

Why Narcissists Are Unwilling to Apologize: The Role of Empathy and Guilt

Leunissen, J. M., Sedikides, C., & Wildschut, T. (2017). Why Narcissists Are Unwilling to Apologize: The Role of Empathy and Guilt. *European Journal of Personality*.
Accepted manuscript.

Corresponding author: Joost M. Leunissen, Division of Psychology, Nottingham Trent University, England, UK. Email: Joost.leunissen@ntu.ac.uk. This research was supported by a grant from the Daedalus Trust (nr. 514458101).

Abstract

We hypothesized that narcissists would be unwilling to apologize for their interpersonal transgressions, and that reduced levels of self-reported empathy and guilt would serially mediate this effect. Narcissism is characterized by little empathy for the victim, which reduces guilt about one's transgressions. Low guilt, in turn, is associated with unwillingness to apologize. In Study 1, we assessed dispositional narcissism, empathy, guilt, and willingness to apologize. In Study 2, we assessed dispositional narcissism and obtained state measures of empathy, guilt, and willingness to apologize. In Study 3, we manipulated narcissism and collected state measures of empathy, guilt, and willingness to apologize. Narcissism was negatively associated with (Studies 1-2) and decreased (Study 3) willingness to apologize, with this link being explained (i.e., serially mediated) by low empathy and guilt. Finally, in Study 4, we showed that antagonistic narcissism (i.e., narcissistic rivalry), but not agentic narcissism (i.e., narcissistic admiration), was negatively associated with willingness to apologize and apologizing behaviour. In all, narcissists are unwilling to apologize for their transgressions, as they experience little empathy for their victims and lower guilt.

Keywords: narcissism, apologizing, empathy, guilt, perpetrators

Why Narcissists Are Unwilling to Apologize: The Role of Empathy and Guilt

Apologizing is an effective way to restore broken relationships and be granted forgiveness following interpersonal transgressions (Fehr, Gelfand, & Nag, 2010; McCullough et al., 1998; Ohbuchi, Kameda, & Agarie, 1989). An apology is defined as a combined statement in which one takes responsibility, and communicates guilt, for a past behaviour or event (Lazare, 2004; Tavuchis, 1991). As such, apologizing is typically regarded as an implicit, and sometimes explicit, promise that the behaviour will not be repeated (Kim, Ferrin, Cooper, & Dirks, 2004). In all, by apologizing, a perpetrator acknowledges the injustice inflicted on the victim, reaffirms moral rules of conduct that were broken, and offers reassurance concerning the appropriateness of future behaviour towards the victim as well as third parties (Lazare, 2004; Tavuchis, 1991; Wenzel, Okimoto, Feather, & Platow, 2008).

The relevant literature has mostly focused on apology's constructive outcomes for transgression victims. Yet, the process of apologizing involves another side, that of the perpetrator. A small, but growing, literature on the topic has identified barriers to willingness to apologize, illuminating factors that foster or constrain it. For example, perpetrators are more willing to apologize when a victim communicates that he/she cares about the relationship, such as by responding in a forgiving (vs. unforgiving) manner (Leunissen, De Cremer, & Reinders Folmer, 2012) or by communicating hurt feelings (vs. anger; Lemay, Overall, & Cark, 2012). Perpetrators are also more willing to apologize after unintentional (vs. intentional) transgressions (Leunissen, De Cremer, Reinders Folmer, & Van Dijke, 2013). Nevertheless, perpetrators may be reluctant to offer an apology for a variety of reasons. For example, they may be motivated to protect their self-image or may be pessimistic that their apology will be appreciated by, or elicit forgiveness from, the victim (Leunissen, De Cremer, Van Dijke, & Reinders Folmer, 2014; Okimoto, Wenzel, & Hedrick 2013; Sedikides & Gregg, 2008).

Although a perpetrator's willingness to apologize fluctuates as a function of situations, the role of individual variation remains largely unaccounted for. Granted, there have been a few studies exploring individual differences in proclivity to apologize (Howell, Dopko, Turowski, & Buro, 2011). Relevant research attempted to map the personality

correlates of this variable. For example, proclivity to apologize is positively related to Agreeableness and self-esteem (Howell et al., 2011) as well as the Honesty-Humility factor of the HEXACO and guilt-proneness (Dunlop, Lee, Ashton, Butcher, & Dykstra, 2015). We focused in this article on the personality trait of narcissism (i.e., grandiose narcissism), defined as a “self-centered, self-aggrandizing, dominant, and manipulative interpersonal orientation” (Sedikides, Rudich, Gregg, Kumashiro, & Rusbult, 2004, p. 400; see: Brummelman, Thomaes, & Sedikides, 2016; Emmons, 1987; Paulhus, 1998). High narcissists (hereafter narcissists) value and self-enhance on agency (e.g., competence, uniqueness), but devalue and do not typically self-enhance on communion (e.g., relatedness, warmth; Campbell, Rudich, & Sedikides, 2002; Morf, Horvath, & Torchetti, 2011; Paulhus, 2001; see Gebauer, Sedikides, Verplanken, & Maio, 2012 for a more nuanced view pertaining to communal narcissism). For example, narcissists attribute success to themselves but failure to their partner on a collaborative task (Campbell, Reeder, Sedikides, & Elliot, 2000), and prefer romantic partners who admire them or are admired by others (Campbell, 1999). On the other hand, narcissists have low need for affiliation (Bradlee & Emmons, 1992; Thomaes, Brummelman, & Sedikides, in press), are status-driven (Horton & Sedikides, 2009; Maltby, 2010), are unwilling to forgive others after interpersonal transgressions (Exline, Baumeister, Bushman, Campbell, & Finkel, 2004; Sandage, Jankowski, Bissonette, & Paine, 2016), and perceive others primarily as instrumental to the accomplishment of their own goals (Morf et al., 2011; Sedikides, Campbell, Reeder, Elliot, & Gregg, 2002).

We expected that this asymmetric weight on agentic versus communal attributes contributes to a negative association between narcissism and willingness to apologize. We had the following reasons for this expectation. First, apologizing means admitting wrongdoing and communicating guilt over past behaviour (Kim et al., 2004; Lazare, 2004). Apologizing, therefore, involves self-depreciating on agentic attributes, and, as such, is likely to thwart a narcissist’s motivation to self-enhance on these attributes. Second, apologizing is aimed at restoring a social bond. Given that the desire to be in a relationship with the victim is a key prerequisite of apologizing (Leunissen et al., 2013), the goal of an apology is linked to communion, a domain that narcissists devalue. Finally, apologizing implies seeing the

victim as an equal, that is, as a person who does not deserve the type of treatment (i.e., transgression) inflicted by the perpetrator (Wenzel et al., 2008). Narcissists' low affiliation, status-orientation, and high exploitativeness will likely be unhelpful in judging the victim as an equal and in fostering a sense of injustice following transgression. Hence, our first hypothesis:

Hypothesis 1: Narcissism predicts reduced willingness to apologize.

Empathy and Guilt as Mediators

We expected that narcissism would predict reduced willingness to apologize due to narcissism's negative association with empathy (Hepper, Hart, Meek, Cisek, & Sedikides, 2014; Vonk, Zeigler-Hill, Mayhew, & Mercer, 2013; Wai & Tiliopoulos, 2012). That narcissists report little empathy is in line with their devaluation of communion (Gebauer, Wagner, Sedikides, & Neberich, 2013; Uchronski, Abele, & Bruckmüller, 2012; Ybarra et al., 2008). Empathy is an affective state that is caused by, and is congruent with, another person's affective state (Davis, 1983; Eisenberg & Miller, 1987). Empathy is a reaction instigated by others, but it also fosters social bonds by facilitating social interaction and group living (Preston & De Waal, 2002). For example, empathy is positively related to prosocial behaviour, such as helping (Aderman & Berkowitz 1970; Eisenberg & Miller 1987). This reasoning sets up our second hypothesis, which aligns with prior research findings (Hepper, Hart, Meek, et al., 2014; Vonk et al., 2013; Wai & Tiliopoulos, 2012).

Hypothesis 2: Narcissism predicts low self-reported empathy.

Empathy is likely associated with willingness to apologize. The ability to empathize with a victim (e.g., experience negative affect or negative cognitions) is vital for acknowledging that one has committed a transgression and for understanding the impact of the transgression on the victim (Green et al., 2013). In the context of committing an interpersonal transgression, empathy with a victim engenders guilt, an unpleasant emotion resulting from (in)actions that have caused harm to another person (Baumeister, Stillwell, & Heatherton, 1994; Tangney & Dearing, 2003). An empathic reaction to a victim's suffering implies an understanding and recognition of the harm inflicted upon the victim. This gives rise to guilt (Basil, Ridgway, & Basil, 2008; Hoffman, 1977; Leith & Baumeister 1998). For

example, manipulating empathy in the context of charity appeals increases guilt, thereby strengthening intentions to donate to charity (Basil et al., 2008). This rationale led us to propose the third hypothesis.

Hypothesis 3: Self-reported empathy predicts higher guilt.

We expected narcissists to experience less guilt after a transgression, as they are deficient on empathy. Guilt motivates individuals to take relationship-restoring action (Baumeister et al., 1994; Cryder, Springer, & Morewedge, 2012). Issuing an apology is an effective way to repair a relationship (Fehr et al., 2010; Leunissen et al., 2013; Ohbuchi et al., 1989), and guilt is positively related to willingness to apologize to a victim (Leunissen et al., 2013; Tangney, Miller, Flicker, & Barlow, 1996). As such, we hypothesized that guilt would be positively associated with willingness to apologize.

Hypothesis 4: Self-reported guilt predicts stronger willingness to apologize.

We have proposed that narcissism is negatively linked with willingness to apologize. Our rationale for this argument relied on the negative relation between narcissism and empathy. Empathy, in turn, is associated with willingness to apologize, as it triggers guilt. Guilt motivates relationship restoring behaviour (i.e., apologizing). Therefore, we expected that empathy, and subsequently guilt, would explain (i.e., serially mediate) the negative association between narcissism and willingness to apologize. Hence, our fifth hypothesis (Figure 1):

Hypothesis 5: Narcissism's negative association with willingness to apologize is explained by low self-reported empathy and low concomitant guilt.

Distinct Facets of Narcissism

Narcissism can be seen as a multidimensional construct, consisting of an agentic and an antagonistic facet (Ackerman et al., 2011; Back et al., 2013; Barry & Malkin 2010). Here, we focus on a two-dimensional process model of narcissism that differentiates between the agentic facet (i.e., narcissistic admiration) and the antagonistic facet (i.e., narcissistic rivalry) (Back et al., 2013). Both facets function to maintain grandiosity, but do so through different routes. Narcissistic admiration sustains grandiosity by means of agentic self-enhancement (elevating the positivity of self-views), whereas narcissistic rivalry maintains grandiosity by

means of antagonistic self-protection (minimizing the negativity of self-views).

Transgressions, and taking responsibility for transgressions via apologizing, can reflect inauspiciously on the self. Narcissistic rivalry, as a facet of narcissism that has self-protection (Alicke & Sedikides, 2009; Sedikides, 2012) at its core, is therefore especially relevant for willingness to apologize. We propose that narcissistic rivalry (relative to narcissistic admiration) is strongly associated with unwillingness to apologize. Similarly, we expect that narcissistic rivalry (relative to narcissistic admiration) is strongly related to low self-reported empathy and guilt. Accordingly, we anticipate a particularly strong negative association between narcissistic rivalry and willingness of apologize, which is serially mediated by low self-reported empathy and guilt.

Hypothesis 6: Narcissistic rivalry is more negatively associated with willingness to apologize (via low empathy and guilt) than is narcissistic admiration.

Overview and Methodological Considerations

We tested these six hypotheses in four studies. In Study 1, a correlational investigation, we collected dispositional measures of narcissism, empathy, guilt, and willingness to apologize. In Study 2, a scenario investigation, we measured dispositional narcissism, and assessed state-level empathy, guilt, and willingness to apologize via self-report in four scenarios, each describing a transgression. In Study 3, an experiment, we manipulated narcissism, and assessed self-reported empathy, guilt, and willingness to apologize after a transgression. Finally, in Study 4, we measured the two distinct facets of narcissism, admiration and rivalry, and assessed state-level empathy, guilt, and apologizing via self-report in four scenarios and an autobiographical experience. All data and Supplemental Materials are available at: <https://osf.io/wgeum>.

In Studies 1-2, we aimed for a sample size that would result in power = .80 to detect an effect size $r = .20$, which approximates the magnitude of the average published effect in personality and social psychology (.21; Richard, Bond, & Stokes-Zoota, 2003). A power analysis suggested a required sample size of 190 ($\alpha = .05$ [two-tailed], power = .80). To determine the sample size for Study 3, we updated the effect-size estimate based on the average correlation between narcissism and willingness to apologize in Studies 1-2 ($r = .37$).

The power analysis indicated a required sample size of 55 ($\alpha = .05$ [two-tailed], power = .80). Given that we expected substantial attrition due to the nature of Study 3's experimental paradigm, we conservatively recruited a sample that was approximately three times larger. In Study 4, we aimed to have sufficient power for obtaining stable estimates of the hypothesized correlations. According to one recommendation (Schönbrodt & Perugini, 2013), a minimum sample of 238 participants is needed for that purpose. We recruited 305 participants.

