Research Article



# Low Self-Control Promotes the Willingness to Sacrifice in Close Relationships

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#### **Abstract**

Although previous theories and research have suggested that human behavior is automatically driven by selfish impulses (e.g., vengeance rather than forgiveness), the present research tested the hypothesis that in close relationships, people's impulsive inclination is to be prosocial and to sacrifice for their partner—to pursue the interests of the partner or of the relationship at some costs for the self. Results from four studies demonstrated that people with low self-control, relative to those with high self-control, reported greater willingness to sacrifice for their close others. Furthermore, Study 4 demonstrated that communal orientation was more strongly associated with sacrifice among participants with low self-control than participants with high self-control. This moderational pattern supports the hypothesis that communal orientation functions as a default approach to sacrifice in the context of close relationships. Taken together, these findings suggest that under certain crucial conditions in close relationships, gut-level impulses are more likely than deliberative considerations to promote prorelationship behavior.

# **Keywords**

self-control, sacrifice, prosocial behavior, close relationships, interpersonal relationships, heuristics, social behavior

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For decades, psychologists have assumed that people's natural impulse is to be selfish and that it requires selfcontrol to overcome this natural tendency and to act in a prosocial manner (e.g., Baumeister, Heatherton, & Tice, 1994; Baumeister, Vohs, & Tice, 2007). Interdependence theory, for example, suggests that people's departure from self-interest requires an effortful and deliberative process called transformation of motivation (Kelley & Thibaut, 1978; also see Dehue, McClintock, & Liebrand, 1993). Thanks to transformation of motivation, individuals frequently forgo their immediate self-interested impulses and instead adopt prosocial responses based on broader values and relationship considerations. Supporting this idea, previous research has shown that when people do not engage in transformation of motivation because they are under time pressure or low in self-control, they are more likely to be selfish and not help strangers (DeWall, Baumeister, Gailliot, & Maner, 2008) and less likely to engage in prosocial behaviors, such as accommodation, forgiveness, and nonaggressive conflict management (Balliet, Li, & Joireman, 2011; Finkel & Campbell, 2001;

Finkel, DeWall, Slotter, Oaten, & Foshee, 2009; Pronk, Karremans, Overbeek, Vermulst, & Wigboldus, 2010; Yovetich & Rusbult, 1994).

Is human behavior always automatically driven by selfish impulses? In the present work, we challenged the assumption that human impulses are always selfish and instead proposed that in some specific contexts—for example, in close relationships—impulsive responses are more prosocial than self-controlled ones. Specifically, we investigated the effect of self-control on willingness to sacrifice—defined as the decision to pursue the interests of the partner or of the relationship at some costs for the self. We hypothesized that, because close relationships are generally characterized by a communal orientation (Clark, Lemay, Graham, Pataki, & Finkel, 2010; Mills, Clark, Ford, & Johnson, 2004), an impulsive decision

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(characterized by a low level of self-control) would lead to greater willingness to sacrifice than a deliberative decision (characterized by a high level of self-control).

# **Self-Control and Decision Making**

Self-control is the ability to change one's automatic responses and instead act according to the requirements of oneself or the situation at hand (e.g., Baumeister et al., 1994). When people have low self-control, they tend to rely on the impulsive system, which is responsible for behavior based on heuristics and associative mental representations. In contrast, when people have high self-control, they tend to rely on the reflective system, which is responsible for higher-order mental operations that provide flexibility and control over the impulsive system (Hofmann, Friese, & Strack, 2009; Strack & Deutsch, 2004).

The strength model of self-control suggests that self-control relies on a limited resource, such that exertion of self-control on one task depletes the psychological resources that are necessary for the exercise of self-control on subsequent tasks (Baumeister et al., 2007). When making decisions, people whose self-control resources have been depleted engage in quick, effortless information processing and follow heuristics and habitual responses. In contrast, people high in self-control engage in deliberative, analytical information processing and correct for heuristics by taking broader considerations into account (Fennis, Janssen, & Vohs, 2009; Janssen, Fennis, Pruyn, & Vohs, 2008; Pocheptsova, Amir, Dhar, & Baumeister, 2009).

