American Psychological Association

Journal of Experimental Psychology: Applied

ISSN: 1076-898X

2021, Vol. 27, No. 3, 503–507
https://doi.org/10.1037/xap0000357

Maybe Favors: How to Get More Good Deeds Done

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While previous research has revealed several reasons why humans generally do good deeds, we explore a simple nudge that might get more of them done: the "maybe favor." We first show conceptually that, compared to a conventional favor, humans are more willing to grant a favor to a stranger on which they might eventually not have to make good. Furthermore, we conducted a series of fully incentivized experiments (total $N = 3{,}475$) where participants could make actual donations to charity. Introducing a "maybe" into our donation proposals by randomly revoking some donations not only led to significant increases in donation rates but also increased the total amount of donations. That is, due to biased perceptions of costs and benefits combined with nonlinear probability weighting, the donations we revoked due to the "maybe" were overcompensated by an increased overall willingness-to-donate.

Public Significance Statement
We demonstrate that introducing a simple "maybe" into requests to do a good deed significantly increases willingness to help. For instance, we increased charitable donations simply by telling people that if they decided to donate, there is only a certain chance they would actually have to make good on their promises. Although we thereby canceled some of the donations, even more people were willing to donate, so that in sum, we raised on average 15% more money to support charitable organizations than conventional campaigns would have.

Keywords: helping, prosocial behavior, altruism, charitable giving, probability weighting

Supplemental materials: https://doi.org/10.1037/xap0000357.supp

Today's world seems to be in permanent crisis, so it may be more important than ever to help each other. To be sure, traditional economic theories give a glum outlook on human altruism (Becker, 1976) and we even seem to be egoistic right down to our genes (Dawkins, 1976). Nonetheless, according to Gallup data (World Giving Index, 2019), about half of the people worldwide regularly do good deeds and help even strangers. Here, we are less concerned with the reasons why people do good deeds (see, Hamilton, 1964; Nowak & Sigmund, 1998; Trivers, 1971) but instead explore a novel intervention (see also, Thaler & Sunstein, 2008) that might get even more good deeds done: the "maybe favor."

Imagine being asked the favor that you help out moving furniture—*definitely, next Thursday*. What is the likelihood that you would grant this favor? Now imagine the case that you are being informed that the original helper is sick and might not be available on Thursday, and you are being asked whether you would help out—*in case the helper might not have recovered next Thursday*. What is the likelihood that you would grant this "maybe favor"? At first glance, introducing the "maybe" does not affect the expected cost-benefit ratio of the favor because both, costs and benefits only occur if you would actually have to make good on your promise. But whereas the costs of helping are very real, the benefits are more obscure and might not even depend on the actual execution of the favor. For instance, merely showing your willingness to help may already suffice to reasonably expect reciprocation even if you might not get the chance to help in the end. Furthermore, the probability that help is needed (i.e., the "maybe") may have different effects depending on who asks the favor. If a stranger asks for help, higher probabilities may primarily increase the expected costs while for friends, high probabilities might primarily signal a dire need for help (Krebs, 1970). Consequently, higher probabilities that help is required might increase your willingness to help a friend, but it might decrease your willingness to help a stranger.

Experiment 1

Our first experiment served as a proof of concept testing whether "maybe" helping a stranger moving some furniture actually increases willingness to help. All data, analysis scripts, and materials used in this manuscript are openly available at https://osf.io/4n96z/. All experiments, conditions, and measures are reported. All reported p-values correspond to two-sided tests. All experiments are in line with the ethical guidelines of the Deutsche Gesellschaft für Psychologie, the American Psychological Association, and the Declaration of Helsinki by the World Medical Association.

This article was published Online First June 3, 2021.

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We thank the Center for Social and Economic Behavior (C-SEB) of the University of Cologne for its financial support. We have no conflicts of interest to disclose. For materials and data please see https://osf.io/4n96z.

