



Shifting toward cooperative tendencies and forgiveness: How partner-focused prayer transforms motivation

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Abstract

Several studies tested whether partner-focused prayer shifts individuals toward cooperative tendencies and forgiveness. In Studies 1 and 2, participants who prayed more frequently for their partner were rated by objective coders as less vengeful. Study 3 showed that, compared to partners of targets in the positive partner thought condition, the romantic partners of targets assigned to pray reported a positive change in their partner's forgiveness. In Study 4, participants who prayed following a partner's "hurtful behavior" were more cooperative with their partners in a mixed-motive game compared to participants who engaged in positive thoughts about their partner. In Study 5, participants who prayed for a close relationship partner reported higher levels of cooperative tendencies and forgiveness.

Forgiveness is associated with a variety of indicators of positive relationship functioning, including relationship satisfaction (e.g., Fincham & Beach, 2007), increased commitment (e.g., Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003; Tsang, McCullough, & Fincham, 2006), and effective conflict resolution (Fincham, Beach, & Davila, 2007; see Fincham, 2009, for review). Thus, forgiveness is an important facet of relationship well-being and it is important to examine its correlates.

Prayer is a pervasive phenomenon. People pray at home, at the office, and even at sporting events. People pray for many reasons, with roughly 90% of Americans praying at least occasionally (McCullough & Larson, 1999). The overall objective of

the current studies is to determine whether partner-focused prayer increases cooperative tendencies and forgiveness. The current research uses video ratings, narrative ratings, experimental, longitudinal, and daily diary designs to test the hypotheses that praying for one's partner is related to increased cooperative tendencies and forgiveness. For the purposes of the current studies "partner" is defined as a close relationship friend or romantic target.

The primary objective of the current research is to investigate whether prayer for one's partner increases cooperative tendencies and forgiveness over time and in the immediate aftermath of a partner transgression. We also address whether praying for one's partner has an impact beyond that revealed by self-report.

Partner-focused prayer, cooperative tendencies, and forgiveness

Some research has demonstrated a positive relation between partner-focused prayer and relationship satisfaction, which is mediated by

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commitment (Fincham, Beach, Lambert, Stillman, & Braithwaite, 2008). Other research, using self-report measures, has shown that prayer increases forgiveness (Lambert, Fincham, Stillman, Graham, & Beach, 2010) and reduces infidelity (Fincham, Lambert, & Beach, 2010). Why might partner-focused prayer relate to forgiveness or other relationship outcomes? We suspect that one key mechanism may involve transformation of motivation during key periods such as when couples experience conflict, making individuals more cooperative and forgiving.

How might partner-focused prayer enhance cooperation? There is evidence that partner-focused prayer increases selfless concern for others (Lambert et al., 2010). Being more concerned about other people's welfare should make a person more likely to cooperate with them. It is also possible that partner-focused prayer changes the very way that an individual perceives others. For instance, Fincham and colleagues (2010) found that praying for a partner was related to a shift in the perception of the relationship as being holy and sacred. Perceiving one's relationship in this way should facilitate cooperation. One objective of the current studies is to examine how partner-focused prayer may facilitate a shift in motivation during a conflict, enhance cooperative tendencies, and thereby increase forgiveness.

Fincham and Beach (1999) argue that motivational processes are particularly consequential when couples are striving to reduce their negative relationship transactions and when they are recovering from negative interactions that have already occurred. These authors hypothesize that during destructive interactions, couples routinely switch from the cooperative tendencies they profess and believe most of the time to emergent tendencies that are adversarial in nature. Partner-focused prayer creates a disposition to exit adversarial, or "tit-for-tat," patterns of interaction, which in turn may shift the interaction toward cooperative, and away from, adversarial patterns. Thus, we view cooperative tendencies as having a state-like quality for the present studies. Even small initial shifts in such patterns have the potential to build over iterations of dyadic

interaction, leading to substantial changes in relationship outcomes (Fincham, Stanley, & Beach, 2007). Hence, we hypothesize that partner-focused prayers (which we view as being primarily a dispositional trait variable) will cause individuals to adopt a more cooperative orientation and be more prone toward forgiveness. We also expect that this transformation of motivation will be manifested in behavior in both laboratory and naturalistic contexts, that it will be visible under conditions that place a stress on the relationship, and that it will ultimately result in greater cooperation and forgiveness among participants who pray for the well-being of their partners.

Study objectives and overview

The primary objective of the current investigation was to examine whether partner-focused prayer may impact cooperative and forgiving tendencies toward close others over time and in the immediate aftermath of hurtful behavior by the partner. The use of global measures of forgiveness instead of forgiveness for a specific act limits theorizing because global tendencies may not translate into forgiving or cooperative actions toward close others, especially immediately following a specific partner transgression. People may report a general tendency to forgive or to cooperate with a partner prior to being stressed by a relationship event, but they may experience a change of heart for the worse when actually confronted with a partner provocation. Studies 1 and 2 begin to address this issue as coders rated participants' reactions to queries about specific, recent grievances. Using a daily diary method, Study 5 tested whether praying for a partner, specifically on days when there was conflict between the partners, would correspond to more cooperative and forgiving responses toward a partner.

