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Daryl R. Van Tongeren^a, Jeni L. Burnette^b, Ernest O'Boyle^c, Everett L. Worthington Jr.^d & Donelson R. Forsyth^b

^a Department of Psychology, Hope College, Schaap Science Center, 35 E. 12th Street, Holland, MI, 49422 9000, MI, USA

^b Psychology, University of Richmond, Richmond, USA

^c Department of Management, University of Iowa, Iowa City, USA

^d Psychology, Virginia Commonwealth University, Box 842018, 806 West Franklin Street, Richmond, 23284 2018, USA

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A meta-analysis of intergroup forgiveness

Daryl R. Van Tongeren^{a*}, Jeni L. Burnette^b, Ernest O'Boyle^c, Everett L. Worthington Jr.^d and Donelson R. Forsyth^b

^aDepartment of Psychology, Hope College, Schaap Science Center, 35 E. 12th Street, Holland, MI, 49422 9000, MI, USA;

^bPsychology, University of Richmond, Richmond, USA; ^cDepartment of Management, University of Iowa, Iowa City, USA;

^dPsychology, Virginia Commonwealth University, Box 842018, 806 West Franklin Street, Richmond, 23284 2018, USA

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In the past decade, interest has flourished in the empirical study of forgiveness in the wake of intergroup conflicts. In the current paper, we sought to empirically integrate the diverse predictors of intergroup forgiveness building on a tripartite model that incorporates affective, cognitive, and constraining features. Using a random effects approach, we meta-analyzed ($N = 13,371$; $k = 43$) correlates of intergroup forgiveness across diverse conflicts (e.g. 65% intrastate, 35% interstate) and populations (20 different nationalities; 60% female). We tested the effect of nine distinct predictors and investigated study characteristics as moderators of these effects (i.e. sex of victim and conflict type). Collective guilt [$r = 0.49$] and trust [$r = 0.42$] emerged as the strongest facilitators, whereas negative emotions [$r = -0.33$] and in-group identity [$r = -0.32$] emerged as the strongest barriers to intergroup forgiveness. We discuss practical applications of these findings.

Keywords: intergroup forgiveness; meta-analysis; social identity theory; contact hypothesis

Enright and his colleagues (Enright & Coyle, 1998; Enright, Freedman, & Rique, 1998) defined forgiveness as 'a willingness to abandon one's right to resentment, negative judgment, and indifferent behavior toward one who unjustly hurt us' (Enright et al., 1998, pp. 46–47). However, in some cases, forgiveness requires psychologically abandoning resentment toward a group rather than a single individual. Intergroup conflicts – countries devastated by internal civil strife and genocide, international disputes between sovereign nations, and prolonged disputes between the members of sociodemographic classes in a single society – pit group against group rather than person against person. And, even when the hostilities abate, distrust, resentment, and antipathy between individuals and groups remain. Recently, a number of researchers, recognizing the potential value of forgiveness as one way of reducing the negative effects of such transgressions, have sought to identify the facilitators of intergroup forgiveness.

Considering the recent empirical interest and the interdisciplinary inquiry into predictors of intergroup forgiveness, it is perhaps not surprising that there has yet to be a systematic empirical integration of this literature. Although work has started to delineate the barriers and facilitators of intergroup forgiveness, research has yet to summarize the nature or strength of these effects across studies, domains, and populations. Additionally, the literature lacks theoretical integration. To summarize findings, bolster theoretical coherence and address potential

discrepancies, we employed meta-analytic procedures. Building on previous work on interpersonal forgiveness (Fehr, Gelfand, & Nag, 2010), we examined *affective*, *cognitive*, and *constraining* features of intergroup forgiveness to organize nine primary correlates of intergroup forgiveness (see Table 1). Consistent with a long line of interpersonal forgiveness literature, (McCullough, Worthington, & Rachel, 1997), we suggest that *intergroup forgiveness* is an internal transformation of motivation toward a perceived perpetrating out-group that is situated within a specific collective, political, or societal context. Before elaborating on meta-analytic findings, we first offer an overview of the intergroup forgiveness tripartite model.

Affective predictors

Affective predictors are those emotions that facilitate or inhibit forgiveness experiences. Given that forgiveness processes involve reducing unforgiveness – characterized by negative emotions and cognitions – toward an offender, the role of affective processes is substantial (Worthington, 2005). Drawing on the existing empirical base, we consider emotional expressions of the victim and the offending group that play an important role in intergroup forgiveness processes. Specifically, we include three affective predictors: empathy, negative mood, and the offending group's collective guilt.

*Corresponding author. Email: vantongeren@hope.edu

Table 1. Affective, cognitive, and constraining features of intergroup forgiveness.

Predictors	
Affective	<p><i>H</i>₁: Empathy (+)</p> <ul style="list-style-type: none"> • <i>Empathic emotions towards the perpetrator (individual member of group or group)</i> • Example item: 'Before judging the members of the Right (Left) for their past misdeeds, I always try to put myself into their shoes' (Noor et al., 2008)
	<p><i>H</i>₂: Negative emotions (–)</p> <ul style="list-style-type: none"> • <i>Negative emotions (e.g. anger, fear) toward the perpetrator (individual member of group or group)</i> • Example item: indicating on a seven-point scale how 'angry' or 'fearful' they felt (Tam et al., 2008)
	<p><i>H</i>₃: Collective guilt (+)</p> <ul style="list-style-type: none"> • <i>Reduction of harm through observing indications of collective guilt</i> • Example item: 'Today's Germans should feel guilty about the awful things their ancestors did to Jews in World War II' (Wohl & Branscombe, 2005)
Cognitive	<p><i>H</i>₄: Trust (+)</p> <ul style="list-style-type: none"> • <i>Assumes that future relations will not be exploitive</i> • Example item: 'Generally speaking, would you say that most of today's Japanese people/Germans can be trusted?' (Hanke, 2009)
	<p><i>H</i>₅: Perceived victimhood (–)</p> <ul style="list-style-type: none"> • <i>Assessment of harm inflicted</i> • Example item: 'Have you ever been injured due to a sectarian incident?' (Myers et al., 2009)
	<p><i>H</i>₆: Amends (+)</p> <ul style="list-style-type: none"> • <i>Reduction of harm through remorse, reparation, apology</i> • Example item: 'In the time since World War II, how remorseful/apologetic/repentant have the Japanese been?' (Philpot & Hornsey, 2011)
Constraints	<p><i>H</i>₇: Strong in-group identification (–)</p> <ul style="list-style-type: none"> • <i>Victim identifies strongly with in-group</i> • Example item: 'I identify with Bosniak' (Cehajic et al., 2008)
	<p><i>H</i>₈: Common, superordinate group identification (+)</p> <ul style="list-style-type: none"> • <i>Victim identifies with a larger group (e.g. Africans, humans) of which all parties involved are members</i> • Example item: Intergroup offense described as 'Humans behaving heartlessly and ignorantly toward other humans' (Greenaway et al., 2011)
	<p><i>H</i>₉: Contact (+)</p> <ul style="list-style-type: none"> • <i>Victim and victim's group have contact with the out-group</i> • Example item: 'How much contact do you have with people from the other community at home, work, or somewhere else?' (Moeschberger et al., 2005)

