

Effects of Time on the Norm of Reciprocity

Jerry M. Burger, Misa Horita, Lisa Kinoshita,
Kris Roberts, and Christopher Vera

*Department of Psychology
Santa Clara University*

The norm of reciprocity is a widely accepted social rule that requires us to return favors to those who do something nice for us. We conducted two experiments to test the hypothesis that the obligation to return favors diminishes as the amount of time between the initial favor and the opportunity to reciprocate grows. Participants in the first experiment were given an opportunity to return a favor either 5 min or 1 week after receiving a free soft drink from a confederate. Participants in the 5-min condition agreed to the confederate's request to deliver an envelope across campus more often than control group participants receiving only the request. However, participants in the 1-week condition showed no significant reciprocity effect. Participants in the second experiment indicated in hypothetical scenarios that they would be less likely to return a favor as the length of time since the favor increased. We interpret the findings to mean that the norm of reciprocity does not mandate an open-ended obligation to return a favor. Rather, the social rule requires only that we return acts of kindness within a reasonable period of time.

Among the most prevalent of the social rules governing our daily interactions is the tendency to reciprocate acts of kindness, that is, the norm of reciprocity (Gouldner, 1960). In accordance with the reciprocity norm, we return favors to those who have helped us in the past and we feel obligated to send birthday and wedding gifts to those who send us gifts on our birthday and wedding day. When one team of researchers sent Christmas cards to people they had never met, a large number of the recipients responded by mailing back Christmas cards, sometimes

including handwritten notes and family photographs (Kunz & Woolcott, 1976). The norm of reciprocity appears to serve several important functions. According to Gouldner (1960), the norm provides stability within social systems, reinforces altruistic acts, and discourages exploitation even in relationships between people with uneven status. One also can look at the reciprocity norm from an evolutionary standpoint. A stable society that exchanges altruistic acts is more likely to survive than one in which members act only in terms of self-interest (Wilson & Sober, 1994).

One implication of the norm of reciprocity is that people should return favors to those who do something nice for them even when the initial favor is unexpected and unrequested. This aspect of the norm was demonstrated by Regan (1971). Participants in these studies were given a free soft drink by a confederate posing as a participant. This unexpected favor was followed several minutes later by a request from the confederate to purchase some raffle tickets. The researcher found that participants who received the soft drink were more likely to reciprocate the favor and purchase raffle tickets than a control group of participants who received no gift from the confederate. Interestingly, participants felt obligated to return the favor by purchasing the raffle tickets even when they did not particularly like the confederate. Moreover, participants reciprocated the favor even though the price of the tickets was substantially more than the cost of a soft drink.

Findings like those reported by Regan (1971) help to explain the effectiveness of fund-raising groups who force "free" gifts upon unsuspecting recipients before asking for a donation. Recipients feel they owe a favor to the giver and contribute to the fund-raiser's cause to relieve their sense of obligation. In fact, recipients may come to dislike an individual who does not allow them an opportunity to reciprocate the favor and thereby remove the obligation (Gergen, Ellsworth, Maslach, & Seipel, 1975).

Another application of the reciprocity norm can be found in research on the "door-in-the-face" procedure (Cialdini et al., 1975). Researchers examining this compliance procedure present participants with a request so large that nearly all refuse. The experimenter responds to this refusal with a second, smaller request. Researchers find these participants are more likely to agree to the smaller request than participants in a control group who receive only the second request. Cialdini et al. (1975) explained the effectiveness of the door-in-the-face procedure in terms of the norm of reciprocity. That is, people are said to see the second request as a kind of concession on the part of the requester. Because the requester has given a little by lowering his or her request, the recipient feels a need to reciprocate this favor by doing something for the requester, that is, agree to the second request. In support of this interpretation, Cialdini et al. found no increase in compliance when the second request was delivered by someone other than the person who presented the initial request. In this latter situation the recipient apparently sees no concession on the part of the new requester and thus feels no obligation to reciprocate.

