OPTIMISING SUGGESTED DONATIONS FOR GIVENOW

Money in the bank or money on the table?

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Optimising Suggested Donations for GiveNow

An Our Community Innovation Lab report,
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This report is produced by the Our Community Innovation Lab – the engine room for mobilising data to drive social change.

Our team of data scientists, IT engineers and domain knowledge experts is working to bring to life ideas to do old things better and new things first.

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Summary of our findings

Tweaking suggested donation amounts on a GiveNow cause page tends to create a self-cancelling effect – the benefits of influencing some donors to donate a bit more are offset by those who donate less than they otherwise would have. However, individual causes can tailor donation amounts to suit the particular profile of their donors (e.g. period since last donation) to maximise their fundraising income.

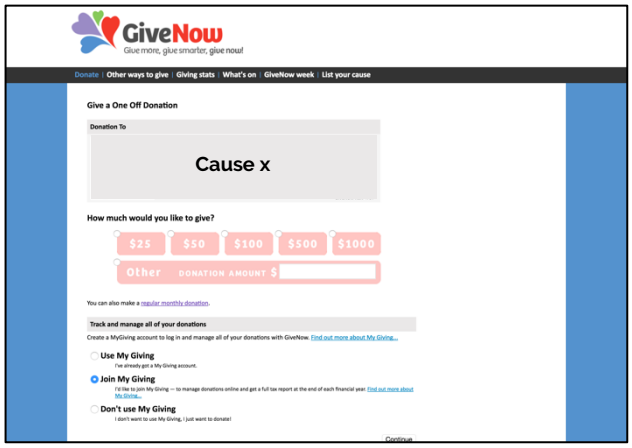
Introduction

Do suggested donations influence giving?

At the Our Community Innovation Lab, we are always on the lookout for opportunities to use data science to improve Our Community's products and services. One such service is our low-fee donations platform, GiveNow. Recently, we set out to answer these questions:

1. Do suggested donations influence giving?
2. Can we increase donations to not-for-profit causes by altering the suggested donation amounts?

Visitors to the GiveNow website are presented with a number of suggested values for their donations[1]:



In the past, we based these default suggested donations on our extensive experience with fundraising, as well as feedback from the organisations that use GiveNow to raise money. While the default values had worked well (GiveNow has raised close to $100 million dollars over its 15-year history) we were intrigued by the possibility of boosting donations by changing the suggested amounts.

There is some evidence (see *Appendix A: Evidence*) in academic literature that donors are influenced by suggested donations. We wondered if there might be some "optimal" suggested donation values (not too high as to turn people off, not too low as to leave money on the table) that would maximise the total amount raised by an organisation using GiveNow. We set out to answer these questions.

[1] GiveNow has received a significant makeover since this study was undertaken, so the images may look different from what visitors see on GiveNow today (check it out!).

From the outset, we realised that we would have to be cautious in making changes to the site. We thought carefully about the ethics of running an experiment on a live site, involving real-life community causes, and about how we would handle the corresponding data.

We made sure to de-identify identifiable information, and to store the measurement data in a secure location and limit its access, all in line with Our Community's privacy policies and Innovation Lab principles. We made sure to never identify individual donors.

We also reflected carefully on the implications of influencing donor decisions. The last thing we wanted was for organisations collecting donations through GiveNow to see a decrease in their fundraising. Because of this, we opted for relatively small, non-intrusive changes; "nudges" if you will. For example, one change we tested was to replace the $25 suggestion with $30. By measuring the response to these small changes over a longer period of time, generally one to two months, we were able to draw statistically significant conclusions. Moreover, we made sure that the donor always had the option to choose their own donation value through a prominently placed "other" value field.

By carefully considering the design of our experiments, we felt comfortable moving forward with the project. Our objective was worthwhile: to ultimately increase income for the (not-for-profit) organisations that use GiveNow.