Note: For correlates, a (+) represents more intergroup forgiveness and a (–) represents less intergroup forgiveness.

Empathy

Individuals experience a variety of emotions following an offense. One emotional experience that may promote intergroup forgiveness is empathy. Empathy encompasses other-oriented emotions that are likely to emerge when one values the relation with the offending party. These other-oriented emotions include compassion and warmth and also may incorporate cognitive components as well (Batson, 1990; Davis, 1983). Empathy has long been considered important for fostering interpersonal forgiveness (e.g. Fehr et al., 2010; McCullough et al., 1997, 1998), and thus, we might hypothesize, intergroup forgiveness. Within an intergroup context, empathy can help to alleviate tension that arises from divergent views and experiences between conflicting groups, thereby facilitating intergroup forgiveness (e.g. Moeschberger, Dixon, Niens, & Cairns, 2005; Noor, Brown, Gonzalez, Manzi, & Lewis, 2008; Noor, Brown, & Prentice, 2008; Tam et al., 2008). Furthermore, perspective-taking – commonly understood as a feature of empathy – has been shown to be a predictor of intergroup forgiveness (Hewstone, Cairns, Voci, Hamberger, & Niens, 2006). However, within an intergroup

context, empathy may be difficult to foster, especially in conflicts involving groups with divergent perspectives. In such cases, the link between empathy and intergroup forgiveness may be weak or even non-existent. For example, in interstate conflicts, in which shared values and goals are limited, empathy may be impossible to foster or shallow at best. Additionally, in an interpersonal context, research has found that the relation between empathy and forgiveness is stronger for women than men (Toussaint & Webb, 2005). However, less is known about relations between empathy and intergroup forgiveness and whether effects are stronger or weaker in certain circumstances or for certain individuals. Thus, in the current analysis, we examine the overall direction and strength of the relation between empathy and intergroup forgiveness and examine relevant moderators.

Negative emotions

Research examining the relations between intergroup emotions and intergroup forgiveness reveals that anger is often a key barrier to intergroup forgiveness (Manzi &

Gonzales, 2007; Tam et al., 2008). This work, along with similar findings in earlier studies (see Tam et al., 2007), suggests that reducing anger is a critical first step in intergroup forgiveness after intense conflict. The importance of reducing anger in facilitating forgiveness is in line with the role of confronting anger in process models of forgiveness (Enright & Coyle, 1998) and with the strong link between anger and reduced interpersonal forgiveness (Fehr et al., 2010). Within an intergroup context, in addition to anger, fear is also a common emotion in members of groups who are oppressed by other groups (Staub & Perlman, 2009). Along these lines, a victimized or oppressed group is likely to feel psychological pain from a trauma. Survivors of mass violence feel disillusioned, insecure, and fearful (Staub & Perlman, 2009). They often suffer from post-traumatic stress disorder (PTSD) and the psychological consequences of PTSD are related to intergroup forgiveness (Pham, Weinstein, & Longman, 2004; Staub & Pearlman, 2006). For example, fear can inhibit trust, empathy, and benevolent attributions, and trauma symptoms can contribute to angry and fearful rumination, which serves as a barrier to intergroup forgiveness. This research highlights how negative emotions may indirectly predict forgiveness but less is known about the strength of direct relations. Although fear, anger, and other hostile emotions likely hinder intergroup forgiveness, some research suggests that negative emotions may facilitate forgiveness. For example, research has found that fear predicts greater forgiveness (Tam et al., 2007). Thus, considering potential ambiguities in the literature, we investigate the overall size of the direct effect of negative emotions on intergroup forgiveness.

Collective guilt

On a group level, a perpetrating group may convey a set of emotions to the victim or victimized group. The primary collective affective component that has been empirically explored within an intergroup forgiveness context is guilt. Collective guilt may signal acknowledgement by the offending group of harm done and may implicitly imply that harm may not be repeated. Brown and Čehajić (2008) suggest that collective guilt arises, when members of a group feel responsibility for misdeeds committed by other in-group members and that such guilt can facilitate reparation. In contrast, a lack of remorse (Morton & Postmes, 2011) and a justification for the offending group's actions (Noor et al., 2008) are barriers to intergroup forgiveness. Additional work suggests that collective guilt is related to the degree of harm done, responsibility for that harm, the perceived immorality or illegitimacy of the in-groups' actions, and the perceived benefits and costs of achieving a more honorable relationship with the out-group (Branscombe &

Doojse, 2004). Initial research finds that the more collective guilt that is detected, the greater the intergroup forgiveness that is experienced (e.g. Manzi & Gonzales, 2007; Myers, Hewstone, & Cairns, 2009). However, other work suggests that intergroup forgiveness requires *both* sides to make concessions (Kadiangandu & Mullet, 2007). Furthermore, less is known about the direct link between collective guilt and intergroup forgiveness, as it is primarily hypothesized to work through amends and reparation. In the current analysis, we examine the strength of the direct relation between collective guilt and intergroup forgiveness.

