpetrator perspectives

Our work is also guided by a final goal: Many extant studies of forgiveness have examined events solely from the victim's viewpoint. Studies examining both victim and perpetrator perspectives reveal that partner perceptions are not necessarily parallel; for example, victims may be less likely to perceive that a betrayal is resolved, perpetrators may minimize the impact of a betrayal, and both parties may perceive circumstances in a self-serving manner (Baumeister et al., 1990; Hodgins & Liebeskind, 2003; Kearns & Fincham, 2005; Zechmeister & Romero, 2002). Thus, it would be easy to imagine that victims and perpetrators experience circumstances quite differently and that their differing perceptions affect the impact of each person's actions on the perceptions and actions of the other.

We suggest that the extent and consequences of such bias need further exploration. Partners may shade their construals in such a manner as to protect the self, but this is not to say that there is no reality underlying perception; such bias may well operate at the margins. Indeed, many prior studies of role-based bias have employed procedures

that may yield exaggerated evidence of role-based bias; for example, many prior studies rest on participant-selected incidents from the point of view of one party to a betrayal, such that role may affect incident selection (e.g., victims and perpetrators recall different incidents, describe incidents differently, or select incidents that reflect favorably on themselves). By examining real betrayal incidents through the eyes of both parties, we hope to determine whether amends and forgiveness are phenomena that are experienced similarly by partners, and that exert parallel effects on betrayal resolution and relationship quality.

Hypotheses and research overview

As displayed in Figure 1, our dyadic model suggests that to the extent that perpetrators offer amends for their actions, victim forgiveness is more probable. In turn, perpetrator amends and victim forgiveness exert independent effects on betrayal resolution, and betrayal resolution promotes enhanced relationship quality. Some extant studies of confession or apology have revealed findings consistent with one or more links in this model (e.g., Gonzales, Manning, & Haugen, 1992; Weiner, Graham, Peter, & Zmuidinas,

1991). However, most such work has studied hypothetical betrayals in nonintimate relationships and has ended with whether forgiveness was given or denied. We suggest that it is important to examine real betrayals in real, ongoing relationships, in that (a) although significant hurtful events may occur during stranger interactions (e.g., in a violent crime), it is in the context of ongoing relationships that meaningful, relationship-relevant transgressions transpire; (b) the question of whether amends and forgiveness promote betrayal resolution and relationship quality is most relevant for ongoing relationships, in which there is not only a history but also a (potential) future; and (c) as noted earlier, from a methodological point of view it is crucial to examine both partners' perceptions of real betrayal incidents.

We conducted three studies to examine the associations among two or more model variables. In Study 1, married couples discussed an unresolved betrayal incident. Immediately following the discussion, participants viewed a video recording of their interaction and rated their own and the partner's behavior; trained observers provided parallel ratings. In Study 2, participants completed interaction records to describe all betrayal incidents that transpired in their dating relationships during

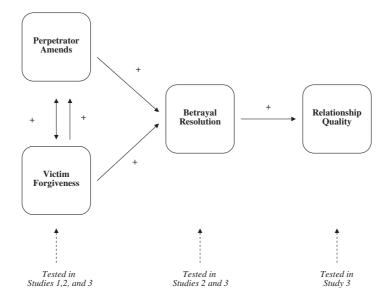


Figure 1. The dyadic model of betrayal resolution.

a 2-week period, whether they were perpetrators or victims in each incident. In Study 3, both partners in dating relationships identified specific prior betrayal incidents and described their own and the partner's behavior during each incident.

In Study 1, we assessed amends and forgiveness at multiple times over the course of interaction to assess whether (a) earlier amends predicts increases over time in forgiveness. We also assessed whether (b) earlier forgiveness predicts increases over time in amends to examine the possibility that forgiveness and amends may operate in a mutually reinforcing manner. In Studies 2 and 3, we not only evaluated whether perpetrator amends and victim forgiveness are positively associated but also whether (c) both amends and forgiveness contribute unique variance to predicting successful betrayal resolution. In Study 3, we also assessed whether (d) betrayal resolution predicts relationship quality. In addition to testing these core predictions of the dyadic model, we examined victim-perpetrator role effects. We anticipated that although we might observe role main effects in levels of variables (e.g., victims might perceive greater forgiveness than perpetrators), the hypothesized associations among amends, forgiveness, and betrayal resolution would be evident using both victim and perpetrator accounts of events.

Study 1

In Study 1, we asked married partners to discuss an unresolved betrayal incident. Following the interaction, each partner viewed a video recording of the discussion and rated his or her own and the partner's behavior. In addition, trained observers later viewed the videotaped interaction and rated both partners' behavior. By asking couples to discuss an unresolved incident, we were able to observe perpetrator and victim behaviors as they unfolded during the course of betrayal-relevant interaction. We asked couples to rate positive behavior rather than explicitly asking them to rate amends and forgiveness; trained observers rated positive behaviors and perpetrator amends and victim

forgiveness. By examining behavior throughout the discussion, we were able to test whether perpetrator positive behavior predicts increases over time in victim positive behavior, as well as whether victim positive behavior predicts increases over time in perpetrator positive behavior. Given that both partners participated in the discussion and rated each person's behavior, we were also able to examine victim and perpetrator accounts of each incident. In Study 1, we examined betrayal incidents that were not resolved at the time of the study, so we were unable to assess the associations of victim and perpetrator positive behavior with betrayal resolution.

Method

Participants and recruitment

Seventy-nine married couples participated in a study of marital processes. The data for 4 couples were deleted from the analyses (2 for failing to follow instructions, 1 because they were not married, and 1 due to videotaping technical difficulties), leaving a total of 75 couples. Participants were recruited via notices posted on the campus and in the community of the University of North Carolina, as well as through advertisements in local newspapers. All announcements briefly described the project, indicated that the study involved three research sessions over an 8-month period, noted that couples would be paid \$50.00 for taking part in each research session, and provided contact information. When couples contacted us, we provided more detailed information about project activities and scheduled appointments. Data from the initial research session are presented here; data collected during the second and third sessions are not relevant to the present work.

Participants were 34 years old on average (SD = 11 years), and most were Caucasian (80% Caucasian, 11% African American, 4% Hispanic, 2% Asian American, and 3% Other). Most participants had at least 4 years of college education (44% obtained advanced) or professional degrees, 38% completed 4 years of college, 11% completed 2 years of college, and 7% completed high school only).

Their median personal income was \$20,000–\$30,000 per year. Participants had been married to one another for 6 years on average (SD = 9 years), and most did not have children (74% no children, 10% one child, 8% two children, and 8% three or more children).

Procedure

Upon arrival at the laboratory, we asked each participant to complete a brief questionnaire that was later used to identify a suitable recent betrayal incident for a videotaped conversation. We did not use the word *betrayal* in our instructions because this word may connote sexual forms of disloyalty or infidelity, and we did not want to limit participants to these types of betrayals. Instead, instructions to participants described such incidents as follows:

All of us have expectations about how our partners should treat us. No matter how well-behaved your partner may be in general, from time to time he or she is likely to "break the rules." For example, your partner may tell a friend something that you think should have remained private; your partner may do something that is hurtful behind your back; your partner may flirt with another person; or your partner may otherwise violate the rules that govern your marriage.

Each partner was asked to describe three such incidents from the past 4 months, providing simple ratings of each incident on 9-point scales (e.g., "How upsetting was it?" 0 = not upsetting at all, 8 = very upsetting). To identify an incident for discussion, we randomly determined whether to use an incident described by the husband or the wife, and selected an incident that was moderately upsetting, that was not totally resolved, and that the partners were willing to discuss. While the experimenter selected an incident for couples to discuss, participants completed other activities that are not relevant to the present work.