Our method of measurement ("AB experiments," see *Appendix B: Detailed results*) required 50% of our visitors to see one version of our website and the other 50% to see another version. For example:

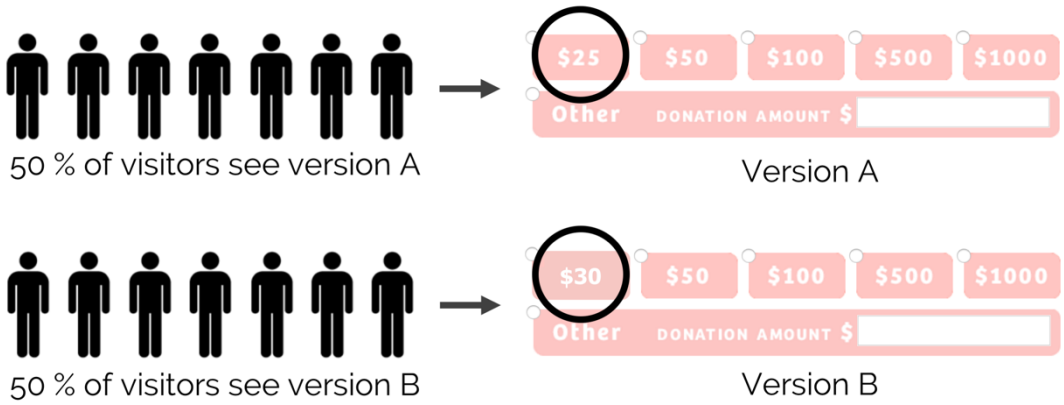


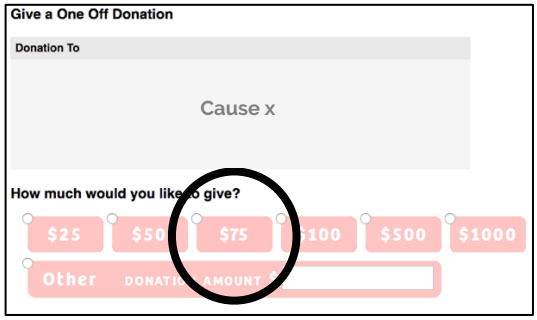
Figure 1: Example of an experiment to measure the impact of changing the $25 suggestion to $30.

Experiments

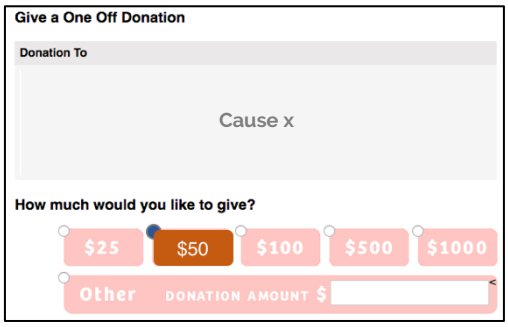
From late 2016 to the end of 2017, we ran a total of three experiments that each compared two versions of the donation page; 50% of users saw the first alternative, the other 50% saw the other. We selected these experiments based on our experience with fundraising and appropriate suggested amounts, as well as our curiosity towards trying a range of different modifications. The experiments are listed below.

1. **Changing the value of a suggested amount**: Changing the $25 suggested amount to $30. Users saw either one of the following two alternatives:

2. **Providing more intermediate suggested amounts**: Adding a $75 suggested amount to the existing suggestions of $25, $50, $100, $500 and $1000. Users saw either one of the following two alternatives:



3. **Setting a default suggested amount**: Pre-selecting and highlighting either $50 or $100. Users saw either one of the following two alternatives:



By examining whether the average donation and/or total value of donations for one option were (statistically) significantly higher than the same values for the other, we could determine whether either option would help raise more donations for the organisations using GiveNow. For further (statistical) details on the experiments, refer to *Appendix B: Detailed results*.

Results

In this section, we summarise the results. For full details, see *Appendix B: Detailed results*.