Cognitive predictors

Next, we consider the cognitive features related to intergroup forgiveness processes. Specifically, as victims make sense of the offense, attribute blame, and assess their relationship to the offending group moving forward, a number of cognitive processes may influence forgiveness decisions. We examine the role of victim trust, perceived victimhood, and the amends made by the offending group in predicting or inhibiting intergroup forgiveness.

Trust

Considering the interdisciplinary nature of trust, it is has been defined in many ways (Simpson, 2007). However, common themes emerge including (a) positive biases in processing of information (e.g. Kollack, 1994) and (b) confidence that the offending party will behave in benevolent manner in future interactions (Rempel, Ross, & Holmes, 2001). Distinct from simply having a more positive attitude toward an offender, trusting an offender often involves more risk as it assumes that future relations will not be exploitive. The extent to which the in-group trusts the out-group to uphold its agreement to positive intergroup relations should predict greater intergroup forgiveness. Indeed, previous research has demonstrated that trust facilitates intergroup forgiveness (e.g. Hewstone et al., 2006; Noor et al., 2008; Noor et al., 2008). The idea that forgiveness is more difficult to attain, when individuals do not trust the perpetrating group is consistent with interpersonal theoretical perspectives (Fehr et al., 2010) and evolutionary driven approaches to forgiveness (McCullough, 2008). However, trust after intense intergroup conflicts may only emerge after forgiveness has been reached and negative emotions have been overcome. Imposing forgiveness when there might be a lack of trust often impairs intergroup forgiveness (Tam et al., 2008). Thus, trust might be a precursor to forgiveness or it might be a potential benefit of forgiveness. Although the current meta-analysis cannot answer the question of causality, we do

explore the overall strength of the direct relation between trust and intergroup forgiveness.

Perceived victimhood

Competitive victimhood refers to claims that one's in-group has endured more unjust suffering than the out-group (Nadler & Saguy, 2003). Greater perceptions of victimhood have predicted reduced intergroup forgiveness across multi-cultural samples (see Nooret al., 2008, for a review; Noor et al., 2008). Additionally, such perceptions exacerbate evaluations related to future risk of exploitation, thereby reducing trust. The more unjust the offense appears to be, the less likely one is to feel that future interactions with the perpetrator will be safe, which likely impedes intergroup forgiveness. Although research generally supports the link between perceived victimhood and intergroup forgiveness, the current analysis examines the overall strength of this relation and also explores potential moderators. For example, considering the different nature of offenses that women and men endure during intergroup conflicts (MacKinnon, 2005), it seems plausible that the link between perceived victimhood and intergroup forgiveness could be moderated by sex.

Amends

Apologies, amends, and reparations can serve to acknowledge the harm, admit responsibility for that harm, and suggest – even if implicitly – that this harm will not be done in the future. Such actions can help to facilitate trust and intergroup forgiveness. However, some research suggests that although apologies promote perceptions of out-group members as remorseful, they may fail to facilitate intergroup forgiveness (Philpot & Hornsey, 2008). In another study, apologies offered to survivors by perpetrators in South Africa facilitated forgiveness more than excuses and justifications, but these effects were meager (Byrne, 2004). In extreme intergroup conflict, apologies may come across as insincere or politically-driven, making them less effective. Although some work has supported the link between amends and intergroup forgiveness, other work finds null or weak relations. To examine these potential ambiguities in the literature, we explore the strength of the relation between amends and intergroup forgiveness.

Constraining predictors

In addition to the affective and cognitive dimensions of intergroup forgiveness, there are features of the forgiveness process that are contextually based. For example, the perceived identity of the victim – which is largely based on cultural influences arising from a combination

of social norms and geopolitical forces – may play a vital role in determining how much one forgives the offending out-group. Moreover, the degree of contact one has with the offending group may have an effect on intergroup forgiveness. Thus, we examine how group identity (both the effect of having a strong in-group identity and sharing a common, superordinate identity with the offending group) and contact with the perpetrating group affect intergroup forgiveness.

In-group and common (superordinate) group identity

In interpersonal contexts, evolutionary theorizing finds support for the important role of the value one places on a relationship in predicting greater forgiveness (e.g. Burnette, McCullough, Van Tongeren, & Davis, 2012). However, what determines whether one values another group? Value can be increased by interdependency, commitment to the relationship, and shared goals. Building on social identity theory (e.g. Tajfel & Turner, 1986; Turner, Brown, & Tajfel, 1979), group identification is a key component related to interdependency and shared goals among groups. Two cognitive processes – categorization and identification – combine to transform a group membership into an identity (e.g. Hogg, 2004). *Categorization* occurs when individuals classify people on the basis of their membership in various groupings. The most critical of classifications is 'in my group' (i.e. in-group) and 'not in my group' (i.e. out-group). *Identification* occurs when individuals take on the qualities and characteristics of the group to which they belong. As Hogg (2004) explains, 'group membership is a matter of collective self-construal – we, us, and them' (p. 136).

Strong in-group identification corresponds with decreases in tolerance towards the out-group. For example, Black South Africans' negative attitudes toward an out-group (Afrikaans Whites) were exacerbated by the strength of their in-group identification (Duckitt & Mphuthing, 1998). Britons' attitudes toward the French were negatively correlated with the strength of their British identities (Brown Maras, Masser, Vivian, & Hewstone, 2001). In contrast, contextual factors that reduce identification with the in-group can increase identification with the out-group, thereby fostering more positive intergroup interactions and relations. The common in-group identity model (Gaertner et al., 1999) suggests that if group members shift away from defining people in terms of two separate groups and instead favor one common superordinate in-group category, then such a recategorization can undo the conflict-exacerbating cognitive factors that are rooted in the in-group-out-group bias (e.g. Sherif & Sherif, 1953).

In summary, intergroup conflict often arises out of divergent identities and conflicting identity-based aspirations. Such in-group identification may foster loyalty

towards members of one's own group who have suffered, devaluing the relation with the out-group (e.g. Noor et al., 2008). Thus, conflicting goals and allegiances that emerge based on strong distinct in-group identification can hinder the intergroup forgiveness process. In contrast, superordinate goals and common in-group identity can reduce out-group homogeneity bias, make individuals within the group more salient and, in turn, facilitate intergroup forgiveness (Cehajic, Brown, & Castano, 2008; Noor et al., 2008a; Noor, Brown, Taggart, Fernandez, & Coen, 2010). For example, identifying the offenders as human (a more inclusive group) helped Jewish individuals forgive Germans (Karremans, Van Lange, & Holland, 2005). Although there is strong theoretical support for examining in-group identity and superordinate identities, less is known about the empirical support and the strength of these relations with intergroup forgiveness. Thus, in the current work, we empirically investigate the strength of the direct relation between strong in-group identity and intergroup forgiveness and a strong common superordinate identity and intergroup forgiveness.