In each study, we tested a serial multiple mediator model (Figure 1). Notwithstanding their well-documented limitations (Bullock, Green, & Ha, 2010; Spencer, Zanna, & Fong, 2005), we regard these analyses as informative, because they placed our hypotheses at risk (Fiedler, Schott, & Meiser, 2011). Kenny and Judd (2014) demonstrated that, in mediation models, the power of the indirect effect's test is often considerably greater than the power of the direct effect's test. Their analysis indicates that (1) it is inadvisable to make claims of complete (vs. partial) mediation based on the non-significance of the direct effect (for an in-depth critique of the distinction between complete vs. partial mediation, see Rucker, Preacher, Tormala, & Petty, 2011), and (2) testing mediation hypotheses does not impose exceptional sample-size requirements. Finally, when we refer to "indirect effects," we adopt the parlance of mediation models and do not claim to demonstrate causality.

Study 1

Study 1 was a preliminary attempt to examine whether narcissism is negatively related to willingness to apologize, and whether empathy and guilt explain this association, thus providing a first test of Hypotheses 1-5. We measured all variables at the dispositional level.

Method

Participants. A total of 191 US residents (112 men, 79 women) took part via Amazon's Mechanical Turk (MTurk) and were paid \$1.50. Participants' age ranged from 18 to 64 years ($M = 34.18$, $SD = 9.20$). We included two attention manipulation checks: "Please answer this question by selecting 2" and "Please answer this question by selecting 5" (Oppenheimer, Meyvis, & Davidenko, 2009). We excluded from the analyses eight

participants, because they responded incorrectly to one or both of these checks. Their inclusion produced results identical to the reported ones.

Materials. We present scale means, standard deviations, and scale reliabilities in Table 1 (top panel). Participants completed scales of dispositional narcissism, empathy, guilt proneness, and willingness to apologize—in that order. We measured narcissism with the Narcissistic Personality Inventory (NPI; Raskin & Terry, 1988). The NPI contains 40 pairs of statements. Each pair consists of one narcissistic statement (e.g., “I know that I am good because everybody keeps telling me so”) and one non-narcissistic statement (e.g., “When people compliment me I sometimes get embarrassed”). Participants are asked to select the statement that best describes them. We calculated each participant’s narcissism score by summing the number of narcissistic statements that they selected.

We measured empathy with three out of four subscales of the Interpersonal Reactivity Index (IRI; Davis, 1980). We excluded the Fantasy subscale, as it assesses the tendency to transport imaginatively oneself into fictional situations (e.g., books, movies, daydreams) rather than assess the construct of empathy as we defined it. The three 7-item subscales that we used are: Perspective Taking (PT; sample item: “Before criticizing somebody, I try to imagine how I would feel if I were in their place”), Empathic Concern (EC; sample item: “I often have tender concerned feelings for people less fortunate than me”), and Personal Distress (PD; sample item: “When I see someone who badly needs help in an emergency, I go to pieces”). Response options ranged from 1 (*not at all*) to 7 (*very much so*). We averaged the responses of these 21 items to form an empathy index.

We measured guilt proneness with the 8-item guilt proneness subscale of the Guilt and Shame Proneness scale (Cohen, Wolf, Panter, & Insko, 2011). A sample item is: “You lie to people but they never find out about it. What is the likelihood that you would feel terrible about the lies you told?” (1 = *very unlikely*, 7 = *very likely*).

Finally, we measured willingness to apologize with the Proclivity to Apologize Measure (PAM; Howell et al., 2011). A sample item is: “I don’t apologize very often because I don’t like to admit that I’m wrong” (1 = *strongly disagree*, 7 = *strongly agree*). We reverse-scored all items, so that higher scores reflected greater willingness to apologize.

Results and Discussion

We present zero-order correlations in Table 1 (top panel). Correlations among the measured variables were consistent with Hypotheses 1-4: narcissism was negatively associated with willingness to apologize, narcissism was negatively associated with empathy, empathy was positively associated with guilt proneness, and guilt proneness was positively associated with willingness to apologize.

We proceeded to evaluate Hypothesis 5 (Figure 1). To test the first link in the serial multiple mediator model, we regressed empathy on narcissism. To test the second link, we regressed guilt on narcissism and empathy. To test the third link, we regressed willingness to apologize on narcissism, empathy, and guilt. We present the results in Table 2. Consistent with Hypothesis 5, narcissism predicted reduced empathy (link 1). Empathy, in turn, predicted increased guilt (above and beyond narcissism; link 2). Finally, guilt predicted increased willingness to apologize (above and beyond narcissism and empathy; link 3). We then used the PROCESS macro (Hayes, 2013; model 6; 5,000 bootstrap samples) to test the serial indirect effect of narcissism, through empathy and guilt, on willingness to apologize. The serial indirect effect was significantly different from 0 ($b = -.005$, $SE = .003$, 95% CI [-.01, -.001]), further supporting Hypothesis 5.

We also examined an alternative serial mediation model, in which the order of empathy and guilt was reversed (narcissism \Rightarrow guilt \Rightarrow empathy \Rightarrow willingness to apologize). This model was not viable, because empathy did not predict increased willingness to apologize above and beyond narcissism and guilt (Table 2, top panel). Accordingly, the serial indirect effect of narcissism, through guilt and empathy, on willingness to apologize was not significant ($b = -.002$, $SE = .002$, 95% CI [-.008, .002]). These results support the idea that guilt (rather than empathy) is the more proximal antecedent of willingness to apologize.

IRI subscales. In supplemental analyses, we examined separately the three IRI subscales. The literature distinguishes between two types of empathy: cognitive and affective (Davis, 1983; Strayer, 1987). Cognitive empathy is the ability to understand others' perspective. It is assessed with the PT subscale. Affective empathy is the visceral or emotional reaction to others' misfortune and includes two components: personal distress and

empathic concern. Personal distress (assessed with the PD subscale) reflects a self-oriented emotional response to the plight of another person, and includes feeling upset, perturbed, distressed, or troubled. Empathic concern (assessed with the EC subscale) is the other-oriented tendency to experience sympathy and compassion for unfortunate others. We present correlations between the IRI subscales and other study variables in Supplemental Materials (Section S1, Table S1). Crucially, narcissism was significantly and negatively correlated with EC only, $r(181) = -.30, p < .001$. Narcissism was not significantly correlated with either PD ($r[181] = -.03, p = .656$) or PT ($r[181] = -.03, p = .655$). These findings support the idea that narcissists' low empathy derives from their devaluation of other-oriented communion (Uchrowski et al., 2012; Ybarra et al., 2008), rather than from an inability to experience self-oriented personal distress or to take the victim's perspective. In our subsequent studies, we therefore operationalized empathy in terms of empathic concern.

Summary. Narcissism was inversely related to empathy. Low empathy, in turn, predicted reduced guilt. Low guilt subsequently predicted reduced willingness to apologize. The results indicate that narcissists (compared to non-narcissists) are less willing to apologize due to their low levels of empathy (in particular, low empathic concern) and low concomitant guilt.

Study 2

We had several objectives in Study 2. First, we examined the replicability of Study 1 findings. Second, we evaluated our hypotheses at the state rather than trait level. This practice has advantages. In Study 1, we measured broad behavioural tendencies to apologize, to feel empathy, and to experience guilt. Whether the results generalize to specific situations following a transgression remains to be seen. Crucially, in Study 1, participants had not committed a transgression. As such, it is not clear whether narcissists are less willing to apologize than non-narcissists following a transgression. Narcissists, for example, can be empathetic, if they are motivated to try (Hepper, Hart, & Sedikides, 2014). Committing a transgression may increase their motivation toward empathic orientation. Alternatively, narcissists may refrain from apologizing out of empathic concern for their victim, but nevertheless may still proceed to apologize for strategic reasons, such as to preserve an

interdependent relationship from which the narcissist will benefit (Schniter, Sheremeta, & Sznycer, 2013). Taken together, we examined, in Study 2, whether narcissism is related negatively to willingness to apologize after a transgression, and whether self-reported empathy and guilt can account for this negative relation. We tested our hypotheses in the context of a work relationship.

Method

Participants. A total of 202 US residents (105 men, 97 women) took part via MTurk. Participants' age ranged from 18 to 68 years ($M = 36.51$, $SD = 11.44$). We included only one attention manipulation check ("Please answer this question by selecting 2;" Oppenheimer et al., 2009), as the survey needed to be substantially shorter than that of Study 1. We excluded from the analysis nine participants, because they responded incorrectly to the check. Inclusion of these participants yielded results virtually identical to the reported ones.

Materials and procedure. As in Study 1, we started by measuring narcissism with the NPI. Next, we presented participants with four scenarios (in random order), each containing a situation in which they behaved unjustly or unfairly towards a colleague. We present these scenarios in Supplemental Materials (Section S2). Due to the use of multiple scenarios, we shortened the state measures of empathy, guilt, and willingness to apologize. Specifically, after each scenario, we assessed empathy with the Empathic Concern scale (Coke, Batson, & McDavis, 1978). The items, preceded by the stem "How would you feel towards your colleague?", were: softhearted, empathic, warm, concerned, compassionate. We assessed guilt with "How guilty would you feel about... (behaviour described in the scenario)." Similar single-item measures of guilt have been used frequently in the literature (Baumeister, Reis, & Delespaul, 1995; Ketelaar & Au, 2003; Leunissen et al., 2013; Nelissen & Zeelenberg, 2009). We assessed willingness to apologize with: "I would want to apologize to my colleague" (adapted from Leunissen et al., 2013).

Additionally, after each scenario we assessed two facets of relationship value, each with two items that were rated on a 7-point scale. We assessed perceptions of how valuable the relationship with the colleague was to the participant, to which we refer as other-value ("Would you value your relationship with your colleague?" and "How loyal would you be to

your colleague?"; $\alpha = .91$, $M = 4.27$, $SD = 1.35$). We also assessed perceptions of how the colleague valued the relationship with the participant, to which we refer as self-value ("Would your colleague value his/her relationship with you?" and "How loyal would your colleague be to you?"; $\alpha = .88$, $M = 2.97$, $SD = 1.12$).

All response options ranged from 1 (*not at all*) to 7 (*very much so*). We averaged responses over the four scenarios to obtain scores for empathy (20 items), guilt (four items), willingness to apologize (four items), self-value (eight items), and other-value (eight items). Similarly, we calculated reliability scores using the total number of items across scenarios (20 empathy items, four guilt items, four willingness-to-apologize items, eight self-value items, and eight other-value items). We present descriptive statistics for each scenario in Supplemental Materials (Section S3, Table S2)

Results and Discussion

We present descriptive statistics, reliabilities, and zero-order correlations in Table 1 (middle panel). Replicating conceptually Study 1, correlations supported Hypotheses 1-4: Narcissism was negatively associated with willingness to apologize, narcissism was negatively associated with empathy, empathy was positively associated with guilt, and guilt was positively associated with willingness to apologize.

Next, we evaluated Hypothesis 5, the serial mediation hypothesis (Table 2, middle panel). Replicating Study 1 and consistent with Hypothesis 5, narcissism predicted reduced empathy (link 1). Empathy subsequently predicted increased guilt (above and beyond narcissism; link 2). Guilt then predicted increased willingness to apologize (above and beyond narcissism and empathy; link 3). Finally, we tested the serial indirect effect of narcissism, through empathy and guilt, on willingness to apologize (PROCESS model 6; 5,000 bootstrap samples). This analysis indicated that the indirect effect was significantly different from 0 ($b = -.005$, $SE = .003$, 95% CI [-.01, -.0009]).

As in Study 1, an alternative serial mediation model that reversed the order of empathy and guilt was not viable. Empathy did not predict increased willingness to apologize (above and beyond narcissism and guilt; Table 2) and, hence, the serial indirect effect of narcissism, through guilt and empathy, on willingness to apologize was not significant ($b = -$

.001, $SE = .001$, 95% CI [-.005, .0005]). This constitutes additional evidence that guilt is the more proximal antecedent of willingness to apologize. We conducted analyses with self-value and other-value as additional mediators of the relation between narcissism and willingness to apologize. Importantly, the indirect effect of narcissism, via empathy and guilt, on willingness to apologize remained significant ($b = -.004$, $SE = .003$, 95% C.I. [-.01, -.001]) when we included these additional indirect effects via self-value and other-value. The indirect effects via self-value ($b = -.001$, $SE = .002$, 95% C.I. [-.001, .005]) and other-value ($b = -.005$, $SE = .003$, 95% C.I. [-.01, .00]) were not significant.

Summary. Study 2 replicated Study 1. Narcissism was inversely related to willingness to apologize in the context of interpersonal transgressions. This relation was mediated by empathy and guilt. In particular, narcissism predicted reduced empathy for the victim. This lack of empathy predicted low levels of guilt, which, in turn, predicted reduced willingness to apologize.

