From "me" to "we": Does forgiveness enhance cognitive interdependence?

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The Role of Forgiveness in Shifting from "Me" to "We"

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The present research was designed to examine the link between forgiveness and cognitive interdependence, the mental state characterized by pluralistic representations of the self-in-relationship (Agnew, Van Lange, Rusbult, & Langston, 1998). Consistent with hypotheses, results revealed that forgiveness was associated with greater perceived overlap between self and partner in a graphical measure of Inclusion of the Other in the Self scale (IOS; Aron, Aron, Tudor, & Nelson, 1991, Study 1), and greater use of first-person plural pronouns (i.e., we, us, our, and ours) in open-ended descriptions of their relationships (Study 2). Forgiveness accounted for cognitive interdependence, while controlling for several variables, including relational commitment and mood. Implications of the present results for relationship functioning and well-being are discussed.

Close relationships with others often provide an important source of happiness and satisfaction. Having supportive relationships may even be associated with one's physical well-being (House, Landis, & Umberson, 1988). At the same time, it seems almost inevitable that every now and then we feel hurt and offended in these same relationships. The amount of relationship damage caused by such offenses appears essentially to rely on the offended person's ability to forgive the partner (e.g., Fincham, 2000; McCullough, Worthington, & Rachal, 1997). For instance, previous research has shown that forgiveness, defined as an intrapersonal prosocial change toward the offender despite his or her hurtful actions (McCullough, Pargament, & Thoresen, 2000), is positively associated with cooperative intentions and willingness to sacrifice for the offender (Karremans & Van Lange, 2004), constructive communication, and negatively related to aggression toward the offender (Fincham & Beach, 2002). Also, higher levels of forgiveness are predictive of relationship satisfaction and marital quality over time (Paleari, Regalia, & Fincham, 2005). Indeed, past research has contributed much to our understanding of whether forgiveness may promote interpersonal behaviors that serve the well-being of the relationship as well as the well-being of the two persons involved.

Despite the rapidly growing theoretical and empirical attention devoted to understanding forgiveness, relatively little is known about the more implicit, or subtle psychological changes that are brought about by forgiveness. For example, are varying levels of forgiveness related to the way we think about ourselves in relationship to an offending partner? Do we perceive the self and the other more as a unit (as ''we'') after we have forgiven the offender. Do we perceive the self and partner as two separate entities (''me-and-the-other'') when we have not forgiven a relationship partner? The answers to such questions are important in fully understanding the effects of forgiveness on relationship satisfaction and functioning. For example, previous research has shown that partners who perceive a relatively strong overlap between the self and the other are happier couples than those partners who perceive themselves as two separate persons (Acitelli, 1988; Acitelli & Young, 1996). Moreover, there is research showing that a sense of ''we-ness'' may promote various forms of prosocial behavior toward an interaction partner (Aron, Aron, Tudor, & Nelson, 1991; Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Medvene, Teal, & Slavich, 2000).

The primary purpose of the present research was to examine whether level of forgiveness is associated with perceived communal identity with a relationship partner. More specifically, we examined whether forgiveness is positively associated with *cognitive interdependence*, defined as a mental state characterized by pluralistic representations of the self-in-relationship (Agnew, Loving, Le, & Goodfriend, 2004; Agnew, Van Lange, Rusbult, & Langston, 1998). Moreover, as will be explained shortly, given that relationship commitment has been demonstrated to be strongly associated with cognitive interdependence, a second purpose of the present research was to examine whether forgiveness is uniquely associated with cognitive interdependence, above and beyond relationship commitment.

Commitment, Forgiveness, and Cognitive Interdependence

Relationships can differ importantly in the way partners see themselves as two independent persons, or whether they view the relationship as a collective unit in which there is a high level of interdependence. Research based on various theoretical accounts have provided evidence for the idea of perceived overlap between the self and the relationship partner. For example, based on the self-expansion model, Aron and his colleagues (Aron et al., 1991; Aron, Aron, & Smollan, 1992) have shown that relationship closeness for an important part exists to the extent that individuals think as if the partner is included in the self (i.e., inclusion of other in the self). In one study, they provided compelling evidence for a cognitive overlap between self and partner by demonstrating that people in close relationships almost literally confuse themselves with the partner in a task where participants have to indicate whether a trait applies to themselves or not (see Aron et al., 1991, for a detailed description).