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Method

For Experiment 1, we recruited $N = 113$ students[1] on campus and presented them 32 vignettes in random order. In the vignettes, participants were asked whether they would help someone moving the furniture. We manipulated within-subjects the supplicant's identity (a close friend or a stranger asks for the favor), favor size (moving the furniture would take 10, 30, 45, or 60 min), and, crucially, the likelihood that the deed is due eventually (the original helper is more or less severely sick and it is 99%, 50%, 10%, or 1% likely that someone has to step in).

Results

The data were analyzed by fitting a mixed model (binomial, logit-link) with the lme4 package for R (Bates et al., 2014). The binary decision to help was predicted by an intercept, a contrast coded variable capturing the identity of the person asking the favor (*friend*: −0.5; *stranger*: 0.5), the required effort (*z*-standardized), and the probability that the favor would have to be delivered (mean centered). Also, all interactions were entered in the regression. In addition to these fixed effects, we added a random intercept for participants to incorporate the dependency in the data.

Obviously, helping strangers was less likely than helping friends, $\beta = -3.14$, $p < .001$, 95% CI [−3.44, −2.87], and it also became less likely the more effort it required, $\beta = -0.69$, $p < .001$, 95% CI [−0.83, −0.55]. Most importantly, however, a significant interaction, $\beta = -1.96$, $p < .001$, 95% CI [−2.72, −1.26], indicated that for friends, helping became more likely the higher the probability that help would actually be required while for strangers, helping became less likely the higher this probability (see Supplemental Materials for details).

Discussion

Our results indicate that when it comes to helping strangers, introducing a simple "maybe" (thereby decreasing the probability that help is required) increases the willingness to help but it decreases the willingness to help a friend. This pattern suggests that friends adding a "maybe" signal reduced need for help while strangers signal reduced expected costs (see also, Trivers, 1971). In addition, if helping is in any way related to a cost-benefit-ratio, the increased willingness to grant a "maybe favor" to a stranger at least tentatively suggests that merely showing the willingness to help is already enough to rake in the benefits. Thus, it seems that *maybe* helping a stranger reduces the expected costs without affecting the benefits.

Nonetheless, fewer good deeds are actually done than promised if there is a "maybe" involved. However, if this relative decrease caused by the "maybe" is smaller than the relative increase in the willingness to do a good deed in the first place, more of them will be done by introducing a "maybe." More specifically, the effectiveness of the intervention depends on the elasticity of the relationship between the willingness to help (x) and the probability of actually having to help (p). If the elasticity $\varepsilon = \left| \frac{\frac{\Delta x}{x}}{\frac{\Delta p}{p}} \right| > 1$, introducing a "maybe" will increase helping.

Technically, a "maybe" creates a decision under uncertainty. Based on modern theories of decision-making under uncertainty, the "maybe" might increase helping because humans weigh probabilities nonlinearly (Starmer, 2000). Most prominently, Prospect Theory (Kahneman & Tversky, 1979; Tversky & Kahneman, 1992; see also Barberis, 2013) assumes an S-shaped weighting function which implies that small probabilities are overweighed but large probabilities are underweighted (see Prelec, 1998). Simply put, such a weighting of probabilities means that a 10% chance is treated as if it was a 20% chance while a 90% chance is treated as if it only was a 70% chance. But because the boundary probabilities (0% and 100%) are not distorted, a "maybe" indicating that an event will only occur with a 95% probability instead of 100%, might cause an overproportionate drop in the probability weight for the event even though the event's actual probability only decreased by 5%. As a consequence, decision-makers might change their choices more than would be warranted given the change in basic probabilities.

For the following series of experiments, we went to the domain of charitable donations. In principle, we simply gave participants some money and then made a proposal to donate this money instead of paying it out to them. In the maybe condition, we added a small passage to our proposal stating that we would randomly revoke some of the donations participants had already agreed to make.