We hypothesized that participants who report praying for their partner would respond in a more forgiving manner when discussing or writing about specific partner transgressions (Studies 1 and 2). Furthermore, we predicted that those who pray for their partner

immediately after being insulted by the partner (Study 4) or following a conflict with that partner (Study 5) would demonstrate more cooperative and forgiving tendencies.

The importance of this research is emphasized by the fact that we tested whether praying for one's partner had behavioral consequences. Although some research has shown a relation between partner-focused prayer and observed behavior of commitment (Fincham et al., 2010), the one study that demonstrated the impact of partner-focused prayer on forgiveness relied exclusively on self-report (Lambert et al., 2010). This raises the possibility that partner-focused prayer, or similar cognitive processes, may produce change in thoughts and self-perceptions rather than producing change in behavior. That is, partner-focused prayer may increase the tendency to self-report forgiveness and other positive relationship outcomes as a way of maintaining cognitive consistency. In principle, partner-focused prayer could increase self-reported forgiveness without having any effect on actual behavior.

Therefore, the current studies tested whether partner-focused prayer would correspond to observed forgiving behaviors (Study 1) or to forgiving themes in written narratives (Study 2) as rated by objective coders and a romantic partner over a 4-week period (Study 3). We also tested whether partner-focused prayer influenced cooperative tendencies, after a person experiences a hurtful perceived insult from the partner (Study 4).

Finally, we note that it is important to demonstrate that relationship constructs do not function as proxies for relationship satisfaction and do more than capture variance in commonly used measures of satisfaction. Otherwise, prayer for a partner may simply reflect relationship quality under a different name. As a result of such observations, Fincham, Beach, and Davila (2004) have argued for routine use of a test of "surplus conceptual value" in relationship research whereby the association between two relationship variables is tested while controlling for relationship satisfaction and communal strength. Stated differently, we sought to rule out the alternative explanation that prayer for partner is simply an indicator

of relationship well-being or having a communal orientation and has no independent effect on cooperative tendencies or forgiveness in one's relationship.

Study 1

Given reliance on self-report in the forgiveness literature and the limitations of self-report (e.g., social desirability, demand characteristics; Nisbett & Wilson, 1977), Study 1 sought to examine whether praying for a partner would relate to more observed forgiving behavior. After reporting the frequency of their partner-focused prayers, participants engaged in a discussion with their partner about a recent transgression by the partner and their reaction to this transgression. Participants were rated on the vengefulness of their reaction to the incident by objective coders, who were blind to study hypotheses. Vengeance is one of two main motivational factors that govern forgiveness (the other being avoidance) and is closely related to poor relationship well-being (McCullough et al., 1998). We hypothesized that praying for one's partner at Time 1 would predict lower levels of observed vengefulness toward a romantic partner 3 weeks later.

Method

Participants

The study included 29 undergraduates (10 female) who received extra credit for their participation. Participants attended with and reported on their relationship with their exclusive romantic partner.

Measures and procedure

In addition to several other measures unrelated to the current study, participants completed two items indicating how often they prayed for their partner's well-being ("I pray for the well being of my partner" and "I pray that good things will happen for my partner") with scores ranging from *never* to *very frequently*. These items were highly correlated, $r(27) = .89$, $p < .001$, and were therefore averaged to form a measure of partner-focused

prayer. Relationship satisfaction was assessed using Funk and Rogge's (2007) four-item measure of relationship satisfaction. These items measured satisfaction with the participant's romantic partner (e.g., "How rewarding is your relationship with your partner?" and "I have a warm and comfortable relationship with my partner"). The items were summed to create an index of relationship satisfaction ($\alpha = .92$). Communal strengths were measured using a 10-item measure developed by Mills, Clark, Ford, and Johnson (2004). The α for the current sample was .69. In this and all the studies, several hundred additional questions were asked and so the participants would not have suspected that the study focused on prayer.

After 3 weeks, participants returned to the laboratory with their romantic partner and were directed to a video room. Using cue cards, we asked the romantic partners of the participants to: "Please describe something you did in the recent past that you know bothered, upset, or annoyed your partner." We then asked the participant to discuss his or her reaction to their partner's transgression. Five trained coders watched the video data and rated participants on "How would you rate the vengefulness this person demonstrated to the partner during this interaction?" (intraclass correlation = .69). We defined "vengeful" to coders as "revengeful, spiteful." We also provided them with some anchors by which to make their judgments: 1 = *not vengeful: the participant showed no malicious intent*, 3 = *a little vengeful: the participant showed signs of spite or wanting to get back at the partner, but not overwhelmingly so*, 5 = *moderately vengeful: the participant showed outward signs of revenge or ill will toward the partner, but not to the fullest extent*, 7 = *extremely vengeful: the participant showed tremendous spiteful actions and wanted revenge*.