Contact

Contextual variables related to the interactions between the victimized and perpetrating group can also affect intergroup forgiveness. For example, the contact hypothesis predicts that members of different groups can become more positive towards one another, or at least less negative, merely through increased contact with each other. This hypothesis, which forms the basis of a number of programs designed to reduce prejudice, discrimination, and intergroup hostility, has been supported in studies that consistently find evidence of the palliative effects of contact. Pettigrew and Tropp (2006), in a meta-analysis of the contact hypothesis in a variety of intergroup conflicts, reported that contact between group members reduced prejudice in 94% of these studies, and that the correlation between contact and conflict was -0.21 .

Findings also support a link between contact and forgiveness. For example, research examining the contribution of integrated schools in Northern Ireland found that social contact facilitated both forgiveness and reconciliation (McGlyn, Niens, Cairns, & Hewstone, 2004). Similarly, researchers found a positive relation between contact and intergroup forgiveness among individuals in Bosnia and Herzegovina (Cehajic et al., 2008). However, whether contact results in subsequent intergroup forgiveness is not a foregone conclusion. For example, researchers report an interaction between religious identity and the contact hypothesis (Cairns, Hewstone, Niens, & Tam, 2005). More specifically, people who have strong group identification (e.g. high religious identity) perceive what

they expect during periods of contact with the other group – and what they expect is a difference – which results in conflict. People who are not as committed to defining the groups by distinctions tend to see beyond differences during contact with the other group, thereby helping to increase intergroup forgiveness. In the current analysis, we examine the strength of the direct relation between contact and intergroup forgiveness.

Scope of the review

The purpose of this meta-analytic review is to identify barriers and facilitators of intergroup forgiveness by examining affective, cognitive, and constraining features, as modeled after a recent meta-analysis in interpersonal forgiveness (Fehr et al., 2010). Thus, the current research excludes interpersonal forgiveness (between two individuals; for a review see Fehr et al., 2010), third-party forgiveness (i.e. forgiveness of an offender by a third-party observer; Green, Burnette, & Davis, 2008), self-forgiveness (Hall & Fincham, 2008; Tangney, Boone, & Dearing, 2005), and trait forgivingness (Berry, Worthington, Parrott, O'Connor, & Wade, 2001).

We have summarized nine discrete links that have arisen from our theoretical analysis in Table 1 (also, see Table 1 for example items for each predictor.) Before presenting the findings, three key stipulations should be noted. First, the list of correlates presented in Table 1 is not all-inclusive. For example, other constructs (e.g. intergroup emotions; Tam et al., 2007) are linked to intergroup forgiveness. However, our meta-analysis is limited by original data from which population estimates can be calculated (Hunter & Schmidt, 1990). Thus, we excluded additional constructs that may merit theoretical attention but lacked sufficient data for meta-analytic population estimations and/or did not relate to the organizing framework. For example, we dropped some predictors of intergroup forgiveness (e.g. attributions, pride, and respect) because there were too few studies reporting such effects. Second, we note that the meta-analytic data yielded only main effects among correlates. That is, we were unable to examine mediated effects among included correlates, even though such process models are highly likely to exist. For example, it seems possible that collective guilt, intergroup trust, and amends are linked to forgiveness via perceptions of victimhood. Empirical studies have begun to examine overall process models of intergroup forgiveness (e.g. Tam et al., 2007). However, this work is in its infancy and thus we could not obtain adequate effect sizes among constructs. Third, we note that although we tested three features (i.e. affective, cognitive, and constraining) that included nine distinct variables, such mutually exclusive categories of constructs are not always the case. Rather, some constructs are likely to be multi-factorial in terms of both

conceptualizations of classification and the processes by which they link to intergroup forgiveness.

Intergroup forgiveness was measured in various ways depending on the particular study context. For example, sample intergroup forgiveness items included 'It is important that my community never forgives the wrongs done to us by the other community [reverse-coded]' (Moeschberger et al., 2005) and 'Germans today should be forgiven for what their group did to Jews during World War II' (Wohl & Branscombe, 2005). A review of the intergroup forgiveness items indicated that these measures reflect substantial similarity, including type of responses. The intergroup forgiveness measure for each study is also listed in the Appendix.

Moderators

Due to the infancy of the intergroup forgiveness literature, we were limited to methodological moderators of intergroup forgiveness that could be coded based on existing data. Specifically, we focused on two theoretically relevant constructs; type of conflict (i.e. intrastate vs. interstate) and sex (i.e. percentage of females). We focus on differences between intrastate and interstate transgressions, because it seems plausible that the affective, cognitive, and constraining features of intergroup forgiveness differ based on the type of conflict. For example, although geographic distance found in interstate, relative to intrastate conflicts, may help reduce opportunities for future exploitation, it also means there is less opportunity to pool resources together and find shared value (e.g. same economic climate that could benefit from groups working together). For instance, trust may be especially important after intrastate relative to interstate conflicts as groups need to work together to achieve common goals. In addition, in intrastate conflicts, negative emotions could serve as a particularly strong barrier as victims interact with the perpetrators on a more regular basis, which could more consistently ignite the rage and fear. Thus, we examine if interstate vs. intrastate conflicts moderate effects. An example of an interstate conflict is whether individuals from Australia, Malaysia, and the Philippines extended intergroup forgiveness toward Japanese individuals in light of the transgressions of World War II (Philpot & Hornsey, 2011). An example of an intrastate conflict is the ongoing conflict in Northern Ireland (e.g. Tam et al., 2007, 2008)

Furthermore, we suggest that in considering correlates of intergroup forgiveness, researchers need to avoid assumptions of homogeneity of experiences (Honeyman et al., 2004). Specifically, we focus on research that has recognized the importance of examining the varying traumatic events that women and men face during war and in its aftermath (e.g. MacKinnon, 2005) and the

potential such differences may have on strengthening or weakening relations among constructs. Although some meta-analytic research on interpersonal forgiveness has shown that there are distinct differences by sex (Miller, Worthington, & McDaniel, 2008), other larger meta-analytic studies suggest that such distinctions are rather weak (Fehr et al., 2010). However, both of these meta-analyses examined interpersonal forgiveness. In the current work, we examine participant sex as moderator of relations among predictors of intergroup forgiveness.