Experiment 1: Changing the value of a suggested amount (from $25 to $30)

Of the users that saw the $30 suggestion, the increase in donation value from users that picked $30 was offset by another group of users who were turned off and manually chose $20 instead. Further analysis showed that the group dropping to $20 when shown the $30 suggested amount consisted mostly of female donors. Male donors, for which the $30 to $20 drop was not statistically significant, appeared to drown down from $40 to $30 instead. Due to the small sample size, no conclusions could be drawn for non-binary donors. Because female donors drop from $30 to $20, and because male donors drop from $40 to $30, in the end the average donation was almost equal ($34.3 vs $35.2). We concluded that $25 may already be the optimal amount, in the sense that showing higher amounts (e.g. $30) would turn off a fraction of donors, while showing lower amounts (e.g. $20) could leave money on the table from users that would have chosen $25 if suggested.

Experiment 2: Providing more intermediate suggested amounts (adding a $75 option)

Similar to the previous experiment, a "self-cancellation" effect was observed. The increase in donations from users choosing $75 was offset by other donors dropping down from higher amounts to $75.

Experiment 3: Setting a default suggested amount (highlighting either $50 or $100)

While highlighting a default donation amount had a statistically significant effect on the number of times $50 or $100 was chosen, the resulting average value of donations was not (statistically) significantly different between the two versions (again, due to self-cancellation).

Conclusion

Self-cancellation was a recurring factor in all our experiments. Several academic studies (see Appendix A: Evidence) report the same phenomenon. These effects mainly manifest in the donation values surrounding the values being experimented on. For example, $20 was chosen frequently during the $25/$30 test, while in the second experiment some users dropped down and others bumped up from values surrounding the $75 suggestion. Psychological effects are likely at play, nudging some donors to donate slightly higher amounts in the experiments, while simultaneously turning off others.

So what is the take-away? Even though we did not find that any of our tested alternatives significantly increased giving, one important lesson can be distilled from our results (and similar studies): fundraisers should tailor the suggested amounts to their particular donors. Setting the suggestions too low when your donor demographics include many high-value donors will likely leave money on the table, while setting the suggestions too high when your donors mostly donate small amounts will likely result in donors being turned off and refraining from donating altogether. In addition to demographics, whether the donor is "warm" (i.e. recently donated) or "cold" (i.e. has not donated before or has not donated in a while) may also determine whether low suggested donations or high suggested donations will produce better results.

Recognising that different causes attract different types of donors and donation values, we now allow organisations using GiveNow to set their own suggested donation values. We hope that the ability to do so, along with the suggestions in this white paper, will aid organisations in their fundraising activities.

Do you have any feedback on this work? We'd love to hear your thoughts! Email us at service@ourcommunity.com.au.

Appendix A: Evidence

There is various evidence in academic literature (more reliable) and from corporate studies (less reliable) that suggests that the value of suggested amounts influences the value of donations. Some studies reporting a positive impact of prior/suggested/default donations are:

- A Bristol University study of donations to 10,000 people running the London marathon found that a visible, large one-off donation of £100 on the runner's fundraising page increased the amount of subsequent donations by £10 on average. A suggested explanation is that donors use information on earlier donations to decide what an appropriate amount is for their own donation.
- Researchers in a 2010 study found that suggested donations do indeed influence giving. While the optimal amount remains debatable, it was clear from the study that suggesting a moderate amount (in contrast with no amount, or a high amount) positively influenced giving.

Studies do not unanimously report the same positive effects of suggested donations, however, as observed in the competing influences of the average donation and the participation rate:

- A University of Chicago study (also covered here) on default (pre-selected) amounts showed that (1) defaulting a low amount increased participation rates, (2) defaulting a high amount increased the average donation, and (3) using a default reduces the influence of other cues (such as positive charity information). Effects (1) and (2) effectively cancel each other out. One useful practice that proved effective in this study is to set a higher default amount for "warm" donors (who recently donated) and a lower default amount for "cold" donors (who haven't donated in a while).
- A comprehensive 2014 study of 25,000 fundraising letters send to attendees of the Bavarian State Opera showed that suggesting an amount (of €100 or €200) increased the average donation but decreased participation. These effects cancelled each other out, resulting in a non-significant difference in the total funds raised through the three versions of the fundraising letter (no suggestion, €100 suggestion or €200 suggestion).