Results and discussion

As expected, praying for one's partner at Time 1 was negatively related to later vengeful ratings 3 weeks later, $\beta = -.48$, $t(22) = -2.54$, $p < .05$. These results persisted even

when we controlled for self-reported relationship satisfaction, $\beta = -.44$, $t(21) = -2.06$, $p = .05$, or communal strength, $\beta = -.41$, $t(21) = -2.17$, $p < .05$. In fact, partner-focused prayer was a much stronger predictor of observed vengefulness (controlling for relationship satisfaction), $\beta = -.44$, $p = .05$, than was relationship satisfaction on its own, $\beta = -.09$, $p = .68$, or communal strength on its own, $\beta = -.00$, $p = .99$. This finding demonstrates that praying for one's partner significantly corresponds to observable vengeful behavior toward one's partner during an interaction above and beyond relationship satisfaction and communal strength. However, the study is somewhat limited in that we did not control for vengefulness at Time 1.

These findings are less susceptible to demand characteristics or to socially desirable responding than self-report data because the vengefulness ratings were completed by objective raters, who were blind to study hypotheses. Although vengeance is only one important aspect of forgiveness (see Fincham et al., 2004), Study 1 focused exclusively on this one aspect of forgiveness. The remaining studies focused exclusively on all aspects of forgiveness. Study 2 sought to build upon these findings using another method, namely narrative ratings.

Study 2

Study 2 sought to provide additional evidence for a relation between partner-directed prayer and forgiveness using ratings of narratives. Participants described a recent incident when a close friend did something to upset or annoy them and then wrote about how they responded. Objective coders rated these narratives on how forgiving the participants behaved toward their friend. We predicted that partner-focused prayer for a friend would relate to higher forgiveness ratings.

Method

Participants

The study included 60 undergraduates (47 female) who received extra credit for their

participation. Participants reported on their relationship with a close friend.

Measures and procedure

In addition to several other measures unrelated to the current study, participants completed the two items from Study 1, indicating how often they prayed for their friend's well-being (e.g., "I pray for the well-being of my friend"). These items were again highly correlated, $r(58) = .86$, $p < .001$, and were averaged to form a composite partner-focused prayer score. To rule out the alternative explanation that prayer for partner is simply an indicator of relationship well-being or having a communal orientation and has no independent effect on forgiveness in one's relationship, we again controlled for relationship satisfaction and communal strength. Relationship satisfaction was again assessed using Funk and Rogge's (2007) four-item measure of relationship satisfaction ($\alpha = .91$). Communal strengths were again measured using the 10-item measure developed by Mills et al. (2004; $\alpha = .82$).

Three weeks later, participants returned to the laboratory and received the following instructions: "Please think about something your partner did (large or small) that was annoying or upsetting to you over the past 2 weeks. Please describe what happened." Once they completed this paragraph participants were instructed: "Now write a paragraph about your reaction to what you described above." Four trained coders (different from the Study 1 coders) read the narratives and rated them based on the question: "How forgiving was this person toward his/her partner?" from 1 (*not forgiving*) to 7 (*extremely forgiving*) (intraclass correlation = .84). Coders were asked to form an impression of the forgiveness based on the overall tone of the essay.

Results and discussion

As expected, praying for one's partner at Time 1 was positively related to the objective forgiveness ratings 3 weeks later, $\beta = .30$, $t(56) = 2.37$, $p < .05$. This relation held even when controlling for initial self-reported

relationship satisfaction, $\beta = .28$, $t(55) = 2.07$, $p < .05$, or for communal strength, $\beta = .34$, $t(55) = 2.43$, $p < .05$. In fact, partner-focused prayer was a much stronger predictor of forgiveness (controlling for relationship satisfaction), $\beta = .28$, $p < .05$, than was relationship satisfaction on its own, $\beta = .05$, $p = .70$, or communal strength on its own, $\beta = .00$, $p = .99$. This finding again demonstrated that praying for one's partner significantly corresponded to objectively rated written narratives above and beyond relationship satisfaction and communal strength.

Although Studies 1 and 2 provide evidence that praying for a partner predicts lower vengefulness or higher levels of forgiveness, they do not take into account the ratings of the recipient of forgiving behavior, namely, the relationship partner. How a relationship partner rates one's forgiving behavior has important practical implications for relationship functioning, but no work to date has examined whether partner-focused prayer increases partners' perceptions that their partner has become more forgiving. To examine this possibility, we conducted Study 3.

Study 3

Study 3 sought to examine whether praying for a partner increases forgiveness behavior to a degree that it is detected by the partner. An important assumption made in our earlier arguments, and in the literature on forgiveness and relationships more generally, is that the forgiver's behavior impacts the partner. If behavioral changes (which triggered differential forgiveness scores) were entirely unnoticed, it is unlikely that partner-focused prayer would have any long-term benefit on relationship well-being. To our knowledge, however, no study has ever tested whether partner-focused prayer increases partner perception of behavioral forgiveness. Study 3 tests this hypothesis.

