

**WHEN ASKING FOR MORE LEADS TO GETTING NOTHING:
THE IMPACT OF ANCHORS ON DONOR'S BEHAVIOR**

Arnaud De Bruyn & Sonja Prokopec
ESSEC Business School

Abstract – Fundraising organizations use donation grids as anchors to artificially influence donation amounts. In this paper, we show that these anchors can have adverse consequences on donation likelihood. We ran a large field experiment in which a charity solicited 50,000 of its donors, and tailored suggested donation amounts based on their past behavior. Two anchoring mechanisms were manipulated, the size of the first amount on the donation grid relative to the previous donation (the *left end* of the grid), and the rate of the increase of the amounts on the rest of the donation grid (influencing the *right end* of the grid). As expected, both anchoring mechanisms have positive influence on donation amounts, but only the size of the first amount on the donation grid negatively influences likelihood of donation. We also show that donors with stronger internal reference points (those who made many donations in the past, or who made a donation recently) are less influenced by grid manipulations.

Keywords – Anchoring; Donation behavior.

Track – Marketing of Public and Non-Profit Organizations

INTRODUCTION

A recurring and important challenge facing managers working in the fundraising sector is how much they should ask for when soliciting donations. The effectiveness of any campaign to solicit donations depends upon compliance rates as well as the magnitude of the help. A standard practice in donation requests is to present a set of suggested amounts, hereafter referred to as a *donation grid*. As we will show in this paper, designing the appropriate donation grid requires strategic trade offs as the donation amounts that are too high might lead to relatively low compliance rates whereas those that are too low might negatively impact the average amount donated.

Anchoring is an extremely robust phenomenon that appears in many contexts, even among experts as well as with important decisions (cf. Wansink, Kent, and Hoch, 1998). People are usually not aware of anchor's influence; furthermore, even random or irrelevant values can influence one's quantity judgments and decisions (cf. Tversky and Kahneman, 1974). Donation grids have been shown to act as de facto frames of reference, directly altering judgment (Schwarz et al. 1991). Fundraising organizations use donation grids to artificially influence donation amounts. When faced with a request for donation, one must decide whether to respond at all, followed by the decision about the amount to be donated. How a consumer makes a decision about the donation is affected partly by the way in which information is presented and partly by his/her own internal characteristics (Lynch, Chakravarti and Anuaree, 1991; Tversky and Kahneman, 1981). While several mechanisms have been identified to positively influence likelihood of donation as well as amounts donated, there is little research that has shown that some anchoring mechanisms might have adverse consequences on consumers' donation decisions.

The purpose of this study is to explore how different designs of donation grids affect the likelihood to donate and the magnitude of average donations. In addition we also explore how donors' individual characteristics impact their compliance with the donation grids. This study makes several contributions to the literature: we identify different donation grid designs that positively as well as negatively impact donation behavior, we show that donors with strong internal reference points are less influenced by the donation grids per se, and finally, our results have both internal and external validity by use of a controlled field experiment.

CONCEPTUAL FOUNDATIONS

There are two theories that could be used to make predictions regarding the effect of the design of the donation grids on the likelihood and the magnitude of donations. The assimilation and contrast theory of Sherif, Taub, and Hovland (1958) as well as the adaptation level theory of Helson (1964) predict that stimuli placed immediately above or below the initial stimuli are assimilated whereas the moderate stimuli are displaced (i.e. contrasted) away from extreme stimuli. In our case this means that suggested contributions signal acceptable amounts to potential donors, thus altering their judgment; possible moderate contributions are perceived to be less generous by the donors when contrasted with large anchor points present on the donation grid, and this in turn might inhibit the donors from donating at all. The results to this point are not always convergent (Desmet and Feinberg, 2003). Previous research shows that as the magnitude of the lower anchor point increases, the magnitude of donation increases but the likelihood of contribution is not affected (Fraser, Hite and Sauer, 1988). However, previous studies have either used very small anchors (Fraser et al. 1998) or only one anchor point was tested (Schwarzwald, Bizman, and Raz 1983). In addition, previous research finds that the most often selected alternative on the donation grid is not the central¹, but the lowest scale value

¹ As could be predicted by the 'extremeness aversion' choice phenomenon (Simonson and Tversky, 1992)

(Schibrowsky and Peltier, 1995). This means that most of the consumers use the lowest value on the donation grid as the anchor against which they judge their contribution.

Both extremes of the donation grids play the role of signals: the *left end* (the lowest amount) of the donation grid signals the lowest amount the donor is expected to contribute; while the *right end* (the highest amount) signals the upper limit of the expected contribution.