Method

Procedure

We conducted an initial search using the following electronic databases: ABI Inform, Dissertation Abstracts International, ERIC, Google Scholar, and PsycInfo. Search terms included various combinations of *intergroup forgiveness*, *intergroup*, *forgive*, *forgiveness*, and *revenge*. Searches returned 281 hits, each of which the authors examined to see if the article met required inclusion criteria elaborated upon below. We also conducted a legacy search on retained articles (i.e. 'back tracking' an article by its references, to identify potentially useful articles). Additionally, to obtain unpublished and in-press articles, we posted messages to listservs to solicit relevant unpublished and in-press articles (e.g. the Society for Personality and Social Psychology: Forgiveness list serve). Data collection ended on 31 December 2012. We did not include any articles published after this date, unless obtained through calls for unpublished manuscripts.

These 281 citations were further analyzed for inclusion in this quantitative synthesis to examine whether the following five inclusion criteria were met. First, although we had no stipulations on age of participants or nationality of sample, only studies that were written in English or had been translated to English were retained. Second, articles needed to include quantitative measures and sufficient information (or we had to be able to obtain it from the authors) to compute a bivariate relationship (e.g. *d*, *r*, group means). Third, a quantifiable measure of intergroup forgiveness and a quantifiable predictor that could be conceptualized within the proposed theoretical framework had to be included. Fourth, we required that each effect size needed to reflect a unique sample. That is, an article that used multiple measures on a single sample could only be entered into the database once. When authors reported multiple relevant outcomes, we averaged the correlates to obtain the effect size, a practice consistent with the guidelines provided by Hunter and Schmidt (2004), and corrected the variance of the averaged effect size using equations put forth by Borenstein, Hedges, Higgins, and Rothstein (2009). In the case, where a study used multiple samples, each

sample could be included as a separate entry as long as it met the other inclusion criteria. In instances where the data were reported in multiple outlets (e.g. dissertation, publication), we used two systems: If results were identical, we used the most detailed source; if results differed, we went with the most recent publication. Fifth, although meta-analysis, in the narrowest of interpretations, only requires two bivariate effects, a k of three is typically cited as the minimum number from which population estimates should be computed (e.g. Bhaskar-Shrinivas, Harrison, Shaffer, & Luk, 2005), as the precision of such estimates increases as the meta-analysis sample size increases (Hunter & Schmidt, 1990). Thus, we excluded studies with fewer than three samples that examined particular bivariate relations. For example, we had to exclude studies examining the relation between social distance and intergroup forgiveness (e.g. Wohl & Branscombe, 2005) as only one or two studies had included such relations. Once we decided on which articles to include, we then organized findings based on their relevance to our tripartite model (see Table 1). Final analyses included 28 publications with a total of 43 independent participant samples ($N = 13,371$) and 102 effects across populations (20 different countries; 60% female). Of the 43 studies, 28 examined intrastate conflicts (65%) and 15 examined interstate conflicts (35%). The research contributing data to the analyses included published (83%) and unpublished studies (17%).

Meta-analytic procedure

Techniques

We drew from both Hunter and Schmidt (2004) and Hedges and Olkin (1985) for random-effects meta-analyses. The combination of techniques allows for both

psychometric corrections and the testing of continuous moderators through meta-regression. All analyses were conducted in Comprehensive Meta-Analysis 2.0 (Borenstein, Hedges, Higgins, & Rothstein, 2005). We also applied random-effects techniques set forth by Hedges and Olkin (1985) to the overall analyses, meta-regressions, tests of moderation, and publication bias analyses.

Statistical test of moderators

Our indicator of potential moderation, the I -squared statistic (Higgins, Thompson, Deeks, & Altman, 2003), is the ratio of true heterogeneity to total variation in observed effect sizes. The I -squared statistic ranges from 0 to 1 (i.e. 0–100% as displayed in Table 2), with higher values indicating greater heterogeneity of effect sizes and increased likelihood of moderators. We used I -squared rather than the Q -statistic or tau-squared because the I -squared is less affected by the scaling of the measures or the number of included studies (Bornstein et al., 2009). An I -squared value greater than 0.25 (i.e. 25%) indicates that a search for moderator is justified (Higgins et al., 2003). When potential moderation was detected, we tested our continuous moderator (percentage of women) with meta-analytic regression maximum likelihood techniques, which avoids many of the limitations related to artificial dichotomization of continuous variables (Steel & Kammeyer-Mueller, 2002), and we tested our categorical moderator (transgression type) with a between group difference test.

Results

All studies included in the meta-analyses are noted in the Appendix. We report each specific predictor with the

Table 2. Predicting intergroup forgiveness from the nine theoretically derived predictors.

Relation	k	n	r	95% CI	I^2	Transgression type (Q)	Inter/Intra	Sex/% women (B)
<i>Affective</i>								
Empathy	13	3190	0.37	0.30; .44	76.9	4.55*	0.55; 0.31	-0.13
Negative emotions	9	3062	-0.33	-0.19; -0.45	92.5	19.60***	-0.52; -0.29	0.24
Collective guilt	3	2489	0.49	0.21; 0.69	98.4	0.00	0.50; 0.49	n/a
<i>Cognitive</i>								
Trust	11	5872	0.42	0.33; 0.51	93.1	3.19†	0.55; 0.38	0.46
Perceived victimhood	16	8480	-0.28	-0.21; -0.35	89.8	35.89***	-0.45; -0.23	0.05
Amends	11	2105	0.39	0.28; 0.49	85.5	0.01	0.40; 0.38	0.65†
<i>Constraints</i>								
In-group identity	20	7254	-0.32	-0.24; -0.40	91.9	0.35	-0.28; -0.32	-0.04
Common identity	14	2830	0.29	0.25; 0.32	0.0	–	–	–
Contact	5	2067	0.31	0.26; .35	33.4	–	–	0.95*

† $p < 0.10$, * $p < 0.05$, *** $p < 0.001$.