Study 3

Our main goal in Study 3 was to test if narcissism is causally related to willingness to apologize. As such, we experimentally induced narcissism (i.e., high vs. low levels of it), and then assessed willingness to apologize as well as implications for empathy and guilt. Our second goal was to test our hypotheses in a more ecologically valid manner. In Study 2, participants imagined committing a transgression. This process, however, may be markedly different, and have dissimilar consequences, from commitment of an actual transgression. For example, perpetrators overestimate the negative affect they actually experience after committing a transgression (Green et al., 2013). Therefore, in order to increase confidence in our findings, we used a behavioural transgression paradigm, allowing us to measure experienced, rather than anticipated, empathy, guilt, and willingness to apologize.

Method

Participants. A total of 162 US residents (93 men, 69 women) took part via MTurk. Participants' age ranged from 19 to 62 years ($M = 33.53$, $SD = 9.39$). We assigned participants randomly to the narcissism or control condition. We did not include an attention

manipulation check, as the experiment involved only a few measures and was sufficiently engaging for participants.

Procedure.

Transgression paradigm. We used a paradigm in which participants committed a transgression against another participant (Leunissen, De Cremer, & Reinders Folmer, 2012; Desmet & Leunissen, 2014). This paradigm is based on a trust game (Berg, Dickhaut, & McCabe, 1995). In the original version of the trust game, Player 1 starts with an initial endowment (i.e., chips) and has the choice to transfer any part of this endowment to Player 2. Whatever Player 1 transfers to Player 2 is tripled. Player 2 can then decide to return any part of his/her endowment to Player 1. In a trust game, participants often base their behaviour on the equality fairness rule, meaning that both players should end up with an equal share of the chips (Van Dijk & De Cremer, 2006). Keeping a larger share is considered unfair behaviour and constitutes a transgression.

In this modified version of the trust game, participants always took the role of Player 2 (assigned through a mock lottery procedure) and played with a fictitious Player 1. Participants did not know the exact size of Player 1's initial endowment; they only knew that it could range from 10 to 30 chips. Player 2 subsequently learned that Player 1 had transferred 10 chips, which were tripled, endowing Player 2 with 30 chips. We expected that most participants would infer that Player 1 had an initial endowment larger than 10 chips, because 10 was at the very low end of the range of possible endowments with which Player 1 could have started. Consequently, most participants would feel justified to keep a larger part of their endowment and return less than half to Player 1.

After participants decided how many of their 30 chips to keep and how many to return to Player 1, they learned that Player 1's initial endowment was 10 chips. Based on this information, participants could infer that Player 1 had transferred their entire endowment. This also meant that the way participants divided their endowment of 30 chips constituted the final division of chips (because Player 1 did not retain any chips). The subset of participants who had returned less than half of the 30 chips to Player 1 had created an unfair final

distribution of chips (in the form of advantageous inequality) and, hence, committed a transgression.

After we informed participants that Player 1's initial endowment was 10 chips (but before the narcissism manipulation), we administered two items to check perceptions of (1) fairness of the final division and (2) violated trust: "To what extent do you think the final division is fair?" and "To what extent do you think Player 1 still trusts you?", respectively (1 = *not at all*, 7 = *very much*; Leunissen et al., 2012). We reversed and then averaged the items to form an index of transgression severity, with higher scores indicating greater severity, $r(160) = .86, p < .001, M = 3.77, SD = 2.07$. We assessed perceived transgression severity because, although this paradigm induces the same type of transgression across participants, there is variation in the severity of the transgression (i.e., some participants keep more chips for themselves than do others). Given that transgression severity has an independent association with willingness to apologize, we repeated the analyses we report below while controlling for transgression severity (Leunissen et al., 2013; see also footnote 2).

Narcissism manipulation. Subsequently, we administered the narcissism manipulation and manipulation check (De Waal-Andrews, 2012). In the narcissism condition, we asked participants to remember and write down an event in which they felt admired by others, and how this event made them feel special and entitled to attention from others. Admiration, specialness, and entitlement are typical narcissistic characteristics (Emmons, 1987; Morf et al., 2011). Participants in the control condition wrote about an event that made them feel no better or worse than others. The writing task was followed by the manipulation check, which had a format identical to the NPI. Participants responded to 14 pairs of statements. They indicated which option best captured how they felt in the situation they just described. Each pair contained a non-narcissistic statement (e.g., "I thought I was much like everybody else") and a narcissistic statement ("I thought I was an extraordinary person"). We formed a manipulation check index by summing the number of narcissistic statements that each participant chose ($\alpha = .76, M = 5.35, SD = 3.26$).

Dependent measures. Next, participants completed the three dependent measures: empathy, guilt, and willingness to apologize. We measured empathy with the same scale as in

Study 2. We measured guilt with five items (adapted after De Hooge, Nelissen, Breugelmans, & Zeelenberg, 2011): “I feel guilty about the division of chips,” “I feel responsible for the division of chips,” “I feel I have done wrong to Player 1,” “I want to repair what has happened”, “I want to be forgiven by Player 1.” Finally, we measured willingness to apologize with “I want to apologize to Player 1.” All items were rated on a 1 (*not at all*) to 7 (*very much so*) scale.

Results and Discussion

Transgression check. A central assumption of the transgression paradigm is that participants overestimate the initial endowment of Player 1. Indeed, on average, participants thought Player 1’s initial endowment was 19.36 chips ($SD = 6.77$). One hundred and five participants (65%) kept more chips than they returned to Player 1, and thus committed a transgression. Perceived transgression severity was much higher among participants who committed a transgression ($M = 4.91$, $SD = 1.53$) than among those who did not commit a transgression ($M = 1.66$, $SD = .99$), $t(160) = 14.47$, $p < .001$. In accordance with previous research that used this paradigm (Desmet & Leunissen, 2014; Leunissen et al., 2012), we analyzed only the responses of participants who committed a transgression ($N = 105$). From this set, we excluded four participants who did not complete the narcissism manipulation, resulting in a final sample of 101 participants.¹

Manipulation check and hypotheses tests. As in the preceding studies, we tested our hypotheses using correlation/regression analyses. We present descriptive statistics, reliabilities, and correlations in Table 1 (bottom panel). For the sake of completeness, we also present means and inferential statistics pertaining to the narcissism manipulation in Table 3. Attesting to the manipulation’s effectiveness, participants in the narcissism (compared to

¹ Inducing transgressions in the laboratory is difficult, because it requires an active role on the part of the perpetrator (contrary to inducing victimhood, which requires a passive role; Leunissen, De Cremer, & Reinders Folmer, 2012; Shnabel & Nadler, 2008). We therefore focused on the responses of those participants who committed a transgression and excluded responses of those who did not commit a transgression. Given that we introduced the narcissism manipulation after participants had (or had not) committed a transgression, the narcissism manipulation could not have influenced transgressions (nor could transgressions have influenced participants’ random assignment to the narcissism vs. control condition).

control) condition chose more narcissistic statements to describe how they felt during the recalled event (Table 3). Replicating Studies 1-2, results supported Hypotheses 1-4: Induced narcissism decreased willingness to apologize, induced narcissism decreased empathy, empathy was positively associated with guilt, and guilt was positively associated with willingness to apologize.

We next tested Hypothesis 5 (Table 2, bottom panel). Replicating Studies 1-2 and consistent with Hypothesis 5, induced narcissism decreased empathy (link 1). Empathy, in turn, predicted higher guilt (above and beyond narcissism; link 2). Guilt then predicted increased willingness to apologize (above and beyond narcissism and empathy; link 3). Finally, we tested the indirect effect of narcissism, through empathy and guilt, on willingness to apologize (PROCESS model 6; 5,000 bootstrap samples). The indirect effect was significantly different from 0 ($b = -.21$, $SE = .10$, 95% CI [-.42, -.02]).

As in Studies 1-2, reversing the order of empathy and guilt did not yield a viable alternative model. Yet again, empathy failed to predict increased willingness to apologize (above and beyond the narcissism manipulation and guilt; Table 2). The serial indirect effect of narcissism, through guilt and empathy, on willingness to apologize was not significant ($b = -.0002$, $SE = .02$, 95% CI [-.04, .04]). This constitutes still further evidence that guilt is the more proximal predictor of willingness to apologize.²

Summary. This experiment complemented Studies 1-2 in two ways. First, it demonstrated that narcissism can be situationally induced. By experimentally manipulating narcissism, we were able to draw causal inferences regarding the link between narcissism and willingness to apologize. Second, Study 3 introduced a behavioural transgression paradigm, thus enabling assessment of experienced (rather than anticipated) empathy, guilt, and willingness to apologize. The findings were consistent with the hypotheses. Narcissism decreased willingness to apologize. Empathy and guilt accounted for this relation. In

² We repeated all analyses with transgression severity as a covariate. Results were identical to those reported, with one exception: The previously non-significant effect of narcissism on guilt ($F[1, 99] = 3.17$, $p = .078$, $\eta_p^2 = .03$) became significant ($F[1, 98] = 4.17$, $p = .044$, $\eta_p^2 = .04$).

particular, narcissism reduced empathy with the victim, which in turn predicted lower guilt about the transgression as well as weaker willingness to apologize to the victim.

Study 4

In Study 4, we aimed at a finer understanding of the association between narcissism and willingness to apologize. To that effect, we included a different measure of narcissism, the Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013), which is designed to assess narcissism's agentic and antagonistic facets. Moreover, whereas in previous studies we only assessed willingness to apologize, in Study 4 we also examined if narcissism is related to apologizing behaviour. To that end, we instructed participants to describe a transgression they committed and whether they followed up with an apology. Finally, we included measures of domain-level personality traits and self-esteem, in order to find out if the narcissism facets predict uniquely (i.e., above and beyond such traits and self-esteem) willingness to apologize and apologizing.

Method

Participants. A total of 305 U.S. residents (156 men, 149 women) took part via MTurk. Participants' age ranged from 19 to 96 years ($M = 37.76$, $SD = 12.57$). We included the same two attention manipulation checks as in Study 1 and excluded 15 participants who failed either of these checks. We excluded a further eight participants, who did not provide complete data on the NARQ, leaving a total of 282 participants in the sample.

Materials and procedure. Participants first completed a number of personality measures, in random order. We administered the NARQ (Back et al., 2013) to assess narcissistic admiration ($\alpha = .90$, $M = 3.69$, $SD = 1.26$) and narcissistic rivalry ($\alpha = .86$, $M = 2.59$, $SD = 1.11$). Narcissistic admiration refers to the pursuit of self-enhancement via social admiration (e.g., "I show others how special I am"). Narcissistic rivalry refers to antagonism in the service of self-protection (e.g., "I enjoy it when another person is inferior to me"). Items were rated on a 7-point scale (1 = *not agree at all*, 7 = *agree completely*). In addition, participants completed the NPI (Raskin & Terry, 1988), the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991), and the Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). We used the same version of the NPI as in the preceding studies. The BFI consists of 44 short

phrases that assess the Big Five personality domains: Extraversion (e.g., “is talkative”), Agreeableness (e.g., “has a forgiving nature”), Conscientiousness (e.g., “does things efficiently”), Neuroticism (e.g., “worries a lot”), and Openness to Experience (e.g., “likes to reflect, play with ideas”). The RSES measures self-esteem with 10 items (e.g., “I have a number of good qualities”). We present descriptive statistics and scale reliabilities for these additional personality measures in Supplemental Materials (Section S4; Table S3).

Transgression scenarios. After participants completed the personality measures, we presented them with four scenarios (in random order), each describing a situation in which they behaved unjustly or unfairly towards a colleague. We used the same scenarios as in Study 2. After each scenario, participants completed the same measures of empathy ($\alpha = .97$, $M = 4.53$, $SD = 1.44$), guilt ($\alpha = .96$, $M = 5.74$, $SD = 1.11$), and willingness to apologize ($\alpha = .83$, $M = 6.11$, $SD = 1.09$), as in Studies 2-3.

Autobiographical experience. Next, participants recalled and described an interpersonal transgression they had perpetrated in the past. They received the following instructions (based on Baumeister, Stillwell, & Wotman, 1990; Leunissen et al., 2013): “In this final part, we would like to ask you to describe an incident in which you did something that another person considered unpleasant, unfair, or unjust. Nearly everyone has experienced such things more than once; please choose an especially important and memorable event.” We then measured our focal constructs: empathy ($\alpha = .97$, $M = 4.45$, $SD = 1.97$), guilt ($\alpha = .92$, $M = 4.92$, $SD = 1.79$), apologizing ($M = 0.61$, $SD = 0.49$). We measured empathy and guilt using the same items as in Studies 2-3. We measured apologizing by asking participants whether they had apologized to the victim (0 = *no*, 1 = *yes*).

Alternative mediators. Additionally, for both the transgression scenarios and the autobiographical experience, we included several transgression-related indices as alternative mediators of the association between the narcissism facets and, respectively, willingness to apologize (in the transgression scenarios) and apologizing (in the autobiographical experience): transgression severity, victim blaming, other-value, self-value, regret. We present the relevant items, descriptive statistics, and scale reliabilities in Supplemental Materials (Section S5; Tables S4 and S5).