As another example, using principles of interdependence theory, Agnew et al. (1998) argued that people in relationships see themselves more as part of a ''pluralistic self-and-partner collective'' (p. 939) to the extent that, over time, they become more committed to the relationship partner. Their research demonstrated that strong commitment to a relationship partner is associated with greater spontaneous use of plural pronouns (we, us, our) when describing the relationship, a greater perceived unity of self and other as measured with the Inclusion of Other in the Self scale (IOS; Aron et al., 1992; details of the measure are provided in the method section of the current Study 1), and greater reported relationship centrality.

Thus, based on these indicators, they demonstrated that commitment is indeed positively associated with cognitive interdependence toward the relationship partner (Agnew et al., 1998).

Most previous research has regarded, and examined, cognitive interdependence as a relatively stable feature of the relationship. As described above, perceived overlap between partners is considered to be an important concomitant of a generally stable relationship characteristic such as commitment (Agnew et al., 1998), or is the result of self-expansion motives that may be fulfilled over the course of the relationship with the partner (Aron et al., 1992). At the same time, we propose that it is also plausible that there are there important *temporal* changes in cognitive interdependence—people may sometimes define the relationship more as a unit, and at other times more in terms of self and the other. For example, when feeling hurt by a relationship partner, a person temporarily may psychologically distance him- or herself from the partner, viewing the relationship more in terms of "I and other" rather than "we." The idea of fluctuating levels of cognitive interdependence is similar to theorizing in the literature on self-construal (e.g., Brewer & Gardner, 1996; Gardner, Gabriel, & Lee, 1999). Influenced by situational factors, people may sometimes define the self more in independent terms (i.e., viewing the self as a autonomous and unique person), and sometimes more in interdependent terms (viewing the self more in terms of one's connectedness with other people). Indeed, this research has shown that subtle manipulations, like priming people with "I" or "we," can easily influence the level of experienced connectedness to others (Garder et al., 1999). Likewise, a person's experienced connectedness to a specific interaction partner is likely to fluctuate from situation to situation.

Although previous research has shown that commitment influences level of cognitive interdependence, we argue that relationship commitment cannot readily account for such fluctuations in cognitive interdependence. Relationship commitment, which is rooted in a long history of interaction experiences, and argued to be influenced by investment size, quality of alternatives, and relationship satisfaction (e.g., Rusbult, Marz, & Agnew, 1998), can be regarded as a *macromotive* that shapes level of cognitive interdependence in a relatively distal way. Even when relationship commitment to the partner is strong—even when the person intends to persist in the relationship, is long-term oriented to the relationship, and feels emotionally attached to the partner—still a person may sometimes cognitively distance oneself from the partner. Such distancing is especially likely to occur when one feels hurt by a relationship partner. Hence, to fully understand possible fluctuations in the degree to which partners see themselves as a collective unit, one should examine relationship motives that may be especially important at a more micro-level (for similar reasoning, see Holmes & Rempel, 1989; Karremans & Van Lange, 2004).

We argue that forgiveness is such a relationship motive that may help to understand temporal variation in cognitive interdependence. Unlike commitment, the psychological state of forgiveness (and unforgiveness) results directly from a specific interaction within the relationship in which a person felt offended or hurt by the relationship partner. When the person is somehow reminded of this incident (e.g., the context reminds the person of the offense, the partner behaves in a way that reminds the person of the offense, or the person is ruminating on the incident), level of forgiveness regarding the offense may—at least temporarily—overrule the influence of relationship commitment on cognitive interdependence. Hence, from a proximal point of view, we suggest that level of forgiveness regarding a specific offense influences cognitive interdependence, above and beyond the effect of

relationship commitment. In other terms, regardless of level of commitment, a person who has not forgiven the offender may cognitively distance him- or herself from the other, resulting in relatively low levels of cognitive interdependence, while a person who has forgiven the offender will display relatively high levels of cognitive interdependence.

