

# Let Me Think About It: Evidence of Choice Deprivation, Not Overload, in Charitable Giving

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**JEL Classification**    C91, D64, D91, H00

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# LET ME THINK ABOUT IT: EVIDENCE OF CHOICE DEPRIVATION, NOT OVERLOAD, IN CHARITABLE GIVING\*

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## Abstract

We present comprehensive experimental evidence that expanding the number of charitable options enhances both donation outcomes and donor experience, suggesting choice deprivation rather than choice overload. In a pre-registered online experiment with over 2,248 participants donating real money to UK charities (average donation of £1.59 out of £2.50), we find that increasing the number of available charities raises total donations robustly by approximately £0.04. Furthermore, allowing participants to donate to multiple charities, rather than restricting them to one, boosts donations by £0.23 on average, without increasing regret or diminishing satisfaction. Other mediators, difficulty, deliberation, and familiarity, do not explain the impact of treatments on giving behaviour. Our design rules out alternative explanations, including self-interest, ease of donation, or perceived importance of giving, and highlights that more choices encourage thoughtful engagement with the donation decision. The results are highly relevant to the design of consumer-facing interventions in pro-environmental domains, importantly for energy and climate policy. In areas such as carbon offsetting and climate-focused giving, individuals are required to make voluntary contributions or adopt sustainable products. Our evidence suggests that providing diverse and flexible choices can increase contributions in these domains.

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# 1 Introduction

In 2023, the British public donated a staggering £13.9 billion to various charitable causes, an upward trajectory that has endured over time (Charities Aid Foundation 2024). The transition toward digital channels has become increasingly pronounced: online donations increased from 20% in 2019 to 26% in 2022, while traditional cash donations dwindled from 51% to 35% (Charities Aid Foundation 2023). In 2020, more than half of charities said they needed to shift to a more online fundraising approach (Charities Aid Foundation 2020). Online donations typically entail a greater variety of options than traditional donations, there are now over 170,000 registered charities in the UK, for instance a notable subset of 4,500 dedicated to animals and animal welfare.<sup>1</sup> As charities rely more on creative and digital fundraising approaches, will providing more giving options result in more or fewer donations?

A large body of literature in economics, psychology, and consumer studies suggests that having too many options can become overwhelming, leading to decision paralysis. Individuals may still make a decision, but often with lower satisfaction and greater regret (Iyengar & Lepper 2000, Chernev et al. 2015, Reutskaja et al. 2020). However, recent studies have highlighted choice deprivation as the lack of a diverse range of options (Reutskaja et al. 2022, Misuraca et al. 2024, Sharma & Sharma 2024, Jacob et al. 2024). Choice deprivation can lead to regret and dissatisfaction, which can be consequential in charitable giving. The absence of meaningful options limits individuals from aligning their donations with personal values, priorities, or preferences. This misalignment results in suboptimal outcomes for the individuals involved and the broader systems they participate in. In charitable giving, choice deprivation may manifest when donors are offered a narrow selection of programmes to support within a charity. Recent studies suggest that choice deprivation can decrease satisfaction more than choice overload does (Reutskaja et al. 2022), underscoring the importance of addressing choice deprivation to foster more effective decision-making frameworks in philanthropy.

On the one hand, the number of people giving has been steadily decreasing since 2016 (an estimated 4.9 million fewer people)<sup>2</sup>, which could indicate choice overload (Schwartz 2004). On the other hand, the total amount donated has increased alongside the growth of online giving, which may suggest choice deprivation. These contrasting trends imply that the extensive margin (number of donors) and the intensive margin (amount donated) reflect different effects, fewer people choosing to give, but those who do give may donate more.

We use a comprehensive experimental design to explore donation behaviour, quantified by the amount donated and donors' subjective well-being, with the latter assessed through regret and satisfaction scales tailored explicitly to donation decisions. All participants in the experiment received an endowment (equivalent to £2.50) which was split into one hundred tokens per donation round. They were made aware that all donations had a real-world impact and were transferred to the respective charities. In this design, we distinguish between donors having

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<sup>1</sup> <https://www.cafonline.org/my-personal-giving/start-giving/donate-now>

<sup>2</sup> <https://www.cafonline.org/home/about-us/press-office/millions-fewer-people-donating-to-charity>

more charities to choose from (the “option” treatment, a within-subjects design) and being able to donate to multiple charities versus just one (the “choice” treatment, a between-subjects design). In another treatment, participants can donate effortlessly by using a “default” charity, which is designed to ease the burden of making a decision and ameliorate potential choice overload. We also measure several potential moderators and mediators, including altruism and charitable behaviour, pre-existing decision-making characteristics, and demographic variables. To isolate the effects of our main treatments, we also control for potential confounds. For instance, the number of available options may serve as a signal of societal need, potentially influencing donation behaviour independently. To address this, we include an additional treatment to test for the perceived importance of a charitable cause as the number of charities increases. Moreover, to ensure that observed non-donation is not simply a result of self-interest, participants could drop out before the main donation decisions and keep the money for themselves. These allow us to more confidently interpret donation behaviour as a product of the experimental conditions rather than individual selfishness.

Our results uniformly point towards choice deprivation rather than choice overload. Participants who see more charities donate around five tokens more to charity. Controlling for the number of charities, those who can donate to multiple charities donate around sixteen more tokens than those who can donate to just one. These treatments interact: being able to choose from more charities is more conducive to increased donations when participants can select multiple charities. A default donation option, intended to reduce choice overload, does not appear to influence donation amounts compared to the treatment without a default. Further analysis uses regret and satisfaction as the dependent variables and the amount donated as a mediator. Our findings reveal that having more charities to choose from significantly increases donor satisfaction. The ability to donate to multiple charities does not meaningfully affect satisfaction levels compared to choosing only one. We find that presenting more options tends to increase regret. However, the “choice” and “default” treatments have no significant impact on regret, suggesting that while the abundance of options shapes reflection, the structure of choice itself does not.

We also examined potential mechanisms behind these effects to better understand how choice structures influence donation behaviour. The larger charity sets significantly enhance deliberation, familiarity, and perceived difficulty, suggesting greater cognitive engagement rather than decision paralysis. But none of these variables mediated the effect of treatment on donation amounts. The choice treatment increases donation amounts but does not significantly affect difficulty or avoidance. It modestly elevates deliberation without affecting satisfaction donors, suggesting that greater flexibility in giving encourages more thoughtful decision-making. Notably, decision avoidance increases only when many options are presented without added choice flexibility, indicating that choice overload is attenuated when donors are empowered to act on their preferences. We further tested whether a greater number of charitable options signals the perceived importance of a cause. The results showed no significant shift in donor category selection, indicating that expanded options influence giving primarily through changes in choice environment rather than signalling urgency or importance.

We contribute to the literature on choice overload in charitable giving in several ways. Firstly, there is an ongoing debate in the literature regarding the appropriate measure of choice overload, with differing views on the most relevant outcome variables, mediators, and moderators (Scheibehenne et al. 2010, Chernev et al. 2015). We address this gap by incorporating a comprehensive set of relevant measures that extend beyond donation behaviour to include donors' welfare. By doing so, our study acknowledges and investigates the multifaceted nature of choice overload in this context. Secondly, we take a three-dimensional approach, analysing the intensive and extensive margins of donation behaviour and donor welfare. This comprehensive framework allows us to capture the nuanced effects of choice overload, considering whether donors give, how much they give, and how their choices affect their overall satisfaction. Thirdly, we rule out likely explanations other than choice overload, such as ease of decision, selfishness, the perceived importance of donation, or individual heterogeneity. To our knowledge, no other study has controlled for all of these confounders when investigating choice overload or deprivation specifically.

Most importantly, we make an important distinction between having many options available and having the freedom to choose multiple options, which has not been extensively explored in the literature. The former concerns the number of available choices, which may lead to cognitive overload, while the latter involves the autonomy to select multiple options, potentially enhancing perceived control. These dynamics may affect decision-making and satisfaction in distinct ways. By separating them, this study offers new insight into how option abundance and choice freedom shape donor behaviour. Related work includes Andreoni (2007) on giving to many vs. one charity, Weisz & Cikara (2020) on how more action options boost donations, and Soyer & Hogarth (2011) on fairness perceptions and choice set size.

Our findings carry important policy implications, suggesting that expanding donation options within a charity can serve as a cost-effective strategy to boost contributions. Participants donated more when presented with a larger set of charities and even more when allowed to donate to multiple charities, without experiencing adverse subjective effects such as regret. This approach contrasts with traditional fundraising strategies that emphasise the impact of a single small donation, such as appeals like "A monthly gift of £3 could feed . . ." or "£5 could provide veterinary care . . .". Instead, our results suggest that allowing donors to support multiple programmes within a single charity, similar to enabling them to allocate funds across different charities, may enhance engagement and increase overall giving.

These results challenge concerns about choice overload and highlight choice deprivation as a limiting factor in charitable giving. While choice deprivation was not a pre-registered hypothesis<sup>3</sup>, they point to the influence of structural features of the choice environment, specifically, the number of options available and the ability to choose multiple recipients, on donor behaviour. Unlike tax incentives, which dominate public policy on charitable donations (Duquette 2016,

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<sup>3</sup>The experimental design and hypotheses were pre-registered at <https://doi.org/10.17605/OSF.IO/SBPM>. Interpretations related to the structure of the choice environment (Johnson et al. 2012) emerged during analysis and are presented as post hoc insights.

[Almunia et al. 2020](#)), adjusting these structural features in online donation platforms offers a cost-effective and non-financial lever to increase contributions. Allowing donors to distribute funds across multiple organisations enhances the voluntary provision of public goods, making it a viable strategy for charities and policymakers seeking to maximise donations. From a public economics perspective, this can be seen as an efficient fundraising mechanism for charities and nonprofits.