Participants were assigned either to pray for their partner or to think positive thoughts about their romantic partner every day for 4 weeks. We predicted that the romantic partners of participants who prayed for them would detect positive changes in forgiveness

over time compared to the partners of participants who thought positive thoughts about them.

Method

Participants

Forty-nine couples began the study; however, 37 couples completed the study and were included in analyses. One individual from each of these 37 couples was the “target” (31 females, 6 males) who received extra credit for participating, and these individuals were randomly assigned to condition and participated in the partner-focused prayer or positive thoughts control intervention. Meanwhile, the romantic partners of the targets (31 males and 6 females), who were blind to participants’ experimental condition, reported on the targets’ forgiveness at the beginning and end of the study. All participants reported current involvement in an exclusive, heterosexual romantic relationship. Only participants who reported being comfortable with prayer were invited to participate. All other potential participants were given an alternative extra credit opportunity.

Measures

Forgiveness. We assessed forgiveness at both Time 1 and Time 2 with a six-item measure (Fincham et al., 2004), except that we changed the wording of the items to reflect the intervention target’s forgiveness rather than the romantic partner’s own forgiveness (e.g., “If my partner is treated unfairly by me, he/she gives me the cold shoulder”; Time 1, $\alpha = .85$; Time 2, $\alpha = .93$).

Severity of prior hurtful behavior. Transgression severity is a robust predictor of forgiveness (Fincham, Jackson, & Beach, 2005), and we therefore attempted to control for it in the analysis. Because a recent hurtful behavior by the participants could affect the partners’ views of the participant’s forgiveness, we asked partners to recount something upsetting or annoying that the participants had done recently and then to rate the severity of this act by asking: “How annoying/upsetting was

what your partner did?” ranging from 1 (*not at all*) to 7 (*extremely*).

Procedure

Intervention participants were randomly assigned to one of two conditions: partner-focused prayer and partner-focused positive thought. The experimenter instructed participants that they would need to complete their assigned activity every day and keep a log of how many minutes they engaged in their activity each day. Intervention participants were also required to log on to an online journal twice a week to report their log and provide written descriptions about their assigned activity. At the beginning and conclusion of the 4-week period, intervention participants’ partners (the respondents) completed the forgiveness measure about the participants.

Partner-focused prayer condition. Participants assigned to this condition were given the following instructions: “Over the next 4 weeks we would like you to set aside at least one time each day to pray for the well-being of your partner. Keep track of how much time you spend doing this as we will ask you to report it for each day.” To help participants understand the type of prayer we had intended them to pray, we provided them with an example prayer and requested that they generate their own partner-focused prayer and report what they prayed about during each online session. The example prayer read as follows: “Dear Lord, thank you for all the things that are going well in my life and in my relationship. Please continue to protect and guide my partner, providing strength and direction every day. I know you are the source of all good things. Please bring those good things to my partner and make me a blessing in my partner’s life. Amen.” These reports were not shared with the partner.

Partner-focused positive thoughts condition. To rule out the alternative hypothesis that thinking about the well-being of the partner generated more positive couple interactions, participants in the positive thoughts condition were given the following instructions: “Over

the next 4 weeks, please set aside at least one time each day to think positive thoughts about your partner. Keep track of how much time you spend doing this as we will ask you to report it for each day.” Again, reports were not shared with the partner.

Results

Attrition

Twelve couples dropped out of the study. We therefore compared Time 1 partner-reported forgiveness scores of those that dropped out with those who remained in the study. There were no differences between the groups, $F(1, 47) = .007, p = .93$. Thus, our results cannot be attributed to differences in participant attrition.

Effect of partner-focused prayer on forgiveness

We predicted that praying for one’s romantic partner, compared to simply thinking positive thoughts about one’s partner, would generate behavioral change in forgiveness that would be evident to romantic partners. As expected, an analysis of covariance (ANCOVA) with condition as a factor and Time 1 forgiveness ratings and hurtful behavior ratings as covariates showed that the partners of participants who had prayed for 4 weeks noticed increased (marginally) forgiveness in their partners ($M = 5.52, SD = 1.36$) relative to the partners of participants in the positive thought condition ($M = 4.64, SD = 1.53$), $F(1, 33) = 3.84, p = .059, d = .61$.

Discussion

Study 3 offered additional evidence that praying for one’s partner produced behavioral changes in forgiveness that were evident to partners. These findings highlight that praying for one’s partner may have implications, not only for the individual, but also for the dynamics of the dyadic relationship.

One limitation of the current study is that it focused on the global tendency to forgive rather than on a specific hurtful instance when

forgiveness may be most difficult. By examining cooperative tendencies in the context of specific hurtful instances, Studies 4 and 5 address these limitations.

