

## RESEARCH ARTICLE

## Empathy as a predictor of high-quality interpersonal apologies

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## Abstract

If left unresolved, interpersonal offenses can poison people's relationships. Fortunately, transgressors can promote reconciliation with the victim by offering comprehensive and non-defensive apologies. What predicts whether transgressors go the extra mile to offer these high-quality apologies? In Study 1 ( $N = 289$ ), participants who reported greater state empathy toward their romantic partner offered more comprehensive and less defensive apologies for an unresolved offense they had committed. In Study 2 ( $N = 150$ ), participants who reported greater state empathy toward a friend offered more comprehensive and less defensive apologies for an imagined offense. In Study 3 ( $N = 251$ ), participants who were experimentally induced to experience high (vs. low) empathy offered more comprehensive apologies for unresolved transgressions across a variety of relationship types. These studies are the first to provide experimental and behavioral evidence of the empathy–apology link, and suggest that fostering empathy might be a powerful way to promote more constructive conflict responses in interpersonal relationships.

## KEYWORDS

apologies, conflict resolution, defensiveness, empathy, interpersonal relationships

## 1 | INTRODUCTION

Interpersonal offenses are everyday conflict experiences that occur across nearly all relationship contexts, ages, and cultures (Schumann & Ross, 2010). Although common, offenses that are left unresolved can poison people's valued relationships (Carrere & Gottman, 1999; Cramer, 2000), lead to psychological and physiological distress for the transgressor and victim (Bastian & Haslam, 2011; Bastian et al., 2013; Baumeister et al., 1990; Kiecolt-Glaser & Newton, 2001; Leary et al., 1998), and even carry negative implications for people in the disputing members' broader network, such as their children and colleagues (DeDreu & Weingart, 2003; Katz & Gottman, 1993). More generally, because unresolved offenses can threaten people's valued relationships and expose them to negative social interactions, these offenses can severely undermine the wellbeing of those involved (Cohen, 2004; Parker-Pope, 2010).

Given the ubiquitous and often harmful nature of interpersonal offenses, it is important to understand what transgressors can do to minimize the negative consequences of their actions. Decades of

research suggest that an apology is a powerful facilitator of reconciliation, predicting forgiveness more strongly than a host of other relationship, dispositional, demographic, and contextual factors (Fehr et al., 2010). This is particularly true of apologies that are comprehensive (i.e., include many of eight apology elements that satisfy the psychological needs of the victim: remorse, acceptance of responsibility, offer of repair, admission of wrongdoing, acknowledgement of harm, promise to behave better, explanation, request for forgiveness) and non-defensive (i.e., do not include many of four self-protective strategies: excuses, justifications, victim blaming, minimizations; see Schumann, 2014). These higher-quality apologies enhance perceptions of sincerity and value, consequently promoting greater forgiveness from victims (Gonzales, 1992; Kirchhoff et al., 2012; Scher & Darley, 1997).

Unfortunately, despite the clear benefits of offering high-quality interpersonal apologies, transgressors often withhold apologies altogether or offer poor apologies that seem insincere (McLaughlin et al., 1983; Schumann, 2012; Woodyatt & Wenzel, 2013). One reason for these less reparative responses may be low levels of empathy, as conflict situations create empathic challenges that often result in failures

to empathize (Schumann et al., 2014; Zaki & Cikara, 2015). In this article, we examine whether transgressors offer higher-quality apologies for their offenses when they are able to overcome this empathic challenge and experience empathy for the person they hurt.

## 2 | INTERPERSONAL CONFLICT AS AN EMPATHIC CHALLENGE

Empathy—the capacity to understand and share other's perspectives and emotional states—is critical to social functioning (Zaki, 2014). It exerts a powerful influence on how people treat one another, with high levels of empathy predicting a variety of prosocial behaviors (e.g., Andreoni, 1990; Andreoni & Miller, 2002; Batson, 1991; Batson et al., 1988; Batson & Shaw, 1991; Eisenberg & Miller, 1987). Relatedly, empathy is considered a key ingredient in conflict resolution, as it can foster mutual understanding and a willingness to curb hostile tendencies (e.g., de Wied et al., 2007; Exline & Zell, 2009; Fatfouta et al., 2015; Fincham et al., 2002; Gini et al., 2007).

However, empathy might be especially challenging to experience after committing an interpersonal offense. People are highly motivated to maintain their sense of self-worth and integrity (Cohen & Sherman, 2014), but the act of harming another person can threaten one's identity as a good and moral person (Aronson, 1999; Goffman, 1971; Schlenker & Darby, 1981). Because of this threat, transgressors are often motivated to see their actions in a self-protective way rather than adopt the perspective or internal emotional state of the victim (Bandura, 1999; Schumann, 2018). Indeed, past research has demonstrated the existence of a magnitude gap (Baumeister, 1997) between transgressors' and victims' accounts of an offense. Rather than empathize with the victims' experience of the offense, transgressors tend to cast the incident as justifiable, provoked by the victim, and having few lasting consequences (e.g., Baumeister et al., 1990). Conflict situations also create feelings of difference and hostility (e.g., Batson et al., 1981; McCullough et al., 1997), which interfere with one's capacity to empathize (e.g., Cikara et al., 2011; Gutsell & Inzlicht, 2010). Empathy might therefore break down for some transgressors exactly when it is needed most in the conflict resolution process (Schumann et al., 2014; Zaki & Cikara, 2015). However, we predict that those who are able to overcome this empathic challenge will offer higher-quality (i.e., comprehensive and non-defensive) apologies that are more effective at promoting conflict resolution.

## 3 | EMPATHY AND APOLOGIES

The act of apologizing is an other-oriented behavior that first requires the recognition that the victim has been offended, followed by a desire to repair one's relationship with the victim (Dunlop et al., 2015; Tavuchis, 1991). Transgressors who feel greater empathy for a victim might have a deeper understanding of the victim's emotional reaction, consequently recognizing their offense and need for a high-quality

apology (Zaki, 2014). They might also experience greater concern for the victim's wellbeing, thereby motivating them to do what is necessary to make amends (Zaki, 2014).

High-quality apologies require a particular focus on the victim rather than the self, as these apologies include elements that communicate concern for the victim and acknowledge the victim's suffering, while accepting responsibility for causing that suffering and avoiding self-protective strategies (Lazare, 2005; Schumann, 2014). Because empathy promotes a heightened focus on the victim (Israelashvili et al., 2020), experiencing higher levels of empathy might help transgressors have both a better sense of what should be said to address the victim's emotions, as well as less need to focus on their own motivation to self-protect through the use of defensive strategies.