The research reported here was concerned with some of the parameters of the reciprocity norm. Specifically, we were interested in the length of time that passes between the initial favor and the opportunity to reciprocate that favor. Does the obligation to return a favor extend for an indefinite period of time? Or is there an implicit limit to how long one must feel obligated to reciprocate an act of kindness? Exploration of this variable not only has some important practical applications, but can provide us with additional insight into how the reciprocity norm operates. Specifically, we propose that the norm of reciprocity does not commit the recipient to an indefinite obligation to return a favor. Rather, the norm carries with it an implicit understanding that if favors are to be returned they should be returned within a reasonable period of time. Of course, what is considered "reasonable" is influenced by a number of factors, including the size of the favor, whether the favor was requested, the relationship between the two individuals, and perhaps the recipient's self-serving motives. But except in unusual cases, people cannot be expected to bear the obligation of an unreturned favor forever.

It is not difficult to see the utility of a built-in time limitation for the reciprocity norm. People do not like to feel obligated (Gergen et al., 1975). We certainly do not like open-ended obligations that commit us to an action for an indefinite period of time. A social norm that mandated such an obligation after a simple favor most likely would generate a great deal of ill-will and tension. Moreover, if people felt they were taking on an indefinite obligation when receiving an act of kindness, they might be reluctant to accept favors from one another. This type of reaction certainly would not be beneficial from an evolutionary standpoint. A more reasonable norm of reciprocity requires us to return favors, but not forever. This modified version of the reciprocity norm allows us to retain the benefits that come from reciprocity without the negative effects of unfulfilled obligations.

However, virtually all of the studies on reciprocating favors have looked at opportunities to return the favor that take place after relatively little time has passed since the favor was performed. We are aware of no study examining directly the effect of the length of this interval on the recipient's likelihood of returning the favor. However, one finding from a meta-analysis of door-in-the-face research suggests that the time interval between favor and request may be important. Dillard, Hunter, and Burgoon (1984) compared the combined effect sizes of door-in-the-face studies that allowed no time delay between the first and second request and those that presented the second request 2 or more days later. The investigators found that the effectiveness of the door-in-the-face technique virtually disappears after 2 days. Because the norm of reciprocity is said to underlie the door-in-the-face effect, this finding suggests that the strength of the obligation to reciprocate a favor may diminish significantly over a short period of time.

Experiment 1 was designed to test this possibility. Like Regan (1971), we gave participants an unexpected gift followed by a request for a favor. Compared to a control group receiving no gift, we expected a higher rate of agreement to the

request when it came a few minutes after receiving the gift than when the request was presented 1 week later.

EXPERIMENT 1

Method

Participants. Ninety-seven undergraduates, 50 men and 47 women, participated in the experiment for class credit.

Procedure. Participants arrived at the experimental room one at a time. About 1 minute later, another participant (really a confederate) arrived. The confederate was always the same sex as the real participant. Participants had been randomly assigned to one of three conditions. In the immediate condition, the experimenter gave both participants questionnaires to complete. The questionnaire consisted of a series of personality tests that were not relevant to the study and was designed to take between 5 to 10 min to complete. After a few minutes, the experimenter announced that he or she needed to leave the room to get some more questionnaires. At this point the confederate asked if he or she could use the rest room, which the experimenter agreed to. The confederate returned a few minutes later, before the experimenter had returned, with two cans of Coca Cola.¹ The confederate explained that he or she had stopped by the soft drink machine in the hallway to purchase a drink and also bought one for the participant. The confederate then handed the Coke to the participant. All participants accepted the gift. Soon the experimenter returned and waited for the participant to complete the questionnaire. The confederate pretended to complete the questionnaire at about the same time as the participant. After collecting the questionnaires, the experimenter again excused himself or herself to get some experiment credit forms, leaving the participant and the confederate alone in the room. At this point the confederate presented the target request. The confederate pulled a 12-in. × 9-in. manila envelope from his or her backpack. The envelope was labeled in bold letters with a fictitious person's name and the name and location of the university's Controller's Office. The confederate explained that he or she had to be someplace shortly after the experiment, but that he or she also needed to get the envelope to the Controller's Office by a certain time. The time given by the confederate was always about 20 minutes from the moment of the request. The Controller's Office is about a 5-min walk from the