There is some initial evidence that points to the relationship between forgiveness and cognitive interdependence. In a study by McCullough and colleagues (1998), it was demonstrated that forgiveness exhibited a positive correlation with perceived relationship closeness or unity as measured with the aforementioned IOS scale. The present research was designed to extend this research in several important ways. First, we sought to illuminate the causal roles by manipulating lower forgiveness versus higher forgiveness using thought instructions. Specifically, based on the assumption that almost anybody can think of largely forgiven and largely unforgiven offenses, in both studies participants were randomly assigned to either the lower forgiveness or higher forgiveness condition by asking our participants to recall either an offense that they have forgiven or an offense that they have not completely forgiven.[1] After this experimental manipulation, we assessed cognitive interdependence, which allowed us to provide preliminary evidence for the causal pathway leading from forgiveness to cognitive interdependence (for a similar method, see Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003; Karremans & Van Lange, 2004; Zechmeister & Romero, 2002). (Granted, there may be important feedback loops between forgiveness and cognitive interdependence—and commitment, which violate a clean differentiation between cause and effect. However, the major goal of the present research is to explore the influence of level of forgiveness on cognitive interdependence—or at least, we examine how thinking of forgiven versus relatively unforgiven offenses affect cognitive interdependence. We return to this issue in the general discussion, when discussing the issue of causality and alternative interpretations.)

As a second extension of previous research, in Study 2 we used a more implicit measure of cognitive interdependence that was previously used by Agnew et al. (1998). Specifically, we measured the spontaneous use of first-person plural pronouns when describing the relationship with the offender, and examined whether this was positively influenced by level of forgiveness.

Finally, to examine whether our predictions could be generalized across different types of relationships, we did not specifically focus on romantic relationships, but rather asked participants to recall an incident with someone to whom they were strongly committed (e.g., intimate partners, close friends, parents, siblings).

Study 1

Study 1 was designed to test the general hypothesis that forgiveness (compared to the lack of forgiveness) leads to greater levels of cognitive interdependence. In this study, as an indicator of cognitive interdependence, we used the Inclusion of Other in the Self scale, a measure developed by Aron et al. (1992) that uses graphical representations of varying degrees of perceived unity between self and other.

Moreover, we examined whether the effect of forgiveness on cognitive interdependence was independent of level of commitment to the offender. As described in the introduction, level of forgiveness emerges from a single, but often powerful, specific interaction experience, whereas level of commitment can be regarded as a generalized summary of numerous interaction experiences (Holmes &

Rempel, 1994; Rusbult, Drigotas, & Verette, 1994). Hence, when a person is reminded of the specific interaction experience (i.e., offense), we hypothesize that level of forgiveness should play a unique role in predicting cognitive interdependence, above and beyond level of commitment.

Method

Participants and design.   Fifty-seven participants (8 men, 48 women, one person did not report gender; mean age 21 years) took part in the experiment, and received 1 Euro in exchange for participation. Participants were randomly assigned to one of the two conditions (offense forgiven vs. offense not forgiven).

Procedure.   Participants completed the research materials in individual cubicles. In the first part of the study participants were asked to bring to mind their most significant other, and to complete an 8-item measure of commitment (as used in previous research, e.g., Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991; Agnew, et al., 1998; e.g., "I feel emotionally attached to the other," *alpha* = .81).

In the second part of the study, participants were asked to bring to mind an incident in which they felt hurt by the significant other, and level of forgiveness was manipulated by means of the instructions (see Karremans et al., 2003; Karremans & Van Lange, 2004; Zechmeister & Romero, 2002), which read as follows:

> Please, bring to mind an incident, in which you felt hurt or offended by the other. However, when you think back of this incident, it does not evoke negative feelings, it does not bother you any more. In other words, you have forgiven the other [in the higher forgiveness condition]/ When you think back of this incident, it still evokes negative feelings, and to a certain extent it still bothers you. In other words, you have not completely forgiven the other [in the lower forgiveness condition].

Participants were asked to briefly describe what happened. The writing part served to induce participants to bring to mind the offense itself as well as the other person whom they believed had offended them. After that, they completed questionnaires that assessed when the offense occurred, how severe the offense was, and, as a manipulation check, the extent to which one had forgiven the other. Next, cognitive interdependence was measured.