During the videotaped interaction, partners were seated at adjacent sides of a table with a microphone positioned in front of each person. A camera was oriented to videotape both partners. Following a 2-min warm-up conversation (discussing the events of the previous day), the experimenter explained that we had randomly determined which partner's incident would be discussed and selected one of that person's incidents as the discussion topic. The experimenter read the incident description aloud; then partners were given 1 min to describe the incident, as a means of helping them bring the incident to mind. After the experimenter left the laboratory, the couple spent 8 min discussing the incident. Immediately following the interaction, partners individually reviewed and rated the videotaped interaction. At the end of the session, couples were paid, thanked for their assistance, and partially debriefed.

Perpetrator and victim ratings of interactions

Following their interaction, partners were led to separate video monitors and individually reviewed the videotaped interaction. The experimenter stopped the videotape at the end of each 2-min segment of the interaction, asking participants to rate their own and the partner's behavior during that segment. Each participant first rated his or her own behavior during a given segment and then rated the partner's behavior. To avoid communicating our hypotheses, we used parallel scales for ratings of victim and perpetrator behavior, employing concrete descriptors of specific interaction behaviors (with appropriate changes in item wording to reflect own vs. partner behavior). Six items measured positive behavior during the interaction (e.g., "My partner tried to comfort me," "I raised my voice toward my partner" [reverse-scored], "My partner wanted to cut off the interaction" [reverse-scored]; for all items, 0 = do not agree at all, $8 = agree\ completely).$ Ratings of positive behavior exhibited good reliability as rated by both perpetrators (for ratings of perpetrator positive behavior, as for the four 2-min segments ranged from .80 to .83; for ratings of victim positive behavior, αs ranged from .77 to .81) and victims (for perpetrator positive behavior, as ranged from .77

to .82; for victim positive behavior, α s ranged from .72 to .76). We calculated measures of perpetrator and victim positive behavior by averaging participants' ratings of each person's behavior during each 2-min segment.

Measuring possible confounds

Participants also completed additional instruments that were used in analyses we performed to control for possible confounds. Given that reports of positive behavior may be vulnerable to socially desirable response tendencies, we asked participants to complete a 20-item version of the Balanced Inventory of Desirable Responding that included the 10 most reliable items from the selfdeception and impression management subscales (Paulhus, 1984; e.g., "I always obey laws, even if I'm unlikely to get caught"; 1 = do not agree at all, $7 = agree\ completely;$ $\alpha s = .69$ and .60). In the present sample of married couples, we were concerned that commitment (rather than partner behavior) might powerfully drive behavior; that is, the relationship with the spouse might be so important that maintaining the relationship would take precedence over all else. To explore this possibility, we measured participants' commitment level using a 15-item version of the Investment Model Scale (Rusbult, Martz, & Agnew, 1998; e.g., "I would feel very upset if our relationship were to end in the near future"; $0 = do \ not \ agree \ at \ all, 8 =$ agree completely; $\alpha = .92$).

Observer ratings of interactions

In addition to obtaining participants' ratings of their interaction, we also asked two trained observers to rate each couple's interaction. Observers received extensive training, including studying and mastering a coding manual and participating in a 4-hr training session. Observers viewed the same 2-min interaction segments as participants. Observer ratings of participant interactions were structured in such a manner as to prompt global, abstract ratings of amends and forgiveness: Observers first provided ratings of concrete interaction behaviors (e.g., "behaved in a warm/friendly manner," "behaved in a

critical manner" [reverse-scored], "exhibited hostility" [reverse-scored]) and then completed two additional one-item global ratings ("perpetrator offered amends" and "victim was forgiving"; for all items, 1 = no evidence of this behavior, 5 = very strong evidence ofthis behavior). We calculated measures of perpetrator amends and victim forgiveness by averaging the two observers' global ratings of the perpetrator's amends and the victim's forgiveness during each 2-min segment. (Parallel findings were evident in analyses using observers' concrete ratings of specific interaction behaviors; for the analyses displayed in Table 1, the same six residualized lagged associations were significant.) Interobserver agreement was acceptable for ratings of both amends and forgiveness (for amends, αs across the four 2-min segments ranged from .69 to .77; for forgiveness, αs ranged from .54 to .72).

Character of betrayal incidents

Consistent with our goals for the betrayal interaction, the betrayal incidents partners discussed were described as moderately to severely upsetting (M = 5.17, SD = 1.68) and were described as not yet fully resolved (M = 4.76, SD = 2.57). The incidents included violations of dependence norms (e.g., overspending after agreeing to save money), monogamy norms (e.g., not trusting the partner with people of the opposite gender), privacy norms (e.g., discussing embarrassing topics in front of family members or neighbors), and decency/etiquette norms (e.g., volunteering the partner for something without asking).

Results

Analysis strategy

Each participant provided four sets of ratings of the videotaped betrayal interaction—ratings of the victim and ratings of the perpetrator for each 2-min segment. Our trained observers provided parallel ratings. Multiple ratings from a given individual are not independent, nor are the ratings of the two partners in a given couple. Therefore, we

Table 1. Residualized lagged analyses: Predicting later victim behavior and later amends behavior from earlier victim and perpetrator behavior: Study 1

	Victim data	Perpetrator data	Across-partner data	Observer data
Later victim positive beh	navior from:			
Earlier perpetrator positive behavior	.18**	.16**	.18**	.16**
Earlier victim positive behavior	.71**	.80**	.71**	.67**
Later perpetrator positiv	ve behavior fro	m:		
Earlier victim positive behavior	.12**	.10**	.05	.03
Earlier perpetrator positive behavior	.83**	.85**	.87**	.68**

Note. The values are standardized regression coefficients from hierarchical linear modeling analyses. Analyses are based on data from 75 couples (150 individuals). Victim data = victim and perpetrator positive behavior as reported by victims; perpetrator data = victim and perpetrator positive behavior as reported by perpetrators; across-partner data = victim positive behavior as reported by victims and perpetrator positive behavior as reported by perpetrators; and observer data = forgiveness and amends as rated by trained observers.

**p < .01.

used hierarchical linear modeling to analyze our data (cf. Kenny, Kashy, & Bolger, 1998; Raudenbush & Bryk, 2002). The multilevel data structure includes measures assessed during each 2-min segment of the interaction (Level 1), represented as nested within participant (Level 2 in within-participant analyses), and nested within couple (Level 3 in acrosspartner analyses and analyses of observer ratings). Hierarchical linear modeling accounts for the nonindependence of observations by simultaneously examining variance associated with each level of nesting, thereby providing unbiased hypothesis tests. Following recommended procedures for couples research, we represented intercept terms as random effects and represented slope terms as fixed effects (Kenny, Mannetti, Pierro, Livi, & Kashy, 2002).

All analyses reported below employed a lagged data structure, wherein we predicted a later criterion from an earlier predictor. That is, we simultaneously predicted (a) Time 2 criteria from Time 1 predictors, (b) Time 3 criteria from Time 2 predictors, and (c) Time 4 criteria from Time 3 predictors. In residualized lagged analyses, we included the earlier measure of the criterion as a control variable. We performed four types of analysis (see Table 1): (a) victim data analyses, employing

victim ratings of partner behavior and their own behavior; (b) perpetrator data analyses, employing perpetrator ratings of partner behavior and their own behavior; (c) acrosspartner data analyses, employing perpetrator ratings of their own behavior and victim ratings of their own behavior; and (d) observer data analyses, employing observer ratings of perpetrator amends and victim forgiveness. We standardized all variables prior to conducting hierarchical linear modeling. We initially performed all univariate analyses including main effects and interactions for participant gender (male vs. female). No main effects or interactions involving participant gender were significant, so this variable was dropped from the analyses.

Dyadic model hypotheses

To determine whether perpetrator amends promotes victim forgiveness and whether victim forgiveness promotes perpetrator amends, we first examined the simple lagged associations of (a) earlier perpetrator positive behavior with later victim positive behavior with later victim positive behavior with later perpetrator positive behavior. All simple associations of earlier predictors with later criteria were significant (for analyses

employing victim, perpetrator, across-partner, and observer ratings, \(\beta \) ranged from .17 to .35, all ps < .05). Analyses predicting change over time in each criterion are presented in Table 1. In these residualized lagged analyses (controlling for earlier levels of the criterion), across all four types of analysis, earlier perpetrator positive behavior predicted increases over time in victim positive behavior (beyond variance attributable to earlier victim positive behavior; under Later victim positive behavior, see row labeled Earlier perpetrator positive behavior, βs ranged from .16 to .18, all ps < .01). Earlier victim positive behavior predicted increases over time in perpetrator positive behavior in the analyses employing victim data and perpetrator data but not in the analyses employing across-partner data or observer data (under Later perpetrator positive behavior, see row labeled Earlier victim positive behavior).