Although previous research has mostly shown that low self-control promotes self-interested behavior, it has also been shown that if heuristics favor prosocial behavior, participants with depleted self-control are likely to be influenced by them and to act accordingly. For example, Fennis et al. (2009) found that participants whose self-control resources had been depleted were more likely than those whose had not to donate money to charity because they relied more on contextual heuristics (i.e., liking, reciprocity, or consistency), which favored prosocial behavior.

# **Self-Control and the Decision to Sacrifice**

Relationships with romantic partners or very close friends are typically characterized by a strong communal orientation (Clark & Jordan, 2002; Mills et al., 2004). In communal relationships, people feel responsible for each other's welfare and desire to benefit the other when he or she is in need; the default is to be responsive to each other's needs without expecting something in return. For example, in communal relationships, compared with

noncommunal relationships, people are more likely to help each other (e.g., Clark, Ouellette, Powell, & Milberg, 1987) and to feel happier about having done so (Williamson & Clark, 1992). Most people learn communal behavior from their family (Clark & Jordan, 2002). We argue that when parents behave in a caring and responsive manner with their partners and children, their children will develop strong communal if-then contingencies (Mischel & Shoda, 1995) in the form of an internalized association: "If a close other is in need, then be helpful and responsive." This learned contingency ultimately becomes the default heuristic people adopt when observing close others in need.

How does self-control influence the decision to promote the interests of the self versus those of the close other in communal relationships? Because individuals with depleted self-control resources tend to rely on non-effortful and intuitive processing, we suggest that they are especially likely to act in accord with their communal-orientation heuristic. In contrast, individuals whose self-regulatory resources are intact tend to engage in careful trade-off comparisons of the alternatives when making a decision (Pocheptsova et al., 2009).

We therefore suggest that individuals with high selfcontrol are likely not only to adopt a communal orientation toward close others but also to take into account multiple factors, such as the pursuit of personal goals, self-respect concerns, fear of vulnerability, equity, and reciprocity norms. Indeed, prior research has shown that people who prioritize the well-being of their relationship to the neglect of their personal well-being tend to have less self-respect and poorer personal well-being than do people who maintain a balance between personal and relationship needs (Helgeson & Fritz, 1998; Kumashiro, Rusbult, & Finkel, 2008; Luchies, Finkel, Kumashiro, & McNulty, 2010). Thus, making sure not to neglect one's personal needs, even within close relationships, is likely to be a relevant issue for people, such as those with high self-control, who incorporate diverse features into their decision making. Therefore, in the current studies, we tested the hypothesis that participants whose self-control resources had been depleted should be more likely to choose to sacrifice than should participants whose selfcontrol resources were intact.

# **Research Overview**

In a pilot study, we tested whether people higher in self-control were indeed more attentive to their personal needs and goals in relationships. In addition, in four studies, we investigated the role of self-control in willingness to sacrifice. In the first two studies, we manipulated self-control and assessed willingness to sacrifice in hypothetical scenarios (Study 1) and a laboratory task (Study

2). In Study 3, we manipulated the impulsiveness of participants' decision making with a time-pressure paradigm in which participants made decisions involving sacrifice either as quickly as possible or with no time pressure. Finally, in Study 4, we assessed trait self-control and past sacrifice behavior in a sample of married couples and examined the potential moderating role of communal orientation.<sup>1</sup>

# **Pilot Study**

Eighty-two participants (52 women, 30 men; mean age = 20.70 years, SD = 2.17) completed two measures. The first was an 11-item Dutch version of Tangney, Baumeister, and Boone's (2004) self-control scale (example item: "I wish I had more self-discipline"); responses were made using a scale from 0 (not at all) to 8 (completely;  $\alpha$  = .70; Finkenauer, Engels, & Baumeister, 2005). The second measure was a novel, 3-item measure of concern with personal goals when in relationships (e.g., "Your personal needs should not be overlooked when you are in a relationship"); responses were made using a scale from 0 (not at all) to 6 (completely;  $\alpha$  = .54). As expected, participants' self-control was positively associated with concern for personal needs in relationships, r = .26, p = .019.

# Study 1

In Study 1, we examined how self-control influences the decision to sacrifice for a close other. We manipulated self-control and measured two forms of sacrifice: active sacrifice (doing something undesirable) and passive sacrifice (giving up something desirable).

# Method

**Participants.** Participants were 46 individuals (32 women, 14 men; mean age = 21.63 years, SD = 6.02). Data from 3 participants were excluded from analyses because the participants did not follow instructions. On average, participants had been in a romantic relationship or maintained a relationship with their current best friend for 64.43 months (SD = 60.22).