- A review of literature in the 2014 study also revealed a similar trend in other studies:

> "Donations can be systematically pushed up through higher relative suggestions but response rates decline. The empirical tradeoff is shown in **Figure 2**. While there is only one study that has documented an increase in response rate and donation size, there are quite a few northeast of the iso-income curve going through (1,1)." (p.14)

Figure 2 shows that studies in the top left-hand corner of the graph (relatively high suggested amounts) reported an increase in average donation (values > 1) but a decrease in participation rates (values < 1), while studies in the bottom right-hand corner (relatively low suggested amounts) reported a decrease in average donation while increasing participation rates. Consequently, as discussed in the aforementioned studies, the net-change in total funds raised is frequently non-significant compared to omitting a suggested or default donation.

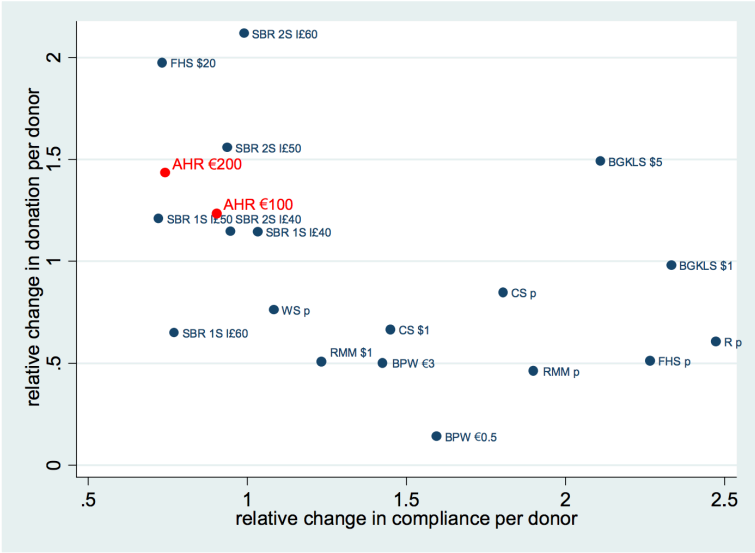


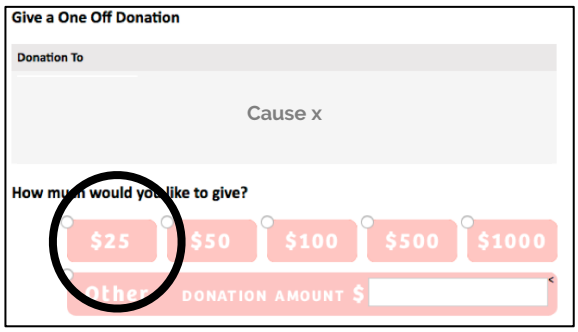
Figure 2 – Relative change in donor compliance (participation rate, on the x-axis) versus the relative change in donation value (on the y-axis), from Adena, Huck & Rasul, 2014.

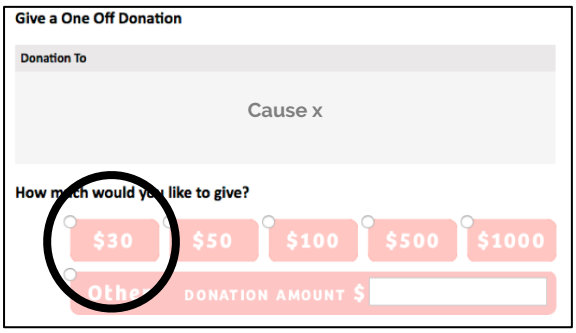
In conclusion, a common theme in research on suggested/default donations appears to be a "self-cancelling" effect, in which increased average donations are offset by lower participation rates. A frequently mentioned remedying strategy is to tailor amounts to the audience of the fundraising campaign, such as the suggestion to set a higher default amount for warm donors and a lower default amount for cold donors.