Potential confounds

Are the present findings attributable to unintended confounds, such as tendencies toward socially desirable responding or commitment to the marriage? We replicated the Table 1 analyses employing victim data and perpetrator data (for which data sets it is suitable to explore potential confounds assessed using self-report measures) including as covariates measures of self-deception, impression management, and commitment. In analyses that simultaneously controlled for the three potential confounds, as well as controlling for earlier levels of each criterion: (a) in predicting later victim positive behavior from earlier perpetrator positive behavior, coefficients remained significant in analyses employing both victim and perpetrator data $(\beta s = .14 \text{ and } .17, \text{ both } ps < .01), \text{ and (b) in}$ predicting later perpetrator positive behavior from earlier victim positive behavior, the coefficient remained significant in analyses employing victim data ($\beta = .13, p < .01$) but declined to nonsignificance in analyses employing perpetrator data ($\beta = .08, ns$).

Victim and perpetrator perspectives

Our Table 1 findings are roughly parallel in analyses employing victim data and

perpetrator data. To further explore the extent to which amends and forgiveness are phenomena that are perceived in parallel manner by partners in a given relationship, we examined whether victims and perpetrators exhibited rough agreement in their reports of one another's positive behavior. To explore simple across-partner agreement in reports of behavior during the videotaped interaction, we (a) regressed victims' ratings of their own positive behaviors during interaction onto perpetrators' ratings of victims' positive behaviors and (b) regressed perpetrators' ratings of their own positive behaviors onto victims' ratings of perpetrators' positive behaviors. Both across-partner associations were significant (for victim positive behaviors $\beta = .59$, for perpetrator behaviors $\beta = .45$, both ps < .01). Thus, partners exhibited good agreement in their ratings of one another's behavior during the course of the interaction. In addition, we examined whether there were mean differences in levels of perceived perpetrator positive behavior and perceived victim positive behavior as a function of perpetrator versus victim role. Analyses in which we regressed ratings of victim and perpetrator behavior onto role (perpetrator vs. victim) revealed no significant differences in victims' and perpetrators' ratings of either victim positive behavior (Ms =5.85 and 5.81), t(74) = 0.55, ns, or perpetrator positive behavior (Ms = 6.08 and 6.00), t(74) = 1.01, ns. Thus, victims' and perpetrators' perceptions of one another's behavior were significantly associated and there were no role main effects in mean levels of variables. Moreover, the hypothesized associations between victim and perpetrator positive behavior typically were evident using both victim and perpetrator accounts of events (see Table 1).

Discussion

In Study 1, we tested the hypothesis that (a) perpetrator amends promotes victim forgiveness; we also examined whether (b) victim forgiveness promotes perpetrator amends, using ratings of each partner's positive behavior during a discussion of the betrayal as a

proxy for amends and forgiveness. In the context of an interaction regarding an unresolved betrayal incident, earlier perpetrator positive behavior reliably predicted increases over time in victim positive behavior. This finding emerged whether the analyses were based on victim ratings of the interaction, perpetrator ratings of the interaction, across-partner ratings, or independent observers' ratings. However, earlier victim positive behavior was a less robust predictor of increases over time in perpetrator positive behavior—this association was significant in only two of the four analyses displayed in Table 1, and one of these two significant associations fell to nonsignificance when controlling for relevant confounds. Thus, Study 1 provides strong evidence that perpetrator amends promotes victim forgiveness but weaker evidence that victim forgiveness promotes perpetrator amends. This finding suggests that the benefits of amends are not attributable to a simple positivity effect (i.e., the positivity of partners' behaviors toward one another). Rather, it is the existence of positive behavior in the context of a particular role—to wit, perpetrator amends—that appears to be crucial to the forgiveness process.

One strength of Study 1 is the control afforded by the laboratory setting. Participants were focused on a specific unresolved betrayal incident in their relationship and provided concrete ratings of each person's behavior during each 2-min segment of their interaction. Indeed, partners exhibited very good agreement in their ratings of one another's behavior. Moreover, this method allowed us to obtain parallel ratings from trained observers; analyses employing observers' ratings confirmed findings based on victims' and perpetrators' ratings. Thus, we can feel relatively confident that participants' ratings of each other's behavior were not unduly colored by availability effects, role-based consistency, or self-serving bias. On the other hand, the observer ratings for victim forgiveness exhibited relatively low reliability, raising some questions about the extent to which outside observers can accurately perceive and rate forgiving behavior.

An important limitation of Study 1 is that the laboratory setting in which the interactions took place could be experienced as artificial. A second limitation of Study 1 is that although it allowed for a focused exploration of the reciprocal, mutually reinforcing association of amends with forgiveness, an 8-min interaction does not lend itself well to studying the actual resolution of betrayal incidents. Finally, we did not explicitly ask participants to rate each other on forgiveness or amends but rather to rate each other on positive, supportive behaviors during the interaction. Thus, our findings point to the significance of perpetrators enacting positive behaviors following betrayal but cannot be interpreted as explicitly supporting the association of amends with forgiveness (with the exception of the ratings provided by trained observers, who were rating participants' amends and forgiveness). In Studies 2 and 3, we employed complementary methods to examine the associations among amends, forgiveness, and betrayal resolution, using measures that explicitly ask participants to rate their and their partner's amends and forgiveness following betrayal.

Study 2

In Study 2, we examined not only perpetrator amends and victim forgiveness but also betrayal resolution. In addition, we tested key hypotheses of the dyadic model by examining betrayals that transpired in the context of everyday interaction. Over the course of a 2-week period, people who were involved in ongoing dating relationships described each incident in which either they or the partner violated relationship-relevant norms. Interaction records completed soon after each betrayal incident included measures of perpetrator amends, victim forgiveness, and betrayal resolution. This method has the advantage of tapping online reports of key variables, thus minimizing the possibilities for biased recall. It also has the advantage of tapping perceptions of incidents in which the participant was the victim as well as incidents in which he or she was the perpetrator, thus allowing us to examine associations among

amends, forgiveness, and betrayal resolution from both victim and perpetrator perspectives.

Method

Participants

Participants were 78 undergraduates (20 men and 58 women) who volunteered to take part in the study in partial fulfillment of the requirements for introductory psychology courses at the University of North Carolina. The prerequisites for participation were involvement in a dating relationship of at least 1 month in duration, in which partners interacted with one another nearly every day, either face to face or in telephone conversations. Participants were 19 years old on average (SD = 1 year), most were freshmen or sophomores (41% freshmen, 44% sophomores, 5% juniors, and 9% seniors), and most were Caucasian (81% Caucasian, 13% African American, 3% Asian American, 1% Hispanic, and 3% Other). Participants had been involved with their partners for 16 months on average (SD = 14 months), most indicated that they dated their partners steadily (83% dating steadily, 8% engaged, 5% dating casually, and 4% dating regularly), and most described their relationships as exclusive (96%).

Procedure

Our procedure was modeled after previous work using the Rochester Interaction Record (cf. Reis & Gable, 2000). Participants attended two laboratory sessions—one at the start of the 2-week study (Time 1) and a second at the end of the study (Time 2). During Time 1 sessions, we explained that the study concerned negative incidents in dating relationships. As in Study 1, we did not use the word betrayal. Instead, we described betrayal incidents in terms of "breaking the rules": We asked participants to complete a diary record for each incident in which "you upset your partner or your partner upsets you For example, your partner may do something that is hurtful behind your back, you may flirt with someone else at a party, or you may forget to call your partner when you said you

would." We asked participants to complete a victim diary record "to record each incident in which your partner made you feel upset, angry, or hurt," and to complete a perpetrator diary record "to record each incident in which you made your partner feel upset, angry, or hurt" (we describe data from these two types of record in terms of betrayal role, victim vs. perpetrator). Participants were asked to record all such incidents, even if (a) the incident was quite brief, (b) the participant had already recorded a similar incident in an earlier record, or (c) the incident did not involve talking. Participants were instructed to complete the diary records without input from their dating partners.