Measures.   Participants indicated *how long ago* the offense occurred on a single-item question, and *severity of the offense* was measured with one item ("the offense was very serious"). Participants also indicated the nature of the relationship with the offender. Across Studies 1 and 2, on average about 40% were romantic partners, 25% parents, 20% friends, 10% siblings, and about 5% other family members or persons categorized as "other." Since in both studies no reliable differences in the association between forgiveness and cognitive interdependence were found for the different types of relationship, we will not further report on this.

For the assessment of forgiveness, three items were taken from a recently developed and validated scale by Brown and Philips (2005; "I have forgiven this person," "I feel angry toward this person," "I do not feel ill-will toward this person," *alpha* = .80, after reverse-scoring the second item).

As in previous research (Agnew et al., 1998), as an indicator of *cognitive interdependence*, participants completed the Inclusion of Other in the Self scale (IOS;

Aron et al., 1992). The IOS scale consists of seven pairs of circles with varying degree of overlap, ranging from no overlap (1) to a nearly complete overlap (7) of the two circles. Of each circle pair, one circle represents the self, the other circle represents the relationship partner. The participant is asked to select the circle pair that best describes the relationship with the other person.

Results

Manipulation check.   An analysis of variance (ANOVA) with level of forgiveness as dependent variable, and condition as independent variable was performed, and revealed that participants in the higher forgiveness condition ($M = 6.02$, $SD = 1.17$) indeed exhibited higher levels of forgiveness than participants in the lower forgiveness condition ($M = 5.12$, $SD = 1.33$), $F(1, 56) = 7.58$, $p < .01$. Thus, the instructions were successful.

Possible correlates of forgiveness.   To examine whether condition (higher forgiveness vs. lower forgiveness) was associated with how long ago the offense occurred, and severity of the offense, we performed an ANOVA with months since the offense and severity as dependent variable, and condition as independent variable. Higher forgiven offenses did not significantly take place longer, or less long, ago ($M = 16.59$ months ago, $SD = 30.00$) than lower forgiven offenses ($M = 10.32$ months ago, $SD = 17.09$), $F(1, 56) = 0.93$, *ns*, and higher forgiven offenses ($M = 5.41$, $SD = 1.50$) were not rated as significantly more, or less, severe than lower forgiven offenses ($M = 4.96$, $SD = 1.50$), $F(1, 56) = 1.27$, *ns*. Finally, level of commitment was, as anticipated, high in both the higher forgiveness ($M = 6.51$, $SD = 0.55$) and the lower forgiveness condition ($M = 6.42$, $SD = 0.63$), with level of commitment ranging from 4.5 to 7.

Cognitive interdependence.   To test the hypothesis that forgiveness is positively related to cognitive interdependence, an ANOVA was conducted with the score on the IOS scale as dependent variable, and condition as independent variable. In support of the general hypothesis, participants in the higher forgiveness condition ($M = 5.29$, $SD = 1.27$) exhibited higher levels of cognitive interdependence than participants in the lower forgiveness condition ($M = 4.50$, $SD = 1.45$), $F(1, 56) = 4.63$, $p < .05$.

In line with previous research findings (e.g., Agnew et al., 1998), level of commitment was positively correlated with cognitive interdependence, $r(57) = .41$, $p < .001$. Therefore, to ensure that the effect of condition on cognitive interdependence was still evident after controlling for level of commitment, commitment was included in the ANOVA as a covariate. This analyses yielded similar results, with a significant effect of condition on cognitive interdependence, $F(1, 55) = 4.32$, $p < .05$.

Also, when we controlled for severity of the offense and how long ago the offense occurred by including these variables each as a covariate in the analysis, these analyses yielded similar results, with significant effects of condition on level of cognitive interdependence.

Thus, the findings of Study 1 provide good support for our predictions: Recalling a forgiven offense is related to stronger cognitive interdependence than recalling an offense that is not completely forgiven. Importantly, this findings occurred above and beyond the effect of commitment.