Study 4

Study 4 sought to determine whether praying for a close relationship partner would affect cooperative tendencies toward that the partner, immediately following a hurtful behavior by the partner. The hurtful behavior by the partner took the form of negative feedback on a drawing task that could be considered insulting. Following the experimentally manipulated feedback, participants were randomly assigned to engage in partner-focused prayer that focused on themes of beneficence, or alternatively to think about God, justice, and religious rules. Next, all participants completed a Prisoner’s Dilemma Game (PDG), ostensibly against their partner, which provided them with easily quantifiable opportunities to cooperate with or to antagonize their partner. We hypothesized that participants who prayed after being insulted by their partner, compared to participants who thought philosophically about God and justice, would demonstrate greater cooperative tendencies.

Method

Participants

Forty-eight undergraduates completed the study for partial course credit with either a romantic partner or close friend. As in Study 3, all participants invited to participate reported being comfortable with prayer and with praying for others.

Measures

Cooperative tendencies. We used the PDG (Komorita, Hilty, & Parks, 1991) to measure cooperative tendencies. The experimenter led participants to believe that they would complete a computerized, 10-trial version of the PDG with their partner. In actuality, participants played the game against a computer program. Therefore, all “partner” responses were experimentally controlled, and stimulus

conditions and contingencies were standardized for all participants.

On each trial, participants had the option to cooperate with or to antagonize their partner. Participants were shown the point distributions for each turn, which were as follows: 4 points if each person cooperated, -2 points if each person antagonized, and when partners made different choices, -5 points to the person who cooperated and 8 points to the person who antagonized. Participants were instructed to try to earn as many points as possible during the game. The game was programmed so that the "partner" antagonized the participant on trials 1, 7, and 10 and played "tit-for-tat" on the remaining trials. By programming the task in this manner, we created a situation that began with antagonism and that remained somewhat antagonistic over the course of the game, allowing multiple opportunities for cooperative and antagonistic responses. The 10 trials were summed (1 = *antagonize*, 2 = *cooperate*) such that higher scores indicated higher levels of cooperation.

This design also had the added benefit of the participant winning the majority of the trials, which we expected would decrease the likelihood of participants antagonizing their partner for purely competitive reasons. The PDG has the benefit of providing a believable framework for interaction of partners while fully controlling the stimulus field and equating it across conditions and participants within condition.

Procedure

Participants arrived at the lab together with their partner and were put in separate rooms. They each received a blank piece of paper and colored pencils and were told that they had 5 min to draw themselves, a car, a tree, a house, and their partner in a picture. Upon completion, participants learned that the purpose of the drawing was to test creativity and that their partners would rate their drawing on a scale of 1 (*not at all creative*) to 5 (*extremely creative*). The research assistant took participants' drawings as if to give to the partners to rate.

A few minutes later, the research assistant returned with an envelope containing the supposed feedback rating of their partner, and said, "I thought you might be interested to see how your partner rated your picture, it is here in this envelope. I'll let you go ahead and look at your partner's rating of your drawing, and then I need you to do a short task for a different study." These instructions were meant to reduce any connection between the feedback participants received and the partner-focused prayer manipulation. All participants were then handed the false rating sheet with the number 1 (*not at all creative*) ostensibly circled by their partner. We borrowed this experimental manipulation of partner provocation used in previously published research (Finkel, DeWall, Slotter, Oaten, & Foshee, 2009). They also received instructions for a 3-min activity that varied based on their condition, which they completed after having looked at the rating supposedly from their partner. They were then instructed that the activity they were to participate in was part of a separate, unrelated study.

Partner-focused prayer condition. Participants were instructed to spend 3 min praying for the well-being of their romantic partner. They were provided with an example prayer (the same one as in Study 3) to get them started and then were asked to say a partner-focused prayer in their own words.

Control condition. Participants were instructed to think about the philosophical question: "Does God make rules or break them?" In Study 3, we ruled out the alternative explanation that praying for one's partner could prime positive interactions with the partner. An additional alternative explanation is that being primed by thinking about God could make participants respond in a more forgiving manner, because many believe that God condones forgiveness. Thus, the condition was designed to control for the effect of thoughts focused on a higher power that conferred a moral framework on cooperative interactive behavior.

Finally, participants completed the PDG task against their partner. On each trial, participants could choose whether to cooperate with

their partner. We were especially interested in how participants responded when their partner behaved in an insulting manner. Would they demonstrate higher cooperative tendencies toward their partner and give him or her another chance or would they refuse to cooperate? We predicted that compared to participants who contemplated a philosophical question related to God, participants who prayed for their partner would cooperate more on the PDG.

Results

As predicted, an analysis of variance (ANOVA) revealed that participants in the partner-focused prayer condition cooperated more on the 10 trials ($M = 7.04$, $SD = 2.32$) than did control participants ($M = 5.64$, $SD = 2.46$), $F(1, 48) = 4.10$, $p < .05$, $d = .59$.

Discussion

Compared to participants who thought about a religious topic, participants who prayed behaved more cooperatively immediately following partner provocation. This finding offers additional evidence that partner-focused prayer can cause actual changes in behavior following insult from a close relationship partner. In addition, this cooperative behavior was in response to a specific hurtful action by the partner, thereby demonstrating the utility of partner-focused prayer in affecting in-the-moment behaviors rather than just self-reported behavioral inclinations.