We asked participants to complete diary records as soon as possible following each incident, and to turn in booklets every Monday, Wednesday, and Friday. To maximize timely reporting, we stressed the importance of carrying diary record booklets at all times, and we telephoned participants Sunday, Tuesday, and Thursday evenings to remind them to turn in their booklets the following day. For each betrayal incident that transpired, participants (a) recorded the date and time at which the incident occurred, (b) recorded the date and time at which the interaction record was completed, (c) recorded the duration of the incident, (d) provided a brief description of the incident, and (e) answered several questions about the incident (described below). During Time 1 and Time 2 laboratory sessions, participants also completed a variety of questionnaires, two of which (described below) are relevant to the goals of the present research. At the end of Time 2 sessions, participants were fully debriefed and thanked for their assistance.

Measures

Participants completed a diary record for each betrayal incident that transpired over the course of a 2-week period, using one type of record for victim incidents and a second type of record for perpetrator incidents. Item wording for victim and perpetrator diary records were identical except for differences reflecting betrayal role (e.g., "I forgave my partner"

Table 2. Predictin	g victim forgivene	ss and betrayal	resolution: Study 2
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Victim data	Perpetrator data	Combined data
.35**	.41*	.34**
.54**	.56**	.52**
.27**	.23*	.24**
	.35**	.35** .41* .54** .56**

Note. The values are standardized regression coefficients from hierarchical linear modeling analyses. Analyses are based on data from 78 individuals. Victim data = predictors and criteria as reported in victim diary records; perpetrator data = predictors and criteria as reported in perpetrator diary records; combined data = predictors and criteria as reported in victim and perpetrator diary records combined.

vs. "My partner forgave me"). Record items were structured in such a manner as to prompt global, abstract ratings of amends or forgiveness: Participants not only provided ratings of concrete interaction behaviors involving amends (e.g., "I showed real remorse about the incident"; as discussed in the introductory text, our goal with these items was to capture amends-related behaviors in addition to explicit apologies) or forgiveness (e.g., "I tried to get even with my partner" [reverse-scored]) but also completed additional one-item global ratings (for amends, "I tried to make it up to my partner"; for forgiveness, "I forgave my partner"; for all items, $1 = do \ not \ agree \ at \ all$, $7 = agree\ completely$). The analyses reported below are based on participants' one-item global ratings. (Parallel findings were evident in analyses using participants' concrete ratings; for the analyses displayed in Table 2, eight of nine associations were significant.) Records also included a one-item measure of betrayal resolution ("By the end of the interaction, the incident was resolved").

Additional items were also included for use in analyses we performed to control for possible confounds: One item assessed *severity of incident* ("When this incident occurred, I thought it had the potential to seriously harm our relationship") and one item assessed *magnitude of betrayal* ("When this incident occurred, I thought my partner had 'broken the rules' of our relationship"). Both of these items were measured using 7-point scales, where 1 = do *not agree at all* and 7 = agree *completely*. In addition, during Time 1

sessions, participants completed the 40-item Balanced Inventory of Desirable Responding, which assesses both self-deception and impression management (Paulhus, 1984; e.g., "I always obey laws, even if I'm unlikely to get caught"; $1 = do \ not \ agree \ at \ all, 7 =$ agree completely; respective $\alpha s = .54$ and .80). Finally, during Time 2 sessions, participants answered questions about the validity of their data, indicating that they recorded 94% of the betrayal incidents that transpired during the 2-week period and completed diary records about 90 min following the incidents; 92% reported that the records accurately reflected their experiences during the 2-week period,² and 79% reported that this period was typical of the sorts of incidents they experienced with their partners.

Character of betrayal incidents

Sixty-four participants (18 men and 46 women) described one or more betrayal incidents in the victim role and 54 participants (16 men and 38 women) described one or more incidents in the perpetrator role. As would be expected for the sort of day-to-day betrayals that emerge over the course of a 2-week period, the incidents were described as mildly

^{*}p < .05. **p < .01.

^{2.} All Study 2 analyses were replicated excluding data for the 8% of participants who indicated that the diary records did not accurately reflect their experiences during the 2-week period. As expected (given the small percentage of participants in this group), these analyses revealed identical conclusions.

to moderately severe betrayals (victim role M = 3.23, perpetrator role M = 2.44) and as having mild to moderate potential for harm (victim role M = 2.51, perpetrator role M = 2.39).

The incidents included violations of dependence norms (e.g., failing to provide assistance when it was needed), monogamy norms (e.g., disappearing into a bedroom for an hour with an ex-partner), privacy norms (e.g., telling a friend an important secret), and decency/etiquette norms (e.g., playing a trick on the partner and then lying about it).

Results

Analysis strategy

Multiple diary records from a given participant are not independent, so we used hierarchical linear modeling to analyze our data, employing strategies that are suitable for the analysis of diary data (cf. Bolger, Davis, & Rafaeli, 2003; Nezlek, 2001; for an empirical illustration, see Bolger, Zuckerman, & Kessler, 2000). The two-level data structure includes measures assessed in each diary record (Level 1), represented as nested within participant (Level 2). For example, a participant who experienced three betrayal incidents during the 2-week period provided reports of three separate betrayals (for each incident, reports of amends, forgiveness, and betrayal resolution).

We performed three types of analysis (see Table 2): (a) victim data analyses, employing participant ratings of the partner's amends and their own forgiveness; (b) perpetrator data analyses, employing participant ratings of their own amends and the partner's forgiveness; and (c) combined data analyses, including both victim data and perpetrator data. We standardized all variables prior to conducting hierarchical linear modeling. We initially performed all combined data analyses including main effects and interactions for participant gender (male vs. female) and betrayal role (victim vs. perpetrator). No main effects or interactions were significant for either variable, so these factors were dropped from the analyses.

Dyadic model hypotheses

Table 2 summarizes results relevant to the dyadic model. In all three analyses, amends was significantly positively associated with forgiveness (under Victim forgiveness, see row labeled Perpetrator amends): That is, in everyday betrayal incidents, the tendency toward victim forgiveness is greater to the extent that perpetrators offer greater amends for their acts of betrayal. Moreover, when we regressed betrayal resolution simultaneously onto amends and forgiveness, both variables accounted for unique variance (under Betrayal resolution, see rows labeled Perpetrator amends and Victim forgiveness); that is, everyday betrayals were more likely to be successfully resolved to the extent that perpetrators offered greater amends and victims found their way to greater forgiveness.

Potential confounds

Are these findings attributable to unintended confounds, such as severity of incident? We replicated the Table 2 combined analyses including as covariates measures of severity of incident, magnitude of betrayal, self-deception, and impression management. In analyses that simultaneously controlled for the four potential confounds: (a) the association of amends with forgiveness was significant ($\beta = .36$, p < .01) and (b) in predicting betrayal resolution, both perpetrator amends ($\beta = .26$, p < .01) and victim forgiveness accounted for unique variance ($\beta = .44$, p < .01).

Victim and perpetrator perspectives

Our Table 2 findings are roughly parallel in analyses employing victim data and perpetrator data. In addition, we examined whether there were mean differences in levels of perceived perpetrator amends, victim forgiveness, and betrayal resolution as a function of perpetrator versus victim role. Analyses in which we regressed each variable onto role (perpetrator vs. victim) revealed a significant effect of role on perpetrator amends (for perpetrator and victim diary records, Ms = 4.37 and 3.66), t(166) = 2.58, p < .02; a

nonsignificant effect of role on victim forgiveness (for perpetrator and victim diary records, Ms = 5.57 and 5.39), t(168) = 0.93, ns; and a significant effect of role on perceived betrayal resolution (for perpetrator and victim diary records, Ms = 5.06 and 4.49), t(168) = 2.69, p < .01. Thus, although we observed some role main effects in mean levels of variables (e.g., compared with victims, perpetrators reported offering higher levels of amends and betrayal resolution), the hypothesized associations between amends and forgiveness typically were evident using both victim and perpetrator accounts of events.

