



## Reports

Emotional responses to intergroup apology mediate intergroup forgiveness and retribution<sup>☆</sup>Diana J. Leonard<sup>a,\*</sup>, Diane M. Mackie<sup>a</sup>, Eliot R. Smith<sup>b</sup><sup>a</sup> Department of Psychological and Brain Sciences, University of California, Santa Barbara, Santa Barbara, CA 93106-9660, USA<sup>b</sup> Department of Psychological and Brain Sciences, Indiana University, Bloomington, 1101 E. Tenth Street, Bloomington, IN 47405, USA

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## ABSTRACT

According to intergroup emotion theory, the impact of many intergroup events on intergroup outcomes is mediated by group-directed emotions. We demonstrate that the ability of apology to reduce retribution against and increase forgiveness of a transgressing outgroup is contributed to by discrete intergroup emotions. We examined both negative (anger and fear) and positive (respect and satisfaction) emotions directed toward the transgressing outgroup. Apology reduced the desire for retribution whereas lack of apology increased it, and outgroup-directed anger uniquely mediated this effect. In contrast, apology increased and lack of apology decreased forgiveness, particularly when the ingroup responded to the transgression, and only outgroup-directed respect mediated this effect. These results provide the first evidence that intergroup emotions can mediate the impact of apology on intergroup relations outcomes.

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Apologies between groups frequently make headlines. In 2010 alone, the international car company Toyota has apologized to its dealers and customers, the United Kingdom has apologized to former child migrants known as the “forgotten Australians,” and a newspaper in Denmark has apologized to Muslims worldwide. However, little evidence exists as to how best to use such apologies to repair intergroup relations: apology does not always forestall desires to harm or avoid the other group (Philpot & Hornsey, 2008). To advance our understanding of how to reduce conflict in the wake of intergroup transgression, we investigated the process by which intergroup apology can promote forgiveness towards the offending outgroup and reduce retributive intentions among members of an insulted group. Specifically, we propose that these changes – when they occur – do so via changes in intergroup emotions.

Apology can be defined as a social account made by a transgressor toward a party they have offended or harmed. It is typically viewed as a strategy to restore the damaged relationship (Hareli & Eisikovits, 2006), and indeed the benefits of apology for interpersonal relationships have been shown to include broad changes in the apology recipient's cognitions, affect, and behavior that characterize a general restoration of positive relations between transgressor and victim

(Darby & Schlenker, 1982; De Cremer & Schouten, 2008; Gunderson & Ferrari, 2008; McCullough et al., 1998; Ohbuchi, Kameda, & Agarie, 1989; Takaku, 2001). This host of positive changes is typically referred to and assessed as evidence of forgiveness, although the function of apology has also been more narrowly characterized as specifically regulating interest in retribution (Ohbuchi et al., 1989).

In the intergroup context, however, the evidence for the effectiveness of apology on retribution and forgiveness is mixed (Brown, Wohl, & Exline, 2008; Philpot & Hornsey, 2008). Philpot and Hornsey were the first to systematically manipulate intergroup apology, presenting participants with five scenarios of intergroup transgression (for example, Australian participants were told that the unethical operation of a pharmaceutical company had ill effects for their ingroup) for which the outgroup apologized or made no comment. Forgiveness was measured in an all-inclusive manner: it included cognition, affect, and behaviors, as well as a face-valid forgiveness probe. Although participants across scenarios were more satisfied with an apology than with no comment from the offending outgroup, and also perceived the apologizing group as more remorseful, receiving an apology made no difference to their forgiveness of the offending outgroup. The authors concluded that the effects of apology shown in the interpersonal context may not easily translate to forgiving entire outgroups.

In contrast, Brown et al. (2008) demonstrated that intergroup apologies can attenuate outgroup-directed revenge and avoidance motives. In their study, a bogus transgression was first introduced: the accidental killing of four Canadian soldiers in Afghanistan by the United States Air Force. Compared to participants who merely read a statement of cooperation with investigation of the event, Canadian

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participants who read an apology from the United States Defense Secretary reported lower levels of avoidance and revenge motives toward the outgroup at-large (as measured by the Transgression-Related Interpersonal Motivation Scale; McCullough et al., 1998). Although this study provides some optimism that an intergroup apology can influence behavioral intentions regarding retribution, the process by which this might occur was not examined.

### Intergroup emotions as a mediator of apology

We looked to advancements in Intergroup Emotions Theory (IET; Maitner, Mackie, & Smith, 2006; Smith, 1993) to explain the process by which apology might effect change in intergroup relations. Research on group-based emotion provides strong support for the view that people experience emotions *as group members* when an ingroup is made contextually salient (Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003; Gordijn, Wigboldus, & Yzerbyt, 2001; Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006). That is, people can feel emotions in response to group-level outcomes, even when those outcomes do not implicate them personally. This group-based emotional experience occurs due to self-categorization, a process by which the self becomes depersonalized and the self-concept becomes interchangeable with the ingroup (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; Turner & Oakes, 1986, 1989). Self-categorization thus prompts shared emotional reactions to events that are relevant to the group (Moons, Leonard, Mackie, & Smith, 2009).

Such intergroup emotions have been shown time and again to mediate the effect of an intergroup event on both intentions to perform, and actual engagement in, intergroup behavior (Mackie, Devos, & Smith, 2000; Tam et al., 2007; van Zomeren, Spears, Fischer, & Leach, 2004). For example, van Zomeren et al. (2004) showed that college students' perceptions of a proposed change in university policy as unfair increased the anger the students felt about the proposal, and, through this change in group-based emotion, indirectly increased willingness to engage in confrontational action to oppose the policy change. Thus, any impact that intergroup apology has on intergroup relations might well be mediated by intergroup emotions.