Appendix B: Detailed results

Experiment 1: Changing suggested amounts

In the first experiment, a suggested amount was varied. Users were shown either of the following two donation pages:





Results

Table 1 shows the results for the first AB experiment. For now, the analysis is limited to one-off donations. We assume that the influence of the difference between version A ($25 suggested) and version B ($30 suggested) is limited to donations between $1 and $50. As such, counts and percentages are shown for the seven most popular donation amounts of $50 and below, with the remaining donations smaller than $50 being aggregated under "Other." The "Significant?" column on the right-hand side of the table indicates whether or not the observed difference in donation count between the two suggested amounts is statistically significant[2].

[2] For the donation counts, a chi-squared test is used, following the formulation used here. Donation averages are compared with a Mann-Whitney U test. Our significance level is 0.05.

One-off donations	$25 suggested		$30 suggested		Significant?
$10	238	(9.2 %)	264	(10.2 %)	No (p=0.24)
$15	39	(1.5 %)	57	(2.2 %)	No (p=0.07)
$20	175	(6.8 %)	253	(9.8 %)	Yes (p<0.01)
$25	705	(27.3 %)	171	(6.6 %)	Yes (p<0.01)
$30	136	(5.3 %)	557	(21.5 %)	Yes (p<0.01)
$40	88	(3.4 %)	53	(2.0 %)	Yes (p<0.01)
$50	1,052	(40.7 %)	1,081	(41.7 %)	No (p=0.48)
Other	151	(5.8 %)	158	(6.1 %)	No (p=0.71)
Total	2,584		2,594		
Average	$34.3		$34.6		No (p=0.05)

Table 1

The results show that changing the suggested amount nudges a certain group of donors to choose $30 instead of manually putting in $25. Interestingly, however, another group of users that saw $30 decided to drop down and manually enter $20 instead. Because the increase in donation value from users that picked $30 instead of $25 is (1) offset by a group of users who were turned off and manually chose $20, and (2) further offset by a group of users who dropped from $40 to $30, the overall average donation between the two versions is very similar ($34.3 vs $34.6).

We see the same trend in regular donations, with the additional observation that the difference in counts for $10 is also statistically significant. This suggests that for regular donations, some donors that saw $30 decreased their final donation even further than observed for one-off donations. It should also be noted that any difference in the average donation will aggregate over time, as the regular donation is repeated every month.

Further investigation of the observations above reveals an interesting difference in gender. Table 2 shows the results for one-off donations, split by gender.

One-off donations	Female donors					Male donors				
	$25 suggested		$30 suggested		Significant?	$25 suggested		$30 suggested		Significant?
$10	131	(8.7 %)	158	(10.3 %)	No (p=0.13)	93	(10.7 %)	90	(10.9 %)	No (p=0.91)
$15	24	(1.6 %)	34	(2.2 %)	No (p=0.21)	15	(1.7 %)	16	(1.9 %)	No (p=0.75)
$20	95	(6.3 %)	168	(11.0 %)	**Yes (p<0.01)**	67	(7.7 %)	68	(8.2 %)	**No (p=0.70)**
$25	457	(30.4 %)	87	(5.7 %)	Yes (p<0.01)	182	(21.0 %)	49	(5.9 %)	Yes (p<0.01)
$30	73	(4.9 %)	347	(22.7 %)	Yes (p<0.01)	49	(5.7 %)	157	(19.0 %)	Yes (p<0.01)
$40	33	(2.2 %)	20	(1.3 %)	**No (p=0.06)**	49	(5.7 %)	29	(3.5 %)	**Yes (p=0.04)**
$50	617	(41.1 %)	629	(41.1 %)	No (p=0.97)	346	(40.0 %)	359	(43.5 %)	No (p=0.14)
Other	73	(4.9 %)	87	(5.7 %)	No (p=0.31)	65	(7.5 %)	57	(6.9 %)	No (p=0.64)
Total	1,503		1,530			866		825		
Average	$34.2		$34.3		No (p=0.23)	$34.2		$35.2		No (p=0.06)

Table 2

The most interesting observation is highlighted in red. As shown, some female donors drop from $30 down to $20, whereas for male donors this does not appear to be the case. Male donors, on the other hand, appear to be responsible for the drop from $40 to $30, when presented with the $30 suggestion, as shown by the statistically significant difference for the $40 donation (which is not significant for female donors). This pattern is not significant for female donors, although it should be noted that the number of observations here (33 vs 20) is relatively low. For regular donations, the results are only shown for a $10 donation (Table 3) to highlight the fact that the drop to $10 can be attributed largely to female donors. In fact, the trend is opposite for male donors: fewer male donors picked $10 when shown $30.