Discussion

Study 2 revealed strong support for our hypotheses. Examining the sorts of betrayals that transpire in the context of everyday interactions over a 2-week period, perpetrator amends was positively associated with victim forgiveness, and both amends and forgiveness contributed positively to the prediction of successful betrayal resolution. These associations did not differ significantly for betrayal incidents described by participants when they were in the role of victims versus perpetrators, nor were these associations attributable to potential confounds such as severity of incident or tendencies toward socially desirable responding.

At the same time, these findings are limited in several respects. First, Study 2 examined betrayal incidents that spanned a narrow range of severity, representing relatively minor, "everyday" forms of betrayal. Based on these findings, it is unclear whether perpetrator amends plays a significant role in relatively more serious betrayal incidents. Second, in Study 2, participants completed diary records for all betrayal incidents that they experienced during the course of the 2-week study. These findings would be augmented by hypothesis tests in which we examine both partners' descriptions of the same betrayal incidents and their aftermath. And third, in order to test our full dyadic model, it is important to examine how the resolution of betrayal incidents relates to the current state of the relationship (see Figure 1).

Study 3

We used a retrospective method in Study 3, testing our hypotheses by asking dating partners to recall recent betrayal incidents in their relationship. Partners in ongoing dating relationships identified an occasion on which the partner violated a relationship-relevant norm. Each person then provided information about perpetrator amends, victim forgiveness, and betrayal resolution, not only for the incident he or she identified but also for the incident identified by the partner. This method has the advantage of tapping betrayal incidents of greater severity than those examined in Study 2. In addition, Study 3 included a new measure of relationship quality so that we could assess whether and how participants felt that these specific betrayal incidents had influenced their relationship. And finally, by obtaining victim and perpetrator accounts of the same incident, we were able to assess the extent to which partners agree in their descriptions of one another's actions, as well as to examine the associations between victim and perpetrator reports while controlling for the severity of a given betrayal. As displayed in Figure 1, we predicted that perpetrator amends would predict victim forgiveness, that both amends and forgiveness would predict betrayal resolution, and that betrayal resolution would predict relationship quality.

Method

Participants

Participants were 70 heterosexual dating couples who responded to notices posted on the campus and in the community of the University of North Carolina, as well as through advertisements in local newspapers. The data for 2 couples were deleted from the analyses (1 because one partner did not follow instructions, 1 due to experimenter error). Couples were paid \$40.00 for taking part in the study. Participants were 22 years old on average (SD=3 years), and most were Caucasian (86% Caucasian, 9% African American, 2% Hispanic, 1% Asian American, and 2% Other). Eighty-eight percent were enrolled in college or had completed undergraduate

degrees; an additional 11% were enrolled in (or had completed) graduate or professional degrees. Partners had been involved with one another for 20 months on average (SD = 18 months), most indicated that they dated one another steadily (81% dating steadily, 7% dating regularly, 7% engaged, and 2% dating casually), and most described their relationships as exclusive (96%).

Procedure

Partners were seated in individual cubicles so that they could neither see nor interact with one another and were informed that the study concerned negative incidents in dating relationships. In an initial questionnaire, each partner was asked to identify a betrayal incident that transpired within the past 4 months. The instructions were worded as in Study 1, such that we avoided using the word betrayal, instead describing betrayal incidents in terms of "breaking the rules." We asked participants to describe two such incidents, indicating that later in the session we would identify one incident for each partner, and ask both partners to provide information about each incident. We asked participants to report on nontrivial incidents and to identify incidents that they (and the partner) would feel comfortable describing in greater detail. Participants wrote brief descriptions of two incidents and rated the extent to which each incident had the potential to harm the relationship $(0 = no \ potential \ for \ harm, \ 8 =$ strong potential for harm). For each partner, we identified an incident that had moderate to severe potential for harm. While the experimenter identified an incident for each partner, participants completed other questionnaires describing themselves and their relationship.

The experimenter prepared photocopies of the selected incidents and randomly determined which partner's incident would be addressed first. The experimenter asked each partner to read the incident description, and asked the perpetrator whether he or she recognized the incident described by the partner. One participant did not recognize the incident; this couple was allowed to converse briefly so that the partner could clarify the incident. Participants then completed questionnaires in which they provided measures of victim behavior, perpetrator behavior, betrayal resolution, and relationship quality for the assigned incident. Following a 5-min break,³ the experimenter distributed the description of the second incident selected for each couple, and participants completed questionnaires describing that incident. At the end of the session, couples were paid, thanked for their assistance, and debriefed.

Measures

The questionnaires participants completed to describe their own and the partner's behavior during each incident were nearly identical except for differences reflecting betrayal role (e.g., "I forgave my partner" vs. "My partner forgave me"). Victim forgiveness was assessed with a 12-item instrument (e.g., "I tried to work things out with my partner"; for all items, $0 = do \ not \ agree \ at \ all$, 8 =agree completely; for ratings by victims and perpetrators $\alpha s = .84$ and .87). Perpetrator amends was assessed with a 24-item instrument designed to tap our broad, atonementbased definition of amends (e.g., "My partner confessed that he/she had done wrong," "My partner attempted to make up for his/her behavior"; for ratings by victims and perpetrators, $\alpha s = .90$ and .86). A Betrayal resolution was measured with a single item, "My partner

^{3.} Participants were allowed to interact during the break but were instructed not to discuss the study. Many participants remained in the laboratory during their break, where the experimenter could verify that they followed these instructions. Most participants who left the laboratory did so to use the restroom, and did not interact with their partners during this time.

^{4.} For each incident, participants provided information regarding both immediate and delayed victim and perpetrator behavior. Items concerning "immediate" behavior described actions immediately following the betrayal incident; items concerning "delayed" behavior described actions at present (or the last time the couple engaged in incident-relevant interaction). Measures of immediate and delayed behavior were significantly correlated with one another for both victims and perpetrators (all rs ≥ .60, all ps < .01), and analyses performed separately for immediate and delayed measures revealed parallel findings. Accordingly, the Study 3 analyses are based on averaged measures of immediate and delayed victim forgiveness and perpetrator amends.</p>

and I have completely resolved this incident." Relationship quality was assessed with a new 6-item instrument designed to measure the impact of a specific betrayal on the present quality of the relationship (the items for victims were as follows [wording was altered as appropriate for perpetrators]; "Our relationship is ruined" [reverse scored], "Our relationship can still work, but it will never be as good as it was before the incident" [reverse scored], "I think my partner and I learned something valuable from the incident," "I believe my partner will not behave this way again," "My partner has a better understanding of my expectations for this relationship now," "Our relationship is better now than ever before"; for ratings by victims and perpetrators, $\alpha s = .77$ and .77). For the purpose of controlling for possible confounds, participants also completed the Study 1 measures of self-deception, impression management, and commitment level ($\alpha s = .72, .73, \text{ and } .96,$ respectively).

Character of betrayal incidents

The betrayal incidents partners recounted were described as having moderate to high potential for harm (M=5.71,SD=1.76). The incidents included violations of dependence norms (e.g., breaking a promise to quit smoking, then lying about the lapse), monogamy norms (e.g., becoming sexually intimate with an extrarelationship partner), privacy norms (e.g., speaking to a third party about matters the individual regarded as private), and decency/etiquette norms (e.g., surreptitiously "borrowing" the partner's debit card to pay for a drinking spree).