Consistent with this view, Maitner et al. (2006) demonstrated that intergroup apology influences emotions directed at the outgroup. They induced students to feel angry by presenting an insulting letter that the faculty had ostensibly published in the local newspaper. Participants were then told that their ingroup had strongly refuted the insult and that the faculty had subsequently retracted their comments and apologized – or had refused to do so. Participants became less angry and more satisfied with the faculty if the faculty apologized. Interestingly, the reverse occurred if the faculty refused to apologize: participants became angrier and less satisfied with them. Thus it appears that both apology and its absence changed emotions about the offending outgroup.

Given that intergroup apology can generate changes in intergroup emotion and that intergroup emotions affect intergroup behaviors, any impact that intergroup apology has on forgiveness and retribution might well depend on the distinct intergroup emotions that apology generates. Since intergroup apology influences both anger and satisfaction (Maitner et al., 2006), and since the emotions of anger and satisfaction have both been linked with both intergroup forgiveness (Philpot & Hornsey, 2008; Tam et al., 2007) and intergroup retribution (Brown et al., 2008; de Quervain et al., 2004; Mackie et al., 2000), intergroup anger and satisfaction seem likely candidates to mediate any intergroup consequences that apology might cause. However, recent evidence has also implicated the emotion of respect or admiration (Ortony, Clore, & Collins, 1988) in the amelioration of both interpersonal and intergroup relations (Algoe & Haidt, 2009; Lalljee, Tam, Hewstone, Laham, & Lee, 2009; Ray, Mackie, Rydell, & Smith, 2008), warranting its consideration as a viable mediator. Additionally, since fear is a common and appropriate response to intergroup transgression (Dumont et al.,

2003; Mackie et al., 2000; Skitka, Bauman, & Mullen, 2004), especially if a weaker group is threatened by a stronger one, the impact of apology on intergroup fear may contribute to whether apology impacts forgiveness and/or retribution. We thus sought the impact of intergroup apology on anger and fear as well as on respect and satisfaction as potential mediators of any impact that apology might have on retribution and forgiveness. By assessing this range of emotions, we were also able to determine whether specific discrete emotions (as predicted by IET) rather than merely positively or negatively valenced feelings were responsible for transforming intergroup apology into more positive intergroup outcomes.

To demonstrate the possible mediating role of group-based emotions, we adapted the materials and procedures developed by Maitner et al. (2006). Participants whose student identity had been activated read that faculty members had published a letter insulting their character and commitment to education. Participants were informed that their ingroup had ignored or refuted the insult, and then that the faculty had subsequently apologized for the content of letter or did not do so. We included the first manipulation so that we could also assess the impact of an ingroup response to the transgression. If the ingroup does not consider the threat severe enough to respond to a transgression, for example, apology may not be expected or desired, and thus its presence or absence may have little effect on intergroup emotions or relations. If, on the other hand, the ingroup refutes the insult, the impact of apology may well be magnified: not receiving an apology may seem like an added insult, and receiving an apology may be particularly satisfying given the further effort expended by the ingroup. Both after the insult and again after the apology, participants reported out-group directed anger, fear, satisfaction, and respect, as well as their intention to seek retribution from or offer forgiveness to the outgroup.

We predicted that compared to when no apology was offered, an apology would reduce desire for retribution and increase the desire to forgive. We further expected these effects of apology to be stronger when the ingroup responded to the insult compared to when it did not. In addition, we expected that in comparison to no apology, apology would significantly impact one or more specific outgroup-directed emotions (decreasing anger and/or fear, increasing satisfaction and/or respect). Finally, we predicted that desire for retribution and forgiveness following the apology manipulation would be mediated by the specific intergroup emotions elicited by apology.

## Method

### Participants and procedure

Participants were 95 students at the University of California, Santa Barbara, recruited to complete a "UCSB student survey about a recent event" for course credit. Participants' ingroup identity was first made salient via a short survey regarding how they felt about being a UCSB student. They next learned about a transgression against their group and completed emotion and intergroup relations measures. Participants subsequently learned whether their ingroup had responded to the transgression or not (ingroup response manipulation), and then whether the outgroup had apologized or not (apology manipulation). Participants then completed emotion and intergroup relation measures again. Thus, we used a 2 (outgroup apology) × 2 (ingroup response) × 2 (time of assessment) design, with the last factor as a within subjects variable.

### Intergroup transgression

Participants read an account of an insulting letter written by a group of UCSB professors and published in the local newspaper. The letter called UCSB students "spoiled, immature, unintelligent, and irresponsible," and claimed that they take little responsibility for their education, instead spending their time "partying, doing drugs, and wasting their potential." (from Maitner et al., 2006).

### Post insult measurement of emotions

After reading about the insult, participants were told “We are interested in UCSB students' responses to this current event” and then reported outgroup directed emotions using 7-point Likert-type scales anchored at 1 (Not at all) and 7 (Extremely). Participants reported how angry and irritated they felt towards the UCSB faculty ( $\alpha = .83$ ), how afraid and scared they were of them ( $\alpha = .89$ ), how satisfied and content they felt with them ( $\alpha = .86$ ), and how much respect and admiration they felt towards them ( $\alpha = .78$ ).

### Post insult measurement of intergroup relations outcomes

Next, participants responded to three face-valid items adapted from Stenstrom, Lickel, Denson, and Miller (2008) that reflected their interest in seeking retribution ( $\alpha = .88$ ). Specifically, participants were asked, “to what extent do you think the faculty should be fined or penalized?” (1–7; not at all to extremely), and then asked in random order how much they should be penalized (1–7; no penalty/high penalty) and how much they should be fined (1–7; no fine/high fine). They also rated their agreement (on scales anchored at 1, disagree strongly, and 7, agree strongly) with three randomly presented face-valid forgiveness items (adapted to the intergroup context from Zechmeister, Garcia, Romero, & Vas, 2004;  $\alpha = .75$ ). Specifically, participants rated their agreement with the statements “the faculty should be forgiven for what their group has done to UCSB students”, “UCSB students as a group should forgive the faculty for what they did,” and “it is possible for me to forgive the faculty for the letter written about my group.”