Some correlational research already supports a link between empathy and self-reported willingness to apologize. For example, people who report higher levels of trait empathic concern, perspective taking, and care for others' welfare also report having a higher proclivity to apologize (Howell et al., 2011, 2012), and feeling greater empathy toward a specific victim is associated with greater self-reported intent to apologize to that victim (Leunissen et al., 2017). However, to our knowledge, no study has tested the link between empathy and actual apology behavior, and no study has tested the empathy–apology link experimentally. Further, examining apology comprehensiveness and defensiveness provides meaningful information about the likely effectiveness of the apology, and no work has yet tested whether empathy predicts these important apology features.

## 4 | STATE VERSUS TRAIT EMPATHY

A common and important distinction in the study of most individual differences is that between trait and state conceptualizations and assessments. Whereas traits reflect relatively stable and enduring characteristics of a person, states reflect a more temporary way of thinking and feeling that tends to reflect features of the situation. Empathy varies both between and within people, which suggests it can be represented and measured as both a trait and state (Nezlek et al., 2007; Zaki, 2014). We anticipate that both trait and state empathy exert an influence on transgressors' responses to victims, as has been found in previous research (e.g., Howell et al., 2011; Leunissen et al., 2017). People who tend to be more empathic on average should also be more willing to offer high-quality apologies on average, and transgressors who feel more empathy following a specific offense should be more willing to offer a high-quality apology for that specific offense. However, because conflict situations are complex and dynamic, we anticipate that situational features of a given interpersonal offense can interfere with the tendency for people high in trait empathy to apologize for that offense. In particular, because even those high in trait empathy can experience barriers to apologizing in a given moment, we expect state empathy—the amount of empathy transgressors are able to feel for a specific victim following a specific offense—to exert a more powerful influence on how

they respond to that specific victim. We therefore focused on the link between state empathy and apology quality in the current research, and tested whether this link persisted when controlling for trait empathy in Study 2.

## 5 | OVERVIEW OF THE PRESENT RESEARCH

To address the gaps in the existing literature on empathy and apologies, we conducted three studies using complementary approaches. In Study 1, participants recalled an unresolved offense they had committed against their romantic partner, indicated their level of state empathy for their partner, and wrote an email to their partner in which they addressed this offense. In Study 2, participants imagined committing an offense against a friend, reported on their state empathy, and then indicated their likelihood of using eight apology elements and four defensive strategies. Participants also completed a measure of trait empathy to test whether associations between state empathy and apology quality were robust when controlling for trait empathy. In Study 3, participants recalled an unresolved offense they had committed against someone, but were randomly assigned to a high empathy, low empathy, or control condition while writing an email to the victim. In all three studies, we tested whether higher levels of empathy toward the victim predicted greater apology comprehensiveness and less defensiveness. In Studies 1 and 3, we also asked participants to self-report on the comprehensiveness and defensiveness of their emails. The results for these self-reports of apology quality closely tracked those for the coded ratings of quality, and thus are reported in Supplemental Materials.

We report all measures, manipulations, and exclusions, and no data collection took place after any stage of data analysis. All deidentified data and materials are openly available at [https://osf.io/7epk6/?view\\_only=4cdfb0ef8f1c46489cc2e1fc7d85b8d4](https://osf.io/7epk6/?view_only=4cdfb0ef8f1c46489cc2e1fc7d85b8d4). The studies reported in this article received ethics approval from the Research Ethics Committee at the authors' university. All studies are original and have been performed according to APA ethical standards for the treatment of human subjects. We have no conflicts of interest to report.

## 6 | STUDY 1

In Study 1, we asked participants to recall an unresolved offense they had committed against their partner and then write a real email to their partner addressing the offense. We then coded these emails for apology comprehensiveness and defensiveness and examined whether self-reported state empathy toward the victim was associated with these apology features. To account for the possibility that a correlation between empathy and apology behavior was driven solely by relationship closeness (e.g., see Cialdini et al., 1997) or features of the offense context (e.g., severity; responsibility; time of offense), we also tested our predicted associations while controlling for each of these factors.

## 6.1 | METHOD

### 6.1.1 | Participants

We recruited 301 American participants from Amazon Mechanical Turk. Participants were screened to be living in the United States, and to have an approval rating of greater than 95% on Mechanical Turk. They were paid \$1.00 for their participation. We excluded participants who did not describe an offense ( $n = 8$ ), did not write an email ( $n = 2$ ), described being the victim of an offense ( $n = 1$ ), or asked us to exclude their data ( $n = 1$ ). A sensitivity analysis conducted in G\*Power on the remaining 289 participants showed that this study had 95% power to detect a small-medium correlation ( $r = .21$ ; power = .95;  $\alpha = .05$ ). Participants' demographic information was not recorded due to experimenter error.<sup>1</sup>

### 6.1.2 | Materials and procedure

#### *Offense recall*

Participants first completed several personality measures (see OSF link for full materials). They were then asked to think about something they had done that had offended or hurt their romantic partner. They were instructed to think about something that was currently unresolved—something that has not yet been fully reconciled or dealt with. Participants were then asked to enter their partner's initials into a text box, so that these initials could be embedded in future questions referring to their partner. Next, participants answered open-ended questions asking them to describe their offense and when it took place. This time of offense variable was later coded on a 7-point scale (1 = yesterday; 2 = previous week; 3 = previous month; 4 = a few months ago; about 6 months ago; 6 = a year ago; 7 = more than a year ago). On 7-point scales, they then rated how close they felt to their partner at the time of the offense, how responsible they felt for the offense, and how severe their offense was with two items ( $r = .54$ ,  $p < .001$ ).

Following data collection, an undergraduate research assistant categorized these offenses into the following types (adapted from Schumann, 2012): criticism (insults, personal attacks, hurting feelings); deception (lying, misleading, withholding information); betrayal (breaking a promise, infidelity, violation of confidence, talking behind someone's back, spreading rumors); misunderstanding (miscommunication, misinterpretation of something said or done); failed obligation (failing to do something you were supposed to do, such as not submitting a work task or not completing chores); inconvenience (something that causes a problem for another person, such as making extra work for them; taking up their time); disagreement (conflict due to divergent values or opinions); physical (causing someone bodily harm); sexual (sexual disagreement, issue, or violation); and possession (damage

<sup>1</sup> Population demographics for Mechanical Turk suggest that our sample was likely predominantly White, split fairly evenly across gender, with a mean age in the mid-thirties (Moss et al., 2020).

or loss to possessions, such as stealing money; breaking a favorite mug).

