

DEPARTMENT OF ECONOMICS AND FINANCE
COLLEGE OF BUSINESS AND ECONOMICS
UNIVERSITY OF CANTERBURY
CHRISTCHURCH, NEW ZEALAND

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Stephen Knowles
Maroš Servátka
Trudy Sullivan

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Department of Economics and Finance
College of Business and Economics
University of Canterbury
Private Bag 4800, Christchurch
New Zealand

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Deadlines, Procrastination, and Inattention in Charitable Giving: A Field Experiment

Stephen Knowles¹
Maroš Servátka^{2*}
Trudy Sullivan³

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Abstract: We conduct a field experiment to analyze the effect of deadline length on charitable giving. Subjects are invited to complete an online survey, with a donation going to charity if they do so. Participants are given either one week, one month or no deadline by which to respond. Donations are lower for the one month deadline, than for the other two treatments, consistent with the model of inattention developed in Taubinsky (2014) and also with the idea that not specifying a deadline conveys urgency.

Keywords: charitable giving; deadline effects; procrastination; inattention; field experiment

JEL Classifications: C93; D64

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¹ Department of Economics, University of Otago, NEW ZEALAND

² New Zealand Experimental Economics Laboratory, Department of Economics and Finance, University of Canterbury, NEW ZEALAND

³ Department of Economics, University of Otago, NEW ZEALAND

*Corresponding Author: Maroš Servátka, maros.servatka@canterbury.ac.nz

1. Introduction

Deadlines often help us organize our lives by motivating us to perform tasks that we have been procrastinating over (O'Donoghue and Rabin, 1999). Some tasks, like filing tax returns, must be completed otherwise the consequences or penalties can be severe. Other tasks, such as redeeming vouchers, are not compulsory, so we sometimes forget to complete them (Taubinsky, 2014). Different tasks, such as donating to charity or completing a survey, in addition to not being compulsory, involve no direct monetary reward for the person undertaking the task. For such non-compulsory tasks, the time available to perform them might influence whether they get completed or not. The deadline length might convey cues about the importance of the task, which would have an impact on the completion rate. In particular, people might be more likely to procrastinate with longer deadlines making them more likely to forget to complete the task.

The conjecture that deadline length affects response rates has been developed theoretically in Taubinsky (2014), whose model of inattention incorporates the possibility of people forgetting to take an action and missing the deadline. Taubinsky argues that “a decision maker may form a clear intention for how he would like to act in the future, but then fails to follow through on that intention because it is not top of mind” (p. 13). We test the conjecture in a charitable giving field experiment in which we invite a nationally representative sample of 3,276 people to give up five minutes of their time to answer an online survey, and, in doing so, earn \$10 that will be donated to charity by the researchers.¹

In the experiment we implement three conditions: a one week deadline, a one month deadline, and no deadline at all. Taubinsky's model predicts that completion rates will be lowest for deadlines of intermediate length (which we calibrate to be one month) whereas the task is more likely to be completed under the shorter deadline (one week in our experiment) as it is going to be on people's minds. If the probability of being attentive is non-zero (e.g. there is a chance of encountering a cue, such as hearing about a charity in a different context or seeing the solicitation letter on the desk, reminding the person to take the action), longer deadlines will not reduce the probability of completing the task. In fact, as the deadline approaches infinity, or if there is no deadline at all, the task will eventually get completed, assuming the

¹ Hence, the task could be thought of as either completing a survey (benefitting those doing the research), or giving up one's time to earn money for charity (benefitting the charity and those who are helped by the charity's work). To keep the discussion focused, we concentrate on the charitable giving interpretation for much of the remainder of the paper.

decision maker intends to do it. Taubinsky notes this prediction of the model is difficult to test empirically, as it is not obvious when the non-monotonicity will set in. Instead, his experiment focuses on testing whether cues (reminders) reduce the gap in task completion rates for a longer versus shorter deadline. He finds this is indeed the case and thus provides evidence for the existence of inattentiveness among his subjects.

Our main contribution to this literature is testing the prediction of Taubinsky's model that completion rates will be lowest for deadlines of intermediate length in a charitable giving scenario, including not only treatments with a short and intermediate deadline, but adding a treatment with no deadline, which is our way of operationalizing the theoretically infinite deadline. The no deadline treatment thus allows us to test Taubinsky's prediction that infinite deadlines will not reduce the probability of completing the task. However, we do not include reminders, as charities are unlikely to include reminders in everyday life.