The remainder of the paper is structured as follows. Section 2 reviews empirical work on choice overload in charitable giving and consumer contexts. Section 3 details the experimental design. Results are presented in Section 4, followed by policy implications in Section 5 and a discussion in Section 6. Section 7 concludes. Summary of the key results is reported in Appendix A. Robustness checks is reported in Appendix B, with survey questions and instructions in Appendices C and D.

## 2 Empirical Studies

This study builds on psychological research showing that large choice sets can reduce motivation and satisfaction ([Iyengar & Lepper 2000](#), [Schwartz 2004](#)). While choice overload has been widely studied, findings remain inconsistent. A meta-analysis by [Scheibehenne et al. \(2010\)](#) found no average negative effect of more options but noted high variability, with some studies showing overload and others finding increased satisfaction, a phenomenon termed “choice deprivation” ([Reutskaja et al. 2022](#)). These mixed results may be due to moderating factors. [Chernev et al. \(2015\)](#) identified four categories of such moderators: choice set complexity, task difficulty, preference uncertainty, and decision goals. We contribute to this literature by testing a broader set of outcomes, treatments, and both moderators and mediators, including decision time, perceived difficulty, and participant understanding. This allows us to examine not only the outcomes of choice but also the underlying processes through which donors engage with complex decision environments.

A smaller but growing literature examines choice overload specifically in the context of charitable giving. Here, too, results are mixed. [Scheibehenne et al. \(2009\)](#), [Soyer & Hogarth \(2011\)](#), [Carroll et al. \(2011\)](#), each examining different aspects of donation decisions. [Scheibehenne et al. \(2009\)](#) report mixed findings from a German study where participants chose to keep or donate money. [Soyer & Hogarth \(2011\)](#) find that more options increase donations, interpreting this as a signal of cause importance that enhances sympathy. [Carroll et al. \(2011\)](#) focus on volunteering (time donation) and find evidence of choice overload in two studies.

More recent work emphasises the dual possibility of overload and deprivation ([White 2021](#), [Weisz & Cikara 2020](#), [Lindkvist & Luke 2022](#), [Moche & Västfjäll 2022](#)). [White \(2021\)](#) find a U-shaped relationship on the extensive margin (whether to donate), with the fewest donations occurring at intermediate choice set sizes, but no effect on the intensive margin (how much is donated). [Lindkvist & Luke \(2022\)](#) test 16 assortment sizes and find no significant effect of choice set size on donation likelihood, regardless of preference certainty. [Weisz & Cikara \(2020\)](#) and [Soyer & Hogarth \(2011\)](#) highlight how giving increases when individuals are presented with multiple

action options (or “bids”), rather than a single default.

Other research explores the emotional and cognitive implications of charitable choices. [Diehl & Poynor \(2010\)](#) show that a greater number of choices indicates to consumers that they will be more likely to match their preferences and, therefore, a greater possibility of disappointment if they do not, leading to lower satisfaction with the choice. [Moche & Västfjäll \(2022\)](#) find that active choices generate more negative affect than passive defaults, challenging the predictions of ‘warm glow’ theory and supporting more consequentialist models of giving.

Our design builds on established methods in experimental economics, including dictator games in charitable contexts ([Eckel & Grossman 1996](#), [Andreoni & Miller 2002](#)) and techniques to distinguish strategic deferral from inattention or overload ([Costa-Gomes et al. 2022](#)). In a set of four different studies, [Herzenstein et al. \(2020\)](#) continuously found a U-shaped relationship between the number of options and likelihood of contribution. They also found shape of the curve is dependent on the cause: pro-social giving has a U-shape, while pro-profit giving has an inverse U-shape. [Zheng et al. \(2025\)](#) found that donors who earn high rewards in the experiment are more likely to experience choice deprivation, while those who earn fewer rewards are likely to experience choice overload.

The study most comparable to ours is [Hilmy et al. \(2023\)](#), who test choice overload in an online donation platform in Indonesia. They find that smaller, highly personalised choice sets, where donors choose among identifiable recipients with photos and detailed narratives, lead to greater giving. Donations are highest with 3 recipients, lower with 8, and lower still with 10. Their interpretation is that fewer, emotionally resonant choices encourage greater cognitive effort and empathy.

Our study differs in both design and context. While their choices centre on identifiable individuals, we model a more realistic digital donation environment, with larger, list-style charity sets, similar to platforms like the Charities Aid Foundation, which initially raised concerns about choice overload. Moreover, we allow multiple donations per session, which may reduce cognitive burden. Our findings suggest that, in these settings, more options do not necessarily overwhelm donors, especially when multiple donations are possible. This underscores the importance of contextual features, such as presentation style and flexibility, in moderating the effects of choice set size.

Finally, our experiment connects to core economic theories of charitable giving, particularly in how choice overload interacts with social preferences. Economists have long studied the motives behind charitable behaviour, which may shape how donors respond to complex choices (see [Vesterlund \(2016\)](#) for a review). For instance, in standard models of altruism and social preferences (e.g., [Becker 1974](#)), donors care about the outcomes of their giving. In this case, a larger set of options might increase cognitive burden, as donors deliberate more carefully to match their preferences. By contrast, if giving is primarily driven by a “warm glow” motive ([Andreoni 1990](#)), where the act of giving itself provides utility, donors may make quicker, less deliberative choices, with little concern for optimisation. These differing motivations suggest that responses to choice overload may vary systematically across donor types.



This literature highlights several open questions: whether increased choice reduces or enhances charitable engagement, whether donors experience choice overload or deprivation, and how active selection affects subjective welfare. Our experiment is designed to speak directly to these debates by varying the number of options and the flexibility of giving, while incorporating subjective measures such as satisfaction and regret. In doing so, we aim to test competing predictions from these literatures in a unified framework.

### 3 Experimental Design

The experiment uses a factorial design with two factors: Option (High, Low), Choice (1Choice, MChoice, Default), resulting in twelve distinct treatment conditions as described below. Donation behaviour is measured using a dictator game framework, where participants allocate a fixed endowment of 200 tokens (= £2.5) across two rounds between themselves and a charity recipient (Forsythe et al. 1994, Eckel & Grossman 1996, Andreoni & Miller 2002).

#### 3.1 Designed Interventions

**Option treatment** The option treatment uses a within-subject design to create choice overload by changing the number of charities shown to participants. The number of charities can be either low (5 charities) or high (40 charities)<sup>4</sup>. Each participant makes two donation decisions, where they choose only one charity and decide how much to donate. The number of charities can either stay the same or change between the two rounds of donation decisions, resulting in four treatment conditions. Participants are randomly assigned to complete one of the treatment conditions. Our first hypothesis aims to test the presence of choice overload through the variation in the number of charities:

**Hypothesis 1.** *A high number of options presented to participants is expected to negatively impact the donation amount due to choice overload.*

**Choice treatment** The choice treatment uses a between-subjects design to change how many charities participants can choose to donate to. It follows the same design as the option treatment but with one key difference: in the option treatment, participants can select only one charity; in the choice treatment, they can choose as many charities as they like. When referring to the selection of charities from the list, we refer to choosing only one charity as the “1Choice” treatment and choosing multiple options as the “MChoice” treatment. Participants are randomly assigned to either the 1Choice or MChoice treatment condition. The 1Choice condition serves as the baseline for comparison to measure how the MChoice condition affects donation behaviour.

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<sup>4</sup> The selected sizes for the list of charities align with the insights of cognitive psychology, suggesting that individuals can process between 4 and 7 alternatives at a time (Chernev 2003, Scheibehenne et al. 2009, Carroll et al. 2011).



The MChoice condition may influence donation behaviour through two opposing mechanisms. On one hand, allowing participants to select multiple charities can enhance perceived autonomy, consistent with self-determination theory (Moller et al. 2006). This choice structure enables individuals to align their donations with a broader set of personal values and preferences, akin to constructing a philanthropic portfolio (Iyengar & Kamenica 2010, Weisz & Cikara 2020). Such diversification can increase satisfaction, reduce regret, and potentially raise donation amounts by facilitating a sense of meaningful, value-aligned giving.

On the other hand, presenting multiple options may induce choice overload, complicating the decision process and reducing the likelihood of generous or thoughtful giving (Carroll et al. 2011). The cognitive effort required to evaluate and compare several charities can lead to decision fatigue, lower satisfaction, and even decision paralysis. Given these competing mechanisms, we propose the following hypothesis:

**Hypothesis 2.** *Donating to more than one charity can have a positive or negative impact on the amount of donations.*

**Default treatment** The default treatment mirrors the structure of the option treatment, with the key distinction that the first charity on the list is pre-selected by default to ensure that the default option is visible to participants. Similar to the option treatment, participants can choose only one charity. Henceforth, we refer to this treatment arm as Default1Choice. This is a between-subjects design. The donation amount and the number of donors in the option treatment serve as the control group for the default treatment.<sup>5</sup>

The purpose of a default option is to reduce choice overload, which is expected to increase both the number of donors and the total amount of donations compared to scenarios without a default charity (i.e., 1Choice treatment). Therefore, the third hypothesis tests the effect of the default option in the context of charitable giving:

**Hypothesis 3.** *A default charity option increases the total amount of donations compared to the 1Choice treatment, which lacks a default option.*

Table 1 summarises the treatments and their random assignments. Participants first select their preferred giving category. They are then randomly assigned to one of the treatment conditions, where they complete two donation tasks within the chosen option treatment. Their donation tasks will be presented according to one of the conditions within the option treatment, such as High-High, High-Low, Low-Low, or Low-High. The participant's task is to choose one charity from the list. With the MChoice treatment, they will be presented with the same lists of charities and can select multiple charities. The default treatment follows the same design as the option treatment, with the difference being that the first charity on the list is pre-selected.