The current study provides evidence consistent with goal theory (Fincham & Beach, 1999), such that praying for a partner can transform emergent tendencies to cooperative ones. However, it does not examine whether such a transformation results in both greater cooperative tendencies and forgiveness. Study 5 examined whether partner-focused prayer enhances both cooperative tendencies and forgiveness.

Study 5

Having already demonstrated experimental and behavioral links between partner-focused

prayer and forgiveness and partner-focused prayer and cooperative tendencies, we examined both related outcomes using a daily diary method. This method is sensitive to participants' naturally occurring praying behavior, allowing examination of the way in which partner-focused prayer relates to cooperation and forgiveness when "real-life" stressors occur. In Study 4, we crafted an insult that would be the same for all participants; however, the advantage of Study 5 was that the conflicts reported were real and salient to participants, increasing the ecological validity of our findings. Participants in Study 5 completed daily measures of prayer focused on a close other, daily cooperative tendencies, and forgiveness toward that close other. To rule out relationship well-being and communal orientation as alternative explanations, participants also completed "relationship satisfaction" and "willingness to sacrifice for that close other" (an indicator of communal strength) items. These daily measures were collected three times a week for a 25-day period (total of 10 waves).

We hypothesized that on days when a conflict arose with a close other, praying for the other person would correspond to more cooperative tendencies and more reports of forgiving, controlling for relationship satisfaction and willingness to sacrifice for that close other.

Method

Participants

Two hundred undergraduates (151 women) completed the study for partial course credit and reported on a relationship with a close friend of the same gender.

Measures

Partner-focused prayer. To assess partner-focused prayer, participants reported how much they have prayed for the well-being of their close friend since their last log, using a 9-point scale ranging from 1 (*Prayer is something that I never engage in*) to 9 (*I prayed for my friend more than once a day with great intensity*).

Cooperative tendencies. Participants completed a one-item measure that assessed how cooperative they were during conflicts with their friend (i.e., "Since the last log, I have been cooperative in the way I handle disagreements with my friend"), using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). If participants did not experience conflict with their friend since their last log, they indicated that there were no issues to address with their friend.

Forgiveness of friend. Participants completed a one-item measure that assessed how forgiving they were during conflicts with their friend (i.e., "Since the last log, I have been patient and forgiving of my friend"), using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). If participants did not experience conflict with their friend since their last log, they indicated that there were no issues to address with their friend.

Relationship satisfaction. Participants completed a one-item measure that assessed how satisfied they were with their relationship with their close friend (i.e., "Overall, how satisfied do you feel today about your relationship with your friend?"), using a 7-point scale ranging from 1 (*not at all*) to 7 (*extremely*).

Sacrifice for close other. Sacrifice for partner is an indicator of communal strength. Participants completed a one-item measure that assessed how much they sacrificed for their close friend each day (i.e., "Since the last log, I gave up something for my friend"), using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

Procedure

Participants were given a URL to record their feelings and behaviors three times each week for 25 days, which included measures of partner-focused prayer, cooperative tendencies, forgiveness of friend, relationship satisfaction, and daily sacrifice for friend. Participants completed daily surveys at the end of each day. Because of the emphasis on prayer, in times of conflict when forgiveness would

be required, data were only reported for the days in which conflict occurred (28% of all reports; 522 days).

Results

Analysis strategy

We predicted that on days when a conflict arose between friends, praying for the friend would be associated with more cooperative tendencies and more reports of forgiving, controlling for relationship satisfaction and willingness to sacrifice for that friend. Because these data are interval contingent (i.e., repeated measures nested within individual participants) their nested structure violates the assumption of independence in ordinary least squares regression. Therefore, we used multilevel modeling techniques to account for statistical nonindependence, using HLM Version 6.08 (e.g., Nezlek, 2001; Raudenbush & Bryk, 2002; Raudenbush, Bryk, Cheong, & Congdon, 2000).

To test our hypothesis that praying for a friend was associated with more cooperative tendencies during disagreements, we constructed a multilevel model with daily partner-focused prayer as a Level 1 predictor, daily relationship satisfaction, and daily sacrifice as Level 1 covariates, and daily cooperative tendencies as the outcome of interest. In these analyses, daily prayer, relationship satisfaction, and sacrifice were each group-mean centered (i.e., person centered), thereby eliminating the influence of person-level differences on parameter estimates of mean daily prayer, relationship satisfaction, and sacrifice (Nezlek, 2001). This meant that in within-person analyses, an individual's coefficient for daily prayer described the relation between deviations from his or her mean level of prayer and deviations from his or her mean daily level of cooperation (similar interpretations can be made concerning the coefficients for daily relationship satisfaction and daily sacrifice). All slopes were treated as randomly varying. To test our hypothesis that praying for a friend was associated with more forgiveness during disagreements, we constructed an identical multilevel model with the exception

of including forgiveness as the outcome of interest in place of cooperative tendencies.