Results

Analysis strategy

Data from the two betrayal incidents described by each participant are not independent, nor are data from the two partners in a given couple. Therefore, as described in Studies 1 and 2, we used hierarchical linear modeling to analyze our data. The three-level data structure includes measures provided by each participant (Level 1), nested within each betrayal incident (Level 2) and in turn nested within each couple (Level 3). We performed four types of analysis (see Tables 3 and 4): (a) victim analyses, employing victim ratings of partner amends and their own forgiveness; (b) perpetrator analyses, employing perpetrator ratings of partner forgiveness and their own amends; (c) combined analyses, including both victim ratings and perpetrator ratings; and (d) across-partner analyses, employing perpetrator ratings of their own amends and victim ratings of their own forgiveness (as well as, in each analysis, ratings of betrayal resolution and relationship quality). We standardized all variables prior to conducting hierarchical linear modeling. We initially performed all univariate analyses including main effects and interactions for participant gender (male vs. female), betrayal role (victim vs. perpetrator), and incident order (victim vs. perpetrator incident described first). Two betrayal role main effects were significant (described below), but no interactions were significant. Given that our findings were not reliably moderated by participant gender, betrayal role, or incident order, these variables were dropped from the analyses.

Dyadic model hypotheses

Table 3 summarizes results relevant to the dyadic model, presenting standardized coefficients for analyses performed separately as a function of betrayal role as well as for the sample as a whole. As hypothesized, perpetrator amends was significantly associated with victim forgiveness (under Victim forgiveness, see row labeled Perpetrator amends). Analyses regressing betrayal resolution onto victim forgiveness and perpetrator amends revealed that betrayal resolution is significantly predicted by: (a) victim forgiveness in the perpetrator data analyses and the combined analyses (under Betrayal resolution, see single row labeled Victim forgiveness) and (b) perpetrator amends in all three analyses (see single row labeled Perpetrator amends). In addition, when we regressed betrayal resolution simultaneously onto forgiveness and amends, forgiveness accounted for significant unique variance in two of the three

Table 3. Predicting victim forgiveness, betrayal resolution, and relationship quality: Study 3

	Victim data	Perpetrator data	Combined data
Victim forgiveness from:			
Perpetrator amends	.24**	.25*	.23**
Betrayal resolution from:			
Victim forgiveness	.19	.35**	.28**
Perpetrator amends	.29**	.21*	.20**
Victim forgiveness	.09	.33**	.25**
Perpetrator amends	.26*	.12	.16*
Relationship quality from:			
Betrayal resolution	.39**	.46**	.38**
Betrayal resolution	.22**	.35**	.28**
Victim forgiveness	.04	.10	.08
Perpetrator amends	.49**	.25**	.35**

Note. The values are standardized regression coefficients from hierarchical linear modeling analyses for one-predictor models (single-row models) and for two- or three-factor models (grouped as two- or three-row models). Analyses are based on data from 68 couples (136 individuals). Victim data = predictors and criteria as reported by victims; perpetrator data = predictors and criteria as reported by perpetrators; combined data = predictors and criteria as reported in victim and perpetrator reports combined.

analyses, and amends accounted for significant variance in two of the three analyses (under *Betrayal resolution*, see two-row models). Thus, (a) in resolving betrayal incidents, perpetrator amends plays an important role beyond the effects of victim forgiveness, and (b) irrespective of role, partners' perceptions of betrayal resolution are influenced by partners' behavior at least as much as by their own behavior.

As predicted, betrayal resolution was significantly associated with relationship quality in all three analyses (under Relationship quality, see single row labeled Betrayal resolution); that is, relationship quality is greater among couples who more successfully resolve their betrayal incidents. Are our results consistent with the hypothesis that betrayal resolution mediates the associations of amends and forgiveness with relationship quality (cf. Baron & Kenny, 1986; Kenny et al., 1998)? We addressed mediation using the combined data. The prerequisites for assessing mediation were satisfied, in that both forgiveness and amends were associated with relationship quality ($\beta s = .16$ and .47, both ps < .01) and with betrayal resolution ($\beta s = .28$ and .20, both ps < .01), and betrayal resolution accounted for significant unique variance in relationship quality beyond forgiveness and amends ($\beta = .28$, p < .01). Tests of the significance of mediation revealed that the association of victim forgiveness with relationship quality was significantly and wholly mediated by betrayal resolution (controlling for perpetrator amends, z = 3.31, p < .01) and the association of amends with relationship quality was significantly but partially mediated by betrayal resolution (controlling for victim forgiveness, z = 2.62, p < .01).

^{*}p < .05. **p < .01.

^{5.} We were concerned with the possibility that some items in our relationship quality measure potentially also tapped betrayal resolution (e.g., "I think my partner and I learned something valuable from this incident."). We repeated the mediation analyses using a subset of relationship quality items that tapped the current state of the relationship (e.g., "Our relationship is better now than ever before."). We found that betrayal resolution significantly mediated the association of forgiveness and amends with relationship quality using this 3-item version of the relationship quality scale ($\alpha = .68$).

Table 4. Predicting victim forgiveness, betrayal resolution, and relationship quality—Across-partner analyses: Study 3

	Across-partner
	data
Victim forgiveness (VR) from:	
Perpetrator amends (PR)	$.15^{\dagger}$
Betrayal resolution (VR) from:	
Victim forgiveness (VR)	.20*
Perpetrator amends (PR)	.21*
Betrayal resolution (PR) from:	
Victim forgiveness (VR)	.10
Perpetrator amends (PR)	.21*
Relationship quality (VR) from	: :
Betrayal resolution (PR)	.26**
Relationship quality (PR) from	: :
Betrayal resolution (VR)	.32**

Note. The values are standardized regression coefficients from hierarchical linear modeling analyses. Analyses are based on data from 68 couples (136 individuals). Acrosspartner data = predictors and criteria as reported by individual specified for each variable; VR = victim report of variable; PR = perpetrator report of variable.

 $^{\dagger} p < .10. *p < .05. **p < .01.$

Across-partner analyses

Is it possible that the Table 3 findings reflect common method variance or tendencies toward consistency in self-report? To address this question, we employed across-partner analyses to examine the direct associations predicted in the dyadic model, employing victim-reports of victim behavior perpetrator-reports of perpetrator behavior (see Table 4). Most predicted associations were significant or marginal: (a) perpetratorreported amends was positively associated with victim-reported forgiveness ($\beta = .15$, p < .10) and betrayal resolution ($\beta = .21$, p < .05), and perpetrator-reported betrayal resolution was positively associated with victim-reported relationship quality ($\beta = .26$, p < .01), and (b) victim-reported betrayal resolution was positively associated with perpetrator-reported relationship quality (β = .32, p < .01). However, victim-reported forgiveness was not significantly associated with perpetrator-reported betrayal resolution (β = .10, ns).

Potential confounds

Are the present findings attributable to unintended confounds, such as commitment level or tendencies toward socially desirable responding? We replicated the Table 3 analyses (simple models) including as covariates measures of self-deception, impression management, and commitment level. In analyses that simultaneously controlled for the three potential confounds, all associations among key model variables remained significant (β s ranged from .18 to .34, all ps < .01).

Victim and perpetrator perspectives

Our Table 3 findings are roughly parallel in analyses employing victim data and perpetrator data. To further explore the extent to which amends and forgiveness are phenomena that are perceived in parallel manner by partners in a given relationship, we examined whether victims and perpetrators exhibited rough agreement in their reports of one another's forgiveness and amends. To explore simple across-partner agreement in reports of behavior, we regressed victims' reports of each variable onto perpetrators' reports of parallel variables. All four across-partner associations were significant (\betas s ranged from .27 to .53, all ps < .01). Thus, partners exhibited good agreement in their ratings of one another's behavior during a given betrayal incident. In addition—and as reported earlier—although preliminary analyses revealed no significant interactions as a function of betrayal role, two main effects were significant: In comparison to victims, perpetrators reported lower levels of victim forgiveness (Ms = 5.05 and 4.85), t(68) = 4.57, p < .01,as well as greater levels of relationship quality (Ms = 6.01 and 6.26), t(68) = 4.24, p <.05. Thus, although there were two role main effects in mean levels of variables (e.g., perpetrators reported lower levels of victim forgiveness), victims' and perpetrators' perceptions of one another's behavior were significantly associated, and the hypothesized associations between amends and forgiveness typically were evident using both victim and perpetrator accounts of a given betrayal incident.