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<sup>5</sup> Participants in Default1Choice will see the exact instructions as the option treatment (Wachner et al. 2021).

Table 1: Summary of the Experimental Design

Elements of Design	Description
Category of giving	Participants can choose from one of the four popular categories of giving (“Animal welfare”, “Children and young people”, “Health and medicine”, and “Housing and hunger”) or leave the experiment.
Initial Endowment	Participants receive £2.50 (200 tokens), equally split between round 1 and round 2, in the same category of giving.
Donation Decisions	Over two rounds, participants select a charity, and could donate 0, 25, 50, 75, or any other tokens.
Treatment Assignment	Participants are randomly assigned to one of 12 treatment conditions.
Option Treatment	Participants see either Low (5 charities) or High (40 charities). With two rounds, this means four combinations: Low-Low, Low-High, High-Low and High-High. All conditions only allow for selection of a single charity (1Choice).
Choice Treatment	Participants can donate to multiple charities (MChoice). The number of charities presented follows the option treatment.
Default Treatment	Participants could see that the first charity is pre-selected (Default1Choice). They can choose any one of the charities, as in 1Choice. The number of charities presented follows the option treatment.
Measured Outcomes	Donation Amount, Regret, Satisfaction.
Measured Moderators	Choice difficulty, avoidant decision-making, familiarity, and deliberation.
Measured Controls	Perceived importance treatment (Section 3.3), altruism, maximisers & satisficers, perceived aim (open-ended), past donations and habits, age, gender, ethnicity, employment, income range, marital status, religion and education.

### 3.2 Subjective wellbeing of donors

We aim to reliably quantify the factors that mediate and moderate the impact of choice overload and specific design elements in charitable giving by incorporating behavioural scales. The post-donation measures include perceived choice difficulty (4 items, [Raghubir & Menon \(1998\)](#)), avoidant decision-making (5 items, [Scott & Bruce \(1995\)](#)), altruism (5 items, [Penner et al. \(2014\)](#)), choice satisfaction (domain-specific 6 items, [Fitzsimons \(2000\)](#)), regret (domain-specific 3 items, [Scheibehenne et al. \(2009\)](#)), maximizers & satisficers (6 items, [Nenkov et al. \(2008\)](#)), familiarity with the listed charities (single-item measure), deliberation (single-item measure), and perceived aim (open-ended question). Furthermore, we included 5 questions adapted from [Choi & Kim \(2011\)](#) on past donations, donation habits, and demographic information (age, gender, ethnicity, employment status, income range, religion, and education). Appendix C provides a list of all measures.

### 3.3 Confounding factors

Studying choice overload in charitable giving presents challenges, as donation behaviour is influenced by personal values, trust in charities, and the distinction between deliberate non-giving and decision fatigue. To address this, we adopt the conceptual framework of [Chernev et al. \(2015\)](#), which identifies four key factors influencing choice overload: choice set complexity, task difficulty, preference uncertainty, and decision goals. The likelihood of overload increases when decisions are complex, cognitively demanding, made under uncertain preferences, or approached with a maximizing rather than satisficing mindset ([Schwartz et al. 2002](#)).

Prior research indicates that overload effects are more likely under conditions of high preference uncertainty or misalignment between options and personal values ([Chernev et al. 2015](#)). To address this, participants first selected one of four philanthropic categories, Animal welfare, Children and young people, Health and medicine, or Housing and hunger.<sup>6</sup> They were then shown only charities within their selected category, increasing the relevance of the choice set and reducing complexity. This approach minimizes baseline preference uncertainty and improves internal validity by ensuring that treatment effects stem from the structure of the choice environment rather than mismatches in personal values.

It is important to note that we do not assume all donors behave as pure altruists or consequentialists ([Becker 1974](#)). Even within a preferred category, participants may experience decision difficulty due to competing perceptions of impact, fairness, or need. Thus, any struggle observed in larger choice sets likely reflects the complexity of selecting among meaningful alternatives, rather than misaligned preferences. Further, the listed charities are active in local areas, i.e., the list does not contain widely recognised national or international organisations. The descriptions of the charities include their mission, registration number, and various activities to eliminate elements of mistrust in charities.

To identify self-interested behaviour ([Lazear et al. 2012](#)), participants could select “None of the above” during category selection, exiting the study before any of the donation tasks. They were asked to provide a reason and then completed behavioural questionnaires, receiving both the participation fee and endowment. This process, clearly explained in the instructions ([Appendix D](#)), ensured that later non-donation could not be misattributed to self-interest.

To capture choice deferral, we follow [Costa-Gomes et al. \(2022\)](#) by including a final option in all treatments: “I will not donate on this occasion.” This allowed participants to skip donating and keep their full endowment. The instructions made it clear that not donating was acceptable and voluntary. We also use five items from [Scott & Bruce \(1995\)](#)’s Decision-Making Styles inventory to assess whether individuals with avoidant tendencies are more likely to opt out.

**Perceived importance of donation** Varying the number of charities can produce two contrasting effects. On the one hand, more options may exacerbate choice overload, as noted in [Hypothesis 1](#). On the other hand, a larger number of charities may signal the importance of a cause

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<sup>6</sup>Categories were based on donor popularity in the 2023 CAF Report ([Charities Aid Foundation 2023](#)).

and increase donations, even if it adds complexity (Soyer & Hogarth 2011, Weisz & Cikara 2020). We introduced the perceived importance treatment as a robustness check to examine whether awareness of the number of options serves as a cue for the perceived significance of giving.

For this treatment, we apply the Inclusion/Exclusion Model (IEM) (Bless & Schwarz 2010) which provides a framework to understand how different sets of information influence judgment formation. The IEM posits that individuals construct mental representations of a target and a comparison standard, and how information is integrated into these representations determines whether an assimilation or contrast effect occurs. Specifically, if accessible information is used to define the target, an assimilation effect follows, whereas a contrast effect emerges if it is used to define the comparison standard.

In the context of our experiment, providing different sets of information about charitable causes influences how participants perceive their donation choices, either broadening their perception of options (assimilation) or highlighting limitations (contrast). By controlling how information is categorised and framed, we can determine the extent to which choice variety enhances or constrains the choice of charitable giving. This approach aligns with prior research demonstrating that contextual cues shape evaluative judgments and decision-making outcomes. Accordingly, the design of the perceived importance treatment seeks to vary how participants use information, while holding the contextual information itself constant. Participants are exogenously assigned to view one of four versions of the same information. This between-subjects design presents the number of charities in each category as participants select their preferred giving category. They are randomly allocated to one of the following conditions:

1. All categories show a high number of charities (4H condition, assimilation).
2. All categories show a low number of charities (4L condition, assimilation).
3. The first category (Animal Welfare) displays a low number, while the three categories display a high number of charities (1L3H condition, contrast).
4. The first category (Animal Welfare) shows a high number of charities, and the three categories show a low number of charities (1H3L condition, contrast).

The 4H and 4L conditions act as baselines, with an equal number of charities across categories, likely leading to a balanced distribution of donor preferences under the IEM framework. In contrast, the 1L3H condition makes animal welfare stand out by offering fewer charities. This contrast may prompt donors to view it as a simpler, less complex option, increasing its selection, not due to a stronger preference, but because of reduced perceived complexity and a more favourable evaluation. Thus, we expect higher donations to animal welfare in 1L3H, driven by reduced complexity compared to 4L. In 1H3L, animal welfare features more charities than other categories, which, under the IEM, may signal greater importance or urgency. This contrast can lead participants to view the cause as more deserving, increasing donations. In 4L, with no such disparity, donations are more evenly distributed due to assimilation. Thus, we expect higher donations to animal welfare in 1H3L, driven by perceived importance rather than reduced complexity.

The primary outcome measure in this treatment is the number of donors self-selecting into each cause. Based on this, we hypothesise that contrasting the number of charities across categories will shape donor behaviour. Our fourth hypothesis is:

**Hypothesis 4.** *The 1L3H condition will lead donors to evaluate it as a cognitively simpler choice, reducing perceived choice overload and increasing selection for that category relative to the 4H condition.*

*The 1H3L condition will serve as a salient cue of greater importance or need, thereby increasing the likelihood of donations to that cause due to heightened perceived urgency relative to the 4L condition.*

### 3.4 Implementation

**Payments and incentives** After completing two donation tasks, participants responded to behavioural and demographic questions. On the final page of the study, participants could view the donation amount, their bonus payment (undonated tokens), and the protocol for transferring their donations to their respective charities.<sup>7</sup> The bonus payment was in addition to the £10/hr participation fee. Every 100 tokens is worth £1.25, so participants could donate or keep £2.50 across the whole study.

**Sample selection and recruitment procedure** We compute the sample size based on the effect size measured in a pilot study.<sup>8</sup> In 2021, we conducted a small-scale study to identify the presence of choice overload. The effect size is measured by the difference between the average donation amount in the choice treatments divided by the standard error. Aiming at a power of .85 and setting the alpha level to .05 (one-sided) suggests a total sample size of 184 for each condition. With 12 main treatment conditions and four conditions for perceived importance, the necessary sample size is 2944. To account for attrition, we recruited 3200 participants.

Participants for all studies are recruited via Prolific. We screened for participants with UK residency, charitable behaviour (at least £50 in the last 12 months)<sup>9</sup> and aged above 25. The median completion was approximately 11 minutes with the average payment of £13.49/hr. About 2342 participants received bonus payments with an average of £1.46/hr.