Charitable giving differs from redeeming vouchers or claiming rebates (or even filling out a survey for money as in Taubinsky's experiment) in that utility is derived from the consumption of others (in the current case the researchers or the charity), or the warm glow of giving, not from increasing the donor's own consumption. Taubinsky's framework does not make a distinction between tasks that benefit the person who takes the action versus tasks that benefit others. Therefore, it is an open question whether procrastination and inattention extend to such areas as charitable giving or voluntary work and whether people's actions in these other-regarding domains is driven by the same behavioral phenomena as in situations where completing the task benefits only the person who undertakes it. However, a recent lab experiment by Knowles and Servátka (2015) and a field experiment by Damgaard and Gravert (2014) find no evidence of a statistically significant deadline effect for charitable giving. Note, however, that neither of these studies includes a treatment where no deadline is specified and hence neither of them can be used to test the theoretical prediction derived by Taubinsky. Related research in the context of taking actions (such as redeeming vouchers) that increase one's own consumption or income tend to find that specifying a long deadline, rather than a short deadline, reduces response rates (see, for example, Janakiraman and Ordóñez, 2012; Shu and Gneezy, 2010) with Tversky and Shafir (1992) finding that response rates are lowest when no deadline is specified, contrary to Taubinsky's theoretical prediction.

The effect of *not* specifying a deadline at all is unresolved in contexts, like charitable giving, where there is no direct monetary reward to the person responding as the probability of forgetting (or conveniently ‘forgetting’) is conceivably higher in this case. Taubinsky’s model predicts responses will not be lower when the deadline is infinite. If decision makers interpret the lack of deadline as meaning they can take as long as they like (i.e. the deadline is infinite), then Taubinsky’s model predicts donations will not be lower than in the intermediate deadline as people will eventually remember to donate. In this case, there will be a non-trivial number of (very) late donations. An alternative possibility is when no deadline is specified, instead of assuming the deadline is infinite, decision makers may interpret the lack of deadline as implying that if they are to respond, they must do so promptly, reducing the potential for procrastination and inattention. Specifying an intermediate deadline (e.g. one month), on the other hand, makes it clear that an urgent response is not required, which may be interpreted as receiving permission to delay, creating greater potential for procrastination and inattention. The key point is that whichever way the lack of deadline is interpreted by decision makers, the lack of deadline is predicted to increase responses relative to an intermediate deadline.

A counter argument is that if longer deadlines do reduce donations (as is found in some studies in other contexts) then it might perhaps seem logical to conclude that as the longest possible deadline is to have no deadline at all, responses will be lowest when there is no deadline. This is assumed, but not formally tested, in the charitable giving context by Damgaard and Gravert (2014) and Huck and Rasul (2011). The assumption is also consistent with Tversky and Shafir’s (1992) finding with respect to actions where there is a direct financial benefit to the person responding. Whether having no deadline increases or reduces responses, in contexts such as charitable giving or completing a survey without payment, is therefore an empirical question, and one of the questions which this paper addresses.

In our experiment we find a significantly higher response rate in the *No Deadline* treatment compared to the *One Month* treatment. This result holds even if we exclude any responses made after one month in the *No Deadline* treatment. Responses are greater in the *No Deadline* treatment than in the *One Week* treatment, but this difference is not statistically significant. In contrast to Tversky and Shafir (1992) our results suggest that response rates are maximized by not specifying a deadline. Consistent with the conjecture that a longer deadline sends a signal that there is no urgency to respond, there are very few responses on the first day in the *One Month* treatment.

Our study has important policy implications for charities regarding whether giving people more time to donate reduces donations. Our experimental results suggest that while specifying a shorter deadline, thus creating some urgency might mitigate donors' procrastination and inattention, a longer (intermediate) deadline seems to remove this urgency and results in lower donations. Consistent with Taubinsky's prediction, specifying no deadline leads to higher donations than an intermediate deadline. However, based on the pattern of donations, most of which come early, this is not because people eventually remember to complete the task, but because having no deadline signals urgency. Nevertheless we do observe a small number of very late donations, consistent with Taubinsky's intuition. Therefore, charities are best to specify no deadline at all in order to maximize donations.