Praying for a friend is associated with greater cooperation and forgiveness

As expected, praying for a friend was associated with more cooperative tendencies during disagreements with that friend, controlling for relationship satisfaction and sacrificing for that friend, $B = 0.12$, $t(128) = 2.30$, $p = .02$. Partner-focused prayer was also related to being more forgiving of that friend during disagreements, controlling for relationship satisfaction and sacrificing for that friend, $B = 0.07$, $t(128) = 2.03$, $p = .04$. Relationship satisfaction was positively related to both cooperative tendencies during disagreements, $B = 0.33$, $t(128) = 5.79$, $p < .001$, and forgiving during disagreements, $B = 0.39$, $t(128) = 5.87$, $p < .001$. Similarly, sacrificing for a friend was also positively related to both cooperative tendencies during disagreements, $B = 0.09$, $t(128) = 2.52$, $p = .01$, and forgiving during disagreements, $B = 0.07$, $t(128) = 2.66$, $p = .009$.

Discussion

Consistent with our hypothesis, praying for one's partner on days when there was a conflict corresponded to reports of higher cooperative tendencies and forgiveness. The current results demonstrate that during the course of naturally occurring conflict, partner-focused prayer played a role in facilitating cooperative tendencies and forgiveness. The daily diary method is an ideal way to examine the effect of praying for a partner on cooperation and forgiveness in one's natural setting, underscoring the ecological validity of our results found in the experimental studies.

General Discussion

Five studies provided consistent evidence for a relation between partner-focused prayer, cooperative tendencies, and forgiveness. Our results suggest that a shift to a more cooperative and less adversarial orientation with a particular partner may be a mechanism linking

partner-focused prayer to increased forgiveness of the partner in the aftermath of negative partner behavior. The primary objective of these studies was to test the impact of partner-focused prayer on cooperative tendencies and forgiveness over time and during the immediate aftermath of a partner transgression. An important ancillary outcome of investigating these issues was to move beyond the limitations of self-report data that plague the forgiveness literature, and in the eyes of some, social psychology more generally.

The initial objective of the current studies was to examine whether partner-focused prayer impacts cooperative and forgiving tendencies toward close others in the immediate aftermath of partner provocation. Studies 1 and 2 began to address this objective as participants were rated on their response to a specific, recent transgression. However, Study 4 best demonstrated the effect of partner-focused prayer immediately following a provocation as participants who prayed for a partner who had delivered insulting feedback increased their cooperative tendencies toward the partner, compared to control participants. Study 5 extended the finding of Studies 1, 2, and 4 across a 25-day period and demonstrated that on days when conflict arose in the relationship, praying for the partner was related to higher levels of cooperation and forgiveness. Thus, when emotions are red hot, partner-focused prayer appears to shift relationship goals from adversarial, emergent ones to more cooperative ones. This yields more cooperation and forgiveness.

A second important objective was to examine goal theory (Fincham & Beach, 1999) by determining whether cooperative tendencies and forgiveness would be enhanced by partner-focused prayer. We found evidence that partner-focused prayer transforms relationship goals from emergent to cooperative ones. In Study 4, we examined whether partner-focused prayer influenced cooperative tendencies. It did. This finding suggests that partner-focused prayer can transform emergent tendencies. In Study 5, we examined the effect of partner-focused prayer on both cooperative tendencies and forgiveness using daily diary data. We found that on days when

there was conflict in the relationship, participants who prayed for their partner reported higher cooperation with and forgiveness of their partner. Thus, consistent with goal theory, partner-focused prayer transformed relationship goals, even in the heat of an insult or conflict, and this transformation of goals facilitated cooperation and forgiveness.

The importance of the current research findings is emphasized by the fact that they went beyond the limitations of self-report and provided valuable data to document the effects of partner-focused prayer. Study 1 found that reports of praying for one's partner at Time 1 predicted observer ratings of participant vengefulness 3 weeks later. Study 2 indicated that praying for a partner at Time 1 positively predicted objective ratings of forgiveness from narrative reports at Time 2, 3 weeks later.

Next, we tested whether the effects of praying for one's partner caused noticeable behavioral consequences as perceived by the romantic partner. Behavioral changes are not always readily observable by a partner. To the extent that changes produced by partner-focused prayer did not result in noticeable change, the implications of such a behavioral impact of prayer for the relationship might be diminished. Study 3 showed that the romantic partners of participants who engaged in a 4-week partner-focused prayer intervention tended to notice a positive change in their partner's forgiveness behavior.