When it comes to donation likelihood, if the lowest suggested amount is considerably higher than donors' internal reference point, they are more likely not to make the donation². However, manipulating the right end should not impact donation likelihood. Thus, we argue that:

H₁ Increasing the *left end* of the donation grid will decrease the likelihood of donation.

Building on assimilation and contrast theory of Sherif et al. (1958), we argue that introducing large anchor points alters the context in which donors contribution is judged, shifting focus and comparison away from the internal reference points (based on previous donation) toward the larger amounts present on the donation grid, and thus altering judgments concerning the perceived generosity of a moderate donation. Larger anchor points on the donation grid should increase response magnitudes, because they provide maximum anchor points, which can be used by individual donors as points of comparison. This reasoning works for both extremes:

H₂ Increasing both the *left end* and the *right end* of the donation grid will increase average donation amount.

In addition to using the suggested amounts on the donation grid (i.e. external reference points) to make their donation decisions, individuals might also use their previous donation amount (i.e. internal reference point) as a basis of their decision. We argue that some characteristics of individual donors make them more (or less) susceptible to the influence of external anchors. Moreover, the salience and the strength of the donors' internal anchor are going to depend on the frequency of their donation, the recency of the last donation as well as the amount last donated. Wansink et al. (1998) find that both low (past purchase quantities) and high (future usage quantities) internal anchors overpower the effect of external anchors. Thus, donors who have clear internal anchors that have been formed based on frequent past donations are less likely to be influenced by the external anchors (or design of the donation grids).

H₃ Anchoring mechanisms will have a stronger influence on the infrequent donors (low frequency) than on the more regular donors.

In similar vein, donors who donated to the charity recently will also have more clear internal anchors, as they can easily recall their previous donation amounts. Thus, they are less likely to be influenced by the design of the donation grids:

H₄ Anchoring mechanisms will have a stronger influence on the lapsed donors (less recent) than on the more recent donors.

Furthermore, we can assume that high givers should have "stronger" internal reference points that are more salient compared to low givers. Thus, we could expect that the external referents (the donation grid) will be less influential on their decision to donate:

² Adaptation level and assimilation-contrast theories conclude that consumers' perceptions are affected by external reference points that are judged plausible relative to consumers' internal reference points. When this is not the case (i.e. the external reference point is judged to be outside the range of plausible reference points), consumers will reject it and judge it as belonging to some other category or grouping – the contrast effect (Monroe and Petroshius, 1981). Urbany, Bearden and Weilbaker (1988) show that a donation request that is considered unrealistic (e.g. asking for far more than someone is willing to give) fails to appreciably influence donor behavior.

- H₅ Anchoring mechanisms will have a stronger influence on the less generous donors' likelihood to donate (low amount) than on the more generous donors' likelihood to donate.

EMPIRICAL STUDY

In the summer of 2006, a large European nonprofit organization sent a solicitation letter to its existing donors. All solicited donors were known to the charity, and had made at least one donation in the past. Each solicitation included a letter, a pre-stamped envelope, and a reply coupon. Typically, if a donor was willing to make a donation, s/he would use the pre-addressed envelope and send a check, along with the reply coupon. The letter was personalized with the donor's name, address, and unique id (to facilitate her identification in the database), as well as a personalized donation grid: a list of four suggested donation amounts, tailored to each donor's past behavior (i.e., last donation amount), as follows (illustration):

100 € 120 € 150 € 200 € Other: _____

Figure 1 – Typical donation grid, with four suggested donation amounts, and an « other amount » option.

The nonprofit organization and the research team manipulated donation grids to study their impact on actual donation behavior. The manipulations were twofold. First, we manipulated how the donor's internal reference point (i.e., her last donation amount) was embedded in the donation grid. Traditionally, the first suggested amount of the grid is very close to the donor's most likely behavior, the other amounts being suggested as upgrading options. The **reference point** (the first amount, or left end of the grid) was manipulated as follow:

LOWER	the first suggested amount (the <i>left end</i> of the grid) is actually lower than the donor's last gift;
EQUAL	the first suggested donation amount is equal to the donor's last gift;
HIGHER	the first suggested donation amount is higher than the donor's last gift.

Second, further suggested amounts were proportionally increased (influencing the *right end* of the grid), and the **steepness** of this increase was manipulated, as follow:

LOW	suggested donation amounts were increasing at a 20% rate;
MEDIUM	suggested donation amounts were increasing at a 50% rate;
HIGH	amounts were increasing at a 80% rate.

		Reference point		
		Lower	Equal	Higher
Steepness	Low	80..140	100..170	120..200
	Medium	50..230	100..350	150..530
	High	20..320	100..580	180..1040

Table 1 – Low and high ends of a donation grid (suggested amounts) for a typical donor whose last donation amount was 100 €, for each condition.

