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# FlashReport

# Too tired to take offense: When depletion promotes forgiveness

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#### ABSTRACT

Although self-regulatory depletion has a broad range of adverse consequences, recent research has established that it can yield prosocial outcomes under certain circumstances. The present experiment examined the interaction between depletion and offense severity on forgiveness of romantic offenses. Consistent with prior research, results revealed that depleted (vs. non-depleted) individuals were less forgiving of severe offenses. In a counterintuitive reversal, however, depleted (vs. non-depleted) individuals were *more* forgiving of mild offenses. This crossover interaction effect was mediated by perception of offense severity, suggesting that depleted individuals may be especially forgiving of mild offenses because they are simply too tired to take offense at their partner's bad behavior. These findings identify one important instance in which depletion can promote salutary relationship processes.

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#### Introduction

Imagine returning home after an exhausting day to a partner who treats you in either a severely or mildly negative manner. How would you evaluate the severity of your partner's bad behavior, and how likely would you be to forgive it? In the present research, we test the hypotheses that (a) depleted (vs. non-depleted) individuals will be less forgiving of severe offenses, but *more* forgiving of mild offenses; and (b) this Depletion × Offense Type interaction will be mediated by individuals' perceptions of offense severity.

The negative consequences of *self-regulation failure*, the process by which individuals fail to act in accord with their goals (Baumeister, Vohs, & Tice, 2007), are legion. Poor self-regulatory ability, whether measured at a dispositional level or manipulated through depletion procedures, impairs a broad range of interpersonal processes and outcomes (for a review see Luchies, Finkel, & Fitzsimons, 2011). For example, people with low (vs. high) dispositional self-regulatory strength are more likely to be unfaithful to their romantic partner (Pronk, Karremans, & Wigboldus, 2011) and to perpetrate intimate partner violence (Finkel, DeWall, Slotter, Oaten, & Foshee, 2009).

Similarly, individuals involved in relationships whose self-regulatory resources have been experimentally depleted tend to show as much interest in attractive alternatives as single individuals do (Ritter, Karremans, & van Schie, 2010) and are especially aggressive in response to partner provocation (Finkel et al., 2009).

Of particular relevance to the present research, poor self-regulation makes individuals less forgiving when confronting offenses enacted by their romantic partner (Finkel & Campbell, 2001), particularly for severe offenses (Pronk, Karremans, Overbeek, Vermulst, & Wigboldus, 2010). Forgiveness involves overriding destructive impulses in favor of constructive responses (McCullough, Worthington, & Rachal, 1997), and research has demonstrated that depleted self-regulatory strength undermines the ability to forgive (or "accommodate") in response to hurtful or inconsiderate partner behaviors (Finkel & Campbell, 2001). Individuals with low dispositional self-regulatory strength also experience more ruminative thoughts about severe offenses, which predict less forgiveness (Pronk et al., 2010). Taken together, the extant literature paints a bleak portrait for the role of diminished self-regulatory strength in relationship dynamics, and in forgiveness specifically. But is the effect of depletion on interpersonal outcomes universally negative?

Recent research suggests the answer is no. For instance, in one study the natural decline in self-regulatory strength that accompanies age led older adults to offer blunt and, consequently, helpful advice to an obese teenager seeking to learn about what might be causing her life problems (Apfelbaum, Krendl, & Ambady, 2010). Objective observers rated the adults with low self-regulatory strength as especially empathic. In an experimental study with a young adult sample, depleted (vs. non-

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depleted) Whites communicated more directly with a Black partner, enjoyed the interaction more, and were perceived as less prejudiced by Black observers (Apfelbaum & Sommers, 2009). It seems that under certain circumstances the self-regulated response (e.g., censoring speech) is maladaptive because it is overly cerebral and stilted. Diminished self-regulatory strength, therefore, yields smoother and more effective interaction. Nonetheless, existing research provides few insights into whether such consequences of depletion can also emerge in intimate relationships (e.g., when one is the victim of an offense).