### Manipulation of ingroup response

Participants were then told either that “UCSB students who have been made aware of the letter have responded strongly. Students have strongly refuted the claims made in the article and pointed out positive attributes of UCSB students” (ingroup action) or that “UCSB students who have been made aware of the letter have largely ignored it. Students have made no attempt to question or respond to its criticisms or provide defense of fellow students” (ingroup inaction).

### Manipulation of outgroup apology

In the apology present condition, participants were told “the faculty authors of the letter have apologized for the content of the letter.” In the apology absent condition, they were told “the faculty authors of the letter have not apologized for the content of the letter.”

### Post apology measurement of emotions and intergroup relations outcomes

Participants again reported their emotions “as a UCSB student” toward the faculty (anger  $\alpha = .90$ , fear  $\alpha = .90$ , satisfaction  $\alpha = .85$ , respect  $\alpha = .81$ ) and their interest in retribution ( $\alpha = .95$ ) and forgiveness ( $\alpha = .91$ ) using the same items just described. A measure of apology expectation was included (“how much were you expecting an apology?”) using a response scale from 1 (not at all) to 7 (very much). This measure was included to allow us to assess any role that different expectations of apology might play in the impact that apology had on intergroup relations. Finally, participants answered face-valid items to check the effectiveness of the manipulations of ingroup response and outgroup apology.

## Results and discussion

### Effectiveness of the manipulations

A 2 (outgroup apology)  $\times$  2 (ingroup response) ANOVA indicated that, as intended, participants appropriately reported that the outgroup had apologized in the outgroup apology condition ( $M = 5.22$ ) compared to the no apology condition ( $M = 1.22$ ),  $F = 302.52$ ,  $p < .001$ . A second identical analysis indicated that, as

intended, participants were appropriately more likely to report that the ingroup had taken action against the insult in the ingroup action condition ( $M = 4.66$ ) than in the no action condition ( $M = 2.67$ ,  $F = 29.27$ ,  $p < .001$ ). Thus, the manipulations of outgroup apology and ingroup response were each successful.

### Expectation of apology

We conducted a 2 (outgroup apology)  $\times$  2 (ingroup response) ANOVA to investigate whether participants in different conditions had differential expectations of apology from the outgroup. Analysis revealed a marginal main effect of ingroup response,  $F(1,91) = 3.74$ ,  $p = .056$ . Regardless of whether they had received an apology or not, participants who had been told that their ingroup refuted the faculty's comments expected an apology to a somewhat greater extent ( $M = 4.42$ ) than those who had learned that the ingroup had taken no action ( $M = 3.60$ ). As a consequence, we conducted all subsequent analyses controlling for this variable.

### Intergroup emotions

To investigate changes in participants' intergroup emotion we conducted a 2 (outgroup apology or no apology)  $\times$  2 (ingroup action or inaction)  $\times$  4 (anger, fear, satisfaction and respect emotion)  $\times$  2 (post insult and post apology time of assessment) mixed-model ANCOVA, with the last two factors as within-subjects variables (and expectation of apology as a covariate). Analysis yielded a main effect of time of assessment,  $F(1, 270) = 15.69$ ,  $p < .001$ . Overall, emotion declined from post insult to post apology (from  $M = 3.49$  to  $M = 3.14$ ). There was also a main effect of emotion,  $F(3, 270) = 22.37$ ,  $p < .001$ , reflecting that participants reported less fear ( $M = 1.98$ ) than they did anger, satisfaction, or respect ( $M = 3.76$ ,  $M = 3.77$ , and  $M = 3.74$ , respectively, all  $p$ 's  $< .001$ ).

Importantly, two significant 3-way interactions qualified the main effects: the predicted emotion by apology by time interaction,  $F(3, 270) = 21.98$ ,  $p < .001$  (which subsumed an emotion by apology interaction,  $F(3, 270) = 4.97$ ,  $p = .002$ ) and an emotion by ingroup response by time interaction,  $F(3, 270) = 3.41$ ,  $p = .018$ . We examined these interactions by submitting each emotion to a 2 (outgroup apology)  $\times$  2 (ingroup response)  $\times$  2 (time of assessment) mixed-model ANCOVA with expectation of apology as a covariate to assess the prediction that apology or lack thereof would elicit specific outgroup-directed emotions.

### Intergroup anger

Analysis revealed a main effect of time of assessment,  $F(1,90) = 6.48$ ,  $p = .013$ ; anger declined from post insult to post apology (from  $M = 3.92$  to  $M = 3.60$ ). There was also a main effect of apology,  $F(1,90) = 10.28$ ,  $p = .002$ . Participants reported less anger when the faculty apologized for the insult ( $M = 3.32$ ) than when they failed to do so ( $M = 4.19$ ). Importantly, these main effects were qualified by the predicted apology by time interaction,  $F(1,90) = 19.37$ ,  $p < .001$ . Anger toward the faculty decreased when they apologized for the insult ( $p < .001$ ) but did not change when there was no apology ( $p = .113$ ). Additionally, an ingroup response by time interaction,  $F(1,90) = 6.19$ ,  $p = .015$ , revealed that anger towards the faculty decreased if the ingroup took no action ( $p = .002$ ), but remained unchanged in the ingroup action condition ( $p = .749$ ). Closer examination of these means indicated that this difference occurred because anger decreased most markedly when the outgroup apologized even if the ingroup did not appear to need an apology (i.e. when they ignored the insult, but the three way interaction was not significant,  $p = .830$  see Fig. 1).