## 4 Experimental Results

First, we provide an overview of the characteristics of the participants in section 4.1. Section 4.2 examines how more charitable options and the ability to donate to multiple charities influence donations. Section 4.3 presents the regression analysis of the main results, indicating evidence of choice deprivation. The welfare implications and the mediation effects are analysed in section 4.4.

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<sup>7</sup> Transferring the donation was facilitated through a non-profit company, Charity Vouchers.<https://charityvouchers.org/about-us/>

<sup>8</sup> This is registered on AsPredicted (68418, 06/14/2021)

<sup>9</sup> Prolific screening question is: How much, if anything, did you donate to charity in the last 12 months?

## 4.1 Participants demographics

A total of 3,200 participants took part in the experiment, with 2,398 randomly assigned to the option, choice, and default treatments and the rest allocated to the perceived importance treatment to test for a confounding factor described in the previous section. Our banded age measures indicate that the average age is 44. The gender balance in our sample is approximately 50-50. Almost two thirds of the sample are in full-time paid employment. Over 40% report that they have a Bachelor’s degree as their highest level of qualification. Over 19% of the sample have an income of £1-19,999, 40% percent of the sample report £20,000-39,999, 23% report £40,000-59,999, and far fewer are in higher income brackets. Further details on the characteristics are reported in Table B.1.

Table 2 highlights that 150 opted out at the start by selecting “None of the above” when offered to choose a charitable cause, so faced no donation decisions.<sup>10</sup> 1,948 donated in both donation rounds, 162 donated in the first donation round but not round 2, and 31 donated in round 2 but not round 1. Finally, 107 chose a category of giving but did not donate in either round. The average total amount donated among all participants in round 1 is £0.82 ( $M = 65.38$ ,  $SD = 32.61$  tokens out of 100), and in round 2, it is £0.79 ( $M = 62.9$ ,  $SD = 35.5$  tokens out of 100).

Table 2: Participants Donation Decisions

Donors Type	Number of participants	Percentage
Leavers	150	6.26%
Both Rounds	1,948	81.23%
Round 1 Only	162	6.76%
Round 2 Only	31	1.29%
Neither Round	107	4.46%
N	2,398	100.00%

Allowing participants to choose a category or leave the experiment effectively filtered out self-interested behaviour rather than the lack of interest in donating. Approximately 6.26% of participants selected “None of the above” and were asked to indicate their reason from a list of options. The majority of them (79.33%) chose “I prefer to keep the bonus”<sup>11</sup> with the majority stating they preferred to keep the money for themselves in an open-ended question.

Table 3 reports the number of participants assigned to each treatment condition. The first panel shows the distribution across the full factorial design, combining three choice conditions (1Choice, Default1Choice, and MChoice) with four option treatment sequences (Low–High, High–Low, Low–Low, and High–High). The second panel presents the sample sizes for the perceived importance experiment. Total sample sizes are listed in the final column of each panel.

<sup>10</sup>Characteristics of these participants are reported in Table B.2

<sup>11</sup>The remaining option and participants’ sections are: “The philanthropic category that I am most passionate about is not listed here.” (10.00%), “None of the philanthropic categories seem appealing to me.” (6.00%), “I didn’t know how to choose between the philanthropic categories.” (2.00%), “I expected more philanthropic categories to surface.” (2.00%), and “I mistakenly chose ‘None of the above’ (0.67%).



Table 3: Sample Sizes per Treatment Condition

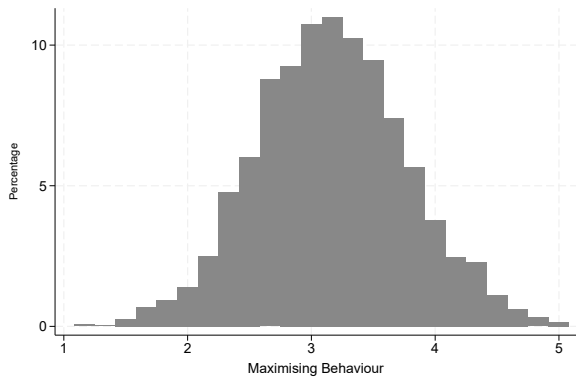
Panle A	Option Treatment				
Choice Treatment	Low-High	High-Low	Low-Low	High-High	N
1Choice	181	191	188	190	750
Default1Choice	190	184	193	189	756
MChoice	185	190	187	180	742
N	556	565	568	559	2,248

Panel B	Perceived Importance				
	4H	4L	1L3H	1H3L	N
1Choice	189	186	187	190	752

Another factor shaping donor behaviour is the maximiser–satisficer decision style, which reflects how individuals approach choices. Maximisers may deliberate more and be more affected by the number and type of charities, while satisficers tend to decide more intuitively. Figure 1 shows participants’ scores, with a mean of 3.14 and SD of 0.64, indicating most fall near the midpoint. This suggests donors generally have balanced decision styles, and treatment effects likely reflect broad patterns rather than extreme decision-makers.

Figure 1: Maximising vs Satisficing Behaviour



Responses to six post-experiment questions measuring participants’ pre-existing maximising vs. satisficing behaviour. Cronbach’s alpha:  $\alpha = 0.52$ .

## 4.2 How choice variety shapes the amount of donation

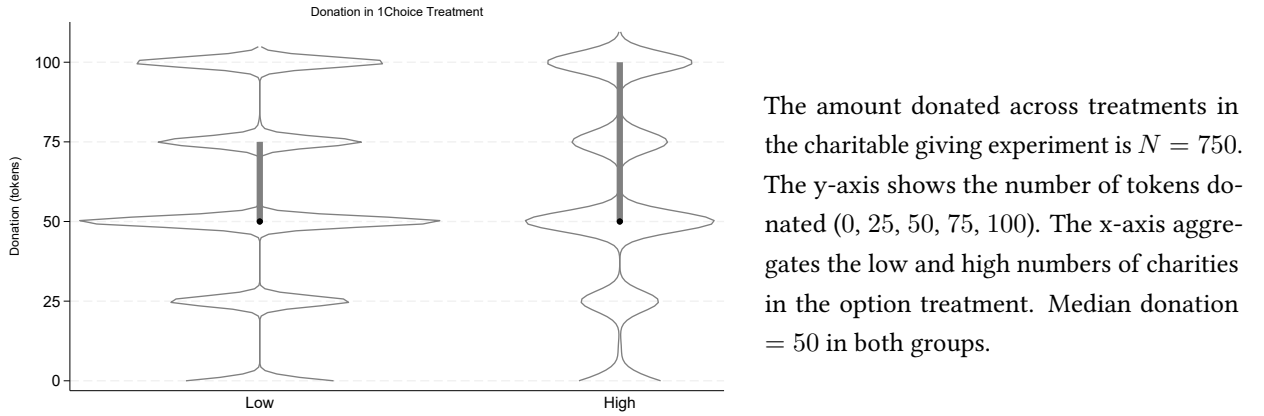
We excluded leavers ( $n = 150$ ) and treated non-donations in either rounds as zero. This is a conservative approach, implying that the choice deferral stems from choice overload rather than selfish motives, as participants had selected a category of giving to donate; otherwise, they would have opted to leave the experiment entirely.

Hypothesis 1 states that increasing charity options will negatively affect donations and other outcomes. Figure 2 violin plots the amount donated between those who see five versus 40 charities on either the first or the second donation page, with a Probability Density Function (PDF). The width of the PDF illustrates the frequency of donation values. While the distribution of the donation



amount in Low looks similar to that of High, the average and median donation differs significantly. Participants presented with five charities, on average, donated 62.9 tokens ( $SD = 32.5$ ), whereas those presented with 40 charities, on average, donated 66.3 tokens ( $SD = 32.8$ ). The grey bar in the figure indicates the first to the third quartile, and the black dot is the median value for each group. The distributions suggest several common donation amounts, reflecting the design’s anchor points (0, 25, 50, 75 tokens) that lead participants to choose similar donation values. Note that donations range from 0 to 100. Figures B.1a and B.1b in the appendix show the violin plot of donation amounts in the MChoice and Default1Choice treatments, respectively.

Figure 2: Donations by Option Treatment (1Choice)



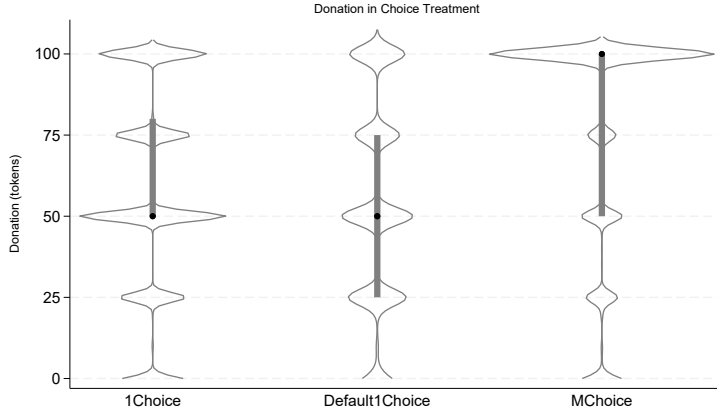
A one-sided t-test comparing the average donation in Low and High treatment conditions is statistically significant at 5% standard p-values ( $p = 0.0381, t = -1.7754$ ), which rejects the null hypothesis that the two treatment means are equal. The Wilcoxon matched-pairs signed-ranks test ( $p = 0.0780, z = -1.762$ ) and sign test of matched pairs ( $p = 0.0438$ ) provide evidence that the median of the differences differs from zero only marginally. This suggests that the number of options influences donation behaviour slightly in the opposite direction of choice overload prediction, indicating choice deprivation, contradicting Hypothesis 1.