**Measures and procedure.** Participants came to the laboratory and were randomly assigned to a depletion condition or a nondepletion condition. Participants reported the name of their partner (if they were in a relationship) or their best friend. Subsequently, participants watched a 7-min video (without sound) of a woman being interviewed and were asked to form an impression of her. During the video, some words appeared at the bottom of the screen for 10 s each. In the depletion condition, participants were asked to actively ignore the words

on the screen, whereas in the nondepletion condition, participants did not receive any specific instruction regarding the words (e.g., Schmeichel, Vohs, & Baumeister, 2003).

After the self-control manipulation, we assessed willingness to sacrifice with a modified version of a measure developed by Van Lange et al. (1997, Study 3). To assess active sacrifice, we presented participants with four moderately undesirable activities and asked them to what extent they would perform each activity for their close other (e.g., "Imagine that it were necessary to go out with your [partner's/best friend's] boring friends in order to maintain and improve your relationship. To what extent would you consider engaging in this activity?"). Responses were made using scales from 0 (I would definitely not engage in this activity) to 6 (I would certainly engage in this activity;  $\alpha = .77$ ). To assess passive sacrifice, we presented participants with four moderately desirable activities and asked them to what extent they would give up each activity for their close other (e.g., "Imagine that, if you were to spend time with one particular friend whom your [partner/best friend] does not like, it would harm your relationship. To what extent would you consider giving up this activity?"). Responses were made on scales from 0 (I would definitely not give up this activity) to 6 (I would certainly give up this activity;  $\alpha = .67$ ).

# Results and discussion

Consistent with our hypothesis, results from independent-samples t tests revealed that participants reported greater willingness to actively and passively sacrifice when their self-control resources had been depleted  $(M = 4.71, SD = 0.86, \text{ and } M = 3.41, SD = 1.02, \text{ respectively}), <math>t(41) = 2.45, p = .019, \omega^2 = .10, \text{ than when they had not been } (M = 4.10, SD = 0.77, \text{ and } M = 2.74, SD = 1.07, \text{ respectively}), <math>t(41) = 2.09, p = .043, \omega^2 = .07.$ 

# Study 2

In Study 1, we investigated the role of self-control depletion in the decision to sacrifice in hypothetical scenarios. In Study 2, we aimed to replicate the findings of Study 1 with a laboratory task in which couples were confronted with a real decision.

#### Method

**Participants.** Both members of 30 heterosexual couples (mean age = 19.93 years, SD = 2.11) took part in this study. Couples were eligible only if they had been dating longer than 4 months. The average relationship duration was 39.96 months (SD = 35.60).

Measures and procedure. Couples were randomly assigned to a depletion condition or a nondepletion condition. On arrival, members of each couple were separated and led to two different rooms. We told participants that the experiment involved impression making, in that the first part of the experiment investigated whether members of couples construct similar or dissimilar impressions of other people. We asked participants to watch the same video used in Study 1 and to form an impression of the woman being interviewed. The real purpose of this task was to manipulate self-control depletion.

Next, we told participants that before reporting their impressions of the woman in the video, they had to complete the second part of the experiment. In our cover story, the second part was concerned with how strangers form an impression of the members of couples. We told participants that they and their partner had to interact with a total of 12 strangers. The task consisted of approaching strangers and saying, "I have an important job interview in a bit. Do you think I'm dressed appropriately?" We told the participants that after they had completed the task, the experimenter would approach the strangers and ask for evaluations of the participants. This task was designed to be moderately embarrassing and, therefore, costly to perform. We also told all of the participants that they had randomly been chosen to be "Partner A," which meant that they were the ones who would decide how many strangers they had to interact with and how many strangers their partner had to interact with. Participants were asked, "With how many strangers do you want to interact?" There were 13 possible responses, ranging from 0 for me and 12 for my partner (0) to 12 for me and 0 for my partner (12). After participants made the decision, they were not asked to carry out the embarrassing task or to answer questions about the video but, instead, were thanked and debriefed.

# Results and discussion

Because the data provided by two partners in an ongoing relationship are nonindependent, we analyzed our data using hierarchical linear modeling (Raudenbush & Bryk, 2002). We represented intercept terms as random effects and represented slope terms as fixed effects (see Kenny, Kashy, & Cook, 2002).