### Intergroup fear

Analysis revealed a three-way apology by time by ingroup response interaction,  $F(1,90) = 6.64$ ,  $p = .012$ . When the ingroup refuted the faculty's insult, there were no significant effects. However,

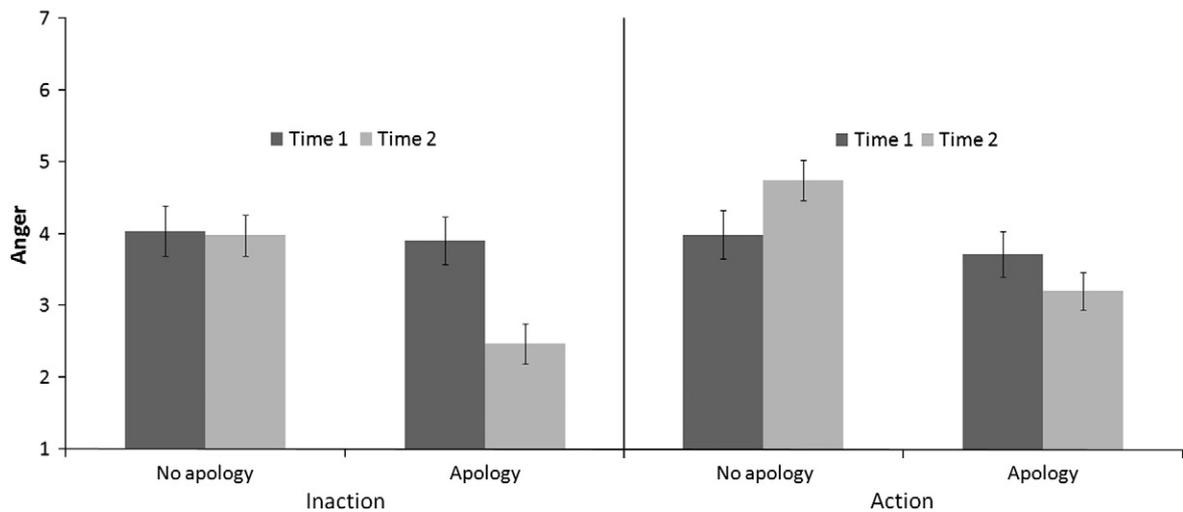


Fig. 1. Anger by apology condition, ingroup response, and time of assessment, controlling for expectation of apology.

when the ingroup took no action, the predicted interaction between apology and time emerged,  $F(1,45) = 6.99, p = .011$ . Fear of the faculty decreased when they apologized ( $p = .003$ ) but did not change when they did not ( $p = .492$ ). However, examination of the means suggests that this result was contributed to by failure of randomization rather than a clean effect of the manipulation: across conditions, apology had little effect on fear.

#### Intergroup satisfaction

The predicted apology by time interaction was significant,  $F(1,90) = 22.19, p < .001$ . Note, however, that satisfaction with the faculty decreased when they did not apologize ( $p < .001$ ) but did not change significantly when they did  $p = .100$ , see Fig. 2.

#### Intergroup respect

Analysis revealed a main effect of time of assessment,  $F(1,90) = 4.26, p = .042$ . Respect for the faculty decreased over time ( $M = 4.05$  to  $M = 3.43$ ). This main effect was qualified by the predicted apology by time interaction,  $F(1,90) = 18.82, p < .001$ . Again, outgroup-directed respect decreased when the faculty did not apologize ( $p < .001$ ), but did not change when the faculty apologized,  $p = .739$ , see Fig. 3.

Overall, intergroup apology decreased anger and fear (although the latter somewhat spuriously) and lack of apology increased satisfaction and respect, consistent with predictions that such intergroup events would influence specific outgroup directed emotions.

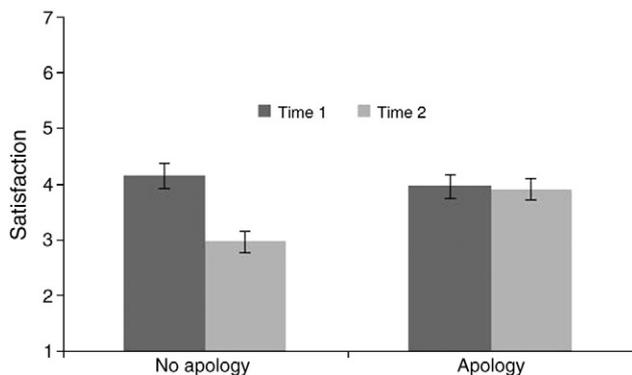


Fig. 2. Satisfaction by apology condition and time of assessment, controlling for expectation of apology.

#### Intergroup relations outcomes

We examined changes in intergroup relations outcomes by submitting the retribution and forgiveness measures to separate 2 (outgroup apology)  $\times$  2 (ingroup response)  $\times$  2 (time of assessment) mixed-model ANCOVAs, with the last factor as a within-subjects variable and expectation of apology as a covariate. We expected apology to decrease retribution and increase forgiveness, effects that we expected to be stronger when the ingroup took action against rather than ignored the faculty insult.

#### Intergroup retribution

Analysis revealed the predicted apology by time interaction,  $F(1,90) = 22.74, p = .001$ . As expected, desire for retribution against the faculty decreased when they apologized ( $p = .009$ ) and actually increased when they failed to do so ( $p < .001$ ), see Fig. 4. The effect of apology was unaffected by ingroup response.