#### *Email response to partner*

Participants then received the following instructions, with their partner's initials (e.g., "RD") embedded to make the task more personal: "We would now like you to write an email to RD. Please use this email to address the offense that you committed against RD, saying whatever it is that you would like to say to RD about this event. At the end of the study, we will ask you to log in to your email account and send the email to RD." Participants therefore believed they would actually be sending this email to their partner. However, in reality, participants were never asked to send the email. After they completed the empathy and self-reported comprehensiveness and defensiveness measures (see Supplemental Materials), they were debriefed with the following:

"Earlier we told you to write an email to the person you had offended, and told you that you would be sending this email to them at the end of the study. However, we will not be asking you to actually send the email. We told you that you would be sending it so that you would write a response that you actually intended this person to see. We apologize for this deception, and hope that you understand the purpose for it. Below we are re-posting the email you wrote, in case you would like to copy it and keep it for your own purposes."

Participants were therefore given an opportunity to use their email if they wished, but no data were collected on whether or not they actually sent an email.

#### *State empathy*

To assess the amount of empathy participants felt for their partner in the moment, they indicated the extent to which they felt "softhearted", "empathic", "warm", "concerned", and "compassionate" while writing the email to their partner (Coke et al., 1978), as well as the extent to which they tried to empathize with their partner in six different ways while writing the email (e.g., "I tried to understand RD's emotions"; Schumann et al., 2014). All items were answered on 7-point scales (1 = *not at all*, 7 = *extremely*). Although the structure of the items in the two measures was different, both reflected participants' empathic experience while writing the email to their partner and thus captured state empathy. An exploratory factor analysis using a principal-axis factor extraction yielded a single factor explaining 71.59% of the variance (with loadings ranging from .69 to .87). These 11 items were therefore averaged to create a reliable measure of state empathy ( $\alpha = .96$ ). For the interested reader, results from all three studies are reported separately for the two state empathy measures in the Supplement; with rare exceptions, results were consistent for both measures of empathy.

#### *Email response coding*

Following data collection, two additional independent undergraduate research assistants coded the responses for each of the eight apology elements and the four defensive strategies. Coders were trained

by the first author over multiple sessions. Inter-observer reliability was good (average Cohen's Kappa = .72); discrepancies between coders were resolved by a third coder. The total number of apology elements included in each response was summed to represent apology comprehensiveness. The total number of defensive strategies included in each response was summed to represent defensiveness.

## 6.2 | RESULTS

Participants rated their recalled offenses as moderately severe ( $M = 5.11$ ,  $SD = 1.27$ ) and high in responsibility ( $M = 5.83$ ,  $SD = 1.58$ ), and they reporting feeling moderately close to the victim ( $M = 4.27$ ,  $SD = 1.92$ ). The time of offense ranged substantially (yesterday = 12%; previous week = 28%; previous month = 11%; past few months = 12%; six months ago = 8%; a year ago = 5%; more than a year ago = 24%). Offense coding revealed that participants recalled a wide variety of offenses, the most common of which included criticism (43%), betrayal (19%), deception (14%), failed obligation (9%), and inconvenience (5%). All other categories comprised fewer than 3% of recalled offenses each.

Interestingly, most emails (83%) contained at least one instance of apology (i.e., expression of remorse, such as "I'm sorry" or "I apologize") despite receiving no instructions to apologize in their email. However, emails varied considerably in how comprehensive they were (see Table 1 for examples of apologies with low, moderate, and high levels of comprehensiveness and defensiveness). As in prior research using similar methods (Schumann, 2014; Schumann & Orehek, 2019), defensive strategies were used less frequently. This is possibly because we instructed participants to identify an unresolved offense they had committed, leading participants to select offenses for which they felt high levels of responsibility.

Consistent with our predictions, state empathy was positively associated with apology comprehensiveness and negatively associated with defensiveness (see Table 2 for correlations and descriptive statistics).<sup>2</sup> To account for the possibility that an association between state empathy and apology behavior could be explained by relationship closeness or features of the offense context (severity; responsibility; time of offense), we controlled for each of these factors in multiple regression. State empathy was still significantly associated with both comprehensiveness,  $B = .69$ ,  $SE = .10$ ,  $t(280) = 6.69$ ,  $p < .001$ , 95% CI [.49, .89], and defensiveness,  $B = -.15$ ,  $SE = .04$ ,  $t(280) = -3.93$ ,  $p < .001$ , 95% CI [-.22, -.07], when controlling for these variables.<sup>3</sup>

<sup>2</sup> Several outliers emerged for both apology comprehensiveness and defensiveness in Studies 1 and 3. In both studies, removing these outliers did not alter any results. We therefore opted to retain these participants in the analyses, as we believe they are meaningful data points.

<sup>3</sup> To ensure that greater state empathy didn't simply promote longer responses (which create more opportunity for the use of various apology elements), we tested our predicted association while controlling for word count. Word count was computed by the Linguistic Inquiry and Word Count (LIWC) software (Tausczik & Pennebaker, 2010), and was positively associated with state empathy ( $r = .17$ ,  $p = .004$ ), apology comprehensiveness ( $r = .44$ ,  $p < .001$ ), and defensiveness ( $r = .12$ ,  $p = .040$ ). However, state empathy remained a significant predictor of both apology comprehensiveness ( $B = .69$ ,  $SE = .09$ ,  $t(286) = 8.15$ ,  $p < .001$ , 95% CI [.52, .86]) and defensiveness ( $B = -.16$ ,  $SE = .03$ ,  $t(286) = -4.92$ ,  $p < .001$ , 95% CI [-.23, -.10]) when controlling for word count.