Note: k = number of studies; n = sample size; r = observed effect size; 95% CI = 95 percent confidence interval of r ; I^2 = test of heterogeneity. Only two of the studies reporting collective guilt reported % women, which is below the threshold of three necessary to test for moderation. Studies examining contact only examined intrastate offenses.

Table 3. Publication bias tests.

Analysis Relation	<i>k</i>	Comparison between published and overall		Trim and fill results		Fail safe <i>N</i> Necessary studies
		<i>r</i> _{overall}	<i>r</i> _{published}	<i>k</i> _i	<i>r</i> _{corrected}	
<i>Affect</i>						
Empathy	13(2)	0.37	0.36	2	0.33	1315
Negative emotions	9(2)	-0.33	-0.27***	0	-0.33	691
Collective guilt	3(1)	0.49	0.49	0	0.49	553
<i>Cognitive</i>						
Trust	11(2)	0.42	0.44	3	0.35	2294
Perceived victimhood	16(2)	0.28	0.28	3	0.25	2079
Amends	11(1)	0.39	0.32	5	0.24	701
<i>Constraints</i>						
In-group identity	20(4)	0.32	0.45	7	0.21	2526
Common identity	14(1)	0.29	0.29	1	0.28	746
Contact	5(0)	0.31	0.31	1	0.30	256

Notes: *** $p < 0.001$ *k*: number of studies included in analysis (numbers of unpublished studies in parentheses), *r*_{overall}: observed correlation of all studies, *r*_{published}: correlation for just the published studies, *k*_i: studies imputed, *r*_{corrected}: effect after trim and fill correction, Fail safe *N*: number of necessary studies to 'null' or make observed effect not significant.

expected direction of effect reported (e.g. victimhood is negative). We also present the moderating effects of transgression type (i.e. intrastate vs. interstate) and sex (percentage of females) for all nine predictors (see Table 2). We conclude with the results of the publication bias analyses (see Table 3).

Affective predictors

Results supported a strong positive relation between empathy and intergroup forgiveness ($r = 0.37$, $p < 0.001$), a strong negative relation between negative emotions and intergroup forgiveness ($r = -0.33$, $p < 0.001$), and a strong positive relation between collective guilt and intergroup forgiveness ($r = 0.49$, $p < 0.001$). All of the links between the affective predictors and intergroup forgiveness are considered moderate to large according to standard guidelines (Cohen, 1988).

Moderators

The *I*-squared statistic indicates moderation. Because meta-regression tests yield unstandardized coefficients, values across tests are not comparable. Thus, we focus on whether the effects are strengthened or weakened by the moderator. The percentage of women in the sample did not moderate the relation between intergroup forgiveness and any of the affective components. However, transgression type did significantly moderate ($ps < 0.05$) the relation between affective components and intergroup forgiveness. Specifically, interstate transgressions showed stronger relations than intrastate transgressions for empathy (0.55 versus 0.31) and negative emotions (-0.52 vs. -0.29).

Cognitive predictors

Results supported a positive relation between trust and intergroup forgiveness ($r = 0.42$, $p < 0.001$), a negative relation between perceived victimhood and intergroup forgiveness ($r = -0.28$, $p < 0.001$), and a positive relation between amends and intergroup forgiveness, ($r = 0.39$, $p < 0.001$). These effects of cognitive predictors are considered moderate to large according to standard guidelines (Cohen, 1988).

Moderators

The percentage of women in the sample did not moderate the relation between intergroup forgiveness and any of the cognitive features, though evidence suggested a marginal moderation effect of percentage of women on amends ($p < 0.10$). Transgression type significantly moderated ($p < 0.05$) the effect of perceived victimhood on intergroup forgiveness. Specifically, interstate transgressions (-0.45) showed stronger relations for perceived victimhood than intrastate transgressions (-0.23).

Constraining predictors

Results supported a negative relation between a distinct in-group identification and intergroup forgiveness ($r = -0.32$, $p < 0.001$), a positive relation between a common in-group identification and intergroup forgiveness ($r = 0.29$, $p < 0.001$), and a positive relation between contact and intergroup forgiveness, ($r = 0.31$, $p < 0.001$). These effects of constraining predictors are considered moderate to large according to standard guidelines (Cohen, 1988).

Moderators

When examining the moderating effect of sex, one significant interaction emerged: The effect of contact was stronger as the percentage of women increased ($B = 0.95, p < 0.05$). Sex did not moderate the relation between intergroup forgiveness and distinct in-group identity. The sample was too small to test sex as a moderator for common group identity.

Publication bias

To address publication bias concerns, we conducted the additional analyses shown in Table 3. Small differences in corrected values, limited number of imputed studies, and large Fail Safe N values were consistent with the inference that publication bias based on these statistical tools was not a concern across most analyses. Nonetheless, concerns related to ‘the aversion of the null’ could still impact findings (see Ferguson & Heene, 2013).

Discussion

Across disciplines, recent trends indicate a sustained interest in the predictors of intergroup forgiveness. This expanding focus can benefit from an overarching theoretical framework that organizes the correlates of intergroup forgiveness. Thus, in the present meta-analysis, we provided an empirical review of diverse literatures by organizing findings using a tripartite model of intergroup forgiveness that draws heavily on a recent meta-analysis of predictors of interpersonal forgiveness (Fehr et al., 2010).

Summary of findings

Consistent with the interpersonal literature on affective features of forgiveness, intergroup forgiveness is fostered when individuals exhibit more positive other-oriented emotions as opposed to anger and fear. Specifically, empathy is positively associated with intergroup forgiveness, whereas negative emotions are a barrier to intergroup forgiveness. Moreover, collective guilt from the offenders (or offending group) facilitates intergroup forgiveness. These findings are consonant with a recent review of interpersonal forgiveness (Fehr et al., 2010) and underscore the role of replacing negative emotions with positive ones in forgiveness processes (see Worthington, 2005).