Study 2

Study 2 was designed to extend and complement Study 1 in several ways. First, it is possible that the measure of cognitive interdependence used in Study 1 was sensitive to various self-report biases, given the explicit nature of the measure. Hence, in Study 2 we used an implicit measure of cognitive interdependence, and examined the extent to which participants described their relationship in terms of "we" (rather than "me and the other"). After participants were reminded of a forgiven or an unforgiven offense, we counted first-person plural pronoun usage when participants described their current relationship with the offender.

Moreover, whereas in Study 1 commitment was measured prior to the recall of the offense, in Study 2 commitment to the offender was measured after recalling the offense. In this manner, we could test whether level of forgiveness regarding the recalled offense influenced cognitive interdependence, but not commitment, and whether the effect of forgiveness on cognitive interdependence occurred independent of any effects of commitment.

Finally, in Study 1, recalling an unforgiven offense may have negatively influenced participants' mood, which may in turn have influenced levels of cognitive interdependence. Therefore, as another important extension of Study 1, in Study 2 we controlled for possible mood effects of our manipulations.

Method

Participants. Seventy-eight students (28 men, 50 women) participated in the experiment and received 2 Euro for participation. They were randomly assigned to one of the two conditions (higher forgiveness vs. lower forgiveness).

Procedure. After they were welcomed in the laboratory, they were seated in individual cubicles, where they received the research material. As in Study 1, level of forgiveness was manipulated by means of the instructions. Participants were asked to bring to mind an offense with someone to whom they were currently strongly committed (unlike Study 1, it was not stated that the other person should be their most significant other).

After these instructions, participants were asked to write a brief paragraph about the offense. Participants then completed the same measure as used in Study 1 to assess *commitment* to the offender (*alpha* = .92), a three-item measure that assessed the *severity of the offense* (e.g., "The offense was very intense," *alpha* = .90), and a single-item open-ended question about how long ago the offense took place (i.e., *time of offense*). As a manipulation check, *level of forgiveness* was assessed using a Dutch translation of the TRIM (i.e., Transgression-Related Interpersonal Motivations) inventory. This measure, developed by McCullough et al. (1998), was designed to assess forgiveness, based on an underlying two-component motivational system (i.e., avoidance and revenge). Eight items of this originally 10-item measure were used (with four items measuring the avoidance-component and four items measuring the revenge component of forgiving; two items were deleted because we were not able to translate these items in a way that connotations of the items perfectly corresponded in English and Dutch). Additionally, on a single-item scale participants indicated "the degree to which you feel you have forgiven the other" (cf. Subkoviak et al., 1995). We averaged the scores on the TRIM and the single-item scale and used this as an indicator of forgiveness. This measure exhibited good internal consistency,

alpha = .91. All above measures were assessed with scales ranging from 1 (*completely disagree*) to 7 (*completely agree*).

Unlike Study 1, in Study 2 participants also completed a mood scale. Four items assessed positive mood (e.g., happy, cheerful) and four items assessed negative mood (e.g., anger, sad). Participants were asked to indicate on 7-point scales the degree to which each item described how they were feeling at this moment. The negative affect items were reverse-scored, and the average score on the eight items served as an indicator of current mood (*alpha* = .88).

Indicator of cognitive interdependence.   After participants had completed these measures, they were asked "to briefly describe your current relationship with the offender. Please use complete sentences" (for a related method, see Agnew et al., 1998). No explicit restrictions were given on how much they could write, except that participants were given twelve lines for describing their relationship with the other. In fact, participants spent no more than twelve lines, and they used eight lines on average. As an indicator of cognitive interdependence, the number of first-person plural pronouns (we, us, our, ours) that participants used in the description of the relationship with the offender was counted.

Results

Manipulation check.   To examine whether the manipulation of level of forgiveness was successful, we conducted an ANOVA, with Forgiveness Condition (higher forgiveness vs. lower forgiveness) as an independent variable and Level of Forgiveness as a dependent variable. This analysis revealed that, as intended, level of forgiveness was higher in the higher forgiveness condition, $M = 5.21$, than in the lower forgiveness condition, $M = 4.53$, $F(1, 77) = 4.28$, $p < .05$.