**TABLE 1** Sample emails, Study 1

Email	Apology elements	Defensive strategies
<i>I am so sorry that I said your dress was ugly</i>	Remorse (1) Responsibility (1)	
<i>I am deeply sorry about lying to you, I know it was wrong and I will try for it to not happen again. I love you very much and I hope things get better.</i>	Remorse (1) Responsibility (1) Admission of Wrongdoing (1) Forbearance (1) Repair (1)	
<i>I'm really sorry for the way I treated you and your feelings. It was really disrespectful of me and the fact that I could not show you how I felt really showed how immature I was. I know that kind of killed our relationship and our friendship, and I truly apologize for it. I hope you forgive me and know that it was not my intention to do this.</i>	Remorse (2) Acceptance of Responsibility (2) Admission of Wrongdoing (1) Request for Forgiveness (1) Acknowledgement of Harm (1) Explanation (1)	
<i>I just wanted to let you know that I only met her because she was in town for a visit and all we did was eat lunch. We did talk about old times we had together but she is married and I respect that. I was in love with her but she found somebody else. I am in love with you. There is no reason for you to worry. I am with you and I love you.</i>	Repair (2)	Excuse (1) Minimization (1)
<i>I'm sorry I kicked you out, but I did what I had to do. You were acting like a maniac for months, and you were eating nonstop. You had to go. I was no longer attracted to you in any way, shape, or form, so why was I going to continue to allow you to live off of me for free? You need to appreciate your responsibility in this.</i>	Remorse (1) Responsibility (1)	Justification (2) Victim Blame (2)

**TABLE 2** Bivariate correlations between and descriptive statistics of all variables, Study 1

	1	2	3	4	5	6
1. State empathy	–					
2. Coded comprehensiveness	.44***	–				
3. Coded defensiveness	-.23**	-.21***	–			
4. Closeness to the victim	.17**	.07	-.10	–		
5. Responsibility for the offense	.37***	.28***	-.07	.18**	–	
6. Offense severity	.18**	.14*	.05	-.04	.36***	–
<i>M</i>	5.28	4.57	0.44	4.27	5.83	5.11
<i>SD</i>	1.42	2.52	.85	1.92	1.58	1.27
<i>Min/Max</i>	1/7	0/15	0/4	1/7	1/7	1/7
<i>Range</i>	6	15	4	6	6	6

\*\*\* $p < .001$ .\*\* $p < .01$ .\* $p < .05$ .

### 6.3 | DISCUSSION

In Study 1, we found a strong association between state empathy and apology comprehensiveness, as well as a more modest but significant negative association between state empathy and defensiveness. Notably, these correlations remained significant when controlling for important features of the relationship and offense, thus revealing the robustness of these associations. However, this study was limited in three ways. First, because participants completed other

personality measures prior to completing measures of empathy and writing their emails, they might have been primed to reflect on their inner thoughts and feelings—a possibility that might have inflated the association between empathy and apology behavior. Second, this study focused only on offenses and apologies occurring in the context of romantic relationships, a context in which empathy could exert a unique influence due to the high importance and closeness of the relationship. Third, only a state measure of empathy was tested, leaving open important questions about the influence of



trait empathy. We therefore sought to address these limitations in Study 2.

## 7 | STUDY 2

In Study 2, we aimed to replicate the associations observed in Study 1 while extending this work in important ways. To address the concern that completing other personality measures inflated the association between state empathy and apology behavior, in Study 2 participants completed no other personality measures (other than trait empathy at the end of the study). To address the concern regarding the use of the romantic relationship context, we had all participants imagine committing an offense against a friend. In addition to allowing us to examine whether the association was robust to relationship context, using an imagined offense situation allowed us to control and standardize important features of the offense, such as degree of severity, responsibility, and type of offense. Further, rather than writing emails, participants also indicated their likelihood of using examples of each of the eight apology elements and four defensive strategies, thereby providing a different way of assessing comprehensiveness and defensiveness. Finally, to address the concern about only assessing state empathy, we included both state and trait measures of empathy, and examined whether state empathy predicted apology quality while controlling for having an empathic disposition. We anticipated that the amount of situational empathy participants experienced would be a more potent predictor of apology behavior, and thus would predict apology comprehensiveness and defensiveness over and beyond trait empathy.

## 7.1 | Method

### 7.1.1 | Participants

Study 2 was preregistered at [osf.io/a7ynu](https://osf.io/a7ynu).<sup>4</sup> An a priori power analysis conducted in G\*Power (Faul et al., 2007) determined that a sample of 138 participants had 95% power to detect a medium-sized correlation ( $r = .30$ ; power = .95;  $\alpha = .05$ ). To account for possible exclusions, we recruited 150 American participants from Prolific Academic, an online survey site shown to be appropriate for social science research (Palan & Schitter, 2018). Participants were screened to be living in the United States, and to have an approval rating of greater than 95% on Prolific. They were paid \$1.00 for their participation. We preregistered that participants would be excluded if they failed both attention checks at the end of the study (see details in Materials and Procedure). Although two participants failed one attention check, no participant failed both and therefore no participants were excluded. The final sample therefore consisted of 150 participants (gender: 81 female; 66 male; three non-binary/third gender participants; age:

$M = 31.29$ ,  $SD = 10.51$ ; race/ethnicity: 68.7% White/Caucasian; 12% Asian; 7.3% Black/African American; 6.7% Latinx; 5.3% mixed race/ethnicity).

### 7.1.2 | Materials and procedure

#### *Imagined offense*

We adapted the offense scenario and responses used in Schumann and Orehek (2019). Participants began by inputting the initials of a real friend, so that these initials could be embedded in the imagined scenario to make it more vivid. They were then asked to read a scenario, imagining “that this event really just happened between you and the person you identified as your friend, [friend’s initials].” Participants then read the following scenario:

It is 4:50 pm on a Thursday, and you are just finishing up at work. You have to leave no later than 5:00pm today, because you promised your friend, [initials], that you would pick them up from work at 5:10pm to go out to dinner. You decide in advance on a convenient pick-up location outside by the gardens. Just as you are preparing to leave, your boss comes over and gives you another task to do. He says that the sooner you can get it done the better. You look the task over and estimate that it will take you about 15 minutes to complete. You call your friend to let them know you’ll be late, but they don’t pick up their phone. You decide to stay and finish it anyway since it will only make you a little late and you’d like to please your boss. Unfortunately, it turns out that the task takes you much longer to finish than you originally expected, and you only end up leaving the office at 5:30pm. As you leave the building you see that it is pouring rain outside. You arrive at the meeting spot 30 minutes late and see [initials] standing there in the rain, soaking wet. When [initials] gets in your car, they say “Where have you been? I’ve been waiting for you out here.”

#### *State empathy*

Next, participants responded to the same 11 items as in Study 1, only without references to an email (e.g., “To what extent would feel the following toward [friend’s initials] ... softhearted”; “To what extent would you try to ... understand [friend’s initial’s] emotions?”). These items were answered on a 7-point scale (1 = *not at all likely*, 7 = *extremely likely*), and were averaged to form a measure of state empathy ( $\alpha = .95$ ).

#### *Responses to friend*

Participants read that they would see different statements they might say to their friend after they get in the car. They then saw a series of statements presented in randomized order, including one statement representing each of the eight apology elements (e.g.,

<sup>4</sup> Studies 1 and 3 were conducted prior to preregistration practices being established in the author’s lab.