Exploring cognitive predictors, intergroup forgiveness is fostered, when individuals interpret the offending groups as being trustworthy and seeking to repair the relationship. Specifically, trust is positively associated with intergroup forgiveness, as are amends (e.g. apologies) from the offending group. However, perceived

victimhood is a barrier to forgiveness and likely signals risk of future exploitation (e.g. McCullough, 2008). Forgiveness is cultivated when victims feel valued and safe from additional harm (Burnette et al., 2012).

Finally, in considering constraining features, whereas identifying strongly with one’s in-group was negatively related to offering intergroup forgiveness, identifying strongly with a larger, superordinate group that includes members of the out-group (e.g. Africans, humans) was positively related to intergroup forgiveness. These findings are in harmony with prior research on social identity theory (Tajfel & Turner, 1986; Turner et al., 1979) and underscore the importance of building superordinate groups or common goals in attempts to reduce conflict and increase shared identities (e.g. Sherif, 1966). Additionally, contact was also found to be positively associated with intergroup forgiveness: greater contact with the out-group predicted greater intergroup forgiveness. These findings are consistent with previous theory and research on the importance of encouraging contact in reducing intergroup conflict (Pettigrew & Tropp, 2006).

Type of conflict (intrastate vs. interstate) moderated three of the links, and percentage of women moderated one of the nine links. Two of the affective features and one of the cognitive features were stronger in interstate relative to intrastate conflicts. Specifically, the positive link between empathy and intergroup forgiveness and the negative link between negative emotions and intergroup forgiveness were stronger in interstate than intrastate conflicts. And, the negative link between victimhood and intergroup forgiveness was stronger in interstate relative to intrastate conflicts. Some of these effects are contrary to what might have been expected. For example, it seems easier to foster empathy in the wake of intrastate conflict when common goals and shared values are more accessible, thereby making the link between empathy and intergroup forgiveness stronger in such circumstances, rather than weaker. However, some of the intrastate conflicts examined in the current work sought to explore intergroup forgiveness of acts committed long ago, thereby potentially impacting the degree to which empathy plays a role in the forgiveness process. Finally, the positive link between contact and intergroup forgiveness was stronger as the percentage of women increased. It seems plausible that females are more open to interactions with out-group members, making contact more effective. Overall, although these interaction effects are notable, they are subject to several potential explanations. Thus, we caution the reader to view these moderating effects as preliminary and are reluctant to draw firm conclusions about them, especially given that these moderators did not substantively alter any of our key conclusions regarding predictors and barriers of intergroup forgiveness.

Practical applications

The present investigation has important potential practical value. News headlines regularly document widespread violence between groups unfolding across the world. In the wake of large-scale offenses, such as mass killings, terrorist attacks, or war, intergroup forgiveness may be a means for rebuilding the lives of the survivors, repairing the relationships between individuals and groups, and recalibrating future interactions built on trust and cooperation (Staub, 2006; Staub, Pearlman, Gubin, & Hagengimana, 2005). The present research identified primary facilitators and barriers of intergroup forgiveness. We hasten to clarify that integrating these findings into interventions promoting intergroup forgiveness will be difficult to achieve. Violence may persist; victims may struggle with feelings of anger and fear and the members of the offending groups are likely to resist admitting guilt; groups may not see commonalities among one another and may not want to relinquish their own strong in-group identity; and groups may be wary of contact with one another, especially if the potential for future exploitation is not eliminated. Indeed, the present research suggests that fostering trust and empathy are especially important factors. Changing the cognitive and emotional experiences will be critical steps in the difficult journey toward intergroup forgiveness.

Summary and conclusions

Although the current meta-analysis offers notable contributions to the literature, before putting these findings into practice, some limitations are worth noting. We discuss a series of potential limitations (many of which apply to most meta-analyses) that scholars should consider when interpreting the meta-analytic findings, each of which can serve as a springboard for future research. First, the extant literature did not allow us to address unique and overall effects. For example, we could not assess the magnitude of the direct association of trust with intergroup forgiveness beyond the direct association of amends with intergroup forgiveness.

Second, we could not test an overall process model. It is likely, however, that the direct relations examined in the current work operate through mediation and moderation as researchers have suggested (e.g. Cehajic et al., 2008). However, work on these types of models is still in its infancy. The current analysis offers an important first integrated look at the facilitators and barriers of intergroup forgiveness and identifies nuances and subtleties that clarify the circumstances under which effects are larger versus smaller. Meta-analyses – even that examine bivariate correlations – are important to summarize past research and integrate previously disparate studies into a more theoretically rich and integrated perspective. They provide a useful metric of the (a)

direction and (b) strength of effects. We believe these are important to establish, across diverse studies and methodologies, before moving forward to process models. Such findings can contribute to the development of more sophisticated process models and can help practitioners target their intervention efforts.

Third, some of the effect sizes for links between predictors and intergroup forgiveness, as well as analyses examining moderators, were based on small sample sizes (and many of the samples were from Western societies), and such samples tend to bias the effect size upward (Reynolds & Day, 1984). Thus, future inquiry should continue to examine facilitators and barriers outlined in the current analysis, examining under what conditions such predictors are especially relevant.

Fourth, a potential limitation of meta-analyses that combine assessments despite uniformity is such decisions could lead to between-study heterogeneity and biased findings (Puhan, Soesilo, Guyatt, & Shünemann, 2006). Thus, an imperative step for future research on intergroup forgiveness is the development of a standardized measure.

Despite the potential limitations related to interpreting effects from the current meta-analysis, the present article also possesses considerable strengths. It represents the first empirical integration of the literature examining affective, cognitive, and constraining predictors of intergroup forgiveness, which is a timely contribution in light of the recent surge in research on this topic and the widespread impact of this research. Additionally, the meta-analysis included correlates of intergroup forgiveness across studies using diverse methods (e.g. cross-sectional and experimental) and populations (e.g. 20 different countries). In summary, the current meta-analysis can allow us to see where we have been, what we have found, and where future research efforts can best be applied in the study of intergroup forgiveness.