Table 1 shows the *low end* and *high end* of the donation grids, for all 3 by 3 conditions. Each condition was tested on 5,579 randomly selected donors. The authors had access to the database at the time of the selection, and performed a stratified sample selection to ensure that no selection biases were inadvertently created across conditions. Information about donors'

behavior at the time of the solicitation (recency, frequency, and amount) was stored for further analysis.

Six months after the launch of the campaign, the list of donors who made a donation for this campaign was reported back to the research team, along with their donation amounts. Only those donors who used the reply coupon –a vast majority of them– were analyzed, ensuring that they have been exposed to the manipulations, and resulting in a sample of 50,208 respondents.

RESULTS

Main effects

The first step of the analysis is to measure the main effects of the anchoring mechanisms on both likelihood of donation and donation amount.

The return rate was 9.0% on the entire sample, and varied between 7.9% and 10.1% across conditions, as shown in Table 2. An ANOVA analysis shows that differences across groups are statistically significant ($F=3.783$, $p<.001$).

		Reference point			
		Lower	Equal	Higher	Average
Steepness	Low	9.8%	9.2%	8.5%	9.2%
	Medium	9.4%	9.1%	8.1%	8.9%
	High	10.1%	9.3%	7.9%	9.1%
	<i>Average</i>	9.8%	9.2%	8.2%	9.0%

Table 2 – Average return rates of the solicitation campaign, for each of the 9 conditions. To manipulate the reference point (low end of the donation grid) affects likelihood of donation, while to modify the steepness of the grid (high end) bears no significant effect.

		Reference point			
		Lower	Equal	Higher	Average
Steepness	Low	.949	.960	1.037	.980
	Medium	.895	1.000	1.085	.989
	High	.937	.982	1.212	1.031
	<i>Average</i>	.927	.980	1.109	1.000

Table 3 – Donation amounts, expressed as a deviation to a base of 1, for each of the 9 conditions. Both anchoring mechanisms affect donation amounts, but to manipulate the reference point (low end of the grid) has a stronger effect than to manipulate the steepness of the grid (high end).

Manipulation of the donation grid reference point affects the response rate, as expected: the response rate in the HIGHER condition is 1% lower than in the EQUAL condition, a difference that strongly achieves significance (t-test, $p<.001$). The difference between the LOWER and the EQUAL condition is 0.6%, which does also achieve significance ($p=.038$). The difference between the LOWER and HIGHER conditions is 1.6% ($p<.001$). To increase the lower end of the donation grid seems to discourage donations, consistent with hypothesis H₁.

To manipulate the steepness of the donation grid, however, does not affect the likelihood of donation, and none of the differences across conditions achieve statistical significance ($p=.377$, $.504$, and $.831$, respectively), consistent with our theoretical development.

Of the 50,208 solicited donors, 4,539 (9.0%) made a donation. We now compare how manipulations of the donation grids affected the donation amount of those 4,539 individuals. To facilitate comparisons, we report donation amounts as a deviation from donors' past donation amount. A high value (>1) indicates a donation amount pushed above what could have been expected from a particular donor, while a value lower than 1 indicates a donation amount adversely affected. Table 3 shows the average donation amounts, expressed as indicated above, across all conditions (by construction, the grand average is equal to 1).

When the reference point is manipulated, donation amounts vary from .927 (or -7.3% compared to base) for the LOWER condition to 1.109 (+10.9%) for the HIGHER condition and is highly significant ($p<.001$). The steepness of the grid also affects donation amounts, as hypothesized, although to a lesser extent. The difference between the LOW and HIGH manipulations is .052, which is significant ($p=.003$). As expected, both anchoring mechanisms affect donation amounts, strongly supporting H₂; although changing the reference point (the lower end of the grid) has the greatest effect.

Moderating effects

We hypothesized that anchoring mechanisms might affect donors differently, depending on their characteristics. While space limitation prevents us to fully develop the procedure used to test the moderating effect of frequency, recency, and past generosity on anchor effectiveness, we report here the key results of our analyses.

Frequency. We suggested that donors who have made numerous donations in the past to the charity might have developed a strong internal reference point, and that this reference point might counterbalance the influence of anchoring mechanisms, hence reducing their amplitude. Data confirms this hypothesis. To manipulate the reference point (we will refer to the difference between the HIGHER/LOWER or HIGH/LOW conditions throughout) reduced donation likelihood by 18.6% for donors who made one donation in the past, while reducing it by 16.8% for donors who made 2 donations or more in the past. The difference is significant at $p=.037$. More strikingly, donations amounts increased by 24.3% (reference point manipulation) and 10.2% (steepness manipulation) for donors who made one donation, while the same figures were much lower (18.7% and 4.7%) for donors with 2 donations or more. Both differences are highly significant ($p<.001$), strongly supporting hypothesis H₃.