Participants reported greater willingness to sacrifice when their self-control resources had been depleted (M = 6.70, SD = 1.68) than when they had not (M = 5.87, SD = 1.43), t(28) = 2.04, p = .051,  $\omega^2 = .05$ . Interestingly, one-sample t tests revealed that nondepleted participants tended to follow an equity (or equality) norm: Their mean was not significantly different from 6, which indicates that they chose an equal number of strangers for

themselves and their partners, t(14) = -0.46, p = .653. In contrast, depleted participants were more generous: They decided to interact with more than half of the strangers (more than 6), t(14) = 2.28, p = .039 (see Fig. 1).

# Study 3

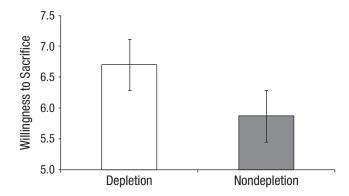
Research has shown that time pressure reduces the operation of controlled, analytical processes while enhancing the use of heuristics and intuitive processing (e.g., Bargh & Thein, 1985; Finkel et al., 2009; Payne, 2001; Yovetich & Rusbult, 1994). In Study 3, we tested how the decision to sacrifice is differentially affected by automatic and controlled cognitive processes, using a time-pressure paradigm.

# Method

**Participants.** Participants were 81 individuals (60 women, 21 men; mean age = 21.42 years, SD = 5.38). On average, participants had been in a romantic relationship or had maintained a relationship with their current best friend for 63.45 months (SD = 67.81).

**Measures and procedure.** Participants were asked to report the name of their romantic partner (if they were in a relationship) or their best friend. To assess willingness to engage in small sacrifices for close others, we used a modified version of the Van Lange et al. (1997, Studies 1 and 2) measure. First, participants listed three of their favorite evening activities that they engaged in independently of their close other. Subsequently, for each activity, we presented participants with the following scenario:

Imagine that this evening you have planned to engage in [Activity X] but [name of close other] now asks you to cancel your plan to help him or her with some homework because tomorrow he or she



**Fig. 1.** Results from Study 2: willingness to sacrifice for one's partner as a function of self-control-depletion condition. Error bars indicate standard errors of the mean.

has an exam (or something very important to deliver at work). To what extent would you consider giving up your activity and instead help him or her with the homework?

Responses were made using a scale from 0 (*not at all*) to 6 (*certainly*;  $\alpha$  = .70). Participants in the time-pressure condition were asked to reply to the questions as quickly as possible, or at least within 4 s, and participants in the no-time-pressure condition were asked to take as much time as they needed to answer.

# Results and discussion

An independent-samples t test revealed that participants in the time-pressure condition were more willing to sacrifice (M = 4.98, SD = 0.81) than were participants in the no-time-pressure condition (M = 4.38, SD = 1.08), t(79) = 2.85, p = .006,  $\omega^2 = .08$ . Thus, participants were more likely to sacrifice for a close other when they engaged in automatic rather than controlled processing in decision making.

# Study 4

In Study 4, we had three aims. The first was to investigate whether self-control affects not only the decision to sacrifice but also behavior. In this study, we assessed whether individuals low in self-control sacrifice more in their romantic relationship than do individuals high in selfcontrol. The second aim was to determine whether individuals low in self-control rely on communal orientation when making sacrifices. In this study, we assessed participants' trait self-control, strength of communal orientation, and actual sacrifice behaviors in the relationship. The strength of the communal orientation can vary according to the degree of responsibility that a partner assumes for the other person's welfare. Because individuals low in self-control rely on their communal orientation to decide whether to sacrifice, we expected that their sacrifice behavior would be influenced by the strength of their communal orientation. For individuals high in selfcontrol, who correct for their communal heuristic, we expected that communal strength would not predict sacrifice.