"I'm very sorry"; "Let me try to make it up to you. Dinner is on me tonight") and one statement representing each of the four defensive strategies (e.g., "You should have answered your cellphone when I called you"; "My boss made me stay late to finish a task he gave me at the last minute"). Participants indicated how likely they would be to say each statement to their friend on a 7-point scale (1 = *not at all likely*, 7 = *extremely likely*). Responses to the eight apology elements were summed to create an index of apology comprehensiveness (possible range: 8–56); responses to the four defensive strategies were summed to create an index of defensiveness (possible range: 4–28).<sup>5</sup>

#### Trait empathy

To assess trait empathy, participants completed the 7-item empathic concern subscale from the Interpersonal Reactivity Index (Davis, 1980). Empathic concern assesses feelings of compassionate concern for other people (e.g., "I often have tender, concerned feelings for people less fortunate than me"), and is a reliable, validated, and widely used measure of empathy (Konrath et al., 2011). Participants responded to items on a 7-point scale (1 = *Not at all true*, 7 = *Exactly true*), and items were averaged to create an index of trait empathy ( $\alpha = .88$ ).

#### Attention check and demographics

Participants answered two attention check questions assessing their comprehension of the scenario (e.g., "When you arrived to pick up your friend ..."; response options: it was pouring raining outside; your friend was gone; your friend was crying). Finally, participants completed demographic questions (e.g., gender; age; ethnicity).

## 7.2 | RESULTS

We first assessed the bivariate correlations between empathy and responses and found support for the predicted associations (see Table 3). Both state empathy and trait empathy were significantly positively associated with apology comprehensiveness. In addition, state empathy was negatively associated with defensiveness, replicating Study 1. However, trait empathy was not associated with defensiveness.

Next, we assessed whether the associations between state empathy and both comprehensiveness and defensiveness remained significant when controlling for the influence of trait empathy (see Table 4 for regression results). Including mean-centered state and trait empathy in a linear regression model, state empathy remained a significant predictor of apology comprehensiveness, while trait empathy did not. Not surprisingly, state empathy also remained a significant predictor

**TABLE 3** Bivariate correlations between and descriptive statistics of all variables, Study 2

	1	2	3	4
1. State empathy	–			
2. Trait empathy	.50***	–		
3. Summed comprehensiveness	.53***	.33***	–	
4. Summed defensiveness	–.18*	.01	.05	–
<i>M</i>	6.27	4.57	41.90	13.28
<i>SD</i>	.86	2.52	7.85	4.28
<i>Min/Max</i>	2.91/7	2.43/7	21/56	4/24
<i>Range</i>	4.09	4.57	35	20

\*\*\* $p < .001$ .

\* $p < .05$ .

Possible ranges for state and trait empathy = 1–7; possible range for apology comprehensiveness = 8–56; possible range for defensiveness = 4–28.

of defensiveness, while the null association between trait empathy and defensiveness remained nonsignificant.

## 7.3 | DISCUSSION

Study 2 replicated the association observed in Study 1 while addressing a number of limitations. This study provides evidence that state empathy might be the more potent predictor of apology outcomes; only state empathy was associated with defensiveness, and only state empathy predicted apology comprehensiveness and defensiveness when state and trait empathy were included in the model. This finding suggests that, when deciding how to respond to victims, the amount of empathy transgressors experience in the moment might often carry more weight than their dispositional tendency to feel empathic concern for others.

Studies 1 and 2 provided evidence of a robust association between state empathy and transgressors' responses to victims. However, because these studies were limited by their correlational design, we moved to an experimental design in Study 3 to test whether feelings of empathy for a victim exert a causal influence on apology quality.

## 8 | STUDY 3

In Study 3, we adapted established methods for increasing or decreasing participants' momentary feelings of empathy by randomly assigning participants to experience high or low empathy while constructing a written response to a person they had hurt. We also included a control condition to test whether high empathy boosts apology quality relative to a neutral control, whether low empathy inhibits apology quality relative to a neutral control, or both. In addition, we moved away from specifying a relationship context to test whether the empathy–apology link would replicate across a variety of relationship types.

<sup>5</sup> We followed Schumann & Orehek (2019) by summing apology elements and defensive strategies to capture comprehensiveness and defensiveness, respectively. Alphas were not computed for these composites because use of one element does not necessarily imply the use of another element; in some cases, using one element might decrease the likelihood of using a similar element.

**TABLE 4** Regression analyses, Study 2

<i>Dependent measure</i>					
Predictor	<i>b</i>	<i>SE</i>	95% CI	<i>t</i>	<i>p</i>
<i>Apology comprehensiveness</i>					
(Constant)	41.90	.55	(40.82, 42.98)	76.81	< .001
State empathy	4.42	.73	(2.98, 5.87)	6.05	< .001
Trait empathy	.66	.63	(-.57, 1.90)	1.06	.290
<i>Defensiveness</i>					
(Constant)	13.28	.34	(12.60, 13.96)	38.65	< .001
State empathy	-1.22	.46	(-2.13, -.31)	-2.65	.009
Trait empathy	.58	.39	(-.20, 1.35)	1.46	.146

## 8.1 | METHOD

### 8.1.1 | Participants

We recruited 306 American participants from Amazon Mechanical Turk. As in Study 1, participants were screened to be living in the United States, and to have an approval rating of greater than 95% on Mechanical Turk. They were paid \$1.00 for their participation. We excluded the data of six participants because they did not write an email, and the data of 49 participants because they failed a manipulation check asking them to identify the instructions they were given in the study (including these 49 participants does *not* change any of the results reported below). The final sample therefore consisted of 251 participants (*gender*: 129 male; 121 female; one unspecified; *age*:  $M = 35.66$ ,  $SD = 11.50$ ; *race/ethnicity*: 78% White/Caucasian; 7.6% Black/African American; 6.4% Latinx; 4% Asian; 2.4% mixed race/ethnicity; 1.6% Native American; .4% unspecified). A sensitivity analysis conducted in G\*Power indicated that our sample had 95% power to detect a medium effect (Cohen's  $f = .25$ ; power = .95;  $\alpha = .05$ ).

### 8.1.2 | Materials and procedure

#### *Offense recall*

Participants were asked to recall something they had done that had offended or hurt someone. Participants were then asked to identify the type of relationship they had with the victim and enter the person's initials (e.g., "RD") into a text box. On 7-point scales, they then rated how close they felt to the victim at the time of the offense, how severe their offense was, and how responsible they felt for the offense. As with Study 1, an undergraduate research assistant categorized the recalled offenses into the 10 possible categories (e.g., betrayal).