Features of the offense and commitment with the offender.   Separate analyses were conducted to examine the possible links between forgiveness and severity of offense and time of offense. Both the ANOVA with severity of offense and time of offense revealed no significant effects of forgiveness condition, $F(1, 77) = 2.26$, $p > .10$ and $F(1, 77) = 0.11$, *ns*, respectively. Overall, participants brought to mind relatively severe offenses ($M = 4.98$, which is above the midpoint of the scale). The offense occurred on average 15 months before.

The ANOVA with level of commitment to the offender as a dependent variable, revealed that level of commitment did not significantly differ between the higher forgiveness condition, $M = 5.12$, and the lower forgiveness condition, $M = 4.74$, $F(1, 77) = 1.01$, *ns*. Overall, participants brought to mind offenses by others to whom they were at present relatively strongly committed, $M = 4.93$ (with 4 being the midpoint of the scale; although level of commitment ranged from an average rating of 1 to 7, more than 75% of the participants scored above the midpoint of the scale). Thus, level of commitment was not influenced by thinking of forgiven versus unforgiven offenses.

Moreover, as expected, level of commitment was significantly correlated with the usage of first-person plural pronouns, $r(78) = .21$, $p < .05$. This finding replicates the results of the study by Agnew et al. (1998).

Mood effects.   To examine whether the manipulation of forgiveness influenced participants' mood, we performed an ANOVA with mood as dependent variable and

condition as independent variable. This analysis revealed that participants in the higher forgiveness condition, $M = 5.34$, reported a more positive mood than participants in the lower forgiveness condition, $M = 4.80$, $F(1, 77) = 4.18$, $p < .05$. This finding replicates earlier research findings, indicating that in relationship of strong commitment level of forgiveness is positively associated with mood (Karremans et al., 2003).

Cognitive interdependence. To test our main hypothesis, we conducted an ANOVA with the number of first-person plural pronouns (we, us, our) used in the description of the relationship with the offender as a dependent variable, and forgiveness condition as an independent variable. This analysis revealed the predicted effect of condition, $F(1, 77) = 5.29$, $p < .05$. In describing their relationship with the offender, participants in the higher forgiveness condition, $M = 2.13$, $SD = 1.70$, used more first-person plural pronouns than participants in the lower forgiveness condition, $M = 1.33$, $SD = 1.32$.

Although the preceding analyses revealed that there were no significant links between forgiveness and the features of the offense, and between forgiveness and commitment with the offender, we wanted to ensure that the effect of forgiveness condition on the use of plural pronouns was still evident when controlling for severity of offense, time of offense, and commitment to the offender. Moreover, we wanted to control for the length of the description, for which we counted the number of lines participants used to describe the relationship. Separate analyses of covariance revealed that the effect of condition on the usage of plural pronouns was significant when severity of offense was included as a covariate, $F(1, 76) = 5.00$, $p < .05$; when time of offense was included as a covariate, $F(1, 76) = 5.48$, $p < .05$; and when length of description was included as a covariate, $F(1, 76) = 5.48$, $p < .05$. Most importantly, the effect of forgiveness condition remained significant when commitment to the offender was included as a covariate, $F(1, 76) = 4.40$, $p < .05$.

Finally, we controlled for mood effects. Importantly, when mood was included as a covariate in the analysis, the effect of condition remained significant, $F(1, 76) = 4.49$, $p < .05$.

Thus, these findings demonstrate that participants who are reminded of an offense for which they have forgiven the offender think more in terms of "we" about their relationship with the offender, compared to participants who are reminded of an offense for which they have not—or at least to a lower degree—forgiven the offender, suggesting that forgiveness is indeed related to cognitive independence. Moreover, the findings revealed that the effect occurred above and beyond the effect of commitment. Finally, it appeared that the effects of level of forgiveness on cognitive interdependence could not be explained by mood.

General Discussion

The primary purpose of the present research was to test the hypothesis that forgiveness is positively associated with cognitive interdependence. Two studies, in which we used two different measures of cognitive interdependence, provided converging evidence in support of this hypothesis. Also, and in line with previous research, the present studies revealed that relationship commitment was positively associated with cognitive interdependence. Further, in support of the unique role of forgiveness, results revealed that forgiveness predicted cognitive interdependence above and beyond the influence of relationship commitment. Taken together, the

present findings illuminate how level of forgiveness shapes the way we think about the relationship, that is, how forgiveness influences the extent to which the relationship is cognitively represented as a unit. In the following paragraphs, we discuss the meaning and implications of the present findings, and conclude with outlining some strengths and limitations of the studies.