Prior studies have shown that dispositional self-regulatory strength facilitates forgiveness only when offenses are severe (Pronk et al., 2010). Our study extends this work in three main ways. First, we objectively controlled severity with pretested offenses, meaning that participants' subsequent severity assessments tapped their subjective judgments of standardized offenses. Second, the methods employed herein focused on in-the-moment responses to potential romantic offenses, as opposed to responses to recalled offenses, which allowed us to avoid the bias that frequently accompanies memories of relationship processes and events (e.g., Karney & Frye, 2002; Luchies et al., 2011). Finally, and most importantly, by experimentally manipulating not only offense severity but also self-regulatory strength, the present study allowed for causal conclusions regarding their interactive effects on forgiveness.

We expected that depleted (vs. non-depleted) individuals would exhibit greater forgiveness of *mild* offenses, a hypothesis that contrasts the null effect found by Pronk et al. (2010). Our rationale for this prediction is that depletion can enhance positive responses when prosocial cues are present (Fennis, Janssen, & Vohs, 2009). We hypothesized that the circumstances surrounding mild offenses "pull for" forgiveness, but when people have sufficient self-regulatory resources they might overanalyze the offense and convince themselves that forgiveness is not warranted.

In sum, we predicted a crossover interaction of depletion and offense type on forgiveness. Specifically, we expected that depleted (vs. non-depleted) individuals would be less forgiving of severe offenses, consistent with prior research (e.g., Finkel & Campbell, 2001). Conversely, we hypothesized that depleted (vs. non-depleted) individuals would be *more* forgiving of mild offenses. In addition, we expected the interaction effect of depletion and offense type on forgiveness to be mediated by perceived severity, the extent to which individuals thought the offense was severe and how much it upset them. In other words, depleted individuals should be especially forgiving of mild offenses because they are too tired to care about the offense in the first place.

#### Method

## **Participants**

Seventy-two undergraduates (39 women) involved in a romantic relationship of at least three months ( $M\!=\!19.69$ ,  $SD\!=\!17.75$ ) participated for partial course credit. We excluded four participants from final analyses because of technical problems with the Stroop task or hypothesis suspicion, and thus retained a final sample of 68 (36 women).

## Procedure

To manipulate self-regulatory strength, we randomly assigned participants to one of two versions of the Stroop color-naming task. In this task, a color word (e.g., "blue") appeared on a computer screen in colored text and participants indicated the text color by speaking aloud into a headset microphone. Trials were either congruent (e.g., "blue" displayed in blue) or incongruent (e.g., "green" displayed in blue). Participants in the control condition completed 20 trials, whereas those in the depletion condition completed 200 trials.

Next, to manipulate offense severity, we randomly assigned participants to contemplate either 10 severe or 10 mild hypothetical relationship offenses, one at a time. The severe offenses were unambiguously hurtful (e.g., "Your partner cheated on you"), whereas the mild ones were ambiguously hurtful (e.g., "Your partner said s/he would call, but didn't"). Participants were asked to imagine each scenario as vividly as possible. After envisioning each offense, individuals completed a five-item measure assessing perceived severity (e.g., "To what extent does your partner's behavior upset you or hurt your feelings?";  $\alpha$  = .91), and a three-item measure assessing forgiveness (e.g., "I would forgive my partner for this behavior";  $\alpha$  = .80) on a scale of 1 (not at all) to 7 (very much so).

Finally, participants completed a two-item manipulation check assessing how difficult and mentally exhausting the Stroop task was on a scale of 1 (*not at all*) to 5 (*extremely*) and a hypothesis suspicion check.

#### Results

#### Manipulation check

The depletion manipulation was effective. Participants who completed the 200-trial version of the Stroop felt it was significantly more difficult and mentally exhausting (M = 2.91, SD = .93) than participants who completed the 20-trial version (M = 1.72, SD = .63), F(1, 64) = 9.89, p = .003,  $\eta_p^2$  = .13.