2. Literature Review

We begin by reviewing the literature on deadline length in the context of charitable giving. Damgaard and Gravert (2014) conduct a natural field experiment in which solicitation emails and texts are sent out to people who have previously donated to a Danish charity. Subjects were told their donation would be matched if the donation was made by a specified deadline. The deadline length varied depending on whether the solicitation was by email or text. In the email treatment the short deadline was three days, the intermediate deadline 10 days and the long deadline 34 days. When the solicitation was by text, the short deadline was two days, the intermediate deadline three days and the long deadline 34 days. They find no evidence of deadline length affecting donations, but instead find what they term a "now or never" effect; people either tend to donate promptly or not at all. Sending out a reminder increased donations, but also increased the probability of someone being asked to be deleted from the charity's database.

Damgaard and Gravert argue that their long deadline is non-binding; that is, it is effectively the same as having no deadline at all. To back up this claim they cite Huck and Rasul's (2011) natural field experiment analyzing the effect of matching subsidies and the presence of a lead donor on charitable giving. Huck and Rasul implement treatments where subjects are told that if they make a donation within four weeks, the donation will be matched by an anonymous donor. In other treatments there was no deadline and no matching subsidy. They suggest that this four week deadline likely did not affect donor behavior as 97% of those who donated did so within the four week deadline, with the median donation time being within one week. Huck and Rasul also point out that they observed no differential effects on the time for

donations to be received between the treatments specifying a four week deadline, and those where no deadline was given. However, this comparison of treatments with and without a deadline is confounded by the fact that the treatments with a four week deadline also include a matching subsidy, whereas the treatments with no deadline do not include a matching subsidy. Consistent with Damgaard and Gravert's results, Knowles and Servátka (2015) find no difference in charitable giving for deadline lengths of one hour, one day and one week in a laboratory experiment. Like Damgaard and Gravert, Knowles and Servátka did not include a no deadline treatment.

Karlan et al's (2011) main focus is on the effect of matching subsidies on donations, but they also consider the effect of adding a message to the solicitation indicating urgency. The wording was either "now is the time to give" or "now is the time to join the fight". Including this message did not increase donations compared to a control without this wording. Subjects in one mail-out were also given different deadlines by which the donation had to be made to qualify for the matching subsidy. In Karlan et al's setting, deadline length has no statistically significant effect on donations.

We now turn our attention to studies on the effect of deadlines in contexts other than charitable giving, where responding is of direct financial benefit to the person taking the action. Tversky and Shafir (1992) offer students \$5 to complete and return a lengthy questionnaire, with students being given either five days, three weeks or no definite deadline by which to complete the questionnaire. The respective rates of return were 60%, 42% and 25%, indicating the more time people were given to complete the task, the lower the response rate. Shu and Gneezy (2010) give subjects vouchers to either a café or, in a different experiment, to a movie theatre, and find the vouchers are more likely to be redeemed for the short expiry date (three weeks in the café experiment and two weeks in the movie experiment) than for the long expiry date (two months in the café experiment and six weeks in the movie experiment). Janakiraman and Ordóñez (2012), in a series of experiments, find that reducing the amount of time subjects are given to return goods they are not happy with increases the probability that goods will be returned. In Taubinsky (2014) subjects were invited to take part in a survey, for which they had to register online, but could not complete until the next day at the earliest. The experiment used a 2 x 2 design that varied whether (i) subjects were either given a short (two day) or long (21 day) deadline by which to complete the task and (ii) whether subjects were sent a reminder. The shorter deadline increases the probability of

completion from 42% to 59%, with reminders increasing the completion rate by 31%-points for the long deadline and 15%-points for the short deadline. In contrast to the studies on charitable giving, these studies all find that increasing deadline length reduces response rates, with Tversky and Shafir finding that specifying no deadline reduces response rates even more.

3. Theoretical Framework, Hypotheses, and Experimental Procedures

Taubinsky's (2014) model of inattention provides an intuitive theoretical framework for analyzing why people might not get around to taking an action. While Taubinsky does not explicitly mention the case of charitable giving, we adapt the narrative to this context. In the one-off task with deadlines version of the model the Decision Maker (DM) receives the solicitation in time period 0. The donation can be made any time from time period 1 until a specified deadline. In each time period, beginning in time period 1, the DM decides whether or not to donate, comparing the benefits of making a donation (i.e. the warm glow or the utility derived from consumption of the recipient) to the opportunity cost of doing so. However, there is a non-zero probability that the DM will be inattentive, and not consider making a donation during that time period. Sophisticated DMs are aware of the possibility of future inattentiveness, and will take steps to protect against this (such as donating early or creating reminders, knowing that if they do not, they may well forget about it). Naïve DMs, on the other hand, mistakenly assume that they will be fully attentive in all time periods, so may put off donations that they fully intend to make, but never get around to making them.