Considering the atrocities against humanity in intergroup conflict, the barriers to intergroup forgiveness and the challenges researchers will face in studying these processes, future work will take time and persistence. Respected and powerful objective third parties will ultimately play a crucial role in facilitating intergroup forgiveness and preventing unnecessary delay or derailment of these processes. These entities must consider not only the psychological underpinnings of intergroup forgiveness, but also broader theoretical perspectives and multi-level interventions. To facilitate these considerations, we have offered a theoretical and empirical overview of the correlates of intergroup forgiveness. Although this meta-analysis gives us a first empirical look at the barriers and facilitators of intergroup forgiveness, considerably more work is needed by scholars and practitioners alike. We hope that this initial synthesis of existing findings can

foster additional empirical research that will contribute to a better understanding of intergroup forgiveness and ultimately genuine transformations in societies recovering from intense conflicts.

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Appendix 1.

List of studies included in meta-analysis. Unique $k = 43$, and unique $N = 13,371$. These 43 studies (28 citations) contributed 102 total effect sizes.

Citation	Year	Published?	Study	Country of sample	Sample size	Forgiveness measure
Bakke, O'Loughlin, and Ward, (2009)	2009	Yes	1	Russia	2000	Single item intergroup forgiveness measure
Bono (2003)	2003	No	1	USA	133	Blaming inclinations (from the TRIM; McCullough et al., 1998)
			2	USA, Italy	389	
Cairns and Mallet (2003)	2003	Yes	1	Northern Ireland	1000	Four-item intergroup forgiveness measure
*Cehajic et al. (2008)	2008	Yes	1	Bosnia	188	Four-item intergroup forgiveness measure (adapted from Zagefka & Brown, 2002)
Ergüner-Tekinalp (2007)	2007	No	1	USA	147	Two single-item measures of intergroup forgiveness
Field and Chhim (2008)	2008	Yes	1	Cambodia	130	Five-item TRIM-Revenge (McCullough et al., 1998)
Greenaway, Quinn, and Louis (2011)	2011	Yes	1	Australian	109	Four-item measure of forgiveness of perpetrators (adapted from Wohl & Branscombe, 2005)
Hall and Kostić (2008)	2008	No	1	Bosnia-Herzegovina, Croatia, and Serbia immigrants living in Sweden	239	10 indicators of intergroup reconciliation (adapted from Kostić, 2007)
Hanke (2009)	2009	No	3a	Philippines, China, Taiwan, France, Russia, and Poland	1197	Three-item intergroup forgiveness measure (adapted from Moeschberger et al., 2005)
*Hewstone et al. (2006)	2006	Yes	1a	Northern Ireland	310	Six-item measure of attitudes toward mixing with the outgroup
			1b	Northern Ireland	422	
			2a	Northern Ireland	391	
			2b	Northern Ireland	647	
Kira et al. (2009)	2009	Yes	1	Iraq	501	10-item intergroup unforgiveness measure (adapted from Mullet, Houdbine, Laumonier, & Girard, 1998)
Leach, Baker, and Zeigler-Hill (2011)	2011	Yes	1	USA	169	Eight-item intergroup forgiveness measure (Adapted from Moeschberger et al., 2005)
Leonard, Mackie, and Smith (2011)	2010	Yes	1	USA	60	Three-item intergroup forgiveness measure (adapted from Zechmeister, Garcia, Romero, & Vas, 2004)
*Manzi and González (2007)	2007	Yes	1	Chile	615	Two-item intergroup forgiveness measure
McLernon et al. (2002)	2004	Yes	1	Northern Ireland	340	60-item Group Enright Forgiveness Inventory (Subkoviak et al., 1995)
*Moeschberger et al. (2005)	2005	Yes	1	Northern Ireland	297	Eight-item intergroup forgiveness measure (based on McLernon, Cairns, & Hewstone, 2002)
*Myers et al. (2009)	2009	Yes	1	Northern Ireland	677	Four-item intergroup forgiveness measure (based on McLernon et al., 2002)
*Noor et al. (2008)	2008	Yes	1	Chile	480	Four-item intergroup forgiveness measure
			2	Northern Ireland	309	Six-item intergroup forgiveness measure
*Nooret al. (2008a)	2008	Yes	1	Northern Ireland	318	Six-item intergroup forgiveness measure
*Philpot and Hornsey (2008)	2008	Yes	1	Australia	60	Adapted 30-item Enright Forgiveness Inventory (Enright, Rque, & Coyle, 2000)
			3	Australia	214	
	2011	Yes	1	Australia, Philippines, Malaysia	348	Adapted 30-item Enright Forgiveness Inventory (Enright, Rque, & Coyle, 2000)

(Continued)

Appendix 1. (Continued).

Citation	Year	Published?	Study	Country of sample	Sample size	Forgiveness measure
*Philpot and Hornsey (2011)			2	Australia	87	Three-item intergroup forgiveness measure
*Staub et al. (2005)	2005	Yes	1	Rwanda	194	21-item readiness to reconcile/willingness to forgive measure
Strelan and Lawani (2010)	2010	Yes	1	Australian, USA	206	Five-item intergroup forgiveness measure (adapted from Bilewicz, 2007 and Sahdra & Ross, 2007); 15-item reconciliation measure (Noor et al., 2008)
*Tam et al. (2007)	2007	Yes	1	Northern Ireland	97	Four-item intergroup forgiveness measure (adapted from Hewstone et al., 2004, 2006)
*Tam et al. (2008)	2008	Yes	1	Northern Ireland	97	Intergroup forgiveness measure (# of items not provided; referred to Hewstone et al., 2004, 2006)
*Wohl and Branscombe (2005)	2005	Yes	1	Jewish	47	Four-item willingness to offer intergroup forgiveness
			2	Jewish	47	
			3	Canada	38	
			4	Jewish	56	
Wohl, Hornsey, and Bennett (2011)	2011	Yes	1	Canada	84	Four-item intergroup forgiveness measure
			2a	Canada	47	
			2b	Canada	52	
			3	Canada	143	
			4	Canada	332	
Zagefka, Pehrson, Mole, and Chan (2010)	2009	Yes	1	Hong Kong Chinese	56	Seven-item reluctance to forgive measure

Note: Studies with an * are also cited in-text.