Hypothesis 2 states that the number of choices the participant can make will affect donations and other outcomes (positively or negatively). Figure 3 violin plots the donated amount between treatment groups who can choose only one versus multiple charities. It is evident from the figure that the distribution of the donation amount in the treatment conditions varies substantially. On average, participants in the 1Choice treatment condition donated 59.55 tokens ( $SD = 30.44$ ), while those in the Default1Choice treatment condition donated 56.10 tokens ( $SD = 30.84$ ). The MChoice treatment induced the highest donation in all descriptive statistics (Average is 78.54 tokens with  $SD = 32.21$ ).

A t-test shows that the difference between 1Choice and MChoice is statistically significant at all conventional levels ( $p = 0.000, t = -11.70$ ), providing evidence to reject the null hypothesis that the means are equal. In other words, the ability to choose more than one charity positively impacts donations. The Wilcoxon rank-sum test for equality of distributions ( $p = 0.000, z = -12.56$ ) and median test of unmatched pairs ( $p = 0.000, \chi^2 = 224.35$ ) rejects the null hypothesis that the

median of the differences equals zero.

Figure 3: Donations for Choice Treatment



The y-axis shows tokens donated. The x-axis shows the three treatment arms: 1Choice ( $N = 750$ ), Default1Choice ( $N = 756$ ), and MChoice ( $N = 742$ ). Median donation are 1Choice = 50, Default1Choice = 50 tokens, and MChoice = 100

### 4.3 Regression analysis

The inferential analysis in the previous section reveals that participants presented with more options donated slightly higher amounts and displayed a broader distribution of donations, challenging Hypothesis 1. Participants in the MChoice treatment donated more, indicating that offering diversified choices positively impacts donations (Hypothesis 2). To further test the Hypotheses, we run OLS regressions of the tokens donated in a given round, on each of two orthogonal option and MChoice treatment dummies. For all regressions, the demographic variables include education level, race, marital status, employment status, religion, income, age, and gender, and standard errors are clustered at the individual level in parentheses, levels of significance are reported at  $*p < 0.10$ ,  $**p < 0.05$ ,  $***p < 0.01$ .

Table 4 shows the first regression results. Column (1) tests Hypothesis 1, and when the individuals are shown 40 as opposed to 5 charities, they donate around five percent more, an effect which is statistically significant at 1%. Column (2) shows that adding covariates does not meaningfully affect the treatment coefficient, and Column (3) shows the same for participant-fixed effects. Column (4) tests Hypothesis 2 in a separate regression. The results show that when individuals are allowed to donate to multiple charities as opposed to just one, they donate around 16 percent more, an effect which is significant at 1%. These findings are consistent with Figures 2 and 3, indicating choice deprivation. Column (5) shows that adding covariates does not affect this conclusion (fixed effects are not possible as this treatment is purely between-subjects).

Table 5 tests an interaction between the option and choice treatments. Though this was not specified in our pre-registration, it is a natural extension of Hypotheses 1 and 2. Column (1) replicates Column (4) from the previous table and is included here for convenience of comparison. The interaction term in column (2) indicates that there may be an additional effect from having more options and choices simultaneously, increasing donations by around five percent. However, the effect is only significant at 10%. The interaction also reduces the magnitude and precision of both individual coefficients compared to column (1). After adjusting for multiple hypothesis

Table 4: Effect of Treatments on Donations

	Hypothesis 1			Hypothesis 2	
	(1)	(2)	(3)	(4)	(5)
Options	5.306*** (1.292)	5.073*** (1.292)	5.818*** (0.944)	5.405*** (1.255)	5.159*** (1.252)
Choices				16.37*** (1.615)	15.83*** (1.620)
Round	-3.270*** (0.625)	-3.272*** (0.631)	-3.265*** (0.624)	-3.269*** (0.625)	-3.271*** (0.632)
Observations	2984	2984	2984	2984	2984
Fixed Effect	No	No	Yes	No	No
Controls	No	Yes	No	No	Yes

OLS regressions of the number of tokens donated on two treatment variables.

testing, the option treatment is no longer significant, but the choice treatment is still strongly significant. Column (3) shows that including covariates reduces the interaction coefficient's size and precision, though the individual treatments are unaffected. Column (4) shows that with individual fixed effects, the interaction coefficient rises to about 8 tokens and is significant at the 1% level, even after the Bonferroni-Holm adjustment. This suggests that participants allowed to choose multiple charities donated more when faced with a high number of options, driving the within-subject effect of the option treatment.

Table 5: Effect of Treatments on Donations (Interaction)

	Donations (Tokens)			
	(1)	(2)	(3)	(4)
Options	5.405*** (1.255)	3.047* (1.651)	2.876* (1.649)	1.713 (1.164)
Choices	16.37*** (1.615)	14.01*** (2.110)	13.54*** (2.107)	
Options $\times$ Choices		4.741* (2.510)	4.596* (2.505)	8.177*** (1.867)
Round	-3.269*** (0.625)	-3.277*** (0.622)	-3.279*** (0.628)	-3.278*** (0.620)
Observations	2984	2984	2984	2984
Fixed Effect	No	No	No	Yes
Controls	No	No	Yes	No

OLS regressions of the number of tokens donated on two treatment variables, and the interaction.

Tables 4 and 5 treat all observations as independent, but participants' decisions may be linked across rounds. As shown in previous tables, the round variable is consistently significant and negative. This suggests that choices in the second round may be influenced by both the number of options and behaviour in the first round.

Table 6 regresses donations in the second donation round on the option treatment, including the lagged donations, as well as an interaction between the lagged and contemporaneous treatments, to account for the effect of the previous round. The base category now captures those in the

Low-Low treatment. The option treatment now captures those in the Low-High treatment. Using Column (2), this group donated almost 9 percent more, and the coefficient is significant at 5%. The lagged option treatment alone captures those in the High-Low treatment, who are statistically indistinguishable from those in the Low-Low treatment. All three coefficients are added together to capture the High-High arm, which is also statistically indistinguishable from the base category ( $p = 0.15$ ). Column (3) shows that the inclusion of covariates increases the precision of these estimates, such that the High-Low treatment donated 6 percent more than the Low-Low. However, this is only significant at 10% and insignificant after adjusting for multiple hypothesis testing. The High-High treatment is still statistically indistinguishable from Low-Low ( $p = 0.12$ ). The Options variable or Low-High treatment remains significant and of similar magnitude to column (2).

Table 6: Effect of Option Treatment on Donations, with lags

	Donations (Tokens)		
	(1)	(2)	(3)
Options	3.091*	8.690**	8.712**
	(1.650)	(3.352)	(3.471)
Options (Lagged)		3.303	6.156*
		(3.577)	(3.650)
Options $\times$ Options (Lagged)		-7.174	-9.568*
		(4.889)	(3.742)
Observations	1500	750	1492
Controls	No	No	Yes

The lagged Options variable measures the number of charities participants had to choose from in the previous round.

We now test Hypothesis 3, which proposes that a default option reduces the impact of choice overload. If the interaction between the options and default treatment is positive, it indicates that the presence of a default charity increases donations only when there are more charities to choose from i.e. it ameliorates choice overload. The observations from the MChoice treatment are not included in this part of the analysis since it does not include the default treatment.

Table 7 shows the results. Column (1) indicates that the presence of the default option alone reduces the amount donated by approximately 3 tokens (significant at the 5% level). Adding the option treatment shows that having more charities to choose from increases donations by around 3.3 tokens while not altering the magnitude of the default treatment (both are significant at 5%). Column (3) tests Hypothesis 3 by adding the interaction term and the coefficient is statistically insignificant, indicating that the presence of a default option did not affect choice overload. Column (4) shows that adding covariates does not alter this conclusion. Column (5) adds individual fixed effects and the coefficient on the default treatment is not identified alone, plus the interaction is still statistically insignificant. We interpret the significance of the default coefficient alone in columns (1)-(3) as the influence of the *mere presence* of a default option, which has been shown to shape decisions in other contexts (Wachner et al. 2020).

Table 7: Effect of Default Treatment on Donations

	Hypothesis 3				
	(1)	(2)	(3)	(4)	(5)
Default	-3.559** (1.540)	-3.546** (1.539)	-3.725 (1.956)	-3.115 (1.946)	
Options		3.271*** (1.173)	3.091* (1.649)	3.545* (1.638)	1.801 (1.159)
Options $\times$ Default			0.359 (2.346)	-0.269 (2.318)	2.434 (1.825)
Observations	3012	3012	3012	3012	3012
Fixed Effect	No	No	No	No	Yes
Controls	No	No	No	Yes	No

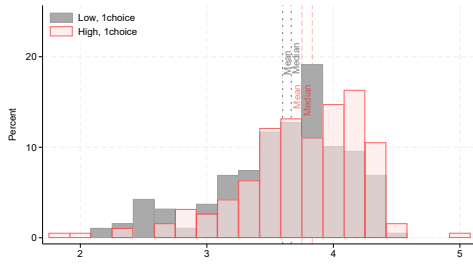
OLS regressions of the amount of tokens donated on two treatment variables.

#### 4.4 Welfare effects of choice variety on donors

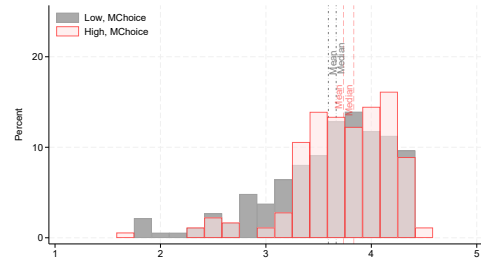
While participants show signs of choice deprivation in donations, this may still involve dissatisfaction or regret. This section examines which aspects of the decision process contribute to that feeling, focusing on option (Low-Low vs. High-High) and choice (1Choice vs. MChoice) treatments. The well-being questionnaire (Appendix C) follows standard measures in the choice overload literature.