Results

We first report results for narcissistic rivalry and narcissistic admiration, as assessed by the NARQ. We then describe supplemental analyses in which we (1) tested whether serial indirect effects via empathy and guilt remained significant following the inclusion of alternative mediational paths via transgression severity, victim blaming, other-value, self-value, and regret, as well as (2) examined the extent to which NARQ narcissism facets uniquely predict willingness to apologize and apologizing, above and beyond domain-level personality traits and self-esteem. Table 4 shows zero-order correlations between key variables. We report NPI results in Research Synthesis.

Willingness to apologize. We conducted multiple regression analyses with narcissistic admiration and rivalry as simultaneous predictors (Table 5, top panel). Narcissistic rivalry (controlling for narcissistic admiration) was negatively associated with willingness to apologize, but narcissistic admiration (controlling for narcissistic rivalry) was not significantly associated with it. Narcissistic rivalry was also negatively associated with empathy, but narcissistic admiration was positively associated with it. The negative associations of narcissistic rivalry (but not narcissistic admiration) with willingness to apologize and empathy provide qualified support for Hypothesis 1 and 2, respectively. Correlations (Table 4) further showed that empathy was positively associated with guilt (Hypothesis 3), and guilt was positively associated with willingness to apologize (Hypothesis 4).

Next, we tested Hypothesis 6, which postulates that narcissistic rivalry is more strongly negatively associated with willingness to apologize (via low empathy and guilt) than narcissistic admiration (i.e., differential serial mediation; Table 6, top panel). Narcissistic rivalry was negatively associated with empathy, whereas narcissistic admiration was positively associated with it (link 1). Empathy subsequently predicted increased guilt (above and beyond narcissistic rivalry and admiration; link 2). Guilt then predicted increased willingness to apologize (above and beyond narcissistic rivalry, admiration, and empathy; link 3). Finally, we tested the indirect effects of narcissistic rivalry and admiration, via empathy and guilt, on willingness to apologize. We found a significant negative indirect

effect of narcissistic rivalry, via reduced empathy and guilt, on willingness to apologize ($b = -.129$, $SE = .028$, 95% CI $[-.191, -.079]$). In addition, we found an unexpected positive indirect effect of narcissistic admiration, via increased empathy and guilt, on willingness to apologize ($b = .077$, $SE = .026$, 95% CI $[.032, .132]$). Consistent with Hypothesis 6, narcissistic rivalry was more negatively associated with willingness to apologize (via low empathy and guilt) than was narcissistic admiration. Indeed, narcissistic admiration was positively associated with willingness to apologize (via high empathy and guilt).

Apologizing. We conducted multiple regression analyses with narcissistic admiration and narcissistic rivalry as predictors (Table 5, bottom panel). A logistic regression analysis indicated that narcissistic rivalry (controlling for narcissistic admiration) was negatively associated with apologizing, whereas narcissistic admiration (controlling for narcissistic rivalry) was positively associated with it. Multiple linear regression further indicated that narcissistic rivalry was negatively associated with empathy, whereas narcissistic admiration was positively associated with it. Again, the negative associations of narcissistic rivalry (but not admiration) with apologizing and empathy offer qualified support for Hypothesis 1 and 2, respectively. Furthermore, correlations (Table 4) showed that empathy was positively related with guilt (Hypothesis 3), and guilt was positively associated with apologizing (Hypothesis 4).

Our next step was to test Hypothesis 6, the differential serial mediation hypothesis (Table 6, bottom panel). Narcissistic rivalry was negatively associated with empathy, whereas narcissistic admiration was positively associated with it (link 1). Empathy, in turn, predicted guilt (above and beyond narcissistic admiration and narcissistic rivalry; link 2), and guilt predicted apologizing (above and beyond narcissistic admiration, narcissistic rivalry, and empathy; link 3). Finally, we tested the serial indirect effects of narcissistic rivalry and admiration, via empathy and guilt, on apologizing. We found a significant negative indirect effect of narcissistic rivalry, via reduced empathy and guilt, on apologizing ($b = -.166$, $SE = .058$, 95% CI $[-.294, -.075]$). We also found a significant positive indirect effect of narcissistic admiration, via increased empathy and guilt, on apologizing ($b = .117$, $SE = .049$, 95% CI $[.036, .228]$). These results further corroborate Hypothesis 6 and highlight the

importance of distinguishing—at least in this context—between the rivalry and admiration facets of narcissism.

Supplemental analyses: Inclusion of additional mediational pathways. We tested whether the serial indirect effects of narcissistic rivalry and admiration on, respectively, willingness to apologize and apologizing (via empathy and guilt) remained significant following the inclusion of alternative mediational paths. Specifically, we re-tested these serial indirect effects in the presence of additional indirect effects via the following transgression-related indices: transgression severity, victim blaming, other-value, self-value, regret (see Supplemental Materials, Section S6 for code).

Willingness to apologize. When we included mediational paths via the additional transgression-related indices, the negative indirect effect of narcissistic rivalry on willingness to apologize, via reduced empathy and guilt, remained significant ($b = -.132$, $SE = .037$, 95% CI [-.223, -.072]). The positive indirect effect of narcissistic admiration on willingness to apologize, via increased empathy and guilt, also remained significant ($b = .078$, $SE = .029$, 95% CI [.035, .154]). We found no additional indirect effects.

Apologizing. After including the alternative mediational paths, the negative indirect effect of narcissistic rivalry on apologizing, via reduced empathy and guilt, remained significant ($b = -.100$, $SE = .062$, 95% CI [-.248, -.005]). The positive indirect effect of narcissistic admiration on apologizing, via increased empathy and guilt, also remained significant ($b = .070$, $SE = .049$, 95% CI [.002, .192]). Additionally, we found a positive indirect effect of narcissistic admiration, via increased other-value (i.e., how valuable the relationship with the victim was to the participant), on apologizing ($b = .123$, $SE = .066$, 95% CI [.022, .274]).

Supplemental analyses: Controlling for domain-level personality and self-esteem. In a final series of supplemental analyses, we examined whether the narcissism facets uniquely predicted willingness to apologize (in the transgression scenarios) and apologizing (in the autobiographical experience), above and beyond domain-level personality and self-esteem. These analyses allowed us to assess whether the role of narcissism is specific or can be subsumed under one or more broader domains of personality (John & Srivastava, 1999).

Prior research indicates that narcissistic rivalry is primarily associated with low Agreeableness, whereas narcissistic admiration is most strongly associated with high Extraversion (Back et al., 2013). We additionally included self-esteem, because it is an important marker of psychological adjustment (Sedikides et al., 2004) that is differentially associated with narcissistic rivalry (negatively) and narcissistic admiration (positively) (Back et al., 2013).

In preliminary analyses, we entered narcissistic rivalry, narcissistic admiration, Big Five personality, and self-esteem as predictors. The results of these analyses indicated a multicollinearity problem (Supplemental Materials, Section S7). Multicollinearity occurs when there are near dependencies among two or more predictors in the model and can generate unstable coefficients with incorrect signs or magnitudes (Belsley, 1984, 1991; Belsley, Kuh, & Welsch, 1980). The most frequently used remedy for multicollinearity is to test a model with fewer predictors. However, because there is often no *a priori* rationale for the selection of predictors, this approach tends to rely on data-driven variable-selection procedures. We addressed this limitation by relying on existing theory and evidence to combine correlated predictors into a smaller number of superordinate constructs.

To be precise, research on the interrelations among the Big Five factors has revealed that they possess a stable two-factor structure (i.e., the Big Two; DeYoung, 2006; DeYoung, Peterson, & Higgins, 2002; Digman, 1997; Markon, Krueger, & Watson, 2005). The first factor, labelled Stability, comprises Neuroticism (reversed), Agreeableness, and Conscientiousness, and reflects the “ability and tendency to maintain stability and avoid disruption in emotional, social, and motivational domains” (DeYoung, 2006, p. 1138). The second factor, labelled Plasticity, comprises Extraversion and Openness, and reflects “the ability and tendency to explore and engage flexibly with novelty, in both behavior and cognition” (DeYoung, 2006, p. 1138). In the analyses reported below, we used Big Two (rather than Big Five) personality as predictors and, by so doing, ameliorated the multicollinearity issue (Stability: $\alpha = .93$, $M = 5.05$, $SD = 0.87$; Plasticity: $\alpha = .91$, $M = 4.41$, $SD = 0.97$). (We calculated reliability coefficients for the Big Two using Nunnally and Bernstein’s [1994, p. 269] formula for the reliability of linear scale combinations.) We

decided *a priori* to retain self-esteem as a separate predictor, because previous research showed it to be equally and moderately related to the Stability ($r = .41$) and Plasticity ($r = .39$) meta-traits (Erdle, Gosling, & Potter, 2009). (Table 4 shows that we found stronger correlations, presumably because our 10-item self-esteem measure was more reliable than Erdle et al.'s single-item measure.) Narcissistic rivalry and narcissistic admiration were the focal variables in these analyses, and we therefore also retained them as separate predictors.

Willingness to apologize. We entered willingness to apologize as dependent variable in a multiple linear regression analysis with narcissistic rivalry, narcissistic admiration, Big Two personality, and self-esteem as independent variables (Table 7, Willingness to apologize). When controlling for Big Two personality and self-esteem, the negative association between narcissistic rivalry and willingness to apologize remained significant. The negative association between narcissistic rivalry and empathy also remained significant, as did the negative association between narcissistic rivalry and guilt. The positive association between narcissistic admiration and empathy, however, was rendered non-significant. This latter finding implies that the positive indirect effect of narcissistic admiration, via increased empathy and guilt, on willingness to apologize should be weakened. Indeed, it was no longer significant ($b = .041$, $SE = .031$, 95% CI [-.015, .104]). In contrast, the crucial negative indirect effect of narcissistic rivalry, via reduced empathy and guilt, on willingness to apologize remained significant ($b = -.089$, $SE = .036$, 95% CI [-.167, -.031]).

Apologizing. We next conducted a multiple logistic regression analysis with apologizing as the dichotomous dependent variable and the same predictor variables as before (Table 7, Apologizing). The negative association between narcissistic rivalry and apologizing remained significant, but the positive association between narcissistic admiration and apologizing became non-significant. Additionally, linear regression analyses showed that the negative association between narcissistic rivalry and empathy became non-significant, as did the negative association between narcissistic rivalry and guilt. The positive association between narcissistic admiration and empathy was also rendered non-significant. The drastic diminution of the link between narcissistic admiration and empathy eliminated the positive indirect effect (via increased empathy and guilt) of narcissistic admiration on apologizing (b

= .057, $SE = .063$, 95% CI [-.055, .196]). The more minor diminution of the link between narcissistic rivalry and empathy weakened the negative indirect effect (via reduced empathy and guilt) of narcissistic rivalry on apologizing, which was no longer significant ($b = -.111$, $SE = .074$, 95% CI [-.266, .016]). However, for the sake of providing complete information, we note that a directional test of this latter indirect effect remained significant (i.e., the 90% CI did not include zero: [-.240, -.005]).

Summary

Study 4 expanded on Studies 1-3. To begin, we tested whether the two narcissism facets were differentially related to empathy, guilt, and willingness to apologize in hypothetical transgression scenarios. Narcissistic rivalry was strongly and inversely associated with willingness to apologize. This negative association was serially mediated by low empathy and guilt. By contrast, narcissistic admiration was not directly associated with willingness to apologize. It did, however, have a positive indirect effect on willingness to apologize, via high empathy and guilt. In addition, we tested whether the two narcissism facets were related to empathy, guilt, and actual apologizing in an autobiographical experience. As hypothesized, narcissistic rivalry (controlling for narcissistic admiration) was associated with lower rates of apologizing following interpersonal transgression, and this link was serially mediated by low empathy and guilt. Narcissistic admiration (controlling for narcissistic rivalry), however, was associated with higher rates of apologizing, via high empathy and guilt. We address this latter, intriguing finding in General Discussion.

We assessed the robustness of these findings in supplemental analyses. First, we examined the role of transgression-related indices that might influence willingness to apologize and apologizing (e.g., transgression severity). When we included these indices as additional mediators, the negative indirect effects of narcissistic rivalry on, respectively, willingness to apologize and apologizing (via low empathy and guilt) remained significant. Thus, these serial indirect effects were independent of other potential influences on willingness to apologize and apologizing. This was also the case for the positive indirect effects of narcissistic admiration (via high empathy and guilt) on willingness to apologize and apologizing. In further supplemental analyses, we asked whether the narcissism facets played

a unique role or whether their involvement could instead be attributed to broader domains of personality. When we controlled for Big Two personality and self-esteem, the negative indirect effect of narcissistic rivalry (via low empathy and guilt) on willingness to apologize remained significant (for apologizing, only a directional test of this indirect effect was significant). However, controlling for Big Two personality and self-esteem eliminated the positive indirect effects of narcissistic admiration on willingness to apologize and apologizing (via high empathy and guilt). The latter finding shows that inclusion of the control variables did create a considerable hurdle—one that only narcissistic rivalry was able to clear.