¹We gave regular Coca Cola to men participants and Diet Coca Cola to women participants because discussions with undergraduates told us, perhaps unfortunately, that these soft drinks would be less likely to be refused.

experimental room, but in a direction typically not traveled by most students. The confederate asked the participant if he or she would take the envelope to the Controller's Office right after the experiment. If the participant said he or she did not know the way to the office, the confederate offered to draw a simple map. If the participant agreed to the request, the confederate handed him or her the envelope. If the participant declined, the confederate thanked him or her anyway and did not repeat the request.

In the delayed condition, participants signed up to participate in two experimental sessions, each held exactly 1 week apart. The procedure was identical to that in the immediate condition, except that both participant and confederate were dismissed after the experimenter collected the questionnaires the first week and reminded to return the second week for the rest of the study. The experimenter excused himself or herself to get experiment credit forms at the beginning of the second session, thus allowing the confederate time to present the target request. Confederates made no mention of the Coke they had purchased for the participant a week earlier and no participant commented about the Coke.

Participants assigned to the control condition did not receive a Coke. These participants attended one experimental session along with a confederate and completed the same questionnaire used in the other two conditions. However, when the confederate left to supposedly use the rest room, he or she returned with no soft drinks. As in the other conditions, the confederate presented the target request when the experimenter left to get some experiment credit forms.

Results and Discussion

The percentages of participants in each condition who agreed to deliver the envelope for the confederate are presented in Table 1. As can be seen in the table, participants in the immediate condition agreed to the request significantly more often than participants in the control group, $\chi^2(1, N = 64) = 7.82, p < .006$. Thus, giving participants an unsolicited soft drink a few minutes before presenting the request significantly increased agreement to the request. More important, immediate condition participants agreed to the request significantly more often than did

TABLE 1
Percentage of Participants Agreeing to the Target Request

	<i>Agree</i>	<i>Refuse</i>	<i>Percentage Agree</i>
Immediate Condition	30	2	93.8
Delayed Condition	25	8	75.8
Control Condition	21	11	65.6

participants in the delayed condition, $\chi^2(1, N = 65) = 4.04, p < .05$. Finally, the rate of compliance for participants in the delayed condition did not differ significantly from the rate of compliance in the control condition, $\chi^2(1, N = 65) = 0.81, ns$.

The results are entirely in line with our predictions. As in earlier research, presenting participants with an unexpected gift led to an increase in the number of participants agreeing to a request a few minutes later. However, this reciprocity effect was not found when participants received the request 1 week after receiving the favor. Apparently the strength of the obligation generated by the free soft drink diminished significantly over the course of 1 week. In fact, for the kind of favor and kind of request used in this experiment, the obligation diminished to a point that it had no significant impact on whether or not people agreed to the target request. Although we would not conclude that all obligations to return favors disappear this quickly, the findings are consistent with the notion that the norm of reciprocity implicitly includes a limit on how long one must feel obligated to return an act of kindness.

EXPERIMENT 2

Experiment 2 was conducted to provide additional insight into how the time interval between favor and request affects the strength of the obligation to return a favor. We interpret the findings from the first experiment in terms of an implicit time limit built into the norm of reciprocity. That is, although the norm of reciprocity holds that we should return favors to those who do something nice for us, we maintain that people also understand this obligation is relatively short-lived. However, other interpretations of the findings are possible. For example, one could argue that the reduction in the reciprocity effect over time may simply be a function of memory loss during the interval between favor given and favor asked. That is, participants in our first experiment may have forgotten all about the soft drink given to them by the confederate 1 week earlier or may have forgotten that the soft drink was given to them free, without asking, or by this same person. If this were the case, then it is understandable that they did not feel an obligation to return the confederate's favor by agreeing to the request. Of course, we would argue against this memory-loss explanation. Because the participants returned to the same room with the same confederate only 1 week later, it does not seem all that likely that they forgot the only really salient piece of information they knew about the confederate, that is, the free soft drink. Nonetheless, Experiment 2 was designed to examine the effects of time delay between favor and request in the absence of potential memory loss.