**Satisfaction in option and choice treatments** Figure 4 compares satisfaction with donation decisions under different treatments. A higher score indicates more satisfaction (Cronbach's  $\alpha = 0.81$ ). Panel (a) examines satisfaction based on the number of charities available in 1Choice treatment, while panel (b) focuses on satisfaction in MChoice treatments. Panels (c) and (d) provide a cross-comparison between the 1Choice and MChoice treatments, controlling for the size of the charity list. A larger set of charities to choose from substantially increases satisfaction (Figures 4a and 4b). However, there is no difference in central tendencies between the 1Choice and MChoice conditions (figures 4c and 4d).

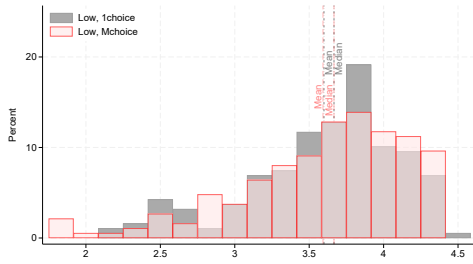
Figure 4: Comparison of Satisfaction with Donation Decision under Different Treatments



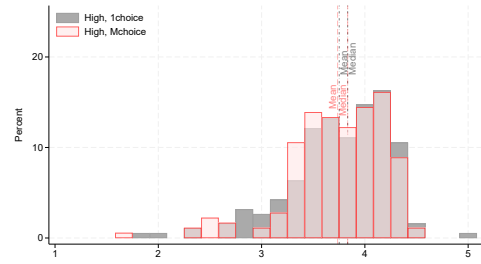
(a) Satisfaction in Low ( $M = 3.60, SD = 0.52$ ) and High ( $M = 3.75, SD = 0.49$ ) in 1Choice. A two-sided  $t$ -test for equality of means yields  $t = -2.93$ ,  $p = 0.0035$ , indicating a statistically significant increase in satisfaction with a larger charity set.



(b) Satisfaction in Low ( $M = 3.59, SD = 0.58$ ) and High ( $M = 3.74, SD = 0.47$ ) in MChoice. A two-sided  $t$ -test for equality of means yields  $t = -2.61$ ,  $p = 0.0094$ , indicating a statistically significant increase in satisfaction with a larger charity set.



(c) Satisfaction in the 1Choice ( $M = 3.60, SD = 0.52$ ) and MChoice ( $M = 3.59, SD = 0.58$ ) treatments with a small set of charities. A two-sided  $t$ -test for equality of means yields  $t = 0.12$ ,  $p = 0.9071$ , indicating no significant difference.



(d) Satisfaction in the 1Choice ( $M = 3.75, SD = 0.49$ ) and MChoice ( $M = 3.74, SD = 0.47$ ) treatments with a large set of charities. A two-sided  $t$ -test for equality of means yields  $t = 0.31$ ,  $p = 0.7548$ , indicating no significant difference.

Table 8 shows that participants exposed to the high-option treatment reported significantly higher satisfaction after donating, with a consistent effect across models (Column 1). Additionally, higher donation amounts were positively associated with satisfaction. The effect of the choice treatment was not consistently significant, and the interaction between option and choice treatments showed no effect on satisfaction. These results indicate that satisfaction was shaped primarily by the number of options available and the amount donated, rather than by MChoice.

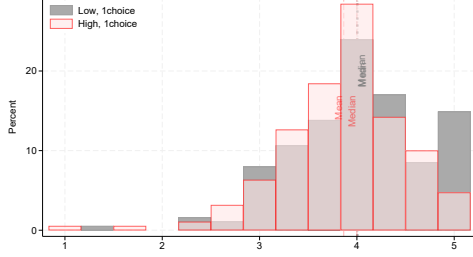
Table 8: Effects of Treatment Conditions and Donation Amount on Satisfaction

	Choice Satisfaction					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	0.152*** (0.0519)	0.137*** (0.0510)			0.152*** (0.0519)	0.137*** (0.0508)
Amount of Donation		0.00181*** (0.000477)		0.00186*** (0.000325)		0.00178*** (0.000324)
Choice			-0.0129 (0.0381)	-0.0751* (0.0386)	-0.00660 (0.0565)	-0.0642 (0.0560)
Options $\times$ Choice					-0.00904 (0.0754)	-0.0133 (0.0736)
Observations	378	378	745	745	745	745

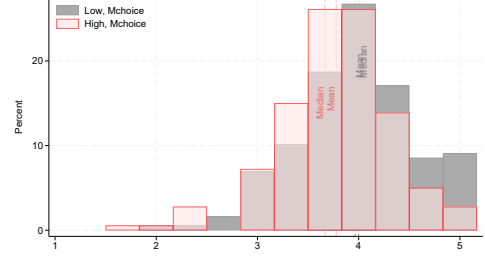
OLS regressions using a dependent variable measuring participants' satisfaction after donation.

**Regret in option and choice treatments** Figure 5 presents a comparison of regret with donation decisions across different treatments. A higher score reflects lower regret. Having a larger set of charities to choose from tends to increase regret, as seen in Figures 5a and 5b. However, when comparing the 1Choice and MChoice conditions (Figures 5c and 5d), the results show no significant difference.

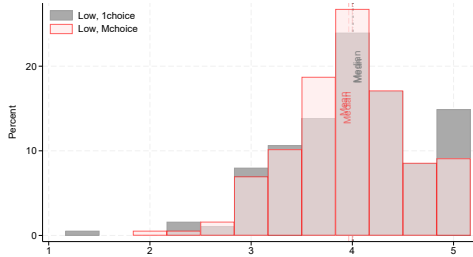
Figure 5: Comparison of Regret with Donation Decision under Different Treatments



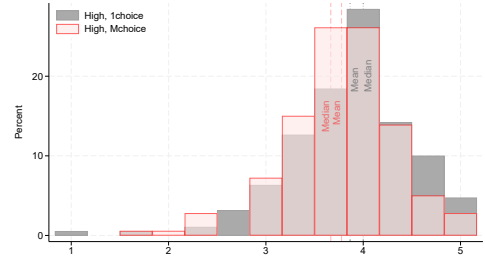
(a) Regret in Low ( $M = 4.01, SD = 0.67$ ) and High ( $M = 3.86, SD = 0.63$ ) in 1Choice. A two-sided  $t$ -test for equality of means yields  $t = 2.18, p = 0.0298$ , indicating a statistically significant increase in regret with a larger set of charities.



(b) Regret in Low ( $M = 3.96, SD = 0.59$ ) and High ( $M = 3.78, SD = 0.56$ ) in MChoice. A two-sided  $t$ -test for equality of means yields  $t = 3.10, p = 0.0021$ , indicating a statistically significant increase in regret with a larger set of charities.



(c) Regret in the 1Choice ( $M = 4.01, SD = 0.67$ ) and MChoice ( $M = 3.96, SD = 0.59$ ) treatments with a small set of charities. A two-sided  $t$ -test for equality of means yields  $t = 0.71, p = 0.4791$ , indicating no significant difference.



(d) Regret in the 1Choice ( $M = 3.86, SD = 0.63$ ) and MChoice ( $M = 3.78, SD = 0.56$ ) treatments, with a large set of charities. A two-sided  $t$ -test for equality of means yields  $t = 1.41, p = 0.1606$ , indicating no significant difference.

The results in Table 9 suggest that having more options increases regret as the Options variable is negative and significant, while donating more reduces regret. This aligns with the paradox of choice. Additionally, choosing multiple charities increased regret and donating more significantly reduces regret. The interaction between options and choice treatments was insignificant, implying that these factors influence regret independently rather than amplifying each other.



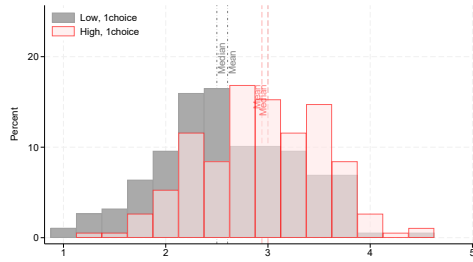
Table 9: Effects of Options and Choice Treatments and Donation Amount on Regret

	Regret					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	-0.146** (0.0668)	-0.167** (0.0652)			-0.146** (0.0668)	-0.164** (0.0653)
Amount of Donation		0.00245*** (0.000553)		0.00193*** (0.000355)		0.00205*** (0.000352)
Choice			-0.0645 (0.0453)	-0.129*** (0.0463)	-0.0463 (0.0653)	-0.113* (0.0654)
Options $\times$ Choice					-0.0408 (0.0899)	-0.0458 (0.0880)
Observations	378	378	745	745	745	745

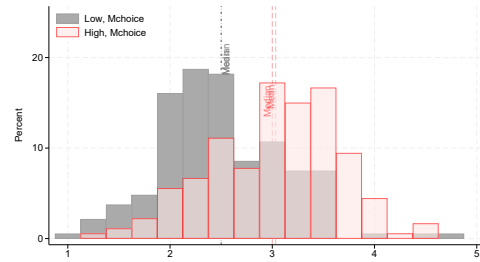
OLS regressions using a dependent variable measuring the regret reported after donating to charity.