#### Intergroup forgiveness

Analysis revealed main effects of time of assessment,  $F(1,90) = 6.29, p = .014$  (forgiveness increased over time from  $M = 4.12$  to  $M = 4.26$ ) and of apology,  $F(1,90) = 5.85, p = .018$  (forgiveness increased when the faculty apologized,  $M = 4.49$ , compared to when they did not,  $M = 3.89$ ). Importantly, both of these main effects were qualified by the significant predicted apology by time interaction,  $F(1,90) = 28.23, p < .001$ . As expected, interest in forgiving the faculty increased when they apologized for the insult ( $p < .001$ ) and actually decreased when they did not apologize ( $p = .008$ ). As anticipated, this effect was involved in a 3-way

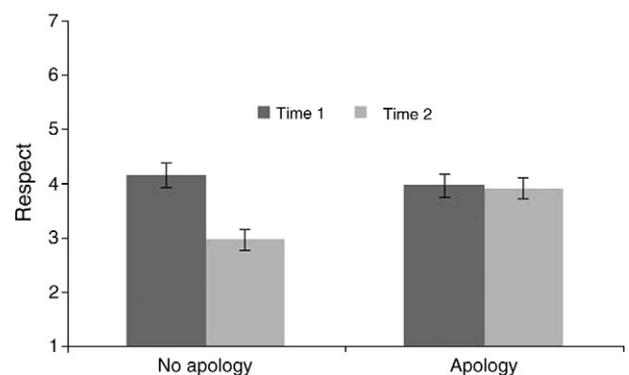


Fig. 3. Respect by apology condition and time of assessment, controlling for expectation of apology.

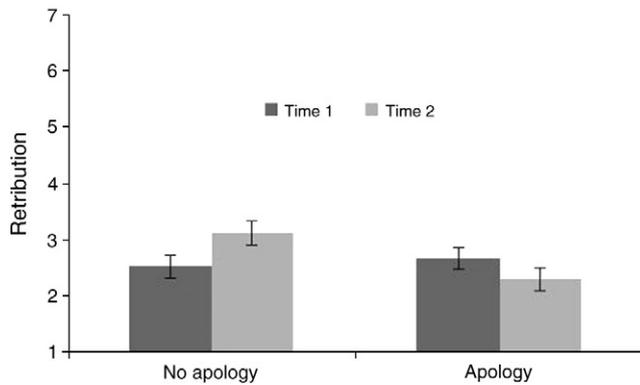


Fig. 4. Retribution by apology condition, controlling for expectation of apology.

interaction,  $F(1,90) = 7.24$ ,  $p = .008$ , indicating moderation by ingroup response, see Fig. 5. When the ingroup acted in response to the outgroup's claims, the predicted 2-way interaction between apology and time again emerged,  $F(1,90) = 29.49$ ,  $p < .001$ . Interest in forgiving the faculty increased when they apologized ( $p < .001$ ) and decreased when they did not apologize ( $p < .001$ ). However, when the ingroup took no action the apology by time interaction was only marginal,  $F(1,90) = 3.67$ ,  $p = .062$ . Thus apology had a significant effect only when the ingroup had responded to the transgression.

#### Mediation

We conducted separate mediational analyses predicting post-apology retribution and post-apology forgiveness from apology condition, with changes in the outgroup-directed emotions as potential mediators. We computed emotion change scores by subtracting post-insult from post-apology ratings of each emotion. Each analysis controlled for all post-insult emotions, post-insult retribution or forgiveness as appropriate, and the expectation of apology. Because these analyses included multiple mediators, the significance of the proposed mediation was evaluated via bootstrapping analyses (MacKinnon, Lockwood, & Williams, 2004; Preacher & Hayes, 2008) using 10,000 resamples to construct asymmetrical, bias corrected, accelerated 95% confidence intervals around the unstandardized indirect effects of changes in emotion and apology condition on each intergroup relations outcome. A confidence interval that does not contain zero represents evidence consistent with mediation at  $p < .05$ .

#### Retribution

The initial regression analysis indicated that change in fear was not significantly predicted by the independent variable (recall that the effect of apology on fear was also tenuous in the ANOVA results): since it was not a viable candidate for mediation, it was eliminated and the analysis was re-run with change in anger, satisfaction, and respect as potential mediators. Apology significantly predicted interest in post-apology retribution as well as changes in anger, satisfaction, and respect (see Fig. 6). The addition of changes in anger, satisfaction, and respect significantly reduced the relation between apology condition and post-apology retribution from  $\beta = -.31$ ,  $p < .001$  to  $\beta = -.17$ ,  $p = .025$ . Anger significantly predicted retribution,  $\beta = .28$ ,  $p = .003$ , but neither respect,  $\beta = -.14$ ,  $p = .161$ , nor satisfaction,  $\beta = .11$ ,  $p = .309$ , did so. Bootstrapping analyses revealed further support for mediation by anger as the confidence interval around change in anger did not contain zero, 95% CI:  $-.367$  to  $-.060$  (The confidence intervals around change in respect, 95% CI:  $-.217$  to  $.019$ , and around change in satisfaction, 95% CI:  $-.070$  to  $.231$ , both contained zero). These results further confirmed that changes in anger (but neither

respect nor satisfaction) felt towards the outgroup significantly but partially explained the effects of apology on retribution.