If the tendency to reciprocate a favor dissipates over time because of implicit time restrictions built into the reciprocity norm, then we should be able to demon-

strate this modified version of the reciprocity norm through the use of hypothetical scenarios. That is, we can ask people how they think they would react if they had received a favor and at some later time were asked to return the favor. In this situation there would be no problem with memory loss because participants would have read about the favor only seconds before being asked how they might respond to a subsequent request. Thus, by manipulating the length of time that supposedly passes between the favor and the request in our scenarios, we can test the notion that the reciprocity norm includes an implied time limit for returning a favor.

As in the first experiment, we expected that participants would report feeling less obligated to return a favor as the length of time since the favor increases. On the other hand, if participants report that they would feel the same strength of obligation to return a favor 1 year later as they would only a week after receiving the favor, then our interpretation would not be supported. In that case, one could argue that any reduction in the tendency to reciprocate favors over time may be due simply to a failure to recall the favor.

Method

Participants. Sixty-three undergraduates, 30 men and 33 women, served as participants in exchange for class credit.

Procedure. Participants completed a questionnaire containing three hypothetical scenarios. Participants were instructed to imagine themselves in the situation described in the scenario and try to anticipate how they probably would react. Three versions of each scenario were used in the study, and each participant received one and only one randomly assigned version of each of the three scenarios. Moreover, the three scenarios were presented in a random order for each participant.

Briefly, Scenario A describes an encounter in which a student named Doug spends about 10 minutes helping the participant load several heavy pieces of furniture onto a truck. Later Doug asks for a ride to his job about 30 minutes away because his car is being worked on. In Scenario B a student named Trisha lends the participant a few dollars so he or she can join friends for pizza, a loan that is paid back the next day. Later Trisha asks if she can borrow \$20 to buy a book for a class. Finally, in Scenario C a student named Martin spends about 15 minutes going over class notes after the participant misses class because of illness. Later Martin asks if the participant will go to the library to look up and photocopy eight journal articles for him. In each case the other student is described as someone the participant does not know very well, and the initial favor is described as one the participant did not request.

TABLE 2
Mean Response Scores for Dependent Variables

	<i>1 Week</i>	<i>2 Months</i>	<i>1 Year</i>	<i>F</i>	<i>p</i>
Scenario A (drive to work)					
Likely to help	7.69 _a	6.91 _a	5.50 _b	6.87	.003
Would feel obligated	6.02	5.54	5.60	0.35	ns
Should help	6.57	5.91	5.30	2.30	.10
Combined index	20.28	18.36	16.40	3.72	.03
Scenario B (lend money)					
Likely to help	7.56 _a	5.84 _b	4.91 _b	6.28	.004
Would feel obligated	5.56	4.94	5.13	0.35	ns
Should help	6.11	5.19	5.13	1.15	ns
Combined index	19.22	15.97	15.17	2.39	.10
Scenario C (do library work)					
Likely to help	7.67 _a	6.36 _b	4.83 _c	10.40	.001
Would feel obligated	6.00 _a	5.23 _{ab}	4.34 _b	3.47	.04
Should help	7.17 _a	5.04 _b	4.69 _b	10.89	.001
Combined index	20.83 _a	16.64 _{ab}	13.86 _b	9.48	.001

Note. For each variable with a significant *F* value ($p < .05$), means not sharing a subscript are significantly different, $p < .05$, Sheffé's test.

Each scenario was written so that either 1 week, 2 months, or 1 year passed between the favor done by the other student and that student's request for help.² After each scenario, participants responded to three questions designed to assess their perceptions about whether they would reciprocate the favor. On 9-point scales participants indicated the likelihood that they would agree with the request, the extent to which they would feel obligated to agree to the request, and the extent to which they thought someone in the situation should agree to the request.