Finally, the third aim was to show that self-control affects sacrifice and forgiveness in different ways. Previous research has shown that when a partner has transgressed, lack of self-control impairs the prosocial tendency of forgiving (Finkel & Campbell, 2001; Pronk et al., 2010). Sacrificing and forgiving are two qualitative, distinctive phenomena. We suggested that when a partner transgresses, the harm the partner has provoked becomes salient. It takes self-control to override the focus

on the harm done by the partner and to take into consideration broader concerns (e.g., the good time that partners generally have in their relationship). In contrast, we suggested that when partners in a communal relationship encounter a situation in which their interests diverge that results from circumstances unrelated to any transgressive behavior (e.g., Mark's desire to watch the football match and Lisa's desire to have him join her to visit her friends), the default is often to be responsive to the other's needs. Therefore, we expected self-control to be negatively related to sacrifice but positively related to forgiveness.

#### Method

**Participants.** Participants were 190 Dutch married couples who had completed a survey at Time 3 of a 5-wave longitudinal study. Participants' mean age was 32.64 years (SD = 4.57). On average, couples had been together for 7.71 years (SD = 3.03) and had been living together for 5.81 years (SD = 2.31).

**Measures.** To assess trait self-control, we had participants complete the self-control measure used in the pilot study with a modified response scale from 1 (not at all) to 5 (very much;  $\alpha = .72$ ). To assess communal orientation, we asked participants to complete a 4-item version of the Clark et al. (1987) Communal Orientation Scale (example item: "When making a decision, I take other people's needs and feelings into account"); responses were made using a scale from 1 (not at all) to 5 (very *much*;  $\alpha = .63$ ). To assess sacrifice behavior, we asked participants, "In the past month, how often have you sacrificed for your partner? How often have you refrained from doing something that you felt like doing (e.g., cancel an appointment with friends)?"; responses were made using a scale from 1 (never) to 5 (very often). Finally, to assess forgiveness, we used Brown's (2003) 4-item Tendency to Forgive Scale (example item: "When my partner hurts or angers me, I am quick to forgive him or her"); responses were made using a scale from 1 (not at all) to 5 (*very much*;  $\alpha = .68$ ).

# Results and discussion

**Analysis strategy.** As in Study 2, because the data provided by two partners in an ongoing relationship are nonindependent, we analyzed our data using hierarchical linear modeling (Raudenbush & Bryk, 2002). Data from 1 participant were excluded from analyses because the participant's responses on the Communal Orientation Scale were more than 3.5 SD below the mean.

**Key findings.** To test the link between self-control and sacrifice, we regressed past sacrifice onto self-control.

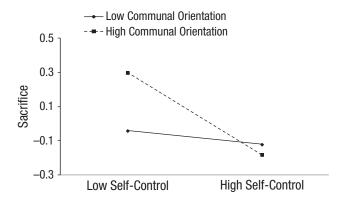
Consistent with our predictions and with the results of Studies 1 through 3, results showed that self-control was negatively associated with past sacrifice,  $\beta = -0.15$ , t(187) = -2.96, p = .003. Furthermore, we regressed past sacrifice onto self-control, communal orientation, and their interaction. Results revealed a main effect of self-control,  $\beta = -0.14$ , t(185) = -2.80, p = .006, and a significant interaction,  $\beta = -0.10$ , t(185) = -2.04, p = .043.

Consistent with our hypotheses, results of simple-slopes analyses revealed that for participants low in self-control (1 *SD* below the mean), communal orientation positively predicted sacrifice,  $\beta = 0.17$ , t(185) = 2.36, p = .019. In contrast, for people high in self-control (1 *SD* above the mean), the effect of communal orientation was not significant,  $\beta = -0.02$ , t(185) = -0.39, p = .700 (see Fig. 2). Finally, consistent with previous research, results showed that self-control was positively associated with forgiveness,  $\beta = 0.34$ , t(187) = -6.92, p < .001.

Results from this study showed that individuals low in self-control sacrificed more (but forgave less) than did individuals high in self-control. Furthermore, individuals low in self-control relied on their communal orientation when deciding whether to sacrifice, whereas individuals high in self-control did not.