Experiment 2

We tested whether people may be overproportionally more likely to grant a "maybe favor" instead of a conventional favor. Consequently, even though some who are willing to donate will eventually not have to make good on their promise, these losses may be overcompensated by an overall increased initial willingness to do some good.

Sample

Instead of assuming an effect size without any empirical basis, we decided to spend a fixed amount on the second experiment which corresponded to 660 participants. In order to collect a sufficiently large and diverse sample and conveniently pay participants according to their decision, we used Amazon's mTurk to conduct the experiment. In all experiments, we restricted participants to residents of a specific country to keep the currency of payments and donations constant. In sum, we recruited $N = 664$ US residents (age: $M = 36$, $SD = 13$; 55% female).

Method

In principle, the experiment consisted only of our donation proposal. Participants could either accept our proposal and waive their \$0.20 payment to make a donation or reject it and receive their payment regularly. Before making our proposal, we gave a short description of the charitable organization *(The Conservation Fund)* and asked participants to indicate how much they would like to donate money to this organization (0 = *not at all* to 10 = *very much*). Importantly, participants were not deceived in any way about the following proposal: "*We would like to ask you to donate the 20 cents that you earn by doing this survey to the Conservation Fund. We would just automatically cancel the current payment, no*

[1] Due to a programming error, sample statistics were not recorded for this experiment.

complicated technical steps are necessary for you." If they agreed to donate, they waived payment and we made a donation to charity instead.[2] We collected all donations and donated the entire amount in one chunk. The proposal in the maybe condition was supplemented by stating that "*[i]f you agree there is only a chance that you will actually have to donate eventually. This is because from all the participants who agree we will randomly select 5% for which we will not cancel the payment; there will be no actual donation!*." Participants were informed immediately after their decisions whether their donation had been randomly selected to be canceled.

Results

In the control condition, 31% agreed to donate their money whereas in the maybe condition, 47% agreed to donate, Fisher's exact test $p < .001$, $OR = 1.98$, 95% CI [1.43, 2.76]. That is, the willingness to donate increased by $\frac{47\%}{31\%} - 1 = 52\%$ but the likelihood of realizing it only dropped by $|\frac{95\%}{100\%} - 1| = 5\%$. Therefore, $\varepsilon = \frac{52\%}{5\%} = 10.4 > 1$ which indicates that the maybe indeed increased the sum of donations. Specifically, we donated \$20.60 from the control condition but \$29.26 from the maybe condition. In this experiment, the "maybe favor" increased donations by 42% compared to the conventional favor.

Experiment 3

Experiment 3 was a direct replication of the second experiment.

Sample

Based on the results of Experiment 2, we aimed for 90% power assuming an effect size $w = 0.162$. The power analysis suggested a sample size of $N = 401$, so we recruited $N = 403$ US residents (age: $M = 36$, $SD = 13$; 54% female) via Amazon's mTurk.

Results

While 38% agreed to donate in the control condition, 47% agreed in the maybe condition, Fisher's exact test $p = .070$, $OR = 1.45$, 95% CI [0.96, 2.21], $\varepsilon = 4.7$. Even though the effect size was obviously reduced in Experiment 3, we donated \$15.80 from the control condition but \$17.30 from the maybe condition (+9%).

Experiment 4

In our fourth experiment, we also explored how people experience the "maybe favor." Therefore, we added three questions assessing the subjective benefits of making a donation (e.g., "warm glow"; Andreoni, 1990). To increase generalizability, we also recruited a different sample of participants (U.K. instead of U.S.).

Sample

The third experiment showed a considerably reduced effect size $w = 0.087$. Therefore, we aimed for 80% power assuming a slightly larger effect size $w = 0.100$. This power analysis suggested a sample size of $N = 785$. We recruited $N = 800$ U.K. residents (age: $M = 34$, $SD = 12$; 70% female) via Prolific Academic.