In this framework, when the probability of being attentive is bounded away from zero, for example due to mental recall or reminders, longer deadlines will not reduce the probability of donating. In other words, as the deadline approaches infinity, the task will eventually get completed. However, if this is combined with exponential decay in attentiveness over time, donation rates will be lowest for deadlines of intermediate length.² Regarding this implication of the model Taubinsky notes that it is difficult to test empirically, as it is not obvious when the non-monotonicity will set in. We take a conservative approach and calibrate the 'intermediate length' based on the previous charitable giving experiments to be one month. If the non-monotonicity actually sets in earlier than one month, this will make it *ex ante* more difficult to identify a statistically significant difference between treatments.

² See Taubinsky (2014) for details.

In Taubinsky's model, the DMs cannot complete the task in time period 0, when they first learn about it. However, in many everyday contexts, including charitable giving, it is possible to complete the task immediately, yet many people still postpone it and eventually forget. Due to our focus on charitable giving we decided to allow our participants to respond immediately upon receiving the solicitation letter. An alternative would have been to not allow the participants to fill out the survey until a certain date. Since our survey solicitations were sent by regular mail, such an approach would have likely resulted in a loss of control as some people would receive the letter earlier than others and thus would have to wait more days to complete the survey, which could make them more likely to forget. Moreover, instructing people that they could not respond until a certain date would seem unnatural for the type of solicitation we implemented.

Our subjects were randomly selected from the New Zealand electoral roll and invited to take part in an online survey on charitable giving, which would take approximately five minutes of their time. Subjects were told that if they completed the survey the researchers would donate \$10 to charity. Subjects were able to choose whether the donation was sent to World Vision or the Salvation Army.³ The letter (provided in the appendix) included a URL for the website, with a different URL given for each treatment. In addition, each letter contained a unique alphanumeric code. One of the questions in the survey asked for this code, and it was explained in the letter that this was to ensure that no one completed the survey more than once. The electoral roll contains information on people's gender and age so we ensured an equal number of letters per treatment were sent out to males and females, and an equal number of letters were sent to those aged 18-35, 36-65 and 66 and over.⁴

We initially sent out 300 letters per treatment, and then followed up with another two mail-outs a few weeks apart with 390 and 402 letters per treatment in the second and third mail-outs respectively. In the *One Week* treatment people were given 10 days from when the letters were sent to complete the survey; as the letters would take two to three days to be delivered,

³ Both charities are well known in New Zealand. The key difference between the charities is that World Vision works to assist families in need in the developing world, whereas the Salvation Army's focus is on assisting families in need in New Zealand. The Salvation Army was chosen by 71 percent of subjects. One of the survey questions gave subjects the opportunity to comment on their choice of charity. We plan to analyse these data in a separate paper.

⁴ The electronic version of the electoral roll we were supplied with did not include dates of birth, but instead grouped people into five-year age bands, based on their age in May 2014. Hence, it is possible that someone could have been in one age band in May 2014 and a higher age band when they completed the survey a few months later. For this reason we do not analyse our results by age group.

this gives seven to eight days to respond. The deadline in the *One Month* treatment was three weeks longer than in the *One Week* treatment, ensuring that the deadline was the same day of the week in each case. The *No Deadline* treatment did not specify a deadline by which the survey had to be completed. All letters were sent out when no major holidays occurred that would interfere with returning the letters.

To sum up, our field experiment allows us to test Taubinsky's two predictions that (1) completion rates will be lowest for deadlines of intermediate length and (2) infinite deadlines will not reduce the probability of completing the task. Given our experimental design, this leads to the following testable hypotheses:

Hypothesis 1a: *No Deadline* > *One Month*

Hypothesis 1b: *One Week* > *One Month*

Hypothesis 2: *No Deadline* $\geq$ *One Week*

As noted in the introduction, having no deadline is theoretically equivalent to having an infinite deadline. Behaviorally, however, some subjects may interpret the lack of deadline as instead implying they need to act promptly (i.e. they are effectively treating the lack of deadline as a short deadline). This interpretation is also consistent with the hypotheses above. Under the infinite deadline interpretation we would expect to see donations continue to come in after one month in the *No Deadline* treatment. Under the conveying urgency interpretation we would expect to see a number of prompt donations in the *No Deadline* treatment.