**Choice difficulty in option and choice treatments** Figure 6 compares difficulty with donation decisions under different treatments. A higher score indicates greater difficulty (Cronbach's  $\alpha = 0.72$ ). A larger set of charities to choose from significantly increases perceived difficulty, regardless of 1Choice or MChoice treatments (Figures 6a and 6b). However, there is no significant difference in perceived difficulty between the 1Choice and MChoice conditions (Figures 6c and 6d). Table 10 presents OLS regression results, further supporting this interpretation.<sup>12</sup>

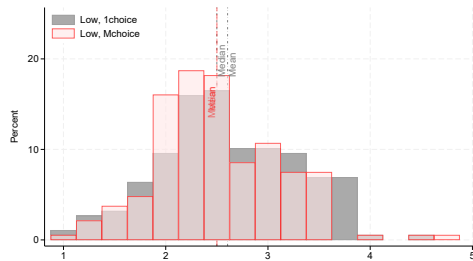
Figure 6: Comparison of Difficulty with Donation Decision under Different Treatments



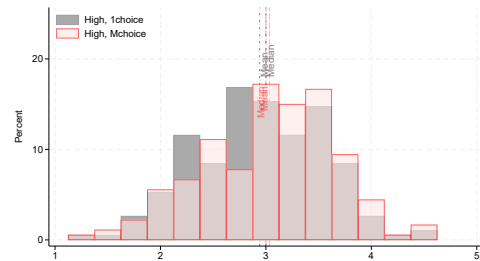
(a) Difficulty in Low ( $M = 2.61, SD = 0.67$ ) and High ( $M = 2.94, SD = 0.61$ ) in 1Choice. A two-sided  $t$ -test for equality of means yields  $t = -5.10$ ,  $p < 0.001$ , indicating a statistically significant increase in difficulty with a larger set of charities.



(b) Difficulty in Low ( $M = 2.50, SD = 0.61$ ) and High ( $M = 3.03, SD = 0.63$ ) in MChoice. A two-sided  $t$ -test for equality of means yields  $t = -8.20$ ,  $p < 0.001$ , indicating a statistically significant increase in difficulty.



(c) Difficulty in the 1Choice ( $M = 2.61, SD = 0.67$ ) and MChoice ( $M = 2.50, SD = 0.61$ ) treatments in a small set of charities. A two-sided  $t$ -test for equality of means yields  $t = 1.56$ ,  $p = 0.1194$ , indicating no significant difference.



(d) Difficulty in the 1Choice ( $M = 2.94, SD = 0.61$ ) and MChoice ( $M = 3.03, SD = 0.63$ ) treatments, in a large set of charities. A two-sided  $t$ -test for equality of means yields  $t = -1.44$ ,  $p = 0.1508$ , indicating no significant difference.

<sup>12</sup>Among the four questions measuring choice difficulty, only “amount of thought” is positively significant, suggesting that cognitive engagement may drive the effect (Table B.15) rather than experiencing choice overload.

Table 10: Mediation of the Effect of Treatments on Difficulty

	Choice Difficulty					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	0.336*** (0.0659)	0.335*** (0.0661)			0.336*** (0.0659)	0.334*** (0.0660)
Amount of Donation		0.000130 (0.000580)		0.000425 (0.000398)		0.000153 (0.000388)
Choice			-0.0115 (0.0490)	-0.0258 (0.0512)	-0.104 (0.0664)	-0.109 (0.0682)
Options $\times$ Choice					0.196** (0.0925)	0.196** (0.0926)
Observations	378	378	745	745	745	745

OLS regressions using a dependent variable measuring the choice difficulty reported after donation.

**Choice deliberation in option and choice treatments** Table 11 presents regression models assessing whether the treatment conditions influence participants' reported deliberation with the listed charities. Across all specifications, the Options has a robust and statistically significant positive effect on deliberation. This effect persists even after controlling for donation amount and the inclusion of Choice. By contrast, the Choice and the Options  $\times$  Choice interaction do not significantly affect deliberation. These findings suggest that deliberation is primarily shaped by the number of charities shown, rather than by choice flexibility or donation behaviour.

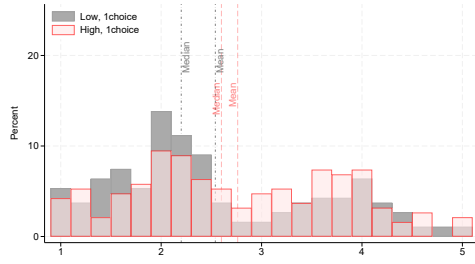
Table 11: Mediation of the Effect of Treatments on Deliberation

	Deliberation over Choices					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	0.182** (0.0809)	0.183** (0.0820)			0.182** (0.0809)	0.180** (0.0815)
Amount of Donation		-0.000168 (0.000713)		0.000400 (0.000466)		0.000261 (0.000471)
Choice			0.0219 (0.0585)	0.00850 (0.0600)	-0.0175 (0.0824)	-0.0259 (0.0842)
Options $\times$ Choice					0.0847 (0.116)	0.0841 (0.116)
Observations	378	378	745	745	745	745

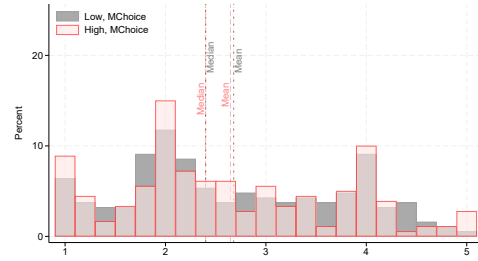
OLS regression results testing the effect of treatment conditions on participants' familiarity with the listed charities. The dependent variable is a single-item Likert measure of familiarity. Standard errors are in parentheses and clustered at the individual level.

**Choice avoidance in option and choice treatments** Figure 7 compares decision avoidance ( $\alpha = 0.94$ ) across treatment conditions. Neither comparison yields a statistically significant difference, except for option treatment (1Choice) in Panel a.

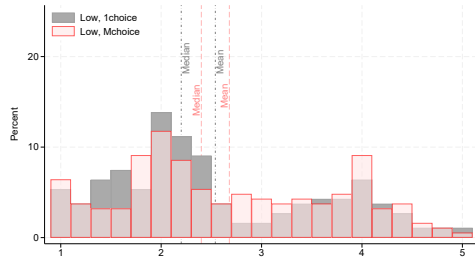
Figure 7: Comparison of Decision Avoidance Across Treatment Conditions



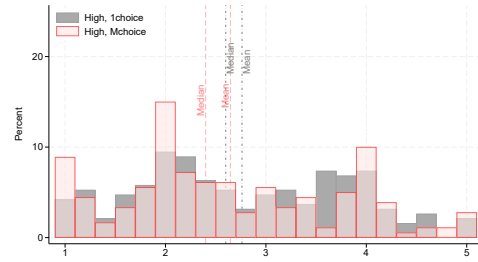
(a) Decision avoidance in Low ( $M = 2.54, SD = 1.04$ ) and High ( $M = 2.76, SD = 1.04$ ) charity set conditions (1Choice). A two-sided  $t$ -test for equality of means yields  $t = -2.08, p = 0.0382$ , indicating a statistically significant increase in avoidance with a larger set of charities.



(b) Decision avoidance in Low ( $M = 2.68, SD = 1.06$ ) and High ( $M = 2.65, SD = 1.09$ ) charity set conditions (MChoice). A two-sided  $t$ -test for equality of means yields  $t = 0.29, p = 0.7720$ , indicating no statistically significant difference in avoidance between set sizes.



(c) Decision avoidance in the 1Choice ( $M = 2.54, SD = 1.04$ ) and MChoice ( $M = 2.68, SD = 1.06$ ) treatments, where participants were presented with a small set of charities. A two-sided  $t$ -test for equality of means yields  $t = -1.29, p = 0.1979$ , indicating no statistically significant difference.



(d) Decision avoidance in the 1Choice ( $M = 2.76, SD = 1.04$ ) and MChoice ( $M = 2.65, SD = 1.09$ ) treatments, where participants were presented with a large set of charities. A two-sided  $t$ -test for equality of means yields  $t = 1.04, p = 0.2977$ , indicating no statistically significant difference.

Table 12 presents regression models testing whether the treatment conditions (Options, Choice, and their interaction) influence participants' levels of choice avoidance. Overall, these results suggest that offering more options can increase choice avoidance; however, this effect may be mitigated when paired with greater flexibility in decision-making as shown in Column (6).

Table 12: Mediation of the Effect of Treatments on Decision Avoidance

	Decision Avoidance					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	0.223** (0.107)	0.226** (0.108)			0.223** (0.107)	0.218** (0.108)
Amount of Donation		-0.000364 (0.000931)		0.000604 (0.000609)		0.000557 (0.000611)
Choice			0.0119 (0.0776)	-0.00828 (0.0802)	0.140 (0.108)	0.122 (0.110)
Options $\times$ Choice					-0.255 (0.155)	-0.257* (0.155)
Observations	378	378	745	745	745	745

OLS regressions using a dependent variable measuring the choice avoidance reported after donation.

**Does the abundance of charities signal the importance of donation?** As outlined in Hypothesis 4, varying the number of charities may either intensify choice overload or signal the importance of a cause, potentially increasing donations despite choice overload. To test this, we implemented a similar design to the option treatment, with the key difference that participants were shown the number of charities available per category. This allowed them to self-select into causes perceived as more or less significant. If perceived importance influences decisions, we would expect a higher concentration of donors in animal welfare cause when it has the highest number of charities (1H3L).

Table 13 shows the proportion of participants selecting one of the categories under various treatment conditions. Using a Kolmogorov-Smirnov test for the equality of the distribution of donors between the different charitable causes showed no significant differences in distribution:  $D = 0.07, p = 0.74$  for 4H vs. 1H3L, and  $D = 0.06, p = 0.918$  for 4L vs. 1H3L. Similarly, Pearson chi-squared tests revealed no significant effect of treatment on category selection:  $p = 0.178$  for the 4H vs. 1L3H comparison and  $p = 0.168$  for 4L vs. 1H3L. The full results for Hypothesis 4 are reported in Appendix B.1.