Results and Discussion

The mean response scores for each of the three questions and the analysis of variance (ANOVA) results comparing the three conditions (1 week, 2 months, 1 year) are presented for each of the scenarios in Table 2. Responses to the three

²We did not include a condition with no time delay because we thought an unsolicited favor followed immediately by a request for a larger favor might look as if the individual in the scenario were attempting to manipulate the participant with the initial offer of help. For example, if Doug offers to help load furniture for a few minutes and then immediately asks for a ride, it might appear that the help was really more a tactic to get a ride than a genuine favor.

questions were significantly correlated within each of the three scenarios (r s ranged from .21 to .66 for Scenario A, from .43 to .67 for Scenario B, and from .59 to .77 for Scenario C). Thus, a combined reciprocation score was created by summing the three responses for each scenario. The means and ANOVA results for these combined indexes also are presented in Table 2. As can be seen in the table, although not all of the analyses reached statistical significance, the same general pattern was found for each of the three scenarios. Consistent with our findings from the first experiment, the longer the delay between the favor and the request, the less likely participants were to say they would return the favor.

The results are consistent with our notion of an implicit time limit for returning favors as part of the reciprocity norm. Participants describing what they thought they would do in the scenarios clearly indicated that they would be less likely to return the favor as time passed. Because the participants obviously were equally aware of the earlier favor in all three conditions, the findings cannot be explained in terms of a failure to recall the favor.

GENERAL DISCUSSION

The results from the research reported here provide additional insight into the norm of reciprocity. Specifically, the tendency to reciprocate favors appears to dissipate over time. We interpret this finding to mean that the norm of reciprocity does not mandate an open-ended obligation to return a favor over an indefinite period of time. Rather, we argue that the social rule requires only that we return favors within a reasonable period of time. At some point following the favor the social requirement that we reciprocate acts of kindness no longer applies. How long it takes before the obligation to return a favor begins to diminish or disappears altogether probably is a function of many variables. For the kind of favor and request examined in Experiment 1 between strangers, it appears the obligation to reciprocate diminishes significantly after a period of only 1 week. However, in other cases people may feel an obligation to return a favor that lasts for a much greater period of time. For example, saving a person's life may produce a sense of obligation that lasts a lifetime.

One methodological issue needs to be addressed. The use of hypothetical scenarios in social psychological experiments has been challenged on the grounds that what people say they will do does not always correspond with actual behavior. This is a reasonable concern, but does not diminish the value of the Experiment 2 data. We were specifically interested in what people *believe* they would or should do in these situations. Social rules like the reciprocity norm can perhaps be thought of as standards people try to live by rather than necessarily how they behave. Thus, estimates of what people think they would do in a given situation probably are fair indicators of the societal standards to which they are trying to adhere. Consequently,

we are encouraged by the fact that the participants' descriptions of what they thought they were supposed to do were entirely in line with our description of the reciprocity norm.

Although we interpret the findings from the present studies in terms of an implied time limit built into the reciprocity norm, additional investigations are needed to explore the role of other variables and other interpretations. For example, it is possible that respondents in the second experiment assumed they would have forgotten about the favor over time and gave their responses based on this assumption. Another possibility is that these respondents assumed that the other person would have forgotten about the favor over time. This interpretation raises questions about whether favors are reciprocated to alleviate the recipient's sense of obligation or to satisfy self-presentation concerns. Although we would argue for the former, we cannot rule out the latter with the data presented here.

In summary, the norm of reciprocity requires that we reciprocate acts of kindness in some way. However, our findings indicate that there are limits to the obligation people feel to return a favor. Although in some cases acts of kindness may generate an obligation to return the favor that lasts a very long time, small favors from people we don't know well probably do not carry such a burden. In addition to expanding our understanding of how the reciprocity norm operates, the findings have implications for those who attempt to use this social rule to sell products, raise funds, and so on. Although the desire to return favors can be powerful and may be exploited by those who want something from us, at least the obligation induced by a small gift or a simple act appears to be short-lived.

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