4. Results

In total, 1092 letters were sent out per treatment, across the three mail-outs. Some letters were returned because the person was no longer at that address. In addition, a small number of people contacted us by phone or email to let us know the person the letter was addressed to is deceased. We omit both groups of people (29 in the *One Week* treatment, 26 in the *One Month* treatment and 22 in the *No Deadline* treatment) from the denominator when calculating response rates. A small number of people completed the survey twice; in all cases the second survey was completed within a few minutes of the first so it is likely these people were unsure if they had correctly submitted the first time. We included the first response only

in our data set for these people. There were three responses made after the deadline in the *One Week* treatment, but none in the *One Month* treatment. We omit these three late responses from our analysis, but note below any cases where our results are sensitive to this. We also omit from our analysis the small number of people who either failed to enter their alpha-numeric code (one person) or entered an invalid code (one person), or who did not choose a charity (five people; three of whom are in the *No Deadline* treatment). It will become clear below that including the five people who did not choose a charity would only strengthen one of our key results.

The overall response rate is 6.68%. The response rates by treatment are given in Table 1. The response rate is highest when no deadline is specified (8.22%) and lowest with the deadline of one month (5.53%).

Table 1: Response Rates per Treatment

Treatment	Responses	Letters Sent Minus Letters Returned	Response Rate
<i>One Week</i>	67	1,063	6.30%
<i>One Month</i>	59	1,066	5.53%
<i>No Deadline</i>	89	1,070	8.32%

We analyze whether these differences across treatments are statistically significant using a two-sided Fisher exact test. The difference between the *One Month* and *No Deadline* treatment (Hypothesis 1a) has a p-value of 0.013. There were three donations made in the *No Deadline* treatment that were made after the deadline for the *One Month* treatment. This deadline was not binding in the *No Deadline* treatment but note that even if we omit these three responses, the difference between the two treatments is still statistically significant (p-value = 0.025).

Result 1a: Specifying no deadline at all results in a higher response rate than specifying a one-month deadline.

Our first key result thus supports Taubinsky's prediction and is counter to the assumption made by both Damgaard and Gravert (2014) and Huck and Rasul (2011). This result is robust

even if we confine our attention to responses in the *No Deadline* treatment made before the expiry of the deadline in the *One Month* treatment.

We next turn our attention to Hypothesis 1b and compare the response rates between the *One Week* and *One Month* treatments. The Fisher exact test detects no statistically insignificant difference between them (p-value = 0.464).

Result 1b: Specifying a one-week deadline does not result in a higher response rate than specifying a one-month deadline.

We test Hypothesis 2 that longer deadlines will not reduce the probability of completing the task by comparing the response rates between the *No Deadline* treatment, where there is no time limit on responding, to the *One Week* treatment, where responding to the solicitation should be on one's mind because of the short deadline. We find the difference between the *One Week* and *No Deadline* to be weakly significant (p-value = 0.081) based on the response rates reported in Table 1. However, if the three donations made after the deadline in the *One Week* treatment are counted (presumably a charity would accept late donations and a researcher would be interested in late survey responses), the p-value increases to 0.138. The key point is that not specifying a deadline does not reduce responses compared to specifying a short (one week) deadline.

Result 2: Not specifying a deadline does not reduce the probability of responding compared to a one-week deadline.

It is also of interest to analyze how promptly donations were made across the three treatments. This potentially offers some insights into whether subjects in the *No Deadline* treatment assumed the deadline was infinite or, alternatively, that the lack of a deadline conveyed urgency. Figures 1-3 show the response times in the *One Week*, *One Month* and *No Deadline* treatments respectively. Figure 3 does not show the three latest responses in the *No Deadline* treatment, which occurred on days 38, 52 and 145.⁵

⁵ It is possible that more responses will continue to come in. However, this would reinforce our key results.