#### *Empathy manipulation*

Adapting methods from Batson and colleagues (1997), we then randomly assigned participants to an empathy condition. First, after being asked to identify an offense, all participants were asked to "please describe this event below." Those in the control received no further

instructions before writing their offense description. Those in the high empathy condition received the additional instructions, "In your description, focus on RD's feelings, and how this event affected RD." Those in the low empathy condition received the additional instructions, "In your description, take an objective perspective. Do not get caught up in RD's feelings, just remain objective and emotionally detached."

After describing the offense, all participants saw the following instructions: "We would like you to take a moment to reflect on what you would say to RD about the event you just described. Those in the high empathy condition then read "When thinking about what you would say, we would again like you to try to focus on how RD feels about the event. Try to put yourself in RD's shoes, imagining how this event has affected RD and how he or she feels as a result." Those in the low empathy condition read "When thinking about what you would say, we would again like you to try to take an objective perspective toward the event. Try not to get caught up in how RD feels, just remain objective and emotionally detached." All participants (including those in the control) then received the same instructions to write an email to the victim as in Study 1. At the end of the Study, participants received the same debriefing information as in Study 1, informing them they would not actually be sending an email to the victim, but giving them an opportunity to copy it for their own purposes if they wished.

#### *State empathy*

Participants completed the same 11 items as in Study 1 assessing the amount of empathy they experienced while writing the email to the victim ( $\alpha = .97$ ).

#### *Email response coding*

Following data collection, two independent undergraduate research assistants coded the responses for each of the eight apology elements (i.e., apology comprehensiveness) and the four defensive strategies (i.e., defensiveness). Coders were trained by the first author over multiple sessions. Inter-observer reliability was good (average Cohen's Kappa = .76); discrepancies between coders were resolved by a third coder.



**TABLE 5** Bivariate correlations and descriptive statistics of all variables, Study 3

	1	2	3	4	5	6
1. State empathy	–					
2. Coded comprehensiveness	.54***	–				
3. Coded defensiveness	–.39***	–.36***	–			
4. Closeness to the victim	.49**	.27***	–.23**	–		
5. Responsibility for the offense	.39***	.30***	–.23***	.38***	–	
6. Offense severity	.33***	.16*	–.09	.22**	.35***	–
<i>M</i>	4.76	4.73	0.59	4.82	5.30	4.04
<i>SD</i>	1.68	2.87	1.06	1.92	1.78	1.53
<i>Min/Max</i>	1/7	0/20	0/8	1/7	1/7	1/7
<i>Range</i>	6	20	8	6	6	6

\*\*\* $p < .001$ .\*\* $p < .01$ .\* $p < .05$ .

### Demographics and manipulation check

Participants answered demographic questions (e.g., gender; age; race/ethnicity) and then completed a manipulation check asking them to identify which of three sets of instructions they had received (“I was instructed to remain objective and emotionally detached”; “I was instructed to focus on how RD was feeling”; “I did not receive either of the above instructions.”). Forty-nine participants failed this manipulation check, and were therefore excluded from analyses. However, including these participants does not change any of the results reported below. Participants then read a feedback letter and were thanked for their participation.

## 8.2 | RESULTS

As in Study 1, participants rated their recalled offenses as moderately severe ( $M = 4.04$ ,  $SD = 1.53$ ) and high in responsibility ( $M = 5.30$ ,  $SD = 1.78$ ). Participants recalled offenses they had committed against a variety of relationship partners (family members = 34%; friends = 30%; past or current romantic partners = 21%; colleagues = 11%; acquaintances = 4%) and rated these relationships as moderately close ( $M = 4.82$ ,  $SD = 1.92$ ) on average. To ensure that participants in the three conditions recalled offenses that were similar in nature, we conducted one-way ANOVAs to test whether participants in each condition recalled offenses that were similar in relationship features (closeness; relationship type) and context features (severity; responsibility). No significant effects of empathy condition emerged on any of these outcomes (one-way ANOVAs on closeness, severity, and responsibility: all  $ps > .348$ ; chi-square for relationship type:  $p = .17$ ).

As in Study 1, offense coding revealed that participants recalled a wide variety of offenses, the most common of which included criticism (47%), betrayal (13%), failed obligation (10%), disagreement (7%), inconvenience (7%), possession (5%), and deception (4%). All other categories comprised fewer than 3% of recalled offenses each.

Looking first at the correlations among self-reported empathy and the apology outcomes, we see a replication of Study 1, such that self-reported state empathy was positively associated with apology comprehensiveness and negatively associated with defensiveness (see Table 5).

A one-way ANOVA revealed a significant omnibus effect of condition on the manipulation check of self-reported state empathy,  $F(2, 248) = 4.85$ ,  $p = .009$ ,  $\eta_p^2 = .04$ , with participants in the high empathy condition reporting significantly greater state empathy than those in the low empathy ( $p = .002$ ) and control ( $p = .047$ ) conditions (see Table 6). A one-way ANOVA also revealed a significant effect of condition on apology comprehensiveness,  $F(2, 248) = 3.57$ ,  $p = .030$ ,  $\eta_p^2 = .03$  (Table 3), with those in the high empathy condition offering more comprehensive apologies compared to those in the low empathy condition ( $p = .029$ ), but not the control ( $p = .814$ ). Although in the expected direction, no significant effect of condition emerged on defensiveness,  $F(2, 248) = 0.53$ ,  $p = .589$ ,  $\eta_p^2 = .004$ .<sup>6</sup> For both apology comprehensiveness and defensiveness, there was no moderation by participant gender, age, or race/ethnicity (coded as white/non-white), all interaction  $ps > .194$ .