Research Synthesis: NPI Facets

Study 4 underscored the importance, at least in the present context, of distinguishing between rivalry and admiration facets of narcissism, as assessed by the NARQ. In light of these findings, we undertook a research synthesis to examine the unique associations of three NPI facets with apologizing (via empathy and guilt). The NPI facets, as identified by Ackerman and colleagues (2011), are: Leadership/Authority (i.e., self-perceived leadership abilities and social potency; L/A), Entitlement/Exploitativeness (i.e., deservingness and manipulateness; E/E), and Grandiose Exhibitionism (i.e., vanity and grandiosity; GE). The E/E facet reflects the antagonistic side of narcissism and is most strongly correlated with narcissistic rivalry, as assessed by the NARQ (Wurst et al., 2017). Accordingly, we predicted that the E/E facet is more strongly negatively associated with willingness to apologize (via low empathy and guilt) than the L/A and GE facets. This prediction is a corollary of Hypothesis 6.

We used meta-analytic structural equation modelling (MASEM; Cheung & Chan, 2005; Cheung & Cheung, 2016) to test the indirect effects of L/A, E/E, and GE, via empathy and guilt, on apologizing, using the r-package metaSEM (Cheung, 2015; for code see Supplemental Materials, Section S8). First, relying on a random-effects model, we synthesised correlation matrices from the three studies in which participants completed the NPI (i.e., Study 1, Study 2, Study 4 transgression-scenarios matrix, Study 4 autobiographical-experience matrix), creating a pooled correlation matrix (Table 8). We then used this pooled

matrix to fit a structural equation model (Figure 1), with the three NPI subscales (L/A, E/E and GE) as predictors. This allowed us to test simultaneously the indirect effects of these subscales, via empathy and guilt, on apologizing. Only the indirect effect of E/E was significant ($b = -.06$, 95% CI [-.07, -.03]). The indirect effects of L/A ($b = -.003$, 95% CI: [-.03, .03]) and GE ($b = .004$, 95% CI [-.04, .05]) were not significant. We obtained similar results in two additional MASEM analyses, in which we included only one of the two Study 4 correlation matrices (transgression-scenarios or autobiographical-experience matrix). In all, Research Synthesis and Study 4 both point to a key role of antagonistic narcissism (NPI E/E and NARQ rivalry, respectively) for understanding (un)willingness to apologize (see Supplemental Materials, Section S9 for results per study).

General Discussion

Apologizing is an effective way to reconcile in the wake of an interpersonal transgression (Leunissen et al., 2013; McCullough et al., 1998; Ohbuchi et al., 1989). But who is more willing versus less willing to apologize following a transgression? We addressed the association between narcissism and apologizing.

Narcissism is a personality trait characterized by grandiosity, a sense of specialness and entitlement, as well as manipulateness (Morf et al., 2011; Thomaes et al., in press). We expected that narcissism would be associated with decreased willingness to apologize. Narcissists' self-views and interpersonal behavioural patterns are high on agency but low on communion (Bradley & Emmons, 1992; Campbell et al., 2002). Apologizing entails admitting wrongdoing, and functions to restore communal bonds. Admitting wrongdoing impedes narcissistic self-enhancement on agentic attributes. Moreover, the aim of apologizing (i.e., restoring social bonds) is an essentially communal aim—a dimension that narcissists devalue. We also examined a specific psychological process that could account for the putative inverse relation between narcissism and apologizing. One characteristic of narcissism is its negative association with empathy. Empathy predicts guilt, which, in turn, predicts willingness to engage in relationship repair behaviours, such as willingness to apologize or apologizing. Thus, we hypothesized that narcissists experience less empathy

with a victim and, hence, less guilt, which would be linked to weak willingness to apologize or apologizing.

Summary

We tested these hypotheses in four studies, encompassing a range of methodologies: a correlational investigation using trait measures, a scenario investigation, an experiment with a narcissism manipulation and a transgression paradigm, and, finally, an investigation involving autobiographical recall. In Study 1, we examined whether trait narcissism, empathy, guilt, and willingness to apologize are interrelated. Narcissism predicted willingness to apologize (i.e., trait-level proclivity to apologize). This association was mediated by trait empathy and trait guilt-proneness. In Study 2, we again measured narcissism at the dispositional level. Next, we presented participants with four scenarios, each describing an interpersonal transgression from the perpetrator's point-of-view. After each scenario, we assessed self-reported state empathy with the victim, state guilt about the transgression, and willingness to apologize to the victim. Again, trait narcissism was associated with willingness to apologize, and this association was mediated by state empathy and state guilt. In Study 3, we used a behavioural transgression paradigm, in which participants were led to believe that they committed a transgression against a fellow participant. We manipulated narcissism, and assessed state empathy, state guilt, as well as willingness to apologize to the victim. Induced narcissism decreased willingness to apologize, and this effect was mediated by state empathy and guilt.

Finally, in Study 4, we measured two narcissism facets: admiration and rivalry. Subsequently, participants responded to four transgression scenarios (as in Study 2) and recalled an autobiographical experience in which they transgressed against another person, indicating whether they apologized to their victim. Narcissistic rivalry had negative indirect effects, via empathy and guilt, on willingness to apologize (in the transgression scenarios) and apologizing (in the autobiographical experience). On the other hand, we found positive indirect effects of narcissistic admiration on willingness to apologize and apologizing (via high empathy and guilt). Supplemental analyses revealed that the negative indirect effects of narcissistic rivalry were robust, whereas the indirect effects of narcissistic admiration were

rendered non-significant when controlling for Big Two personality and self-esteem. Study 4 thus provides evidence that the negative association of narcissism and apologizing is only present for the antagonistic facet of narcissism. A research synthesis of the associations between NPI facets and willingness to apologize further corroborated this conclusion.

Limitations

Our research has several limitations. Studies 1-4 used a measurement-of-mediation design. The limitations of this design are well documented (Bullock et al., 2010). Yet, we regard the serial mediation analyses as informative, because they placed the hypothesized model (Figure 1) at risk (Fiedler et al., 2011). That is, the postulated causal chain comprised several links. Failure of even a single link would have invalidated the hypothesized model, but each link held and did so repeatedly. Nevertheless, future investigations should incorporate experimental-causal-chain designs (Spencer et al., 2005). Here, a researcher would manipulate empathy and examine downstream consequences on guilt and willingness to apologize or actual apology, and would then manipulate guilt and assess its consequences on willingness to apologize or actual apology. Longitudinal or experience-sampling designs could also address these issues.

Furthermore, all our measures were based on self-report. The disadvantages of self-report measures are well documented (Paulhus & Vazire, 2007). Response sets, such as social desirable responding and acquiescent responding, can compromise the validity of self-report measures and introduce common method variance (CMV). CMV can also arise from common scale formats, common scale anchors, and item demand characteristics, among other factors (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). To gauge the role of CMV, we used Study 4 data to implement the partial-correlation procedure developed by Lindell and Whitney (2001). This procedure relies on identifying a marker variable that is theoretically unrelated to the substantive variables but is assessed with the same method. If the theoretical correlation between the marker variable and the substantive variables is 0, then unexpected nonzero correlations indicate CMV. For illustrative purposes, we present details of these analyses in Supplemental Materials (Section S10). Results indicated that CMV made a relatively small contribution to the observed correlations in Study 4. Nevertheless, it is clear

that future investigations should demonstrate convergence between different measurement methods. This could be achieved, for instance, by obtaining informant reports (McCrae & Weiss, 2007), including performance-based measures of empathy, and measuring actual apologizing behaviour in realistic interaction contexts (e.g., field experiments, experience sampling studies). We consider the Study 4 assessment of apologizing in the context of a recalled autobiographical experience an important step in this direction.

Implications and Future Research Directions

As Study 4 and Research Synthesis indicated, it is the antagonistic rather than the agentic facet of narcissism that is linked with unwillingness to apologize or lack of apologizing. In fact, in Study 4, narcissistic admiration was positively associated, via high empathy and guilt, with willingness to apologize (in the transgression scenarios) and apologizing (in the autobiographical experience). Although these indirect effects were drastically attenuated after controlling for Big Two personality and self-esteem, we offer a possible interpretation to guide future research. Narcissistic admiration is characterized by agentic self-enhancement, which works to maintain grandiose self-views by eliciting social adulation (Back et al., 2013). As such, people high on narcissistic admiration may use apologies as an instrument for agentic self-enhancement or self-promotion (Back et al., 2013); that is, they may apologize in order to increase their social standing (by presenting themselves as “the better person”) in the wake of transgression. Apologizing can improve social standing. For example, apologizing positively influences victims’ impressions of the perpetrator after a transgression, and increases social approval (Darby & Schlenker, 1982; Ohbuchi et al., 1989). Higher levels of empathy and guilt that accompany narcissistic admiration, following transgression, may signal when an apology is required.

Supplemental Study 4 findings are consistent with this reasoning. Individuals scoring high on narcissistic admiration ascribed more value to their relationship with the victim (i.e., other-value). In turn, value ascribed to the relationship increased the likelihood of apologizing to the victim. This indirect effect reveals a motivational path to restore the relationship (in addition to an emotional path via empathy and guilt). People high on narcissistic admiration value relationships, and are motivated to maintain them, because

relationships allow them to self-promote and gain admiration. Future investigations should test these possibilities directly.

Narcissistic admiration (as opposed to narcissistic rivalry) was positively associated with empathy, guilt, and apologizing. This finding aligns with literature showing that narcissistic admiration is positively related to empathy and forgiveness (Back et al., 2013, Study 5). The relation between narcissistic admiration and forgiveness could be the result of a dynamic similar to the one discussed above. By forgiving gracefully their perpetrators, people high on narcissistic admiration may seek social adulation. Heider (1958) pioneered theorizing on the self-enhancing effect of forgiveness (p. 269):

“By forgiving, *p* [reference person] can assert in effect that he is so superior that he can afford to be forgiving. Or the forgiveness can imply that since *o*'s [other person] actions are based on untrue beliefs, why should *p* be bothered by taking them seriously and avenging himself? Rather it is the attacker who is to be pitied, and being forgiven through *p*'s magnanimity emphasizes *o*'s inferiority still more. Forgiveness can devalue the attack, devalue the attacker, and affirm the power and status of the forgiver.”

Indeed, people high on narcissistic admiration may be particularly sensitive to how their apologies and forgiveness might serve to enhance their status and others' impressions of them. If so, this would challenge the sincerity of their overtures. Future empirical efforts could focus on whether apologizing and forgiveness are driven by the self-enhancement motive among persons high on narcissistic admiration, whether the other party detects this motive, and whether apologizing and forgiveness are effective in promoting reconciliation.

Relatively little is known about the determinants of perpetrators' willingness to apologize following interpersonal transgressions (Leunissen et al., 2012; SimanTov-Nachlieli, & Shnabel, 2014). Our research highlights the importance of studying personality traits, specifically narcissism, to understand apologizing. We extended findings that narcissists react defensively or aggressively to failure feedback (Bushman & Baumeister, 1998; Campbell et al., 2000) into the realm of interpersonal transgressions. That is, narcissists, due to their lack of empathy, are unlikely to attempt to reconcile with a victim

after an interpersonal transgression. Given that the absence of an apology can escalate conflict situations (Ohbuchi et al., 1989), such an absence may be one process through which antagonistic narcissism contributes to conflict escalation. Finally, we provided an explanation for why higher antagonistic narcissism is related to lower willingness to apologize.

Antagonistic narcissism (but not agentic narcissism) is negatively related to empathy. Lack of empathy among narcissists renders them relatively guilt-free following a transgression.

Although previous work has examined guilt as a predictor of apologizing (Leunissen et al., 2013), the role of empathy in the process of apologizing has not been studied. Our research highlights empathy's capacity to promote reconciliation, a finding that is echoed in the relation between empathy and forgiveness (Fehr et al., 2010; Sandage & Worthington, 2010).

Our research also contributes to the literature on narcissistic leadership (Rosenthal & Pittinsky, 2006; Sedikides & Campbell, 2017). Narcissism is disproportionately high among leaders and the upper echelons of organizations (Schoel, Stahlberg, & Sedikides, 2015; Sedikides, Hoorens, & Dufner, 2015). Mistreatment of subordinates by leaders is a pervasive phenomenon in organizations (Mayer, Thau, Workman, Van Dijke, & De Cremer, 2012). Episodes of mistreatment are salient moments to subordinates, and how leaders handle the aftermath of these episodes is crucial to subordinates' well-being and leader evaluation (Tucker, Turner, Barling, Reid, & Elving, 2006). Apologizing constitutes an effective way for a leader to initiate reconciliation with a follower. Indeed, when a leader apologizes, followers perceive her or him more positively (Basford, Offermann, & Behrend, 2014), and an apology from their leader has beneficial effects on followers' psychological health and well-being (Byrne, Barling, & Dupré, 2014). Our research helps to understand the apparent reluctance of leaders to apologize after organizational transgression (Kellerman, 2006) by pointing to a prevalent personality characteristic among them, namely narcissism.

The findings point to follow-up investigations into associations between personality traits and willingness to apologize. Narcissism is positively associated with psychopathy and Machiavellianism (i.e., the dark triad; Jonason & Webster, 2010; Paulhus & Williams 2002). Hence, Machiavellianism and psychopathy may be inversely related to empathy, guilt, and willingness to apologize after interpersonal transgressions. The case of Machiavellianism is

especially relevant. High Machiavellians may be unwilling to apologize, because they feel little empathy and guilt following a transgression. These individuals, however, may be particularly willing to apologize when there are instrumental reasons to do so -- for example when they ascribe a high value to the relationship with the victim.