Discussion

Study 3 revealed good support for our hypotheses. Examining partners' descriptions of recent betrayal incidents, we obtained consistent support for the hypothesized association of perpetrator amends with victim forgiveness. Moreover, the combined analyses revealed that both partners' actions contribute to the resolution of betrayal incidents, and that betrayal resolution positively predicts relationship quality. These findings generally were evident for both victims and perpetrators, with one interesting exception: In analyses based on victim-report data, perpetrator amends accounted for significant unique variance in betrayal resolution, whereas their own forgiveness did not, and in analyses based on perpetrator-report data the opposite was true-victim forgiveness accounted for significant unique variance in betrayal resolution, whereas their own amends did not. This suggests that in understanding whether a betrayal is successfully resolved, the behavior of the partner may be somewhat more salient than one's own behavior. Strikingly, the dyadic model received moderately good support not only in within-participant analyses but also in across-partner analyses examining the associations of self-report measures with partner-report measures.

The main limitation of these findings is that they rest on retrospective reports of prior betrayal incidents. It is possible that (a) recall of prior betrayal interactions might be shaped by the present state of the relationship, or that (b) different aspects of betrayal incidents may be salient in the memories of the two partners. However, our confidence in the validity of participants' descriptions is enhanced by the fact that partners exhibited good agreement about the extent to which each person did versus did not offer amends and was versus was not forgiving, as well as by the fact that across-partner analyses revealed good support for model predictions. Study 3 extends Study 1 by examining the resolution of betrayal incidents, as well as the association of betrayal resolution with relationship quality. And Study 3 extends Study 2 by obtaining both partners' reports of interaction behaviors following betrayal incidents, by examining more severe betrayal incidents, and by examining how behavior during prior betrayal incidents relates to present relationship quality.

General Discussion

An observational study of married couples, an interaction record study of individuals in ongoing dating relationships, and a crosssectional survey study of dating partners yielded findings that extend previous research regarding forgiveness. These studies revealed that forgiveness and betrayal resolution are thoroughly interpersonal processesprocesses that are shaped by the behavior of both victim and perpetrator. Moreover, our findings regarding betrayal role are consistent with the claim that amends and forgiveness are phenomena that are perceived in parallel manner by victims and perpetrators and that exert parallel effects on betrayal resolution and relationship quality as perceived by each partner. In the following paragraphs, we review findings relevant to our theoretical model and discuss their implications.

Support for the dyadic model

Figure 2 presents a modified version of our dyadic model of forgiveness based on our findings across Studies 1-3 and displays meta-analytic coefficients for each link in our model (with coefficients weighted by the number of participants in each study). First, we address results regarding the association of perpetrator amends with victim forgiveness. A meta-analytic summary of findings from Studies 2 and 3 revealed a reliable concurrent association of perpetrator amends with victim forgiveness (see Figure 2; metaanalytic $\beta = .27$, p < .01). This association was evident not only in analyses employing victim data and perpetrator data but also in across-partner analyses and in analyses that controlled for potential confounds such as severity of betrayal, commitment level, and tendencies toward socially desirable responding. Thus, and consistent with predictions,

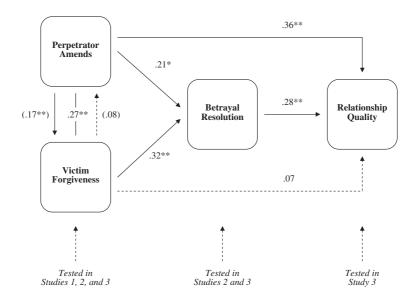


Figure 2. The dyadic model of betrayal resolution: Associations observed in Studies 1, 2, and 3.

Note. Coefficients in parentheses are residualized lagged associations. Dashed lines indicate insignificant model associations.

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

when Mary offers amends for her offense, John is more forgiving. And conversely, when Mary is defensive or hostile, John is less forgiving. In interdependence terms, Mary's amends indeed appear to facilitate John's transformation of motivation from potentially vengeful given preferences to effective preferences that favor a forgiving response.

Is this association a unidirectional relationship wherein amends promotes forgiveness, or is the association of amends with forgiveness reciprocal? In Study 1, we examined the temporal unfolding of amends and forgiveness in the course of betrayal-relevant interactions. Study 1 revealed good support for the assertion that earlier perpetrator amends promotes increases over time in victim forgiveness (see Figure 2; meta-analytic $\beta = .17$, p < .01). This residualized lagged association was significant not only in analyses employing victim data and perpetrator data but also in across-partner analyses and in analyses employing observer data, as well as in analyses that controlled for potential confounds such as commitment level and socially desirable responding. Following an act of betrayal, to the extent that Mary apologizes for her actions or atones for the harm she has caused, John becomes increasingly likely to let go of his hurt and anger, gradually moving toward forgiveness. However, earlier victim forgiveness does not reliably promote increases over time in perpetrator amends (meta-analytic $\beta = .08$, ns). This residualized lagged association was significant in analyses employing victim data and perpetrator data, but not in across-partner analyses or in analyses employing observer data. Moreover, this association was even less reliably observed in analyses that controlled for potential confounds. Therefore, it appears that the power of positive behavior in the wake of betrayal may be dependent on the role of the actor; perpetrator amends more reliably inspires victim forgiveness than victim forgiveness inspires perpetrator amends. Mary's amends create a powerful form of situation selection; to the extent that amends improves John's willingness to forgive, the couple will have more positive interactions.

Next, we address findings regarding the associations of amends and forgiveness with

betrayal resolution and relationship quality. A meta-analytic summary of findings from Studies 2 and 3 revealed that perpetrator amends and victim forgiveness reliably account for unique variance in betrayal resolution (see Figure 2; meta-analytic β s = .21 and .32, both ps < .05). These associations were evident not only in analyses employing victim data and perpetrator data but also in across-partner analyses and in analyses that controlled for diverse potential confounds. Thus, and consistent with predictions, forgiveness per se is no magic bullet in the resolution of betrayal dilemmas. The process of betrayal resolution is thoroughly interpersonal, and rests on pro-relationship transformation on the part of both victim and perpetrator.

Finally, it is important to comment on our findings regarding relationship quality. Study 3 revealed not only that betrayal resolution is reliably associated with relationship quality (see Figure 2; meta-analytic $\beta = .28$, p < .01) but also that perpetrator amends accounts for unique variance in relationship quality beyond betrayal resolution (metaanalytic $\beta = .36$, p < .01). The former finding is of consequence—it is important to demonstrate that successful betrayal resolution is associated with healthy couple functioning (and that failure to resolve betrayals is harmful). Yet the latter, unexpected finding is perhaps even more striking. It appears that perpetrator amends yields benefits that extend beyond the fact that amends promotes betrayal resolution; that is, amends also helps couples move forward in a positive manner in the aftermath of betrayal. We speculate that the direct association of amends with couple functioning may be attributable to the fact that amends promotes broader healing processes, perhaps by helping couples reestablish relationship-relevant norms or by promoting the recovery of trust or commitment. It is also possible that these findings are in part due to our exploring perpetrator amends (defined as behaviors to atone for the betrayal) in these studies rather than just perpetrator apology (e.g., an explicit verbal statement about being sorry for the betrayal). Future research should explore the precise mechanisms that account for the restorative properties of perpetrator amends.