It should be noted that despite the fact that female donors tend to donate smaller amounts and are more likely to be turned off by the $30 suggestion, women donate far more frequently overall (3,033 donations, versus 1,691 donations by male donors during

this experiment alone). As a result, female donors collectively donate a larger total amount than male donors.

Regular donations	Female donors					Male donors				
	$25 suggested		$30 suggested		Signifi-cant?	$25 suggested		$30 suggested		Signifi-cant?
$10	281	(16.6 %)	429	(22.0 %)	Yes (p<0.01)	140	(12.6 %)	81	(9.2 %)	Yes (p=0.01)
Other	1,416	(83.4 %)	1,520	(78.0 %)	Yes (p<0.01)	967	(87.4 %)	802	(90.8 %)	Yes (p=0.01)
Total	1,697		1,949			1,107		883		
Average	$27.25		$27.15		No (p=0.83)	$30.6		$31.7		Yes (p<0.01)

Table 3

Lastly, we checked if the interest area is a confounding variable for the observed drop from $30 to $20 and $10. For example, we investigated whether or not donations made to Animal Welfare causes are made by donors who are likely to drop to $20/$10 when shown $30, while also being more likely to be female. In this scenario, interest area would be the confounding variable for being turned off by $30. Results (not shown) reveal, however, that this scenario does not hold, so (pending any other confounding variables, such as income inequality) the gender explanation stands.

Experiment 2: Adding suggested amounts

In the second experiment, a suggested amount was added. Users were shown either of the following two donation pages:

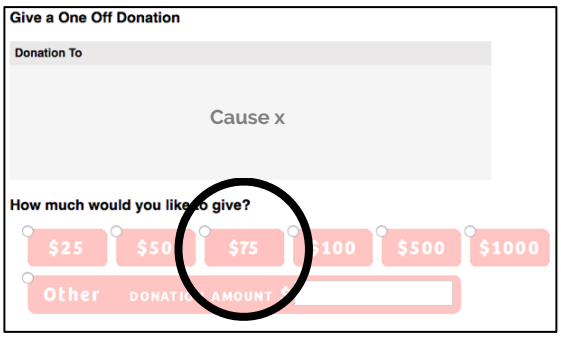


Figure 4: Experiment 2

Results

Table 4 shows the results for the second AB experiment. We assume that the influence of the difference between version A (without $75 option) and version B (with $75 option) is limited to donations between $1 and $200. As such, counts and percentages are shown for the fifteen most popular donation amounts of $200 and below.

One-off donations	Without $75		With $75		Significant?
$10	299	(4.1 %)	330	(4.5 %)	No (p=0.24)
$15	62	(0.8 %)	75	(1.0 %)	No (p=0.28)
$20	208	(2.8 %)	251	(3.4 %)	Yes (p=0.049)
$25	1,082	(14.8 %)	1,030	(14.0 %)	No (p=0.16)
$30	171	(2.3 %)	158	(2.1 %)	No (p=0.43)
$35	35	(0.5 %)	38	(0.5 %)	No (p=0.75)
$40	77	(1.1 %)	77	(1.0 %)	No (p=0.96)
$50	1,916	(26.2 %)	1,881	(25.5 %)	No (p=0.36)
$60	80	(1.1 %)	78	(1.1 %)	No (p=0.84)
$75	56	(0.8 %)	196	(2.7 %)	Yes (p<0.01)
$80	53	(0.7 %)	48	(0.7 %)	No (p=0.59)
$100	2,000	(27.4 %)	1,968	(26.7 %)	No (p=0.39)
$120	52	(0.7 %)	41	(0.6 %)	No (p=0.24)
$150	203	(2.8 %)	177	(2.4 %)	No (p=0.15)
$200	581	(7.9 %)	617	(8.4 %)	No (p=0.34)
Other	437	(6.0 %)	400	(5.4 %)	No (p=0.15)
Total	7,312		7,365		
Average	$75.04		$74.78		No (p=0.47)