Figure 1: Timing of Responses in the One Week Treatment

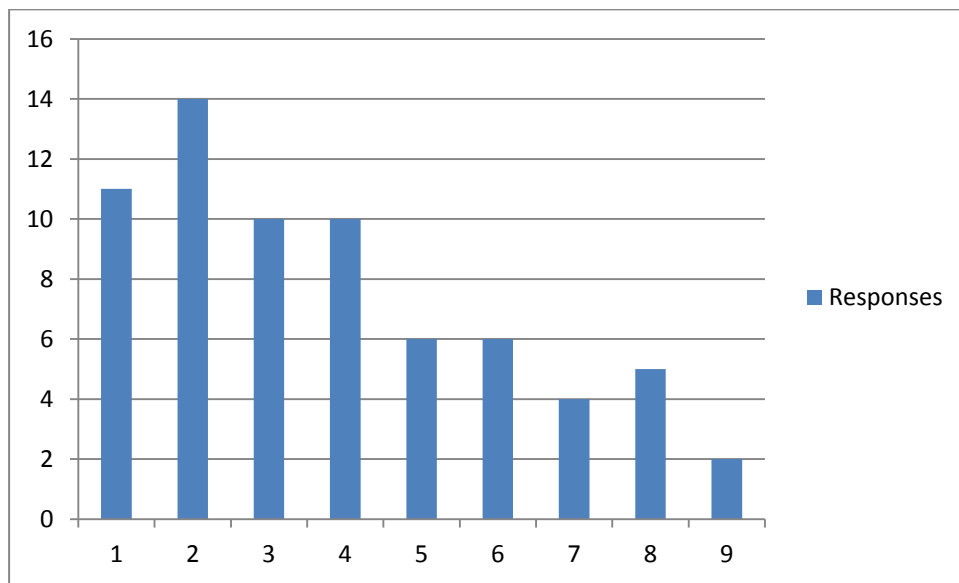


Figure 2: Timing of Responses in the One Month Treatment

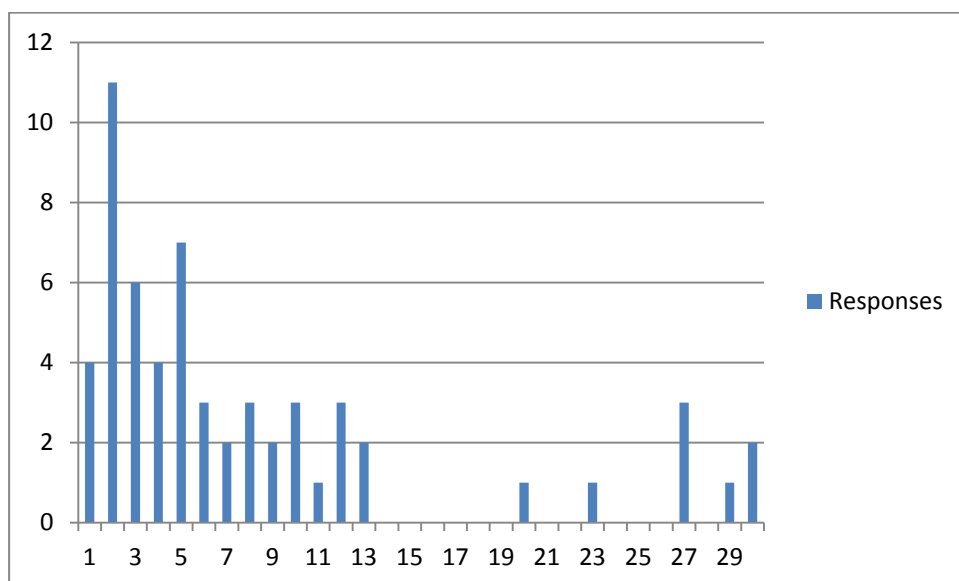
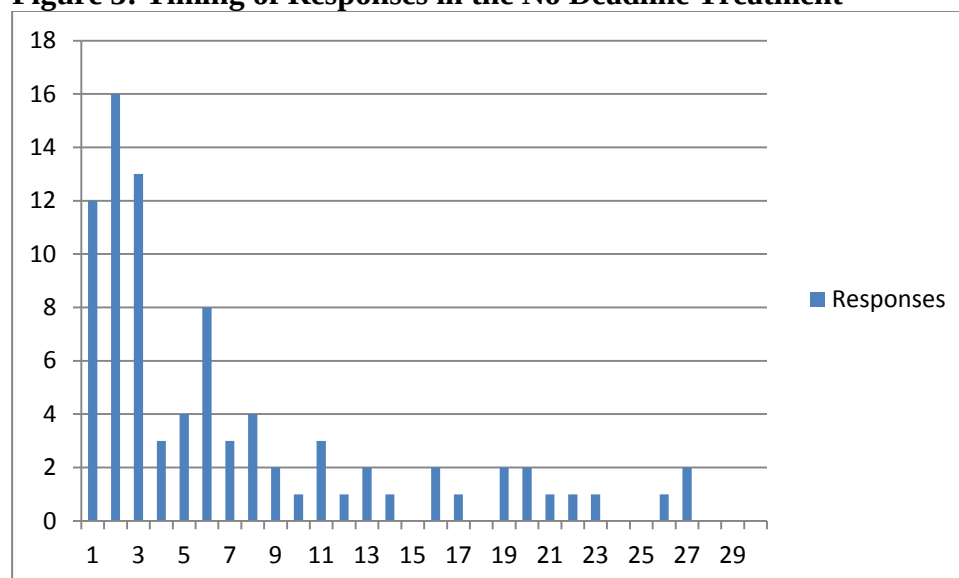