### 8.2.1 | Indirect effects through self-reported state empathy

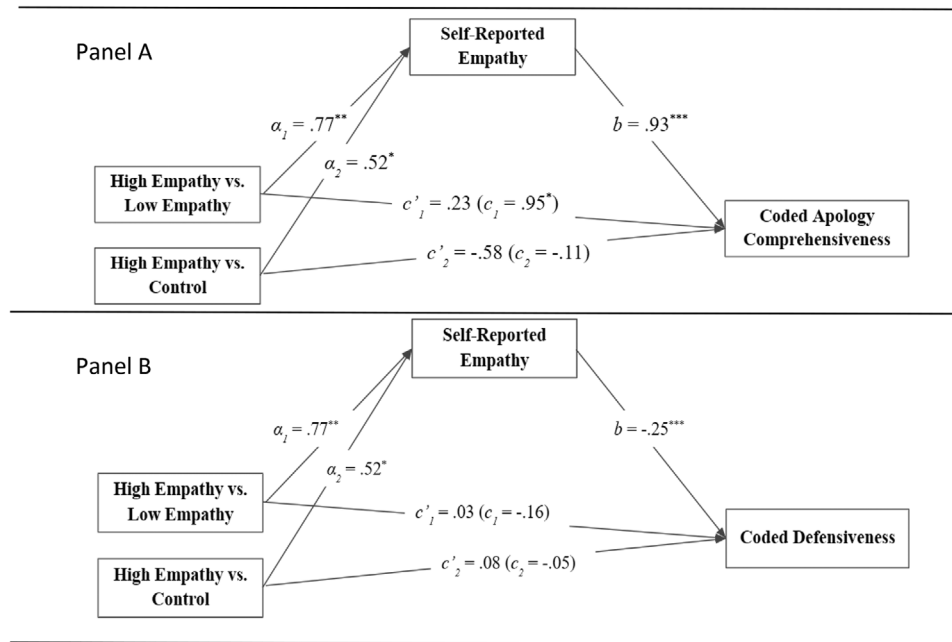
Although we did not find significant effects of condition on defensiveness, or a significant difference between the high-empathy condition and control condition on apology comprehensiveness, an independent variable can indirectly affect a dependent variable even in the absence

<sup>6</sup> As in Study 1, we tested the effect of empathy condition on each of the outcomes while controlling for word count. LIWC-computed word count did not differ by condition ( $p = .707$ ), but was positively associated with self-reported empathy ( $r = .16$ ,  $p = .009$ ), apology comprehensiveness ( $r = .49$ ,  $p < .001$ ), and defensiveness ( $r = .31$ ,  $p < .001$ ). However, empathy condition remained a significant predictor of self-reported empathy,  $F(2, 247) = 5.21$ ,  $p = .006$ ,  $\eta_p^2 = .04$ , and apology comprehensiveness,  $F(2, 247) = 4.44$ ,  $p = .013$ ,  $\eta_p^2 = .04$ , when controlling for word count.

**TABLE 6** Means and standard deviations by empathy condition, Study 3

	Experimental Condition		
	Control M (SD)	Low Empathy M (SD)	High Empathy M (SD)
State empathy	4.68 <sub>a</sub> (1.71)	4.43 <sub>a</sub> (1.79)	5.20 <sub>b</sub> (1.44)
Coded apology comprehensiveness	5.14 <sub>a</sub> (3.17)	4.09 <sub>b</sub> (2.53)	5.04 <sub>a</sub> (2.82)
Coded defensiveness	0.57 <sub>a</sub> (1.26)	0.67 <sub>a</sub> (1.01)	0.51 <sub>a</sub> (0.90)

Note. Means within the same row that do not share a subscript differ significantly at  $p < .05$ .

**FIGURE 1** Mediation model testing the effect of empathy condition on apology comprehensiveness (a) and defensiveness (b) through self-reported state empathy for the victim, Study 3. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ **TABLE 7** Indirect effects of empathy condition on apology outcomes via state empathy, Study 3

	Indirect effect	SE	95% CI
<b>Apology comprehensiveness</b>			
High versus low empathy	.71	.23	.26, 1.20
High empathy versus control	.48	.23	.01, .94
<b>Defensiveness</b>			
High versus low empathy	-.19	.07	-.34, -.07
High empathy versus control	-.13	.07	-.28, -.01

Note. Confidence intervals for the indirect effects reflect unstandardized estimates and were calculated based on 5000 bias-corrected bootstrap samples; confidence intervals that do not include the value '0' are considered statistically significant.

of a significant total effect (Hayes, 2013; Rucker et al., 2011; Shrout & Bolger, 2002). We therefore assessed whether the empathy manipulation affected apology comprehensiveness and defensiveness by influencing self-reported state empathy toward the victim. Using PROCESS,

Model 4 (Hayes, 2017), we found indirect effects of empathy condition through state empathy for both high versus low empathy and high empathy versus control on apology comprehensiveness and defensiveness (see Table 7 and Figure 1). After accounting for state empathy, no direct effects remained significant.

### 8.3 | Discussion

Study 3 provides evidence for a causal relationship between empathy and apology behavior, with participants who were instructed to experience high empathy for their victim offering more comprehensive apologies relative to those who were instructed to take a less empathic perspective. As in Study 1, the results for defensiveness were weaker (and in this case not significant), possibly due to a floor effect in the use of defensive strategies in these emails. However, indirect effects through state empathy emerged, offering additional evidence for what is likely a modest link between empathy and defensiveness. Study 3 also provides evidence for the association between empathy and apology comprehensiveness across a variety of relationship types, suggesting that

the empathy–apology link is generalizable across these different contexts.

Although the benefits of the high empathy condition compared to the low empathy condition on apology comprehensiveness were clear and robust, we did not find a significant difference between the high empathy and control condition. This might suggest that inducing higher levels of empathy holds little benefit over and above a neutral state, and that apology comprehensiveness only suffers under lower levels of empathy. Although this is certainly possible, it is also possible that writing about the offense in the high empathy condition—which explicitly instructed participants to focus on the victim's feelings and negative outcomes—felt more threatening than writing about the offense in the control condition. Consistent with this possibility, participants' offense descriptions were higher in LIWC-coded anxiety when they were in the high empathy (vs. control) condition,  $p = .012$ . Because feelings of threat and anxiety can interfere with transgressors' willingness to offer high-quality apologies (Schumann, 2014), it is possible that the nature of our manipulation suppressed the benefits of the high-empathy condition relative to the neutral control. Notably, we found significant indirect effects of the high empathy versus control condition through self-reported state empathy, which suggests that the high empathy condition indeed promoted apology comprehensiveness relative to the control condition through an empathy pathway. Future research might examine whether a high empathy condition is superior to a neutral control when the empathy induction does not inadvertently increase feelings of threat.

## 9 | GENERAL DISCUSSION

In three studies using complementary methods, we found that the amount of empathy transgressors felt toward a victim was associated with higher-quality apologies in the form of greater comprehensiveness and (less consistently) lower defensiveness. To our knowledge, these are the first studies to test and find an association between state empathy and actual apology behavior in the form of apology content, and the first experimental demonstration of an empathy–apology link. Further, this is the first work to compare how state and trait empathy predict apology behavior, providing evidence that the amount of empathy transgressors experience in the moment likely exerts a stronger influence on how they apologize than their dispositional tendency to be empathic toward others. This is encouraging, as people might be better able to bolster their state empathy toward a victim in a specific conflict situation than increase their trait empathy.