Method

The procedure was largely identical to the previous experiments. However, we selected a new charity organization to receive the donations, the *Dian Fossey Gorilla Fund International*. Also, participants received a certain payment of £0.20 for participating in the experiment and additionally £0.40 to donate. As a consequence, we also adjusted our donation proposal:

> We would like to ask you to donate the £0.40 that you additionally received to the Dian Fossey Gorilla Fund International. If you agree, you will still receive the £0.20 payment as advertised but you will not be paid out the additional £0.40. Instead, we will donate your £0.40 to the Dian Fossey Gorilla Fund International.

In the maybe condition, we added:

> If you agree there is only a chance that you will actually make the donation eventually. This is because from all the participants who agree, we will randomly select 5% for which we will revoke the donation.

After their donation decision, participants indicated their agreement (0 = *not at all* to 10 = *very much*) to the following statements: "*It was the right thing to do*," "*I feel good about it*" and "*It makes me a good person*." Participants who agreed to donate in the maybe condition were asked the same questions again after they had learned whether donation had been randomly revoked.[3]

Results

Agreement to the statements assessing the subjective consequences of the donation decisions all correlated highly, $r > .53$, $df = 798$, $p < .001$. Thus, we averaged the ratings for each participant to construct a benefit index. In line with our hypotheses, subjective benefits were larger for donators than for nondonators, $F(1, 796) = 296.67$, $p < .001$, $\eta^2 = 0.272$, 95% CI [0.222, 0.320], but did not differ between conditions, $F(1, 796) = 0.16$, $p = .689$, and were also not qualified by an interaction, $F(1, 796) = 1.78$, $p = .183$. That is, the subjective benefits of making a donation were not affected by adding the "maybe" to the donation proposal.

At the same time, 74% agreed to donate £0.40 in the maybe condition but only 68% agreed in the control condition, Fisher's exact test $p = .052$, $OR = 1.36$, 95% CI [0.99, 1.86], $\varepsilon = 1.8$. Consequently, we donated £103 from the control condition but £117 from the maybe condition (+14%).

Experiment 5

Experiment 5 was a preregistered, direct replication of the fourth experiment.

Sample

We used the data obtained in Experiment 4 to simulate different sample sizes and perform power analyses on the basis of binomial

[2] For technical reasons, making the donation also meant that workers also could not successfully complete the HIT (Human Intelligence Task) on Amazon mTurk.

[3] We do not report the analyses regarding the second ratings in this article. However, all data and the analyses can be found on OSF.

regression models (*lme4 package*; Bates et al., 2014). The procedure is implemented in the *simr package* for R (Green & MacLeod, 2016). Based on the simulations ($\beta_{Maybe} = 0.35$), we preregistered a sample size of $N = 1600$ (https://aspredicted.org/hv3xr.pdf). We recruited $N = 1{,}608$ U.K. residents (age: $M = 34$, $SD = 11$; 67% female) via Prolific Academic. People who had already participated in Experiment 4 were not eligible to participate in this direct replication.

Results

Except for minor deviations, all previous results were replicated. Like in the previous experiment, the agreement to the statements assessing the subjective consequences of the donation decisions all correlated highly, $r > .49$, $df = 1606$, $p < .001$. Also, subjective benefits were larger for donators than for nondonators, $F(1, 1604) = 673.23$, $p < .001$ $\eta^2 = 0.296$, 95% CI [0.261, 0.330]. Benefits were not qualified by an interaction, $F(1, 1604) = 1.16$, $p = .281$, but there was a marginally significant difference between conditions, $F(1, 1604) = 3.56$, $p = .059$. That is, decisions were considered slightly more beneficial in the maybe condition ($M = 6.35$; $SD = 2.55$) than in the control condition ($M = 6.16$; $SD = 2.49$). However, this difference was not significant in the direct comparison, $t(1606) = 1.58$, $p = .113$. Crucially, we argue that the subjective benefits of donating (warm glow, etc.) are not reduced by including a maybe in the proposal. Therefore, the data from Experiment 5 is in line with this reasoning.