Lastly, the findings have implications for intergroup reconciliation. Collective narcissism, an over-inflated evaluation of an ingroup (Golec de Zavala, Cichocka, Eidelson, & Jayawickreme, 2009), may be negatively linked to intergroup apologies and intergroup reconciliation. We would expect that collective narcissism is negatively related to empathic responses to outgroup victims and, hence, to collective guilt. Indeed, collective guilt is related positively to support for intergroup apologies among perpetrator groups (Brown, González, Zagefka, Manzi, & Čehajić, 2008; Wohl, Branscombe, & Klar, 2006). Thus, collective narcissism may play a key role in perpetrator groups' (lack of) support for collective apologies and empathy with outgroup members; in turn, collective guilt may account for this association.

Coda

Little empirical attention has been directed at perpetrator characteristics that are associated with apologies (i.e., willingness to apologize or apologizing). The current research demonstrated that narcissism, specifically its rivalrous or antagonistic facet, is negatively related to apologies. Antagonistic narcissism's negative association with empathy, and subsequently guilt, explained this association. The findings highlight the relevance of studying personality traits to understand apologies.

References

- Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., & Kashy, D. A. (2011). What does the narcissistic personality inventory really measure? *Assessment, 18*, 76-87. DOI:10.1177/1073191110382845
- Aderman, D., & Berkowitz, L. (1970). Observational set, empathy, and helping. *Journal of Personality and Social Psychology, 14*, 141-148.
- Alicke, M. D., & Sedikides, C. (2009). Self-enhancement and self-protection: What they are and what they do. *European Review of Social Psychology, 20*, 1-48.
DOI:10.1080/10463280802613866
- Back, M. D., Kufner, A. C., Dufner, M., Gerlach, T. M., Rauthmann, J. F., & Denissen, J. J. (2013). Narcissistic admiration and rivalry: Disentangling the bright and dark sides of narcissism. *Journal of Personality and Social Psychology, 105*, 1013-1037.
DOI:10.1037/a0034431
- Barry, C. T., & Malkin, M. L. (2010). The relation between adolescent narcissism and internalizing problems depends on the conceptualization of narcissism. *Journal of Research in Personality, 44*, 684-690. DOI:10.1016/j.jrp.2010.09.001
- Basford, T. E., Offermann, L. R., & Behrend, T. S. (2014). Please accept my sincerest apologies: Examining follower reactions to leader apology. *Journal of Business Ethics, 119*, 99-117.
DOI:10.1007/s10551-012-1613-y
- Basil, D. Z., Ridgway, N. M., & Basil, M. D. (2008). Guilt and giving: A process model of empathy and efficacy. *Psychology & Marketing, 25*, 1-23. DOI:10.1002/mar.20200
- Baumeister, R. F., Reis, H. T., & Delespaul, P. A. (1995). Subjective and experiential correlates of guilt in daily life. *Personality and Social Psychology Bulletin, 21*, 1256-1268.
DOI:10.1177/01461672952112002
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: an interpersonal approach. *Psychological Bulletin, 115*, 243-267. DOI:10.1037/0033-2909.115.2.243
- Baumeister, R. F., Stillwell, A., & Wotman, S. R. (1990). Victim and perpetrator accounts of interpersonal conflict: autobiographical narratives about anger. *Journal of Personality and Social Psychology, 59*, 994-1005. DOI:10.1037/0022-3514.59.5.994

- Belsley, D. A. (1984). Demeaning conditioning diagnostics through centering. *The American Statistician*, *38*, 73-77. DOI: 10.2307/2683236
- Belsley, D. A. (1991). A guide to using collinearity diagnostics. *Computer Science in Economics and Management*, *4*, 33-50. DOI:10.1007/BF00426854
- Belsley, D. A., Kuh, E., & Welsch, R. E. (1980). *Regression diagnostics: Identifying influential data and sources of collinearity*. New York, NY: Wiley.
- Berg, J., Dickhaut, J., & McCabe, K. (1995). Trust, reciprocity and social history. *Games and Economic Behavior*, *10*, 122–142. DOI:10.1006/game.1995.1027
- Bradlee, P. M., & Emmons, R. A. (1992). Locating narcissism within the interpersonal circumplex and the five-factor model. *Personality and Individual Differences*, *13*, 821-830. DOI:10.1016/0191-8869(92)90056-U
- Brown, R., González, R., Zagefka, H., Manzi, J., & Čehajić, S. (2008). Nuestra culpa: Collective guilt and shame as predictors of reparation for historical wrongdoing. *Journal of Personality and Social Psychology*, *94*, 75-90. DOI:10.1037/0022-3514.94.1.75
- Brummelman, E., Thomaes, S., & Sedikides, C. (2016). Separating narcissism from self-esteem. *Current Directions in Psychological Science*, *25*, 8-13. DOI:10.1177/0963721415619737
- Bullock, J. G., Green, D. P., & Ha, S. E. (2010). Yes, but what's the mechanism? (don't expect an easy answer). *Journal of Personality and Social Psychology*, *98*, 550-558. DOI:10.1037/a0018933
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, *75*, 219–229. DOI:10.1037/0022-3514.75.1.219
- Byrne, A., Barling, J., & Dupré, K. E. (2014). Leader apologies and employee and leader well-being. *Journal of Business Ethics*, *121*, 91-106. DOI:10.1007/s10551-013-1685-3
- Campbell, W. K. (1999). Narcissism and romantic attraction. *Journal of Personality and Social Psychology*, *77*, 1254-1270. DOI:10.1037/0022-3514.77.6.1254
- Campbell, W. K., Reeder, G. D., Sedikides, C., & Elliot, A. J. (2000). Narcissism and comparative self-enhancement strategies. *Journal of Research in Personality*, *34*, 329-347. DOI:10.1006/jrpe.2000.2282

- Campbell, W. K., Rudich, E., & Sedikides, C. (2002). Narcissism, self-esteem, and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin*, *28*, 358-368. DOI:10.1177/0146167202286007
- Cheung, M. W. L. (2015). metaSEM: An R package for meta-analysis using structural equation modeling. *Frontiers in Psychology*, *5*, 1521.
- Cheung, M. W.-L., & Chan, W. (2005). Meta-analytic structural equation modeling: A two-stage approach. *Psychological Methods*, *10*, 40-64. DOI:10.1037/1082-989X.10.1.40
- Cheung, M. W. L., & Cheung, S. F. (2016). Random-effects models for meta-analytic structural equation modeling: review, issues, and illustrations. *Research Synthesis Methods*, *7*, 140-155. DOI:10.1002/jrsm.1166
- Cohen, T. R., Wolf, S. T., Panter, A. T., & Insko, C. A. (2011). Introducing the GASP scale: A new measure of guilt and shame proneness. *Journal of Personality and Social Psychology*, *100*, 947-966. DOI:10.1037/a0022641
- Coke, J. S., Batson, C. D., & McDavis, K. (1978). Empathic mediation of helping: A two-stage model. *Journal of Personality and Social Psychology*, *36*, 752-766. DOI:10.1037/0022-3514.36.7.752
- Cryder, C. E., Springer, S., & Morewedge, C. K. (2012). Guilty feelings, targeted actions. *Personality and Social Psychology Bulletin*, *38*, 607-618. DOI:10.1177/0146167211435796
- Darby, B. W., & Schlenker, B. R. (1982). Children's reactions to apologies. *Journal of Personality and Social Psychology*, *43*, 742-753. DOI:10.1037/0022-3514.43.4.742
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, *10*, 85.
- Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. *Journal of Personality and Social Psychology*, *44*, 113-126. DOI:10.1037/0022-3514.44.1.113
- De Hooge, I. E., Nelissen, R., Breugelmans, S. M., & Zeelenberg, M. (2011). What is moral about guilt? Acting “prosocially” at the disadvantage of others. *Journal of Personality and Social Psychology*, *100*, 462-473. DOI:10.1037/a0021459

- De Waal-Andrews, W. G. (2012). *What it takes to attain status in face-to-face groups: the importance of distinguishing between dominance and prestige hierarchies*. Unpublished dissertation, University of Southampton.
- DeYoung, C. G. (2006). Higher-order factors of the Big Five in a multi-informant sample. *Journal of Personality and Social Psychology, 91*, 1138–1151. DOI:10.1037/0022-3514.91.6.1138
- DeYoung, C. G., Peterson, J. B., & Higgins, D. M. (2002). Higher-order factors of the Big Five predict conformity: Are there neuroses of health? *Personality and Individual Differences, 33*, 533–552. DOI:10.1016/S0191-8869(01)00171-4
- Desmet, P. T., & Leunissen, J. M. (2014). How many pennies for your pain? Willingness to compensate as a function of expected future interaction and intentionality feedback. *Journal of Economic Psychology, 43*, 105-113. DOI:10.1016/j.joep.2014.05.002
- Digman, J. M. (1997). Higher-order factors of the Big Five. *Journal of Personality and Social Psychology, 73*, 1246–1256. DOI:10.1037/0022-3514.73.6.1246
- Dunlop, P. D., Lee, K., Ashton, M. C., Butcher, S. B., & Dykstra, A. (2015). Please accept my sincere and humble apologies: The HEXACO model of personality and the proclivity to apologize. *Personality and Individual Differences, 79*, 140-145. DOI:10.1016/j.paid.2015.02.004
- Eisenberg, N., & Miller, P. A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin, 101*, 91-119. DOI:10.1037/0033-2909.101.1.91
- Emmons, R. A. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology, 52*, 11-17. DOI:10.1037/0022-3514.52.1.11
- Erdle, S., Gosling, S. D., & Potter, J. (2009). Does self-esteem account for the higher-order factors of the Big Five? *Personality and Individual Differences, 43*, 921-922. DOI: 10.1016/j.jrp.2009.04.012
- Exline, J. J., Baumeister, R. F., Bushman, B. J., Campbell, W. K., & Finkel, E. J. (2004). Too proud to let go: Narcissistic entitlement as a barrier to forgiveness. *Journal of Personality and Social Psychology, 87*, 894-912. doi:10.1037/0022-3514.87.6.894
- Fehr, R., Gelfand, M. J., & Nag, M. (2010). The road to forgiveness: a meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin, 136*, 894-914.

DOI:10.1037/a0019993

- Fiedler, K., Schott, M., & Meiser, T. (2011). What mediation analysis can (not) do. *Journal of Experimental Social Psychology, 47*, 1231-1236. DOI:10.1016/j.jesp.2011.05.007
- Gebauer, J. E., Sedikides, C., Verplanken, B., & Maio, G. R. (2012). Communal narcissism. *Journal of Personality and Social Psychology, 103*, 854-878. DOI:10.1037/a0029629
- Gebauer, J. E., Wagner, J., Sedikides, C., & Neberich, W. (2013). The relation between agency-communion and self-esteem is moderated by culture, religiosity, age, and sex: Evidence for the self-centrality breeds self-enhancement principle. *Journal of Personality, 81*, 261-275. DOI:10.1111/j.1467-6494.2012.00807.x
- Golec de Zavala, A., Cichocka, A., Eidelson, R., & Jayawickreme, N. (2009). Collective narcissism and its social consequences. *Journal of Personality and Social Psychology, 97*, 1074-1096. DOI:10.1037/a0016904
- Green, J. D., Davis, J. L., Luchies, L. B., Coy, A. E., Van Tongeren, D. R., Reid, C. A., & Finkel, E. J. (2013). Victims versus perpetrators: Affective and empathic forecasting regarding transgressions in romantic relationships. *Journal of Experimental Social Psychology, 49*, 329-333. DOI:10.1016/j.jesp.2012.12.004
- Hayes, A. F. (2013). *Introduction to mediation, moderation and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.
- Heider, F. (1958). *The psychology of interpersonal relations*. London, UK: John Wiley and Sons, Inc.
- Hepper, E. G., Hart, C. M., Meek, R., Cisek, S. Z., & Sedikides, C. (2014). Narcissism and empathy in young offenders and non-offenders. *European Journal of Personality, 28*, 201-210. DOI:10.1002/per.1939
- Hepper, E. G., Hart, C. M., & Sedikides, C. (2014). Moving narcissus: Can narcissists be empathic? *Personality and Social Psychology Bulletin, 40*, 1079-1091. DOI:10.1177/0146167214535812
- Hoffman, M. L. (1977). Sex differences in empathy and related behaviors. *Psychological Bulletin, 84*, 712-722.