The present research, in particular Study 2, has revealed implicit effects of forgiveness on the way people perceive the relationship. Possibly, such implicit effects associated with level of forgiveness may especially influence motivation and behavior toward the offender at an implicit level (that is, outside of the offended person's conscious awareness). For example, as a result of decreased (implicit) cognitive interdependence, a person who has not entirely forgiven a relationship partner may, unwittingly, keep greater physical distance from the partner during interaction, may imitate the partner to a lesser extent, or may display negative facial expressions toward the partner. Indeed, such subtle interpersonal behaviors have been demonstrated to be influenced by the extent to which people think in terms of "we" (Holland, Roeder, Van Baaren, Brandt, & Hannover, 2004; Van Baaren, Maddux, Chartrand, De Bouter, & Van Knippenberg, 2003). Since such implicit behaviors may importantly influence the quality of interactions between two partners (Lakin, Jefferis, Cheng, & Chartrand, 2003), it would be very interesting for future research to examine whether level of forgiveness indeed influences such implicit behaviors, and whether such an effect could be mediated by cognitive interdependence.

Our findings have implications for the general literature on how people are able to maintain healthy relationships with others, despite sometimes hurtful moments. By examining the link between forgiveness and cognitive interdependence, the current findings underscore the role of forgiveness in understanding relationship maintenance. For instance, previous research has demonstrated that scores on the IOS scale are significantly correlated with the likelihood that romantic partners will still be together three months later (Aron et al., 1992). Also, more recent research on cognitive interdependence revealed that the IOS scale is correlated with a number of important indicators of relationship health (e.g., relationship satisfaction, centrality of the relationship to the individual's life; Agnew et al., 1998). Finally, a recent study by Simmons, Gordon, and Chambless (2005) demonstrated that spouses who use more first-person pronouns in a problem-solving task were more effective in generating mutually satisfactory problem solutions. Thus, although derived from cross-sectional research, the present findings suggest that, through its influence on cognitive interdependence, level of forgiveness regarding a past offense may ultimately influence relationship outcomes that are importantly related to relationship maintenance and health.

The present findings, which suggest that forgiveness can positively influence the degree of perceived overlap between self and an offending partner, may also have important implications for forgiveness and related identity processes at the intergroup level. Recent research findings indicate that a greater perceived common identity between rival groups can promote forgiveness (Wohl & Branscombe, 2005; see also Hewstone, Cairns, Voci, Hamberger & Niens, 2006). It would be interesting to see whether our current findings can be generalized to intergroup contexts. That is, in addition to the reversed causal pathway, greater forgiveness toward an offending group may induce a greater perceived common identity between groups, and may help to reduce thinking in terms of "we" versus "them". Such reductions in in-group versus out-group thinking as a result of forgiveness may be important in facilitating reconciliation processes.

Strengths, Limitations, and Directions for Future Research

The present research is one of the first studies that has explicitly explored social-cognitive changes that are associated with forgiveness (however, see Karremans & Aarts, in press; Karremans, Van Lange, & Holland, 2005), thereby focusing on the extent to which people think of the relationship in terms of "we" rather than "I and the other." We used two converging measures of cognitive interdependence, which provided consistent findings across the two studies. Moreover, by using a very implicit measure of cognitive interdependence in Study 2, it is unlikely that our findings may have been influenced by, for instance, self-presentation motives. Despite these strengths of the present research, we should acknowledge some limitations.

First, because the present set of studies did not make use of a no-reminding control group, it is entirely possible that merely reminding people of the offense underlies the present findings. Recall that in our study people were always reminded of the offense in both the forgiving and not-forgiving conditions. This suggests that caution is warranted in interpreting the present findings. The potential effects of reminding could be addressed in future work by using longitudinal designs in which session 2 compares participants who are reminded of the offense with participants who are not reminded of the offense. More generally, this may be an interesting avenue of future research, because it is theoretically possible that reminders of the offense may under certain circumstances undo forgiveness to some degree, and therefore undo some of the benefits that are associated with forgiving, such as enhanced psychological well-being (Karremans et al., 2003; McCullough, Fincham, & Tsang, 2003).