Most importantly, 74% agreed to donate in the maybe condition while 69% agreed in the control condition, Fisher's exact test $p = .036$, $OR = 1.26$, 95% CI [1.01, 1.58], $\varepsilon = 1.4$. As a result, we donated £215 from the control condition but £230 from the maybe condition (+7%).

General Discussion

Our findings show that with a simple "maybe," we can capitalize on fundamental biases of human cognition to get more good deeds done. Of course, it is hardly surprising that people are more willing to help when there is a chance they may not have to make good on their promise. The crucial point is that this increase overcompensated our obligation to revoke some donations because of the "maybe." This effectiveness of the "maybe favor" seems to rest on two psychological phenomena. First, granting the favor appears to yield its subjective benefits irrespective of whether the favor actually has to be granted. That is, by agreeing to do a good deed the altruist already feels the rewarding "warm glow" (Andreoni, 1990) even if the deed is never done. Likewise, if a noble effort was prevented by external circumstances (such as us canceling the donation), the willing helper can still maintain a positive self-image (Heider, 1958). Second, probabilities are weighted nonlinearly such that a drop from 100%—certainty to 95%—maybe causes an overproportionate behavioral reaction. That is, instead of mirroring the 5% change, donation rates on (weighted) average increased by 18%. Admittedly, our donations from the experiments were not tremendously high but the findings clearly demonstrate the potential of our simple intervention. Given that we increased the total sum of donations by 15% on (weighted) average, we can expect a remarkable boost in donations considering that, according to *Giving USA*, over $400 billion have been donated in 2018 alone. Furthermore, the effectiveness of the "maybe favor" should not be limited to monetary donations but could also help to increase blood and organ donations or the willingness to help refugees. In sum, we believe we have identified a powerful mean to really get more good deeds done easily.

To be sure, our participants neither donated large amounts of money nor came to the money directly out of their own pockets. Certainly, this might limit the generalizability of our findings and therefore warrants further research. However, in Experiments 2 and 3, participants donated money that they worked for by completing the experiment and the donation additionally incurred costs from relinquishing the successful completion of the task on mTurk (which might partly explain the lower donation rates in these experiments). Furthermore, participants in the last two experiments donated amounts of money that were twice as high as their regular payment for participation in the experiment. In sum, the current results show that "maybe favors" increase charitable donations that are doubtlessly costly to the donators.

Like most nudges, "maybe favors" might also be abused to trick people into actions they should rather avoid. For instance, people who cannot actually afford it might end up making donations. At the same time, there is no reason to speculate that including a "maybe" affects the poor differently so this concern also applies to any other donation campaign. Nonetheless, caution is always warranted if choice architectures are designed with a specific goal in mind. In a related vein, preventing people from carrying out their good deeds (by revoking their donations) might be considered unethical. However, given that the total amount of donations is increased without reducing the subjective benefits to the individual donators (Experiments 4 & 5), this concern might be secondary.

Two additional issues seem important for implementing "maybe favors" in larger calls for donations. First, the absolute difference in donation rates between conditions only varied between 5% and 16% across experiments while donation rates themselves varied between 31% and 74%. Therefore, lower donation base rates (which can be expected in real-life contexts involving "out of the pocket" donations) may yield even more favorable results if the absolute increase due to the "maybe favor" remains approximately constant. Second, previous research suggests that the bias in probability weighting is more pronounced for affect-rich outcomes (Rottenstreich & Hsee, 2001). Therefore, using either a more affect-inducing framing of the decision or a more affectively rich cause might further increase the power of the maybe favor. Certainly, the psychological nuances still need to be fully explored, but we think that in times where altruism and solidarity are needed more than ever, this simple intervention may be used to really get more good deeds done.

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Received August 25, 2020
Revision received February 5, 2021
Accepted March 16, 2021 ■