The current studies contribute to an emerging body of work examining the transgressor's perspective (Schumann, 2018), identifying empathy as a driver of higher-quality apologies that can attenuate the destructive consequences of interpersonal offenses (Byrne et al., 2013; Kirchhoff et al., 2012; Scher & Darley, 1997; Schumann, 2012). This work therefore converges with other work showing that empathy is an important factor in the conflict resolution process (e.g., de Wied et al., 2007; Exline & Zell, 2009; Fincham et al., 2002; Gina et al., 2007).

Given these benefits, how can people enhance their empathy when facing interpersonal conflicts? Previous empathy-building programs employ techniques to situationally increase empathy (e.g., perspective-taking instructions; e.g., Batson et al., 1997; Todd et al., 2011; Vescio et al., 2003) or teach empathy (e.g., by training them to make associations between target facial expressions and emotions; Feshbach & Cohen, 1988; Golan & Baron-Cohen, 2006; Hadwin et al., 1996; Riess et al., 2012; Şahin, 2012). Although often successful in enhancing empathy, these techniques might not produce an enduring motivation to try to empathize with others in challenging empathy contexts, such as an interpersonal conflict.

Fortunately, people can *invest effort* to try to empathize in conflict situations, potentially modulating their empathy experience (Schumann et al., 2014). For example, after committing an offense, a transgressor might actively listen to the victim, ask the victim to explain his or her perspective, or consciously try to share the victim's affective state (Eyal et al., 2018; Schumann et al., 2014). But how can we foster transgressors' motivation to invest empathic effort? Previous work has revealed that encouraging a growth mindset of empathy is one method for promoting empathic effort in challenging empathy situations (Schumann et al., 2014), and future research might test the efficacy of a growth mindset intervention for promoting transgressor empathy, and, consequently, higher-quality apologies. If effective, this type of intervention could be useful in a variety of important contexts, such as couples seeking marital therapy, organizations seeking to improve workplace functioning, conflict mediators and restorative justice facilitators, and teachers seeking to manage peer conflicts on the playground and in the classroom.

One limitation of the current studies is that transgressors identified unresolved offenses that had occurred sometime in the past. Transgressors therefore recognized that they had committed an offense. Future work might examine whether empathy plays as powerful a role in promoting higher-quality apologies when transgressors do not believe they have committed an offense. Can empathy for the victim motivate reparative responses even when a victim accuses a transgressor of wrongdoing but the transgressor does not agree that they have transgressed? What happens when transgressors recognize their offense but also believe they have been victimized by the other person (SimanTov-Nachlieli & Shnabel, 2014)? Although we expect empathy to be even more challenging in these situations, we predict that those who are better able to relate to the conflict partner's affective experience will still be more apt to offer higher-quality apologies. Additionally, transgressors' self-reported state empathy toward victims was fairly high in the current studies, potentially due to the retrospective nature of the recalled offense paradigm. Future work might examine whether empathy promotes higher-quality apologies immediately after committing an offense, when intense emotions might make empathy especially challenging.

Relatedly, defensiveness was fairly low in the current studies—a pattern consistent with past research using similar methods (Schumann, 2014; Schumann & Orehek, 2019). This could be due to a number of reasons, such as participants recalling an event they recognized as a clear offense, the retrospective nature of the paradigm, the written

(rather than face-to-face) format of the apologies, or the absence of explicit instructions to apologize—all of which might have reduced participants' motivation to self-protect. Future research might examine whether defensive responding is more common during face-to-face conflicts occurring in the moment, and how empathy predicts defensiveness under these circumstances.

Conflict resolution is a dynamic dyadic process wherein the transgressor and victim influence each other's responses. For example, hostile responses from the victim predict defensive responses from the transgressor (Woodyatt & Wenzel, 2013). By contrast, transgressors often seek acceptance from the victim, and victims' expressions of empathy toward the transgressor promote transgressors' willingness to reconcile the conflict (Shnabel & Nadler, 2008). More broadly, work on perceived partner responsiveness—the perception that a partner understands, values, and supports important aspects of the self (Gable & Reis, 2006)—suggests that seeing your partner as responsive to you leads you to be responsive in return (Canevello & Crocker, 2010), a pattern that is likely to emerge for the similar construct of empathy. Transgressors might therefore be more willing to invest effort to empathize with the victim when they perceive victim empathy (rather than hostility) toward them. Thus, victims might play an active role in motivating empathy and, consequently, high-quality apologies from the transgressor. Future work might explore this interesting dyadic process of empathy in conflict situations.

Future research might also examine the enduring relational benefits that transgressor empathy might produce by promoting higher-quality apologies, as no work to our knowledge has investigated whether apologies contribute to long-term relationship functioning. An apology might seem like a simple gesture, but it might beget a more forgiving response from the victim, which then might reinforce the transgressor's constructive response and promote more constructive conflict behavior in the future, ultimately putting the relationship on a better course. Understanding whether empathy can create a recursive process of constructive responses could illuminate ways to positively impact the health of our relationships.

## 10 | CONCLUSION

Interpersonal offenses represent pivotal points in people's relationships, and transgressors of these offenses face an important decision regarding how to respond to the people they hurt. Should they offer a heartfelt apology where they take stock of their offense, express remorse for it, and promise to do better? Or should they seek to protect themselves with defensive strategies, such as justifications and excuses? Despite the frequency with which people transgress and potentially damage their relationships, we are only recently starting to uncover factors that underlie transgressors' responses following an offense. Our research demonstrates that in-the-moment empathy for the victim plays a powerful role in moving transgressors toward higher-quality apologies, thereby offering a potential pathway to relationship-protection. Fortunately, empathy appears to be a motivated process that lends itself well to intervention (Schumann et al., 2014; Zaki,

2014), thus opening the door to the discovery of methods that can enhance empathy in conflict contexts, and in turn, promote conflict resolution.

## ETHICS STATEMENT

The studies reported in this article received ethics approval from the Research Ethics Committee at the authors' university. All studies are original and have been performed according to APA ethical standards for the treatment of human subjects.

## CONFLICTS OF INTEREST

The authors have no conflicts of interest to report.

## DATA AVAILABILITY STATEMENT

All deidentified data and materials are openly available at <https://osf.io/7epk6/>.

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## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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