Table 4

The results show that adding the $75 suggested amount increases the uptake of the $75 donation. Besides a minor difference in the $20 donation, none of the differences in the other donations under $200 are statistically significant. A better view of the effect of adding the $75 amount is obtained by viewing the percent increase or decrease in the number of donations, as shown **Figure 5**.

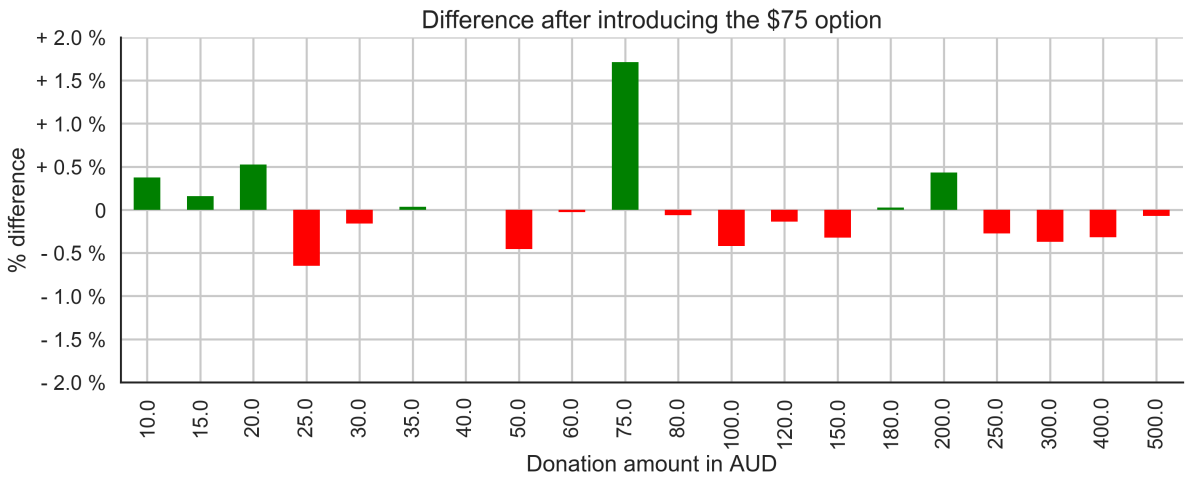
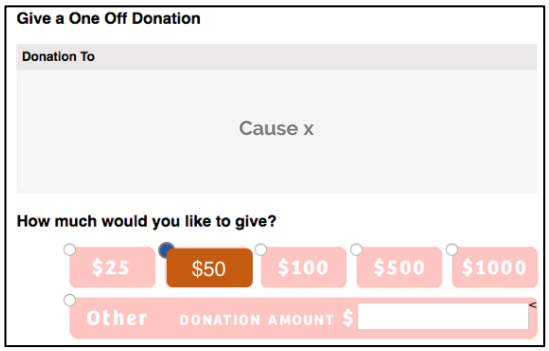


Figure 5

The increase in the number of $75 donations is associated with a decrease in uptake of both several lower donations (e.g. $50) and higher donations (e.g. $100). The decrease in the number of donations over $75 cancels out any increase in donations stemming from donors choosing $75 over a lower donation. As a result, the average donation when the $75 amount is shown ($74.78) is slightly lower (and not statistically different from) the average donation with $75 is not shown ($75.04). These observations hold for regular donations. Unlike the first AB experiment, no gender differences are observed this time.

Experiment 3: Setting a default amount

In the third experiment, a default amount was set. Users were shown either of the two versions below. The default amount is highlighted and the tick box is pre-selected.