#### Discussion

Relationship partners often face situations in which they need to decide between pursuing their self-interest and sacrificing to promote the well-being of their partner or their relationship. Results from four studies revealed that in communal relationships, the impulsive response is often to opt to sacrifice for the close other. Studies 1 and 2 showed that depletion of self-control promotes sacrifice for close others in both hypothetical scenarios and a laboratory task. Study 3 showed that when people need to make a decision under time pressure (i.e., impulsively), they are more likely to decide to sacrifice than



**Fig. 2.** Results from Study 4: standardized values for sacrifice behavior as a function of participants' self-control and communal orientation.

when they are not under time pressure. Study 4 showed that in ongoing romantic relationships, people with low trait self-control tend to sacrifice more than do people with high trait self-control. Furthermore, people with low self-control are particularly prone to sacrifice when their communal orientation is high. People with high self-control do not rely on their communal orientation when deciding to sacrifice. Finally, Study 4 showed that self-control affects sacrifice and forgiveness in different ways. As in Studies 1 through 3, self-control was negatively related to sacrifice, but as in previous research (Finkel & Campbell, 2001; Pronk et al., 2010), results showed that self-control was positively related to forgiveness.

The present findings illuminate one of the few cases in which self-control does not facilitate but, instead, inhibits prosocial behavior. Our work contributes to the emerging literature demonstrating that under certain circumstances, self-control depletion may promote smooth interpersonal interactions (Apfelbaum, Krendl, & Ambady, 2010; Apfelbaum & Sommers, 2009). An alternative explanation for our findings might be that individuals low in selfcontrol make sacrifices for their partner to avoid the effort required to engage in interpersonal conflict (Stanton & Finkel, 2012).<sup>3</sup> Situations in which the interests of two partners do not correspond can provoke conflicts, which can yield potentially exhausting discussions. By sacrificing, partners avoid effortful communication while facilitating smooth interaction. However, in the long run, the unconditional tendency to sacrifice might backfire on people with low self-control, who might be less able to maintain the balance between personal and relationshiprelated concerns (Kumashiro et al., 2008). Future research should investigate which specific concerns different people adopt to correct for communal impulses. For example, avoidant individuals might be especially wary of extreme interdependence, and individualistic people might be especially concerned with the fulfillment of their own personal needs.

A limitation of this work is that we studied small sacrifices that people confront daily in a relationship (e.g., going out with the close other's boring friends). We did not focus on large sacrifices that are likely to be less frequent in relationships (e.g., moving to another country to promote the close other's career). It is possible that when people must make decisions about large sacrifices, individuals with low self-control might be driven by a self-protective rather than a communal heuristic and sacrifice less than individuals with high self-control do. This might occur because in such contexts, the large potential losses for the individual become immediately salient, overriding any other prosocial tendencies.

A strength of this work is that the effect of self-control on willingness to sacrifice was replicated in four studies that used different manipulations and measures of self-control (ego-depletion and time-pressure manipulations and a measure of trait self-control), different measures of sacrifice (involving hypothetical scenarios, a laboratory task, and reports of actual sacrifice in one's relationship), and different samples (close friends, dating couples, and married couples).

# **Conclusions**

Although psychologists have assumed that much relationship behavior is driven by automatic selfish impulses, the current work suggests that under certain conditions, automatic processes are more likely than deliberative processes to foster prosocial responses. In communal relationships, it may be that the first impulse frequently is to be responsive to the partner's needs, even at the cost of personal interest.

#### **Author Contributions**

F. Righetti developed the study concept. F. Righetti and C. Finkenauer contributed to the study design. Data collection was performed by F. Righetti and C. Finkenauer. F. Righetti analyzed and interpreted the data under the supervision of C. Finkenauer. F. Righetti drafted this manuscript, and C. Finkenauer and E. J. Finkel provided critical revisions. All authors approved the final version of the paper for submission.

## **Declaration of Conflicting Interests**

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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# Notes

- 1. In all studies, we explored possible main effects of and interactions with participant sex. Results revealed no systematic sex differences.
- 2. We also tested whether the relation between self-control and sacrifice was moderated by couples' relationship well-being, which was assessed with the Dyadic Adjustment Scale (Spanier, 1976). There was no evidence that our key processes were stronger among individuals with high or low levels of well-being,  $\beta = 0.01$ , t(185) = 0.94, p = .348. In addition, we assessed whether trait agreeableness moderated the relationship between self-control and sacrifice. Agreeableness was assessed using six items from the Big Five subscale for agreeableness (Goldberg, 1992). The moderation was not significant,  $\beta = 0.01$ , t(183) = 0.13, p = .893.
- 3. This explanation might not apply to Study 2, in which it was unlikely that if the depleted-self-control participants had followed an equality norm like the nondepleted-self-control participants did (i.e., choosing 6 interactions for themselves and 6

for their partner), they would have encountered a conflict with their partner.

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