#### Forgiveness

Since apology had a significant effect on forgiveness only when ingroup members responded to the intergroup insult, we looked at mediation in only the ingroup action condition ( $n = 47$ ). The initial analysis once again revealed that fear was not a viable candidate for mediation and the analysis was re-run with change in anger, satisfaction, and respect as potential mediators. Apology significantly predicted post-apology forgiveness as well as changes in anger, satisfaction, and respect, see Fig. 7. The addition of changes in anger, satisfaction, and respect significantly reduced the relation between apology condition and post-apology forgiveness from  $\beta = .50$ ,  $p < .001$  to  $\beta = .35$ ,  $p = .003$ . Respect predicted forgiveness,  $\beta = .35$ ,  $p = .018$ , but neither anger,  $\beta = -.13$ ,  $p = .376$ , nor satisfaction,  $\beta = -.15$ ,  $p = .397$ , did so. Bootstrapping analyses revealed further support for mediation by respect as the confidence interval around change in respect did not contain zero, 95% CI:  $.055$  to  $.528$ . (The confidence intervals around change in anger, 95% CI:  $-.205$  to  $.386$ , and around change in satisfaction, 95% CI:  $-.358$  to  $.094$ , both contained zero). These results further confirmed that changes in respect (but not anger or satisfaction) felt towards the outgroup significantly but partially explained the effects of apology on forgiveness.<sup>1</sup>

#### Discussion

These findings make several significant new contributions to our understanding of both how apology can affect intergroup relations following a transgression and how intergroup emotions help transform apology into more or less conciliatory intentions toward the transgressing outgroup. First, these results provide the first empirical support for the claim that intergroup apology can ameliorate intergroup relations both by decreasing desire for retribution (consistent with Brown et al., 2008) and by increasing forgiveness (despite Philpot Hornsey, 2008 findings). Examining changes over time in this way also provide a fresh perspective on the dynamic process of intergroup apology and its downstream consequences.

Second, because we simultaneously assessed retribution and forgiveness, our results are revealing about the apparently different nature of those different indices of intergroup relations. Although some intergroup researchers have relied on measures of interpersonal forgiveness that include revenge motivations (e.g. the TRIM; McCullough et al., 1998), we chose to assess the two concepts separately (following Zechmeister et al., 2004) with the intent of independently assessing both their emotional precursors and their susceptibility to the apology manipulation. Our findings suggest the benefits of doing so. Most importantly for our theoretical roots in intergroup emotions, different distinct emotions mediated the effect of apology on these intergroup relations outcomes (anger on retribution; respect on forgiveness). More surprising perhaps is that respect felt towards the offending outgroup uniquely (although partially) mediated the effect of apology on interest in forgiveness despite the fact that some researchers have theorized that letting go of negative emotion, and anger in particular, is at the very core of what it means to forgive (Baumeister, Exline, & Sommer, 1998; Tam et al., 2007). Retribution and forgiveness also differed in their sensitivity to

<sup>1</sup> The effect of apology on forgiveness was strictly significant only when the ingroup took no action against the insult. However, Fig. 5 makes clear that the interaction reflects magnitude rather than nature of the effect (indeed the predicted effect was  $p < .06$  in the inaction condition). Mediational analysis of the full data set confirmed our findings: the addition of changes in anger, satisfaction, and respect significantly but only partially reduced the relation between apology condition and post-apology forgiveness (from  $\beta = .38$ ,  $p < .001$  to  $\beta = .22$ ,  $p = .010$ ). Respect predicted forgiveness,  $\beta = .21$ ,  $p = .053$ , whereas neither anger  $\beta = -.10$ ,  $p = .343$ , nor satisfaction,  $\beta = .09$ ,  $p = .471$ , did so.

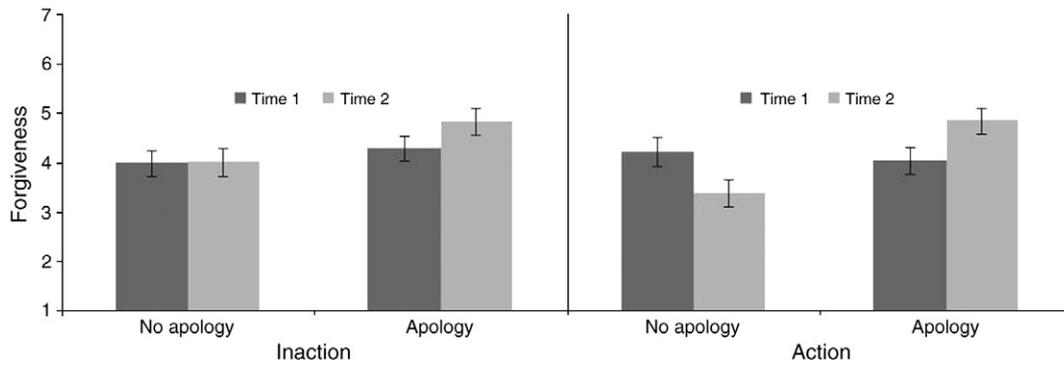


Fig. 5. Forgiveness by apology condition, ingroup response, and time of assessment, controlling for expectation of apology.

ingroup response. The ingroup's reaction to the transgression moderated the effect of apology on forgiveness; any effect of apology was muted if the ingroup had not acted in response to the insult. Importantly, the lack of moderation by ingroup response for retribution suggests that retribution may be more closely linked to the transgression itself and less closely tied to contextual factors. Given the immediate negative consequences of retribution, its potential immunity to contextual factors warrants further investigation.

The third set of contributions these findings make are both empirical and theoretical. Our findings provide the first empirical evidence that apology has effects on a range of transgression-relevant intergroup emotions, and that specific intergroup emotions at least partially mediate the impact of apology on intergroup relations outcomes. At the theoretical level, these results provide further confirmation for the role of discrete intergroup emotions in influencing intergroup behavior. Our results also confirm the IET view that it is the nature, rather than the valence, of emotions that most crucially affects intergroup relations. Consistent with prior research, the intergroup transgression did not have identical effects on all negative emotions (anger and fear); not did it have identical effects on all positive emotions (respect and satisfaction). Even more importantly, anger, but not fear, was indeed influential in altering desire for or intentions of engaging in revenge or retributive behavior, consistent with the body of work on group-based emotions regarding the capacity of anger to shape aggressive responses to intergroup conflict (Mackie et al., 2000; van Zomeren et al., 2004). And although satisfaction was responsive to intergroup apology as in Maitner et al. (2006), it was respect rather than satisfaction that mediated the effect of apology on forgiveness in our data. Thus these results both clearly demonstrate the critical role of specific emotions rather than valence

in determining intergroup outcomes and highlight the continued importance of measuring multiple theoretically relevant emotions in future examinations of intergroup apology.