Figure 3: Timing of Responses in the No Deadline Treatment



One feature of all three treatments is that the highest number of responses occurs on Day Two. However, not all letters will have been delivered on the same day; people outside the main centers may have received their letters on what we have labelled as Day Two, whereas for them it was really Day One. Day One is a Thursday (in all three mail-outs), so Days Three and Four correspond to the weekend. Only in the *One Week* treatment do responses fall off immediately after the first weekend. For all three treatments, the majority of donations are made in the first few days, but we do not find as strong a “now or never” effect as Damgaard and Gravert (2014). In our *One Month* treatment only 63% of responses occur in the first seven days; the corresponding figure for the *No Deadline* treatment is 67%. In our *No Deadline* treatment 97 percent of those who responded did so in the first month, with a median response time of 4.5 days. The median response time in *One Month* is five days.

Only four people responded on Day One in the *One Month* treatment, compared to 11 in the *One Week* and 12 in the *No Deadline* treatment. The difference in Day One response rates is marginally statistically significant ($p\text{-value} = 0.076$) between the *One Month* and *No Deadline* treatments. Between the *One Week* and *One Month* treatments the difference is also marginally statistically significant ($p\text{-value} = 0.075$). This lower level of donations on the first day is consistent with the intermediate deadline conveying less urgency than a short deadline or no deadline at all. Focusing on the *No Deadline* treatment, a number of responses continued to come in some weeks after the letter was sent out, with three being received after a month, one of which was after several months. This is consistent with the notion that some

subjects at least interpreted the deadline as being infinite, lending weight to Taubinsky's prediction that responses will be highest in infinite time. However, Figure 3 also shows a significant number of prompt donations, consistent with the idea that some subjects interpreted the lack of deadline as conveying urgency. The key point is that irrespective of how subjects interpreted the lack of deadline, responses were not significantly lower in the *No Deadline* treatment than *One Week* treatment.

The Effect of Gender

As we sent out an equal number of letters to people by gender, we can also analyze whether males and females respond to deadlines in different ways. Due to the nature of our field experiment it is possible that a person receiving the letter passed it on to another household member to complete, and we have some anecdotal evidence that this may have happened in a small number of cases. We know which codes are associated with each gender and also have the data on gender from the online survey.⁶ Of the 215 people who completed the survey, there are two who entered a different gender in the survey, than that associated with the person whom the letter was sent to. Both were in the *One Month* treatment, and both letters were sent to males, but the person answering the survey stated that they were female. It is possible that the wrong answer was included in the survey in error, but another possibility is that the survey was filled in by someone other than the person it was sent to. For our aggregate results, we do not think this is an issue as in everyday life charities would accept donations from a household member other than the person the letter was addressed to; the same may also be true of people conducting surveys. However, this does complicate our analysis of deadline effects by gender. For this reason we omit these two responses from our analysis.

Across the three treatments females were more likely than males to respond, with 134 females (8.36%) and 79 males (4.96%) responding. A Fisher test of these differences is highly significant ($p < 0.001$). Table 2 summarizes the response rates by gender for each treatment and Table 3 presents the p-values for two sided Fisher tests for the level of statistical significance.

⁶ This does not violate subject anonymity, as we looked only at participants' codes, not names, when making this comparison.