Thus, although betrayal incidents tend to be upsetting and potentially harmful, it is important to recognize that partners' behavior following such incidents can be highly diagnostic of the degree to which they value their relationship (cf. Holmes & Rempel, 1989). Their behavior provides meaningful information about (a) each person's dispositions, values, and motives, as well as (b) each person's probable future behavior. After violating Mary's expectations about normative behavior, if John promises not to do so again, apologizes for causing Mary pain, and behaves in such a manner as to partially "repay the debt" he has incurred, Mary may have reason to believe that John has developed a better understanding of her expectations and that he values their relationship sufficiently to change his ways. Conciliatory behavior of this sort may do a good deal to reduce victim uncertainty, assuage anxiety, and increase intimacy by communicating perpetrator understanding, validation, and caring for the victim (Laurenceau, Barrett, & Pietromonaco, 1998; Reis & Shaver, 1988). Of course, rather than offering amends, John might alternatively declare that Mary's expectations are unreasonable or belittle her for feeling hurt by his actions. Either way, Mary has learned a good deal about John that she would not learn under sunnier circumstances of interdependence.

Victim versus perpetrator perspectives

All three studies allowed us to explore possible differences between perpetrators and victims in perceptions of betrayal incidents. In Study 2, we "controlled for person," asking a given individual to report on victim and perpetrator behavior in the context of betrayal incidents in which he or she was the perpetrator as well as in betrayal incidents in which he or she was the victim. In Studies 1 and 3, we "controlled for betrayal incident," asking two partners to report on their own behavior and the partner's behavior in a given betrayal incident. Consistent with prior research regarding betrayal role (e.g., Baumeister et al., 1990; Kearns & Fincham,

2005; Zechmeister & Romero, 2002), we observed some evidence of biased or self-serving perception. For example, perpetrators tended to perceive that they offered greater amends than victims perceived they were offered (Study 2), and tended to perceive that betrayals had more positive relational outcomes (Study 3); victims tended to perceive that they offered greater levels of forgiveness than perpetrators believed they received (Study 3). However, such role effects were unreliably observed (e.g., no role effects were evident in Study 1).

Thus, victims and perpetrators do not live in separate worlds—partners' perceptions are considerably more convergent than divergent. At heart, many social psychologists are social constructionists; we are intrigued by evidence of biased perception and cognition. The present research suggests that although partners may shade their construals in such a manner as to protect the self, this is not to say that no shared reality underlies perception. In the present research, the elephant on the stage was the reality of betrayal-relevant interaction, which was perceived in roughly parallel manner not only by partners but also by outside observers.

Broader implications

Folk wisdom suggests that "it takes two to tango"—that there must be two parties to a quarrel. The present studies suggest that there must also be two parties to the resolution of a quarrel. An interaction-based analysis of the forgiveness process allows us to recognize the contributions of both victims and perpetrators to the successful resolution of betrayal. To be sure, work regarding intra personal processes (cognition and emotion) informs our understanding of important social psychological phenomena. But beyond such intrapersonal processes, an interdependence-based analysis illuminates our understanding of the interpersonal character of forgiveness and reconciliation, highlighting the fact that behavior during interaction (a) has important direct consequences for individuals and (b) shapes cognitive, emotional, and motivational events in ways that govern the course of future

interaction (Kelley et al., 2003; Rusbult & Van Lange, 2003). These broader effects are not fully tractable in individual-focused social psychological analyses.

An interdependence-based analysis also addresses the consequences of interaction for dyads. The present work revealed that partners who offer amends and forgiveness experience greater betrayal resolution and more positive relational outcomes than those who do not. These findings have clear potential for application in couples counseling and family therapy. Moreover, this work may have important implications for understanding forgiveness in other contexts—contexts involving nonclose dyads and groups. It seems plausible that even in settings wherein no formal relationship exists between victim and perpetrator, perpetrator amends may yield beneficial consequences.⁶ For example, when criminal defendants exhibit remorse for their actions, the victims of violent crimes may more readily recover from their maltreatment; when formal organizations apologize for their transgressions, they may enjoy more congenial relations with constituents (e.g., corporations' apologies for shareholder abuse, governments' apologies for prior group-based exploitation). Numerous interventions exist to help victims achieve forgiveness (Enright & the Human Development Study Group, 1996); the present work suggests the need for more interventions that help people make amends when they have hurt others (intentionally or not).

Limitations and directions for future research

Before closing, we should address several limitations of the present work. Ironically, the most serious limitation rests on a feature of the present work that may also be regarded as

^{6.} Interestingly, everyday experience suggests that even in instances such as these, victims yearn for perpetrator amends. For example, during criminal trials, victims are soothed by signs of remorse on the part of criminal defendants; the victims of group-based exploitation welcome apologies and confessions of wrongdoing on the part of formal "perpetrator representatives" (e.g., politicians' apologies for reprehensible societal phenomena, such as the existence of slavery during prior generations).

one of its greatest strengths: In all three studies, participants described betrayals that transpired in ongoing relationships. This approach enabled us to address some important gaps in the forgiveness literature; we were able to study betrayal interactions in real time, study both victim and perpetrator behavior (and perceptions of partner behavior) during the forgiveness process, and learn how both victims and perpetrators perceive the aftermath of betrayal and forgiveness. However, it could be argued that all of the couples in Studies 1 and 3 experienced at least some degree of forgiveness and reconciliation; otherwise, the couples would not have lived to tell their tales. The procedures employed in Study 2—asking individuals to complete diary records of betrayals in their dating relationships as they occurred—are not subject to this critique, but the betrayals captured with this method were comparatively mild. Due to this limitation, our findings about the forgiveness process may be limited to describing how the forgiveness process unfolds in ongoing relationships; it remains to be seen whether the same processes and relationships among our model constructs apply to betrayals that occur in relationships that dissolve. Future studies should employ longitudinal methods to explore betrayal incidents of even greater consequence, toward determining whether the survival of a relationship is influenced by dyadic forgiveness processes.

A second limitation stems from the fact that many of our findings rest on self-report ratings of one's own or a partner's behavior. It is reassuring that partners exhibit moderate to good agreement in their descriptions of one another's behavior. Nevertheless, given that self-report measures are vulnerable to bias, our Study 1 analyses of observers' ratings are particularly compelling. However, given that Study 1 did not assess betrayal resolution and relationship quality, future studies might seek to examine interaction-based elements of the forgiveness process by studying interactions regarding both resolved and unresolved betrayal incidents. Such studies would also allow for studying additional aspects of the forgiveness process, such as perceived sincerity of amends and forgiveness that we did not include in these studies.

A third limitation is that although we examined betrayal role in Studies 1 and 3, it must be recognized that all three studies ultimately are nonexperimental. Therefore, we cannot form confident conclusions regarding the causal relations among amends, forgiveness, and betrayal resolution. Although the residualized lagged analyses we performed in Study 1 suggest that perpetrator amends may causally precede victim forgiveness, definitive causal evidence will require experimental work regarding perpetrator-victim interaction (e.g., via the use of priming techniques, false feedback regarding perpetrator behavior). These methods often require a tradeoff between control and artificiality. In the case of real romantic relationships, there are also ethical problems associated with manipulating betrayal or amends, particularly when we seek to study severe betrayal incidents. Although we cannot draw causal conclusions on the basis of the present work, we performed diverse confound analyses to help rule out several potential alternative explanations, such as socially desirable responding or commitment to a relationship. Finally, the external validity of our findings may be questioned, in that our findings rest on evidence provided by North American participants. For example, work employing role-playing methods suggests that in organizational settings, amends following promise breaking is regarded as significantly more appropriate by Japanese undergraduates than by American undergraduates (Takaku, 2000).

Conclusions

The present research provides unique information regarding the role of perpetrator amends in the aftermath of betrayal, establishing the importance of amends in facilitating victim forgiveness and successful betrayal resolution. Moreover, the present research revealed that both partners' actions shape the manner in which betrayals are experienced and resolved by couples. Furthermore, data obtained from both partners—irrespective of their role in the betrayal—revealed the

importance of both victim and perpetrator behavior in bringing about forgiveness and betrayal resolution. These findings highlight the importance of moving beyond the traditional victim-centered approach to explaining forgiveness, illustrating the utility of an interaction-based analysis of couple reactions to betrayal. To the extent that both partners are able to enact constructive behaviors following acts of betrayal, both are likely to reap the rewards of enhanced outcomes for their relationship.

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