Fourth, our findings make an important contribution to our understanding of how and why apologies for intergroup transgressions might facilitate intergroup reconciliation. Our results indicate that apology can be successful in doing so at least partially because it changes the emotions the victim group feels toward the transgressor group. Such findings suggest, for example, that different kinds of apologies may be differentially effective for different kinds of transgressions (Leonard, 2011). Transgressions against the ingroup produce different kinds of emotional reactions (threat to the group's physical safety might produce anger or fear, for example, whereas a threat of moral contamination might elicit disgust; Cottrell & Neuberg, 2005; Mackie et al., 2000). As a consequence, an apology may only be effective (in terms of reducing the desire for retribution and/or increasing forgiveness) to the extent that it eliminates that particular emotion. Thus, our findings generate several new possibilities for investigating the effectiveness of intergroup apology.

One question that may arise concerning our results is the extent to which intergroup emotions, rather than individual emotions, are necessary to explain these findings. Our previous work has repeatedly demonstrated that individual emotions are correlated with but quite distinct from group level emotions (Leonard, Moons, Mackie, & Smith, 2011; Moons et al., 2009; Smith, Seger, & Mackie, 2007). Perhaps most definitively, Smith et al. demonstrated that when people reported the extent to which they felt 12 different emotions as individuals and then reported the extent to which they felt those same emotions when categorized as group members, profiles of group emotions and individual emotions were both quantitatively different – differing in

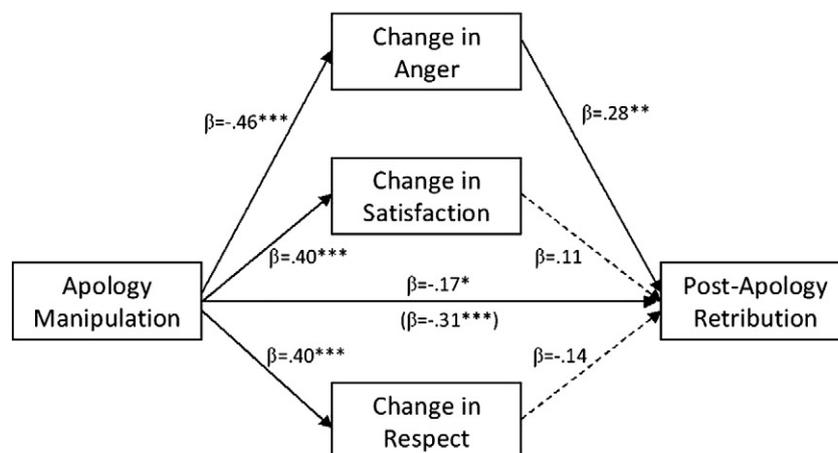


Fig. 6. Mediation by change in emotion of the effects of intergroup apology on retribution (controlling for post-insult retribution, post-insult emotions, and expectation of apology).

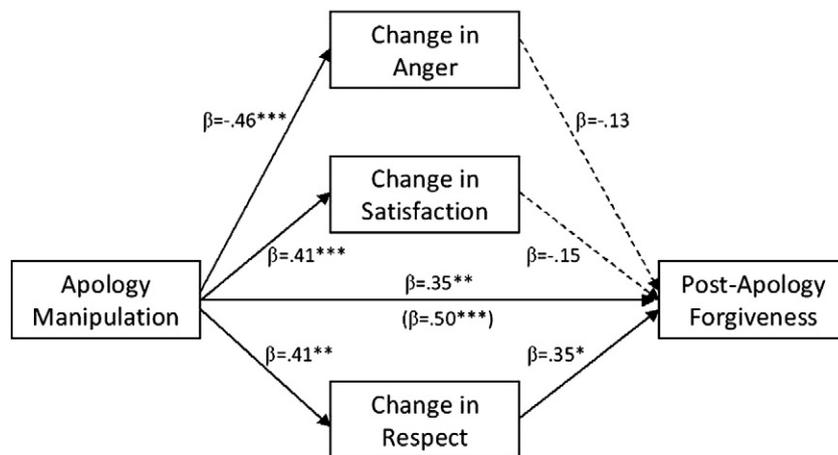


Fig. 7. Mediation by change in emotion of the effects of intergroup apology on forgiveness, ingroup response condition only ( $n = 47$ ; controlling for post-insult forgiveness, postinsult emotions, and expectation of apology).

the overall level or intensity of emotion reported – and qualitatively different, so that different emotions predominated when a social identity rather than individual identity was salient (despite individual and group emotion being correlated at  $r = .30$ ; see also Seger, Smith, & Mackie, 2009). Moreover it was the group-based emotions, and not the individual emotions, that predicted participants' behavioral intentions toward the other group (see also Leonard et al., 2011; Moons et al., 2009).

Thus empirical precedent indicated that group-based rather than individually experienced emotion would be a key to predicting reactions to intergroup transgressions and intergroup apologies. It was for these very reasons that we measured group-based emotions so explicitly by highlighting participants' UCSB student identity and asking them how they felt as a UCSB student. Despite decades of research that indicates significant shifts in attitudes, beliefs, and behaviors following social categorization (Brown & Hewstone, 2005), emotion researchers have been slower to consider that the context in which they ask the simple question “what emotions do you feel?” may dictate quite different answers. Although it is often assumed that such a question elicits individual emotions, social identity theory suggests and Smith et al. (2007) confirmed that when group membership is psychologically activated, the responses to such a question tap intergroup emotions, rather than individual ones (indeed it might be asked if individual emotions are even possible when social identity dominates, especially if group members are highly identified). Thus with the precedent of experimental findings, we were careful to assess group-based rather than individual emotions, and confident that group-based rather than individual emotions uniquely mediated the impact of intergroup transgressions on intergroup relation outcomes.