Table 2: Response Rates per Treatment by Gender

Treatment	Responses	Letters Sent Minus Letters Returned	Response Rate
<i>Male</i>			
<i>One Week</i>	22	532	4.13%
<i>One Month</i>	22	531	4.14%
<i>No Deadline</i>	35	531	6.59%
<i>Female</i>			
<i>One Week</i>	45	531	8.47%
<i>One Month</i>	35	533	6.57%
<i>No Deadline</i>	54	539	10.02%

Table 3: Significance Tests of Differences between Treatments by Gender

	All Participants	Male	Female
<i>One Week v One Month</i>	0.464	1.000	0.247
<i>One Week v No Deadline</i>	0.081	0.078	0.400
<i>One Month v No Deadline</i>	0.013	0.102	0.046

The only differences between treatments by gender that is statistically significant is *One Month* versus *No Deadline* for females (p-value = 0.046)⁷ and *One Week* versus *No Deadline* for males (p-value = 0.078). However, for males the *One Month* versus *No Deadline* comparison is very close to being significant at the ten percent level (p-value = 0.102). It is likely that the reduction in sample size when disaggregating by gender is responsible for the higher p-values compared to the results for the full sample (i.e. when data on males and females is pooled).

⁷ If the two observations we omitted from the analysis for the reasons discussed above had been included, this p-value would be 0.079.

5. Conclusions

This paper presents a field experiment analyzing the effect of deadline lengths on charitable giving, an example of a non-compulsory task that does not directly benefit the person undertaking it. Our experiment can also be interpreted as providing insights regarding the effect of deadline length on response rates for completing surveys. There is evidence from previous research that increasing deadline length reduces the probability of completing tasks that directly benefit the person taking the action, with the probability of task completion being the lowest when no deadline is specified. In contrast, we find that in the charitable giving context the highest response rate is when no deadline is specified. This is consistent with the predictions of Taubinsky (2014), but in contrast to the assumption made by Damgaard and Gravert (2014) and Huck and Rasul (2011). In our treatment with an intermediate deadline, there were fewer very prompt responses than when we specified a short deadline, or no deadline at all. We interpret this as evidence that specifying a longer deadline in contrast to a short deadline or no deadline at all, sends a signal that there is no urgency to act. People therefore put off donating, and since they are inattentive, this results in lower response rates. Our results have important policy implications both for charitable giving and for maximizing completion rates for surveys. Researchers conducting surveys often specify a deadline by which the survey needs to be completed. Our results imply that survey response rates would be higher in the absence of a deadline. Charities typically do not specify deadlines by which donations need to be made and our results imply this is the optimal strategy, when there are few naturally occurring reminders. However, our results do not imply that deadlines will reduce charitable donations in contexts where there are strong naturally occurring reminders that a deadline is approaching. For example, if a charity asks people to donate before Christmas, there are constant reminders that Christmas is approaching, which may remind people about the opportunity to donate. Having said this, many fundraisers do not have natural reminders and our results suggest that in these reminder-free cases charities should avoid setting deadlines, especially intermediate deadlines, by which donations have to be made.

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Appendix: Sample Letter Sent to Participants

Dear X

Are you interested in completing an online survey on charitable giving, and in doing so earning \$10 for charity? If so, then read on.

Researchers at the University of Otago and University of Canterbury are conducting a survey on charitable giving. Your name has been randomly chosen from the electoral roll to take part in this survey. Note, that in order to take part, you do not need to have made a donation to a charity before. We are interested in the responses both of people who do give money to charity, and those who do not. If you complete the survey by **8 August** the researchers will donate \$10 to charity on your behalf. You will get to choose whether this donation is forwarded to World Vision or the Salvation Army.

The survey is an online survey. To complete the survey please go to **<http://goo.gl/CPW1cr>**

We estimate that the survey will take approximately five minutes to complete.

At the bottom of this letter is a code, which you will need to enter when completing the survey, in order for us to forward \$10 to the charity of your choice. Requiring you to enter the code is to ensure that no-one completes the survey more than once. Each person we have written to has been given a different code. Please be assured, however, that we have not kept a record of who has been given which code (we have just kept a list of all the codes used), so we will have no way of knowing who has given which answers to the survey; that is, your responses will be completely anonymous.

Please note that because of the steps we have taken to guarantee your anonymity, we cannot provide you with a receipt for the money donated on your behalf.

Enclosed is an information sheet with some more information about this research project. Remember, in order for us to make a \$10 donation to the charity you chose, you need to complete the online survey by **8 August**.

Your personal code is **AWF001**.

Thank you for considering this request. If you have any questions, please feel free to email Stephen Knowles (stephen.knowles@otago.ac.nz).

Associate Professor Stephen Knowles (University of Otago)
(On behalf of Maroš Servátka and Trudy Sullivan)