# Effects on forgiveness

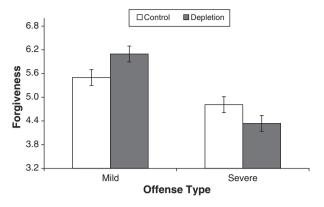
A 2 (Depletion: control vs. depletion)×2 (Offense Type: mild vs. severe) between-subjects analysis of variance revealed a main effect of offense type on forgiveness, F(1, 64) = 36.98, p<.001,  $\eta_p^2 = .37$ . Unsurprisingly, participants were significantly more forgiving of mild offenses (M=5.80, SD=.69) than of severe offenses (M=4.57, SD=1.00). As expected, there was no main effect of depletion condition, F(1, 64) = .09, p=.77,  $\eta_p^2 < .01$ .

Most importantly, as depicted in Fig. 1, the Depletion × Offense Type interaction effect was significant, F(1,64)=7.06, p=.01,  $\eta_p^2=.10$ . Replicating previous research, depleted participants who encountered severe offenses were (marginally) less forgiving of their partner's behavior (M=4.34, SD=.74) than were non-depleted participants (M=4.81, SD=1.18), F(1,64)=2.78, p=.10,  $\eta_p^2=.04$ . Conversely, consistent with hypotheses, depleted participants who encountered mild offenses were significantly *more* forgiving (M=6.09, SD=.61) than were non-depleted participants (M=5.50, SD=.65), F(1,64)=4.37, p=.04,  $\eta_p^2=.06$ .

# Mediation by perceived severity

We also examined whether the perceived severity of the offense mediated the association of the Depletion × Offense Type interaction effect on forgiveness. As hypothesized, the Depletion × Offense Type interaction effect on perceived severity was significant, F(1, 64) = 13.47, p < .001,  $\eta_p^2 = .17$ . Depleted participants who encountered severe offenses perceived the offense significantly more negatively (M = 5.88, SD = .47) than did non-depleted participants (M = 5.17, SD = .78), F(1, 64) = 10.27, p = .002,  $\eta_p^2 = .14$ . In contrast, depleted participants who encountered mild offenses perceived the offense *less* negatively (M = 3.60, SD = .51), than did non-depleted participants (M = 3.93, SD = .46), F(1, 64) = 3.94, p = .05,  $\eta_p^2 = .06$ .

 $<sup>^1</sup>$  In a previous pilot study, 20 objective raters evaluated 34 relationship offenses on a scale of 1 (*not severe at all*) to 7 (*very severe*). The severe offenses chosen for the present study were the 10 offenses with the highest ratings (M = 5.42, SD = .73); the mild offenses were the 10 with the lowest ratings (M = 2.91, SD = .75).



**Fig. 1.** Interaction of self-regulatory depletion and offense type on forgiveness. Error bars represent 1 *SEM*.

Next, we tested for mediation. We first regressed forgiveness (the dependent variable) onto depletion (-1= control, 1= depletion), offense type (-1= severe, 1= mild), and their interaction, which revealed a significant effect for the interaction term,  $\beta=.26$ , t(64)=2.66, p=.01. Next, we regressed perceived severity (the hypothesized mediator) onto depletion, offense type, and their interaction, which revealed that the interaction effect predicted perceived severity,  $\beta=-.24$ , t(64)=-3.67, p<.001. We then regressed forgiveness onto depletion, offense type, their interaction, and perceived severity, which demonstrated that perceived severity predicted forgiveness,  $\beta=-.58$ , t(63)=-3.42, p=.001. Furthermore, this last analysis revealed that inclusion of perceived severity in the model both (a) significantly reduced the magnitude of the Depletion × Offense Type interaction effect on forgiveness, Sobel z=2.50, p=.01 and (b) reduced it to nonsignificance,  $\beta=.12$ , t(63)=1.19, p=.24 (see Fig. 2).