Like any single study, this study has limitations derived from its focus on one transgression and one intergroup situation. The transgression we studied was a mild one, and one apparently amenable to changes in emotion, retribution, and forgiveness because of an apology – changes that have proven elusive in other intergroup settings (Philpot & Hornsey, 2008). Of course to study the effects of apology on intergroup emotions we needed to have a transgression for which apology could render such changes, and so we make no claim that our findings hold for conflicts that do not arouse intergroup emotions or for which apology is not effective. The transgression we studied might have dictated some of the specifics of our findings, such as which distinct emotions played the crucial roles in translating an apology into more positive intergroup outcomes. In our experiment the faculty insulted students and defamed their character, a transgression that elicited anger and lack of respect and satisfaction but not fear. While transgressions typically induce anger, this kind of insult may have been construed as a breach of hierarchy and

community and thus less likely to generate fear (compared to immediate physical threat, for example, Cottrell & Neuberg, 2005) but particularly likely to induce changes in respect (Laham, Chopra, Lalljee, & Parkinson, 2009). We also examined only one intergroup context, and our offending outgroup (faculty) may be uniquely marked for respect by the victim ingroup (students). Thus it is possible that only in this particular intergroup relationship, with this particular kind of transgression, is respect crucial in getting groups to forgive and forget.

Nevertheless, our results are quite consistent with other recent research favoring the importance of respect in healing damaged intergroup relations. Janoff-Bulman and Werther (2008), for example, review a number of studies that demonstrate the role of respect in creating and reconciling marital, political, and international conflicts. Similarly, Seger et al. (submitted for publication) showed that respect was a significant mediator of whether intergroup interaction reduced prejudice, both toward ethnic groups and toward gay men. In addition, Algoe and Haidt (2009) have proposed that feeling admiration/respect towards others prompts a motivation for emulation of the target, which may in turn provide a privileged avenue by which forgiveness can be magnified and retribution muted following apology. Thus although it is possible that the role of respect was unduly highlighted in our study, it is also possible that the potent role of respect may be much more general.

It is also possible that the way we operationalized whether or not the outgroup apologized and whether or not the ingroup reacted dictated some of the effects we found. We contrasted receiving an apology from the outgroup with learning that the outgroup “did not apologize,” wording that may have conveyed belligerence on the outgroup's part (adding insult to insult) or suggested that an apology was needed. Such possibilities might exacerbate ingroup members' reactions in the no-apology condition, so that rather than learning about the effects of apology, we investigated the effects of refusal to apologize. Definitely answering this question awaits further investigation of all the various ways in which a lack of apology can be conveyed (as previous research on this topic has also examined a limited number of “no apology” options). However several aspects of our data argue against this being a particularly unusual control group. First, examination of the relevant interactions shows that both receiving an apology and not receiving an apology had clearly significant effects on intergroup outcomes; the size of the effect on forgiveness was stronger for receiving an apology than for not receiving one, whereas the opposite was true for retribution. Second, receiving an apology had a greater effect on anger and fear than not receiving an apology, whereas not receiving an apology had a greater effect on satisfaction and respect. Third, although the interactions

were significant only for forgiveness, the impact of not receiving an apology was more muted when the ingroup didn't respond; under these conditions receiving an apology counted a lot but not receiving one did not particularly matter. By and large then, the data demonstrate the power of apology, but also make clear that "lack of apology" might have its own interesting effects.

It is also possible that our manipulation of whether the ingroup had responded or not was uniquely influenced by our telling the participants that the ingroup had "refuted the outgroup's insults". Feedback that the ingroup has refuted an outgroup insult might increase both the negativity of emotions and the need for or value of an outgroup apology (because the outgroup has not only been disparaging but also untruthful). Indeed, participants expected an apology in this condition more than they did in the other conditions. However, our data argue against any definitive role for this manipulation. First, and most importantly, apology influenced all four measured emotions, as well as retribution, quite independently of whether the ingroup took any action or not. Second, these effects held even while controlling for expectation of apology, as did the mediational role of the emotions on retribution. Third, although the ingroup response did make the impact of apology on forgiveness stronger, the interaction reflects quantitative rather than qualitative differences in responding since the overall pattern of results was the same regardless of whether the ingroup had responded or not. Taken together it appears that participants did not react strongly to the precise wording of our manipulation of ingroup response. However, given that there are many circumstances under which ingroup responses to outgroup transgression may make a difference to both the emotions experienced and the desire to forgive or to punish, the subtle effects observed in our data suggest that this issue is worthy of further study. Indeed, since intergroup apologies often follow public reactions by the offended party (Harris, Grainger, & Mullany, 2006), this factor may prove important in unfolding episodes of real intergroup conflict in ways that cannot be directly anticipated based on findings from the interpersonal forgiveness literature.

## Conclusion

We extended intergroup emotions theory to investigate and help explain the process by which intergroup apology can influence forgiveness and retribution action tendencies, and thus foster reconciliation following intergroup transgression. In an intergroup context in which apology both reduced retribution and increased forgiveness, we provided evidence supportive of the idea that anger mediates the effect of apology on retribution and respect mediates the effects on forgiveness. Consistent with the IET perspective, the benefits of considering distinct consequences of distinct emotions accrue at the level of intergroup relations. These results allow for a broader understanding of the role of intergroup emotions in intergroup relations, which has largely focused on the ways in which these emotions exacerbate rather than ameliorate conflict. Given the inconsistent findings on the effectiveness of intergroup apology thus far (Brown et al., 2008; Philpot & Hornsey, 2008), continuing this line of research could be the key to improving our understanding of when apology does and does not have a beneficial effect for intergroup relations.

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