- Horton, R. S., & Sedikides, C. (2009). Narcissistic responding to ego threat: When the status of the evaluator matters. *Journal of Personality, 77*, 1493-1525. DOI:10.1111/j.1467-6494.2009.00590.x
- Howell, A. J., Dopko, R. L., Turowski, J. B., & Buro, K. (2011). The disposition to apologize. *Personality and Individual Differences, 51*, 509-514. DOI:10.1016/j.paid.2011.05.009
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The "Big-Five" Inventory—Versions 4a and 54*. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.
- John, O. P., & Srivastava, S. (1999). The Big Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives. In L. A. Pervin, & O. P. John (Eds.), *Handbook of Personality: Theory and Research* (pp. 102-138). New York: Guilford Press.
- Jonason, P. K., & Webster, G. D. (2010). The dirty dozen: a concise measure of the dark triad. *Psychological Assessment, 22*, 420-432. DOI:10.1037/a0019265
- Kellerman, B. (2006). When should a leader apologize and when not? *Harvard Business Review, 84*, 72-81.
- Kenny, D. A., & Judd, C. M. (2014). Power anomalies in testing mediation. *Psychological Science, 25*, 334-339. DOI:10.1177/0956797613502676
- Ketelaar, T. & Au, W. T. (2003). The effects of feelings of guilt on the behavior of uncooperative individuals in repeated social bargaining games: An affect-as-information interpretation of the role of emotion in social interaction. *Cognition and Emotion, 17*, 429-453. DOI:10.1080/02699930143000662
- Kim, P. H., Ferrin, D. L., Cooper, C. D., & Dirks, K. T. (2004). Removing the shadow of suspicion: the effects of apology versus denial for repairing competence-versus integrity-a9010.89.1.104
- Lazare, A. (2004). *On apology*. New York, NY: Oxford University Press.
- Leith, K. P., & Baumeister, R. F. (1998). Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of Personality, 66*, 1-37. DOI:10.1111/1467-6494.00001

- Lemay Jr., E. P., Overall, N. C., & Clark, M. S. (2012). Experiences and interpersonal consequences of hurt feelings and anger. *Journal of personality and social psychology, 103*, 982. DOI:10.1037/a0030064
- Leunissen, J. M., De Cremer, D., & Reinders Folmer, C. P. (2012). An instrumental perspective on apologizing in bargaining: The importance of forgiveness. *Journal of Economic Psychology, 33*, 215-222. DOI:10.1016/j.joep.2011.10.004
- Leunissen, J. M., De Cremer, D., Reinders Folmer, C. P., & Van Dijke, M. (2013). The apology mismatch: Asymmetries between victim's need for apologies and perpetrator's willingness to apologize, *Journal of Experimental Social Psychology, 49*, 315-324. DOI:10.1016/j.jesp.2012.12.005
- Leunissen, J. M., De Cremer, D., Van Dijke, M., & Reinders Folmer, C. P. R. (2014). Forecasting Errors in the Averseness of Apologizing. *Social Justice Research, 27*, 322-339. DOI:10.1007/s11211-014-0216-4
- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology, 86*, 114-121. DOI:10.1037//0021-9010.86.1.114
- Markon, K. E., Krueger, R. F., & Watson, D. (2005). Delineating the structure of normal and abnormal personality: An integrative hierarchical approach. *Journal of Personality and Social Psychology, 88*, 139-157. DOI: 10.1037/0022-3514.88.1.139
- Maltby, J. (2010). An interest in fame: Confirming the measurement and empirical conceptualization of fame interest. *British Journal of Psychology, 101*, 411-432. DOI:10.1348/000712609X466568
- Mayer, D. M., Thau, S., Workman, K. M., Van Dijke, M., & De Cremer, D. (2012). Leader mistreatment, employee hostility, and deviant behaviors: Integrating self-uncertainty and thwarted needs perspectives on deviance. *Organizational Behavior and Human Decision Processes, 117*, 24-40. DOI:10.1016/j.obhdp.2011.07.003
- McCrae, R. R., & Weiss, A. (2007). Observer ratings of personality. In R. W. Robins, R. C. Fraley, & R. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 259-272). New York, NY: Guildford.

- McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington Jr., E. L., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships: II. Theoretical elaboration and measurement. *Journal of Personality and Social Psychology, 75*, 1586-1603.
DOI:10.1037/0022-3514.75.6.1586
- Morf, C. C., Horvath, S., & Torchetti, L. (2011). Narcissistic self-enhancement: Tales of (successful?) self-portrayal. In M. D. Alicke & C. Sedikides (Eds.), *Handbook of self-enhancement and self-protection* (pp. 399-424). New York, NY: Guilford.
- Nelissen, R., & Zeelenberg, M. (2009). When guilt evokes self-punishment: evidence for the existence of a Dobby Effect. *Emotion, 9*, 118-122. DOI:10.1037/a0014540
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Okimoto, T. G., Wenzel, M., & Hedrick, K. (2013). Refusing to apologize can have psychological benefits (and we issue no mea culpa for this research finding). *European Journal of Social Psychology, 43*, 22-31. DOI:10.1002/ejsp.1901
- Ohbuchi, K. I., Kameda, M., & Agarie, N. (1989). Apology as aggression control: its role in mediating appraisal of and response to harm. *Journal of Personality and Social Psychology, 56*, 219-227. DOI:10.1037/0022-3514.56.2.219
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology, 45*, 867-872. DOI:10.1016/j.jesp.2009.03.009
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing? *Journal of Personality and Social Psychology, 74*, 1197-1208.
DOI:10.1037/0022-3514.74.5.1197
- Paulhus, D. L. (2001). Normal narcissism: Two minimalist accounts. *Psychological Inquiry, 12*, 228-230.
- Paulhus, D. L., & Vazire, S. (2007). The self-report method. In R. W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 224-239). New York, NY: Guilford.

- Paulhus, D. L., & Williams, K. M. (2002). The dark triad of personality: Narcissism, Machiavellianism, and psychopathy. *Journal of Research in Personality, 36*, 556-563. DOI:10.1016/S0092-6566(02)00505-6
- Podsakoff, P. M., MacKenzie, S. M., Lee, J., & Podsakoff, N. P. (2003). Common method variance in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879-903. DOI: 10.1037/0021-9010.88.5.879
- Preston, S. D., & De Waal, F. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and Brain Sciences, 25*, 1-20. DOI:10.1017/S0140525X02000018
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology, 54*, 890-902. DOI:10.1037/0022-3514.54.5.890
- Richard, F. D., Bond, C. F., Jr., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology, 7*, 331-363. DOI:10.1037/1089-2680.7.4.331
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenthal, S. A., & Pittinsky, T. L. (2006). Narcissistic leadership. *The Leadership Quarterly, 17*, 617-633. DOI:10.1016/j.leaqua.2006.10.005
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation analysis in social psychology: Current practices and new recommendations. *Social and Personality Psychology Compass, 5*, 359-371. DOI:10.1111/j.1751-9004.2011.00355.x
- Sandage, S. J., Jankowski, P. J., Bissonette, C. D., & Paine, D. R. (2016). Vulnerable narcissism, forgiveness, humility, and depression: Mediator effects for differentiation of self. *Psychoanalytic Psychology*. Advance online publication. DOI:10.1037/pap0000042
- Sandage, S. J., & Worthington, E. L., Jr. (2010). Comparison of two group interventions to promote forgiveness: Empathy as a mediator of change. *Journal of Mental Health Counseling, 32*, 35-57. DOI:10.17744/mehc.32.1.274536n518571683
- Schönbrodt, F. D., & Perugini, M. (2013). At what sample size do correlations stabilize? *Journal of Research in Personality, 47*, 609-612. DOI:10.1016/j.jrp.2013.05.009

- Schniter, E., Sheremeta, R. M., & Sznycer, D. (2013). Building and rebuilding trust with promises and apologies. *Journal of Economic Behavior & Organization*, *94*, 242-256.
DOI:10.1016/j.jebo.2012.09.011
- Schoel, C., Stahlberg, D., & Sedikides, C. (2015). Psychological insecurity and leadership styles. In P. J. Carroll, R. M. Arkin, & A. L. Wichman (Eds.), *The handbook of personal security* (pp. 55-73). New York, NY: Psychology Press.
- Sedikides, C. (2012). Self-protection. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 327-353). New York, NY: Guilford Press.
- Sedikides, C., & Campbell, W. K. (2017) Narcissistic force meets systemic resistance: The Energy Clash Model. *Perspectives on Psychological Science*. Advance online publication.
DOI:10.1177/1745691617692105
- Sedikides, C., Campbell, W. K., Reeder, G., Elliot, A. J., & Gregg, A. P. (2002). Do others bring out the worst in narcissists? The “Others Exist for Me” illusion. In Y. Kashima, M. Foddy, & M. Platow (Eds.), *Self and identity: Personal, social, and symbolic* (pp. 103-123). Mahwah, NJ: Erlbaum.
- Sedikides, C., Hoorens, V., & Dufner, M. (2015). Self-enhancing self-presentation: Interpersonal, relational, and organizational implications. In F. Guay, D. M. McInerney, R. Craven, & H. W. Marsh (Eds.), *Self-concept, motivation and identity: Underpinning success with research and practice*. International Advances in Self Research (Vol. 5, pp. 29-55). Charlotte, NC: Information Age Publishing.
- Sedikides, C., & Gregg, A. P. (2008). Self-enhancement: Food for thought. *Perspectives on Psychological Science*, *3*, 102-116. DOI:10.1111/j.1745-6916.2008.00068.x
- Sedikides, C., Rudich, E. A., Gregg, A. P., Kumashiro, M., & Rusbult, C. (2004). Are normal narcissists psychologically healthy? Self-esteem matters. *Journal of Personality and Social Psychology*, *87*, 400-416. DOI:10.1037/0022-3514.87.3.400
- Shnabel, N., & Nadler, A. (2008). A needs-based model of reconciliation: Satisfying the differential emotional needs of victims and perpetrators as a key to promoting reconciliation. *Journal of Personality and Social Psychology*, *94*, 116–132. DOI:10.1037/0022-3514.94.1.116

- SimanTov-Nachlieli, I., & Shnabel, N. (2014). Feeling both victim and perpetrator investigating duality within the needs-based model. *Personality and Social Psychology Bulletin*, *40*, 301-314. DOI:10.1177/0146167213510746.
- Spencer, S. J., Zanna, M., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, *89*, 845-851. DOI:10.1037/0022-3514.89.6.845
- Strayer, J. (1987). Affective and cognitive perspectives on empathy. In N. Eisenberg, & J. Strayer (Eds.), *Empathy and its development* (pp. 218-244). New York, NY: Cambridge University Press.
- Tavuchis, N. (1991). *Mea Culpa: A sociology of apology and reconciliation*. Stanford, CA: Stanford University Press.
- Tangney, J. P., & Dearing, R. L. (2003). *Shame and guilt*. New York, NY: Guilford Press.
- Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, *70*, 1256-1269. DOI:10.1037/0022-3514.70.6.1256
- Thomaes, S., Brummelman, E., & Sedikides, C. (in press). Narcissism: A social-developmental perspective. In V. Zeigler-Hill & T. Shackelford (Eds.), *The SAGE Handbook of Personality and Individual Differences*. New York, NY: Sage.
- Tucker, S., Turner, N., Barling, J., Reid, E. M., & Elving, C. (2006). Apologies and transformational leadership. *Journal of Business Ethics*, *63*, 195-207. DOI:10.1007/s10551-005-3571-0
- Uchronski, M., Abele, A. E., & Bruckmüller, S. (2012). Empathic perspective taking and the situational malleability of the communal self-concept. *Self and Identity*, *12*, 238–258. DOI:10.1080/15298868.2012.655896.
- Van Dijk, E., & De Cremer, D. (2006). Tacit coordination and social dilemmas: On the importance of self-interest and fairness. In D. De Cremer, M. Zeelenberg, & J. Keith Murnighan (Eds.), *Social psychology and economics* (pp. 141-154). Mahwah, NJ: Erlbaum Publishers.