This finding is significant because it is the first to obtain partner report of changes in behavior as a consequence of partner-focused prayer, suggesting forgiveness may serve as a relationship maintenance process with implications for long-term commitment and relationship satisfaction. This could operate in several ways. At the simplest level, the forgiver and/or partner observe the forgiving behavior and align their relationship evaluation accordingly. In addition to noticing positive behavior it is possible that following the norm of reciprocity, the partner also makes alterations in his or her behavior. Doing so could further benefit the relationship. These findings highlight the potential benefit of using partner-focused prayer,

where culturally appropriate, in clinical settings or in relationship education programs. Also, this study, involving noticeable overt behavior, will advance the forgiveness literature that has hitherto relied almost exclusively on self-report.

Study 4 also demonstrated that praying for one's partner has behavioral consequences, this time for cooperative tendencies. In Study 4, we provided participants with false feedback on a drawing to provide a uniform partner transgression and found that participants who prayed for benefits to the partner following the partner's hurtful insult behaved more cooperatively toward their partner in the PDG, despite several standardized provocations provided by the computer program. This study demonstrates that partner-focused prayer may have a rapid effect on cooperative tendencies and may be particularly useful in helping couples manage an ongoing stream of interaction when multiple opportunities for additional provocations may arise.

Studies 1–4 are the first of which we are aware to go beyond the limitations of self-report data in documenting the consequences of partner-focused prayer on cooperative tendencies and forgiveness. In doing so, they address limitations of prior self-report research and suggest that partner-focused prayer that is focused on beneficence toward the partner can produce more than change in self-reported, general tendencies. This suggests that manipulations of beneficence are possible and consequential.

Furthermore, the current findings suggest that it is possible to manipulate the frequency and content of prayers, which affects forgiveness. This makes it possible to test the causal impact of partner-focused prayer on interactive behaviors with implications for longer-term couple functioning. In this way, the current results also advance the literature on couple functioning and the role of spirituality in promoting adaptive couple outcomes.

Limitations and future directions

As in many psychological studies, the young adult participants in the current studies limit the generalizability of our findings to other

populations. Further studies need to be conducted with older, more mature or more ethnically diverse couples to ensure that the effects of partner-focused prayer on forgiveness are not limited to young adult relationships.

In addition, the analog nature of the hurtful behavior by the partner used in Study 4, receiving a false low rating on a drawing supposedly from a partner, may not necessarily generalize to "real-world" transgressions (e.g., calling one's partner fat or ugly). However, we attempted to increase the ecological validity of our findings with a daily diary technique in Study 5, which yielded similar results. Also, Studies 1 and 2 measured naturally occurring partner-focused prayer and asked participants to respond to transgressions that actually occurred in their relationship. Furthermore, the current studies focused exclusively on how partner-focused prayer enhances cooperative tendencies, and future studies should also examine whether partner-focused prayer similarly diminishes emergent tendencies.

We note that not all prayer is expected to have the effects observed in our research. In particular, prayer focused on other attributes of God such as justice, omniscience, and wisdom would not be expected to produce the same effect as prayer focused on beneficence, love, or mercy. In addition, we would predict that prayers that focus on partner weaknesses or character flaws (e.g., perhaps pleading for God to help a partner to address such shortcomings) are likely to have a potential deleterious effect, or at best no effect on forgiveness and other relationship outcomes. Rather, consistent with goal theory, the indicators of transformation of motivation we found in these studies should only occur as a result of partner-focused prayer. Future studies should examine the effect of other types of prayer on relationship well-being.

Another important direction is to further examine whether prayer is unique to this transformation of motivation or whether any well wishing for a partner would have a similar effect. Although we controlled for relationship satisfaction and in Study 4 we included a positive thought about partner

control condition, future studies may examine whether wishing one's partner well without prayer would elicit a similar result.

We propose that prayer would have a unique effect due to sanctification. Mahoney and colleagues (1999) found that perception of marriage as holy and sacred was related to greater global marital adjustment, more perceived benefits from marriage, less marital conflict, fewer communication problems, and more verbal collaboration for husbands and wives. Dollahite and Lambert (2007) found that perception of their marriage as being sacred enhanced couples' marital quality and fidelity Fincham and colleagues (2010) also found that sanctification mediated the relationship between prayers for partner and infidelity. We suspect that partner-focused prayer would likely have a stronger effect on transformation of motivation than would well wishing for partner due to the sanctifying effect that prayer can have on a relationship. Again, this possibility awaits future research.

Conclusion

In five studies, we found that praying for a close relationship partner was related to more cooperative and forgiving behavior toward the partner. The results are among the first to go beyond the limitations of self-report data and to demonstrate that partner-focused prayer increases cooperative and forgiving tendencies in the immediate aftermath of a hurtful behavior by the partner. They are also the first to document that the effect of partner-focused prayer on forgiveness is visible to close relationship partners. In addition, these studies provide an empirical test of goal theory, demonstrating that praying for a partner transforms relationship goals to be more cooperative, which has implications for forgiveness. Although our findings have the potential to inform relationship education and couple therapy (for religious clients), they may also help clarify the types of interventions that might be developed for nonreligious couples to accomplish similar goals. In particular, the current results suggest the potential for interventions

that increase a cooperative orientation toward the partner to facilitate forgiveness.

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