Second, the present studies are silent on whether forgiveness increases cognitive interdependence (compared to "baseline levels" of cognitive interdependence in the relationship), whether unforgiveness decreases cognitive interdependence, or both. However, we suggest it is plausible that both effects underlie the link between forgiveness and cognitive interdependence. That is, it may be that, after an offense, lower forgiveness is associated with reduced cognitive interdependence (i.e., psychological distancing), while higher forgiveness reinstates cognitive interdependence to baseline levels, and future research would do well to test this hypothesis directly. In accordance with this line of reasoning, previous research has demonstrated that low levels of forgiveness are associated with reductions in prosocial behavior toward the offender, psychological well-being, and a generalized prosocial motivational state, while forgiveness is associated with levels of prosocial behavior, psychological well-being, and a generalized prosocial motivational state comparable with baseline levels in the relationship (Karremans & Van Lange, 2004; Karremans et al., 2003; McCullough et al., 2003).

Third, although we controlled for relationship commitment, we cannot rule out the possibility that the instruction of recalling a forgiven versus unforgiven offense may have brought to mind relationships that have qualitative differences other than commitment (and that may be related to cognitive interdependence). However, recall that in Study 1 participants first brought to mind their most significant other, and were only then instructed to recall a forgiven or unforgiven offense with this person. Thus, in this study, it is not possible that the instructions to recall a forgiven versus relatively unforgiven offense had an influence on what kind of relationship participants brought to mind. In Study 2, however, participants were free to recall a conflict with anyone, as long as they were strongly committed to this person. Here,

recalling a forgiven versus unforgiven offense may have influenced what kind of relationship participants brought to mind, which may have influenced the degree to which participants described this relationship in terms of "we." In a related manner, it is possible that participants in the lower forgiveness condition (compared to the higher forgiveness condition) could draw from a greater pool of offenses with relatively low cognitive interdependence persons. To address such issues, future research could examine the influence of level of forgiveness (regarding different offenses) on cognitive interdependence within the same relationship.

Finally, as briefly noted in the introduction, although we have focused in the present research on the influence of forgiveness on cognitive interdependence, we acknowledge that there may be a bidirectional link between the two constructs. For example, a person who has not forgiven a relationship partner may experience lower levels of cognitive interdependence, which in turn may prevent the person from forgiving future offenses. It is also plausible that, over a longer period of time, such negative spirals within a relationship may ultimately affect relationship commitment and relationship persistence. Related to this issue, the design of the present studies was not appropriate for testing possible mediational models. For example, although we theorized in the introduction that forgiveness influences cognitive interdependence above and beyond relationship commitment, it would also be possible that commitment influences forgiveness, which in turn would influence cognitive interdependence. Longitudinal research could examine such feedback loops and mediational pathways between forgiveness, cognitive interdependence, and relationship commitment.

Concluding Remarks

It seems only natural that people distance themselves from their partner after a serious offense. The present research suggests that forgiveness helps individuals to feel part of the relationship again, as indicated by a greater perceived overlap of circles representing self and partner and a greater use of plural pronoun use in descriptions of their relationship. These findings cannot be accounted for by various variables, including commitment, which has consistently been demonstrated to be a powerful determinant of the degree to which people perceive their relationship as a unit. While commitment may be important to understanding relationships as they develop over time (i.e., the macro-level aspects of relationships), forgiveness seems especially important to understanding the immediate and concrete consequences of specific social interactions (i.e., the micro-level aspects of relationships) on identity processes in relationships. As such, these micro-level aspects of relationships may well be very important to understanding how people deal with threats and challenges of relationships, how it affects their feelings and thoughts about the relationship, and eventually how people are—or are not—able to maintain healthy relationships in the long term.

Note

1. In both studies presented in this article, ratings of forgiveness were relatively high in both conditions. Therefore, we describe our results in terms of lower forgiveness versus higher forgiveness (rather than no-forgiveness versus forgiveness). Note that level of forgiveness is generally regarded as a continuum rather than an all-or-nothing phenomenon (e.g., Finkel et al., 2002).

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