- Vonk, J., Zeigler-Hill, V., Mayhew, P., & Mercer, S. (2013). Mirror, mirror on the wall, which form of narcissist knows self and others best of all? *Personality and Individual Differences*, *54*, 396-401. DOI:10.1016/j.paid.2012.10.010
- Wai, M., & Tiliopoulos, N. (2012). The affective and cognitive empathic nature of the dark triad of personality. *Personality and Individual Differences*, *52*, 794-799. DOI:10.1016/j.paid.2012.01.008
- Wenzel, M., Okimoto, T. G., Feather, N. T., & Platow, M. J. (2008). Retributive and restorative justice. *Law and Human Behavior*, *32*, 375-389. DOI:10.1007/s10979-007-9116-6
- Wohl, M. J., Branscombe, N. R., & Klar, Y. (2006). Collective guilt: Emotional reactions when one's group has done wrong or been wronged. *European Review of Social Psychology*, *17*, 1-37. DOI:10.1080/10463280600574815
- Wurst, S. N., Gerlach, T. M., Dufner, M., Rauthmann, J. F., Grosz, M. P., Küfner, A. C. P., Denissen, J. J. A., & Back, M. D. (2017). Narcissism and romantic relationships: The differential impact of narcissistic admiration and rivalry. *Journal of Personality and Social Psychology*, *112*, 280-306. DOI:10.1037/pspp0000113
- Ybarra, O., Chan, E., Park, H., Burnstein, E., Monin, B., & Stanik, C. (2008). Life's recurring challenges and the fundamental dimensions: An integration and its implications for cultural differences and similarities. *European Journal of Social Psychology*, *38*, 1083-1092. DOI:10.1002/ejsp.559

Table 1

Descriptive Statistics, Zero-Order Correlations (Above Diagonal) and 95% CI (Below Diagonal) in Studies 1-3

	<i>M</i>	<i>SD</i>	α	Narcissism	Empathy	Guilt	Willingness to Apologize
Study 1 (<i>N</i> = 183)							
Narcissism	15.28	8.63	.91	-	-.25**	-.36**	-.31**
Empathy	4.24	0.63	.73	-.39, -.11	-	.47**	.28**
Guilt	5.27	1.21	.85	-.50, -.22	.34, .60	-	.41**
Willingness to apologize	5.33	1.42	.93	-.45, -.17	.13, .42	.27, .54	-
Study 2 (<i>N</i> = 193)							
Narcissism	11.47	8.33	.91	-	-.19**	-.49**	-.41**
Empathy	3.69	1.47	.96	-.33, -.05	-	.31**	.30**
Guilt	5.82	1.27	.86	-.58, -.35	.17, .43	-	.76**
Willingness to apologize	5.93	1.28	.87	-.50, -.26	.15, .40	.65, .83	-
Study 3 (<i>N</i> = 101)							
Narcissism manipulation	0.11	1.00	-	-	-.20*	-.17	-.23*
Empathy	5.04	1.23	.88	-.39, -.003	-	.59**	.52**
Guilt	4.93	1.44	.89	-.37, .02	.43, .75	-	.81**
Willingness to apologize	4.46	2.16	-	-.42, -.03	.35, .69	.70, .93	-

Note. In Study 3, we effects-coded the narcissism manipulation (-1 = *control*; 1 = *narcissism*). *Ns* are number of cases analyzed. * $p < .05$; ** $p < .01$

Table 2

Linear Regression Analyses Testing Links in the Serial Multiple Mediator Model in Studies 1-3

Predictor	Outcome					
	Empathy		Guilt		Willingness to Apologize	
	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>
Study 1 (<i>N</i> = 183)						
Narcissism	-.25 [-.39, -.11]	.001	-.26 [-.39, -.13]	< .001	-.18 [-.32, -.04]	.015
Empathy			.40 [.28, .53]	< .001	.09 [-.06, .24]	.236
Guilt					.30 [.15, .46]	< .001
Study 2 (<i>N</i> = 193)						
Narcissism	-.19 [-.33, -.05]	.008	-.45 [-.57, -.32]	< .001	-.05 [-.16, .06]	.375
Empathy			.23 [.10, .35]	< .001	.07 [-.03, .16]	.189
Guilt					.71 [.60, .82]	< .001
Study 3 (<i>N</i> = 101)						
Narcissism	-.20 [-.39, -.003]	.047	-.05 [-.21, .11]	.513	-.09 [-.21, .04]	.183
Empathy			.61 [.45, .77]	< .001	.001 [-.15, .15]	.394
Guilt					.80 [.65, .95]	< .001

Note. Numbers in brackets indicate 95% confidence intervals. *N*s are number of cases analysed.

Table 3

Means, Standard Deviations (in Parentheses), and Inferential Statistics for Control and Narcissism Conditions in Study 3

Dependent variable	Control	Narcissism	$F(1, 99)$	p	η_p^2
Manipulation check	4.13 (3.06)	6.23 (3.28)	10.85	.001	.10
Empathy	5.28 (0.96)	4.80 (1.34)	4.04	.047	.04
Guilt	5.21 (1.21)	4.71 (1.58)	3.10	.081	.04
Willingness to apologize	5.00 (1.97)	4.02 (2.23)	5.38	.022	.05

Table 4

Zero-order Correlations (Above Diagonal) and 95% CI (Below Diagonal) in Study 4

	Zero-order correlations										
	1	2	3	4	5	6	7	8	9	10	11
1. Rivalry	-	.41**	-.51**	-.04	-.39**	-.24**	-.40**	-.41**	-.16**	-.10	-.11
2. Admiration	.30, .51	-	.23**	.53**	.31**	.09	-.13*	-.09	.09	.06	.09
3. Stability	-.59, -.42	.12, .34	-	.49**	.74**	.29**	.27**	.30**	.23**	.12*	.13*
4. Plasticity	-.16, .07	.44, .61	.40, .57	-	.51**	.20**	.10	.16**	.19**	.11	.13*
5. Self-esteem	-.48, -.28	.20, .41	.68, .79	.42, .59	-	.21**	.24**	.31**	.17**	.10	.11
6. Empathy (TS)	-.35, -.12	-.03, .20	.18, .40	.09, .31	.10, .32	-	.58**	.52**	.58**	.31**	.20**
7. Guilt (TS)	-.51, -.29	-.25, -.02	.15, .37	-.02, .21	.12, .34	.50, .65	-	.83**	.37**	.37**	.16**
8. Willingness (TS)	-.51, -.30	-.20, .03	.19, .40	.05, .27	.20, .41	.43, .60	.79, .87	-	.36**	.36**	.19**
9. Empathy (AE)	-.27, -.04	-.02, .21	.11, .33	.08, .30	.05, .28	.50, .65	.27, .47	.26, .46	-	.66**	.41**
10. Guilt (AE)	-.22, .01	-.06, .17	.00, .23	-.01, .22	-.02, .21	.20, .41	.26, .46	.26, .46	.58, .72	-	.53**
11. Apology (AE)	-.23, .00	-.02, .21	.02, .25	.02, .25	-.01, .22	.08, .31	.05, .28	.08, .30	.31, .50	.45, .61	-

Note. $N = 282$. Rivalry = narcissistic rivalry. Admiration = narcissistic admiration. TS = Transgression scenarios. AE = Autobiographical experience. Willingness = willingness to apologize. Apology was coded: 0 = *no*, 1 = *yes*. Stability comprises Neuroticism (reversed), Agreeableness, and Conscientiousness. Plasticity comprises Extraversion and Openness. * $p < .05$; ** $p < .01$

Table 5

Multiple Regression Analyses in Study 4: Empathy, Guilt, and Apologizing as a Function of Narcissistic Rivalry and Narcissistic Admiration in Transgression Scenarios (Top Panel) and Autobiographical Experience (Bottom Panel)

Predictor	Outcome							
	Empathy		Guilt		Willingness to Apologize		Apologizing	
	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>	<i>B</i>	<i>p</i>
Transgression scenarios								
Rivalry	-.32 [-.45, -.20]	< .001	-.41 [-.53, -.29]	< .001	-.44 [-.56, -.32]	< .001		
Admiration	.22 [.10, .34]	.001	.03 [-.09, .15]	.590	.09 [-.03, .21]	.134		
Autobiographical experience								
Rivalry	-.24 [-.36, -.11]	< .001	-.15 [-.28, -.02]	.022			-.39 [-.66, -.11]	.005
Admiration	.19 [.07, .32]	.003	.12 [-.01, .24]	.073			.37 [.08, .65]	.011

Note. *N* = 282. Rivalry = narcissistic rivalry. Admiration = narcissistic admiration. Numbers in brackets indicate 95% confidence intervals.

Apologizing was coded: 0 = *no*, 1 = *yes*. We obtained regression weights for apologizing in a logistic regression analysis.

Table 6

Multiple Regression Analyses Testing Links in the Serial Multiple Mediator Model in Study 4: Transgression Scenarios (Top Panel) and Autobiographical Experience (Bottom Panel)

Predictor	Outcome							
	Empathy		Guilt		Willingness to Apologize		Apologizing	
	β	p	β	p	β	p	B	p
Transgression scenarios								
Rivalry	-.32 [-.45, -.20]	< .001	-.24 [-.34, -.14]	< .001	-.11 [-.19, -.03]	.005		
Admiration	.22 [.10, .34]	< .001	-.08 [-.18, .02]	.107	.06 [-.02, .13]	.133		
Empathy			.53 [.44, .63]	< .001	.04 [-.04, .13]	.285		
Guilt					.77 [.69, .86]	< .001		
Autobiographical experience								
Rivalry	-.24 [-.36, -.11]	< .001	.01 [-.09, .11]	.887			-.26 [-.59, .07]	.115
Admiration	.19 [.07, .32]	.003	-.01 [-.11, .09]	.864			.31 [-.03, .66]	.068
Empathy			.66 [.57, .75]	< .001			.23 [-.14, .60]	.209
Guilt							1.18 [.78, 1.58]	< .001

Note. $N = 282$. Rivalry = narcissistic rivalry. Admiration = narcissistic admiration. Numbers in brackets indicate 95% confidence intervals.

Apologizing was coded: 0 = *no*, 1 = *yes*. We obtained regression weights for apologizing in a logistic regression analysis.

Table 7

Multiple Regression Analyses Study 4: Controlling for Stability, Plasticity, and Self-Esteem

Predictor	Outcome							
	Empathy		Guilt		Willingness to Apologize		Apologizing	
	β	<i>p</i>	β	<i>p</i>	β	<i>p</i>	<i>B</i>	<i>p</i>
Transgression scenarios								
Rivalry	-.23 [-.40, -.06]	.009	-.32 [-.49, -.16]	< .001	-.32 [-.48, -.16]	< .001		
Admiration	.12 [-.05, .29]	.158	-.07 [-.23, .09]	.400	-.06 [-.22, .10]	.436		
Stability	.17 [-.02, .36]	.081	.03 [-.16, .21]	.773	-.03 [-.21, .15]	.738		
Plasticity	.09 [-.06, .24]	.252	.06 [-.08, .21]	.381	.11 [-.03, .25]	.136		
Self-esteem	-.08 [-.26, .09]	.352	.09 [-.09, .25]	.349	.17 [.01, .34]	.040		
Autobiographical experience								
Rivalry	-.16 [-.33, .02]	.075	-.13 [-.31, .05]	.151			-.40 [-.78, -.02]	.037
Admiration	.09 [-.08, .26]	.292	.08 [-.10, .25]	.393			.33 [-.05, .70]	.090
Stability	.12 [-.07, .31]	.224	.02 [-.18, .22]	.852			.03 [-.39, .44]	.902
Plasticity	.11 [-.04, .26]	.154	.07 [-.09, .23]	.388			.15 [-.17, .48]	.356
Self-esteem	-.07 [-.24, .11]	.475	-.03 [-.21, .16]	.786			-.13 [-.51, .25]	.511

Note. *N* = 282. Rivalry = narcissistic rivalry. Admiration = narcissistic admiration. Numbers in brackets indicate 95% confidence intervals.

Apologizing was coded: 0 = *no*, 1 = *yes*. We obtained regression weights for apologizing in a logistic regression analysis.

Table 8

Pooled Correlations (Above Diagonal) and 95% CI (Below Diagonal): Research Synthesis Across Studies 1, 2, and 4

	LA	EE	GE	Empathy	Guilt	Apologizing
LA	-	.47	.57	-.11	-.22	-.15
EE	.41, .52	-	.42	-.23	-.36	-.35
GE	.52, .62	.38, .47	-	-.09	-.24	-.19
Empathy	-.18, -.05	-.30, -.17	-.17, .00	-	.51	.40
Guilt	-.28, -.15	-.42, -.30	-.31, -.17	.39, .64	-	.62
Apologizing	-.21, -.09	-.47, -.24	-.25, -.12	.29, .50	.46, .80	-

Note. LA = Leadership/Authority, EE = Entitlement/Exploitativeness, GE = Grandiose Exhibitionism.

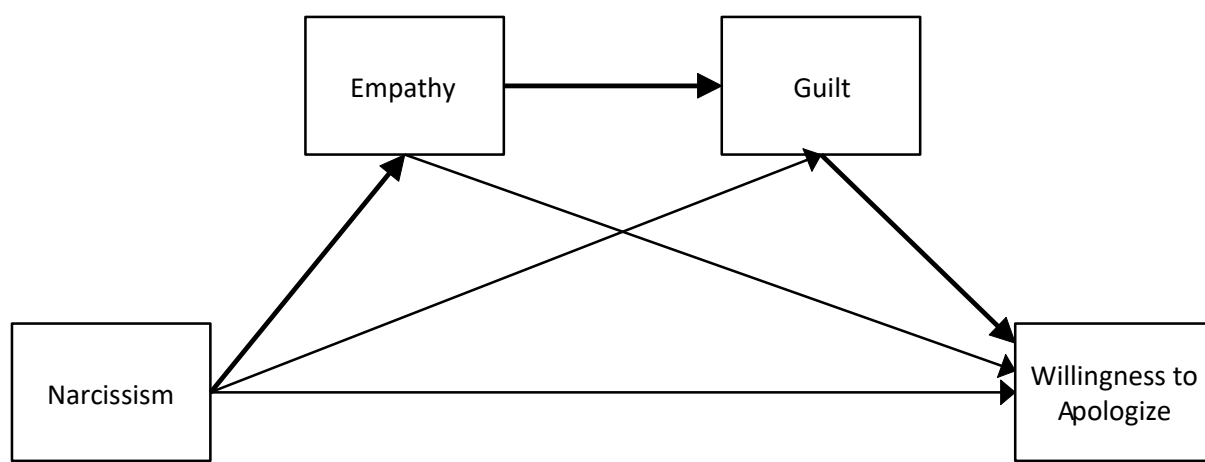


Figure 1. Hypothesized serial multiple mediator model (Hayes, 2013; model 6)