Results

Table 5 shows the one-off donation results for the third AB experiment. We assume that the influence of the difference between version A ($50 default) and version B ($100 default) is limited to donations between $1 and $200. As such, counts and percentages are shown for the eight most popular donation amounts of $200 and below, with the remaining donations smaller than $200 being aggregated under "Other."

One-off donations	$50 default		$100 default		Significant?
$10	92	(6.3 %)	103	(7.5 %)	No (p=0.21)
$20	91	(6.2 %)	88	(6.4 %)	No (p=0.85)
$25	228	(15.5 %)	227	(16.4 %)	No (p=0.51)
$30	28	(1.9 %)	29	(2.1 %)	No (p=0.72)
$50	419	(28.6 %)	299	(21.7 %)	Yes (p<0.01)
$100	308	(21.0 %)	335	(24.3 %)	Yes (p=0.04)
$150	36	(2.5 %)	29	(2.1 %)	No (p=0.53)
$200	82	(5.6 %)	76	(5.5 %)	No (p=0.92)
Other	183	(12.5 %)	195	(14.1 %)	No (p=0.20)
Total	1,467		1,381		
Average	$65.52		$67.26		No (p=0.32)

Table 5

As in previous experiments, the variation has a statistically significant effect on the amounts being tested ($50 and $100). Setting the default clearly increases the uptake of the default amount. This trend is also observed for recurring donations. However, while setting a default has a statistically significant effect on the number of times $50 or $100 is chosen, the average value of donations were not (statistically) significantly different between the two default amounts. Why this is the case can be derived from the consideration of all donations under $200, and the percent change in the number of donations for these amounts if $100 is set as a default rather than $50. The result is shown in **Figure 7**.

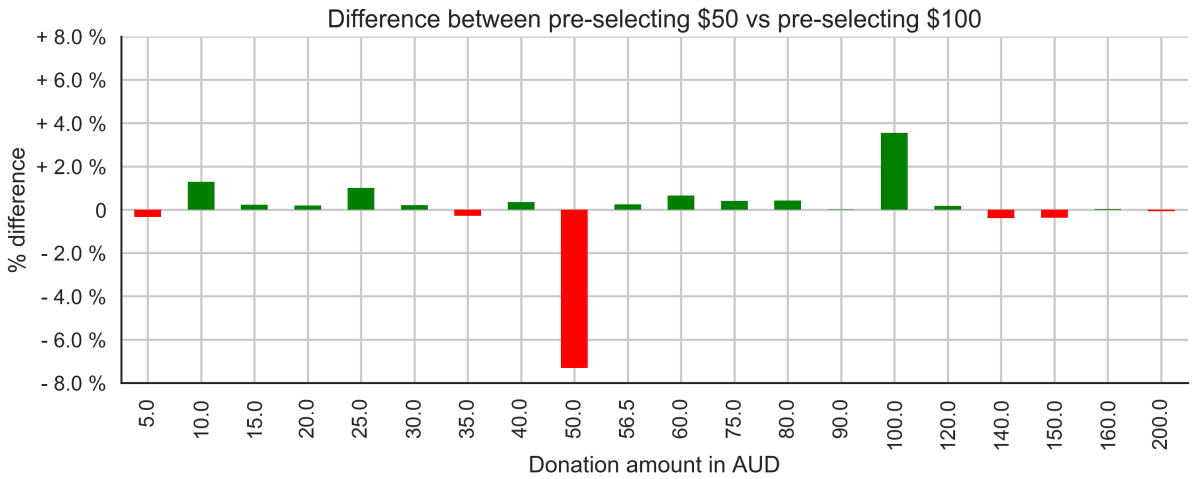


Figure 7

While a fraction of donors opted for a $100 donation when $100 was the default, the size of the green bar for $100 is much smaller than the size of the red bar for $50. The difference (93 donors) is spread across both amounts higher than $50 and amounts lower than $50, with self-cancellation as a result. This, combined with the fact that some donors dropped from $140 and $150 to $100, results in a non-statistically significant difference in average donation between version A and version B of the experiment.

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