## Discussion

Although depletion of self-regulatory strength has historically been linked to negative interpersonal outcomes, new research indicates that it can sometimes yield prosocial behavior (e.g., Apfelbaum & Sommers, 2009). In the present study, depletion yielded less forgiveness in response to severe romantic offenses, replicating prior research (e.g., Finkel & Campbell, 2001), but yielded *greater* forgiveness in response to mild romantic offenses. Additionally, the interactive effect of depletion and offense type on forgiveness was mediated by participants' perceptions of offense severity, suggesting that depleted individuals more readily forgive mild offenses because they are too tired to be bothered by the behavior. Put another way, greater depletion when encountering mild offenses leads individuals to perceive the behavior less negatively, and such perceptions appear to increase forgiveness.

These findings dovetail with recent research demonstrating that forgiveness depends on dispositional self-regulatory strength for severe (but not mild) offenses (Pronk et al., 2010). The present study represents an important extension to Pronk and colleagues' research by (a) objectively controlling severity such that later measures assessed subjective reactions to standardized offenses, (b) demonstrating that prospective and retrospective reports of forgiveness may differ under certain circumstances, and (c) establishing causal interactive effects of depletion and offense type on forgiveness.

Before concluding, we note two limitations of the present research. First, we assessed forgiveness in response to hypothetical offenses rather than in response to naturally occurring offenses. We selected this approach because it allowed us to standardize the objective severity of the offenses across participants; however, definitive conclusions about how depletion predicts forgiveness of severe versus mild naturally occurring offenses await future research. Second, although we framed the current results in terms of the circumstances under which depletion makes people more forgiving of offenses, an alternative interpretation of the results is also plausible. This alternative interpretation, which is broadly consistent with our theoretical analysis, is that depleted (vs. non-depleted) individuals are more polarized in their judgments and responses. That is, another way to interpret the results is in terms of the stronger impact of the severity manipulation for depleted (vs. non-depleted) participants. Future research could fruitfully explore the role of depletion in judgmental and behavioral polarization, especially in the relationships domain.

The present study raises interesting questions regarding how depletion affects intimate relationships. Recent research has demonstrated that forgiving a romantic partner's offenses can undermine one's self-respect if the partner has failed to make amends, but only for severe offenses; for mild offenses, forgiving does not undermine one's self-respect, even if the partner has failed to make amends (Luchies, Finkel, McNulty, & Kumashiro, 2010). These findings, in combination with evidence that forgiveness often predicts positive physiological and relational consequences for both the victim and the perpetrator (Hannon, Finkel, Kumashiro, & Rusbult, in press; Rusbult, Hannon, Stocker, & Finkel, 2005), suggest that it might be adaptive for people to be unforgiving of severe offenses but forgiving of mild offenses, which is precisely the pattern that depleted participants exhibited in the present research. To be sure, depletion frequently yields adverse relationship outcomes, but the present study suggests that depletion might sometimes yield adaptive patterns of responding to partner behaviors, a possibility that is readily amenable to empirical investigation.

In conclusion, the present research not only replicated the finding that depleted (vs. non-depleted) individuals tend to be more vengeful in response to severe offenses, but also established the novel finding that depleted individuals tend to be particularly forgiving of mild offenses. These findings open the door to a second generation of research linking depletion to relationship dynamics by extending beyond the view that depletion always negatively impacts such dynamics in favor of a more nuanced view recognizing that depletion can sometimes promote salutary relationship processes and outcomes.

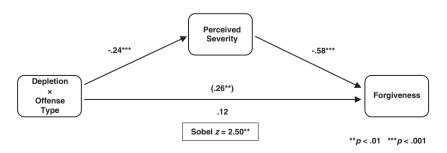


Fig. 2. Mediation of the association of the Depletion × Offense Type interaction effect with forgiveness by perceived severity. Values represent standardized regression coefficients. The coefficient in parentheses represents the association of the Depletion × Offense Type interaction effect with forgiveness when perceived severity is not included in the model.

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