Recency. It was hypothesized that for those donors who made a donation recently, their behavior would be more vivid in their memory, and would serve as a stronger internal reference point from which anchoring mechanisms might not be able to lead them astray. This hypothesis is confirmed when it comes to likelihood of donation: a high reference point decreased donation likelihood by 13.3% for the most recent donors, while decreasing it by 19.1% for the lapsed donors. The difference is highly significant ($p<.001$). (Since steepness had no influence, differential impact is meaningless and is not reported.) The reverse relationship is observed for donation amounts, however, both anchoring mechanisms having a larger impact on recent donors ($p<.001$), offering only partial support to hypothesis H₄.

Generosity. When looking at donation likelihood, to manipulate the reference point had a 14.9% negative impact on average response rate for the most generous donors. For the least generous donors, the same manipulation decreased donation likelihood by 17.5%, which is significantly higher than 14.9% ($p<.001$). (Since steepness had no effect on donation likelihood, we do not draw conclusions about the observed differences.) The same pattern of results emerge about donation amount; the least generous donors' were much more influenced by anchoring mechanisms, whether the manipulation was the reference point ($p<.001$) or the steepness of the donation grid ($p<.001$). The least generous donors are much more influenced by anchoring mechanisms than more generous donors, strongly supporting hypothesis H₅.

CONCLUSIONS

Charities use donation grids (suggested donation amounts) to influence donors' monetary contributions. The influence of donation grids on behavior is well explained by the anchoring literature. However, the literature reports little evidence about the potentially adverse consequences of these marketing tactics on likelihood of donation.

In this paper, we report the results of a large controlled experiment, in which 50,000 donors were solicited, and were exposed to various manipulations of donation grids. While our results confirm that both anchors (manipulating the *low end* and the *high end* of the donation grid) increase donation amount, we showed that manipulating the *low end* of the donation grid also decreased the likelihood of donation, hence adversely affecting overall donations. We also showed that the amplitude of these effects predictably varied based on donors' characteristics.

This paper is important both for academics and practitioners, demonstrating for the first time in a large-scale experiment the potentially adverse consequences of anchoring mechanisms on donation likelihood, and the need for future research in this area.

REFERENCES

- Davison, A.C. & Hinkley D.V. (1997). *Bootstrap Methods and Their Application*. Cambridge Series in Statistical and Probabilistic Mathematics: Cambridge University Press.
- Fraser, C., Hite R.E., & Sauer P.L. (1988). Increasing contributions in solicitation campaigns: The use of large and small anchor points. *Journal of Consumer Research*, 15 (September), 284 -287.
- Helson, H. (1964). *Adaptation-level theory: An experimental and systematic approach to behavior*, New York: Harper & Row.
- Lynch, J.G., Chakravarti, D., & Mitra, A. (1991). Contrast effects in consumer judgments: Changes in mental states or rating scales? *Journal of Consumer Research*, 18, 284-297.
- Monroe, K.B. & Petroshius S.M. (1981). Buyers' Perceptions of price: An update of the evidence, in *Perceptives in Consumer Behavior*, eds. Harold H. Kassarian and Thomas S. Roberston, Glenview, IL: Scott, Foresman, 43-55.
- Schwarzwald, J., Bizman, A., & Raz, M. (1983). The foot-in-the-door paradigm: Effects of second request size on donation probability and donor generosity. *Personality and Social Psychology Bulletin*, 9 (September), 443-450.
- Sherif, M., Taub, D., & Hivland, C. (1958). Assimilation and contrast effects of anchoring stimuli on judgments. *Journal of Experimental Psychology*, 55 (2), 150-156.
- Simonson, I. & Tversky, A. (1992). Choice in context: Tradeoff contrast and extremeness aversion. *Journal of Marketing Research*, 29 (August), 281-295.
- Tversky, A. & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 453-458.
- Tversky, A. & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 1124-1131.
- Urbany, J.E., Bearden, W.O., & Weilbaker, D.C. (1988). The effect of plausible and exaggerated reference prices on consumer perceptions and price search. *Journal of Consumer Research*, 15, 95 -110.
- Wansink, B., Kent R.J., & Hoch R.J. (1998). An anchoring and adjustment model of purchase quantity decision. *Journal of Marketing Research*, 35(1), 71-81.