Table 13: Distribution of Categories: 4H/1H3L and 4L/1H3L

Category	4H	1H3L	4L	1H3L
Animal welfare	58	45	44	45
	30.69	23.68	23.66	23.68
Children and young pe	58	65	68	65
	30.69	34.21	36.56	34.21
Health and medicine	28	41	25	41
	14.81	21.58	13.44	21.58
Housing and hunger	45	39	49	39
	23.81	20.53	26.34	20.53
Observations	189	190	186	190
%	100.00	100.00	100.00	100.00

The table shows the distribution of selected charitable categories across perceived importance treatments.

We also ran a multinomial logistic regression to examine whether the likelihood of participants selecting a particular charity category was affected by changes in the number of charities within categories. Results are reported in Table 14. Column (1) shows that when the animal welfare category contains 40 charities and the other three categories have only 5 each, it is slightly less likely to be chosen compared to when all categories include 40 charities. This effect is significant only at the 10% level, suggesting that the perceived importance of a cause may not be strongly influenced by the number of charities representing it. Columns (2) and (3) indicate that the likelihood of choosing animal welfare is unaffected by the informational signals, even though that category was the primary focus.

Table 14: Multinomial Regression of Perceived Importance Treatment

	(1) 1H3L vs 4H	(2) 1L3H vs 4L	(3) 1H3L vs 1L3H
Animal Welfare	-0.37* (0.190)	0.27 (0.199)	-0.20 (0.20)
Health and Medicine	0.27 (0.215)	0.74*** (0.223)	-0.20 (0.205)
Housing and Hunger	-0.26 (0.201)	0.31 (0.192)	-0.49** (0.200)
Observations	758	746	754

Results of three multinomial logistic regressions of the number of participants choosing each category of giving on the arm of the Perceived importance treatments. Children and Young People are the base category. Each column represents an independent variable displayed as ‘treatment vs control’. Animal welfare is always the leftmost category.

## 5 Policy Implications

We examine two distinct but complementary dimensions of impact. First, under the option and choice treatments, how do donors’ allocation decisions affect the charities? While allowing donors to support multiple charities increases total donations, it may also lead to a dilution of funds, reducing the share received by each individual charity.

Table 15 highlights notable differences between the 1Choice and MChoice treatments. In 1Choice, average donations remain stable across the Low (57.66 tokens) and High (60.75 tokens) conditions, with participants donating to a single charity per round. In contrast, MChoice yields significantly higher average donations, 84.31 tokens in Low and 90.19 in High, while donations are distributed across more charities (2.76 in Low and 7.20 in High). Given the fixed donation budget, the lower average donation per charity in MChoice likely reflects this mechanical constraint rather than reduced generosity.

Table 15: Average Donation and the Number of Charities Receiving Donations in the Main Treatments

<b>Panel A</b>	Average Donation (Tokens)		# Charities Receiving Donations	
	Low	High	Low	High
1Choice				
Round 1	58.98	60.10	1.00	1.00
Round 2	56.37	61.42	1.00	1.00
Average	57.66	60.75	1.00	1.00
<b>Panel B</b>	Average Donation (Tokens)		# Charities Receiving Donations	
	Low	High	Low	High
MChoice				
Round 1	86.43	90.62	2.82	7.55
Round 2	82.03	89.73	2.71	6.83
Average	84.31	90.19	2.76	7.20

The average donation and the number of charities receiving donations for option and choice treatments. Panel A shows the 1Choice treatment and Panel B shows the MChoice treatment.

Given the homogeneity of the charities, differing only in their specific activities, the distribution of donations across larger charity lists can be viewed as analogous to allocating funds across multiple programmes within a single organisation. This suggests that offering a greater variety of programmes within a charity can increase both the total amount donated and the number of programmes receiving support. Future research could examine whether this effect persists when donors are allowed to expand their budgets rather than reallocate a fixed amount.

Second, given the designed option and choice treatments, we assess their impact on the number of donors each charity attracts, a metric particularly relevant for organisations aiming to expand their supporter base through the *donor's journey*. Table 16 presents linear probability model estimates assessing the impact of various treatments on the likelihood of donating.

Across specifications, the effect of *Round* is consistently negative and statistically significant, indicating that donations are less likely in later rounds. The *Options* treatment has no robust effect overall, although it is positive and marginally significant in Column (2) when fixed effects are included. Notably, the interaction term *Options*  $\times$  *Round* is positive and significant in several models (e.g., Columns 1, 6, and 7), suggesting that allowing options may help offset the decline in donations over time. The *Choice* treatment increases the likelihood of donating (Columns 4 and 5). Additionally, the negative and significant *Choice*  $\times$  *Round* interaction indicates that the positive effect of choice diminishes in later rounds. The triple interaction term *Options*  $\times$  *Choice*  $\times$  *Round*, in Columns 6 and 7, is not significant, suggesting no meaningful combined effect of treatments over time.

Table 16: Effect of Treatments on Likelihood of Donations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Options	-0.006 (0.019)	0.039** (0.019)	0.008 (0.019)			-0.004 (0.013)	-0.000 (0.013)
Round	-0.080*** (0.019)	-0.046*** (0.016)	-0.067*** (0.019)			-0.079*** (0.017)	-0.074*** (0.017)
Options $\times$ Round	0.073** (0.030)	0.006 (0.025)	0.046 (0.029)			0.071*** (0.026)	0.060** (0.026)
Choice				0.037*** (0.013)	0.032** (0.013)	0.015 (0.013)	0.010 (0.013)
Choice $\times$ Round				-0.066*** (0.011)	-0.066*** (0.011)	-0.016 (0.024)	-0.019 (0.024)
Options $\times$ Choice $\times$ Round						-0.012 (0.033)	-0.005 (0.033)
Obs	1500	1500	1500	2984	2984	2984	2984
FE	No	Yes	No	No	No	No	No
Controls	No	No	Yes	No	Yes	No	Yes

Presents linear probability model estimates of the likelihood of donating.

## 6 Discussion

The findings presented above offer consistent evidence in support of choice deprivation over choice overload in charitable giving. However, as with any experimental study, our interpretation relies on assumptions about how specific design features relate to underlying mechanisms. Some of these

links, such as the role of perceived importance or autonomy, are suggestive rather than conclusive, and alternative explanations remain plausible. In this section, we discuss these limitations, clarify where our claims are strongest, and identify areas where further work is needed to isolate and test the mechanisms more directly.

Our implementation of the default treatment did not provide evidence that offering a pre-selected charity mitigates choice overload by simplifying the decision-making process. Participants rarely selected the default option, suggesting limited appeal or trust in the pre-selection. This contrasts with findings from studies such as [Van Gestel et al. \(2021\)](#), which show that defaults can ease cognitive burden and facilitate decision-making. Interestingly, the mere presence of a default in our design led to a small but notable reduction in donations, approximately 3 tokens, indicating a possible backfiring effect. This result is consistent with [Wachner et al. \(2020\)](#), who find that defaults can undermine perceptions of autonomy and satisfaction, even when not actively chosen. More broadly, our findings echo the growing recognition that behavioural interventions are not universally effective and that their impact is often highly sensitive to context ([Sunstein 2017](#)).

Another contention in the literature is that a greater number of charities might signal the importance or urgency of a cause, potentially confounding interpretations based on choice overload ([Soyer & Hogarth 2011](#), [Weisz & Cikara 2020](#)). While the perceived importance treatment was designed to test whether a greater number of options would signal the urgency or salience of a cause, we found no consistent evidence that this influenced donor category selection in the intended direction. This suggests that either the manipulation was too subtle or that pre-existing preferences for cause types outweighed any signal provided by the quantity of options, despite the random allocation of the treatments. Alternative interpretations remain possible. For example, participants may have perceived fewer charities as a sign of coordination or efficiency or simply followed strong prior preferences for specific causes regardless of the number of options presented. Nevertheless, if participants consistently chose their preferred cause regardless of the number of options, this may suggest that intrinsic motivation or alignment with personal values was sufficient to overcome the importance or urgency of a cause.

An interesting nuance in our findings is that larger charity sets increased both satisfaction and regret. Greater satisfaction likely reflects better alignment with personal values, while higher regret suggests heightened awareness of foregone alternatives. This trade-off aligns with psychological evidence on autonomy versus opportunity cost in large choice sets ([Schwartz 2004](#)). Crucially, the rise in both measures supports the view that donors were thoughtfully engaged, not overwhelmed, and that more options had a net positive effect.

In the context of charitable giving in the UK, our findings suggest that the growing proliferation of online donation platforms could positively influence overall contributions. As online giving rises and cash donations decline, presenting donors with more options may encourage more thoughtful engagement and, ultimately, higher giving. Notably, one of the “stylised facts” in CAF’s 2023 report is that average donation amounts are increasing *despite* a decline in the number of donors, coinciding with the expansion of online giving ([Charities Aid Foundation 2023](#)). While multiple factors likely drive these trends, our controlled experimental setting highlights the value



of causal research in interpreting them. Offering more options can be seen as a form of programme diversification, especially given the relative homogeneity of the charities and the variation in their specific activities. However, our experiment was conducted under a fixed-budget constraint; future research with flexible donation amounts may uncover additional behavioural responses.

The findings indicate that policy strategies to enhance charitable contributions should focus on expanding donor options rather than limiting them. Many public policy efforts to increase charitable giving focus on financial incentives (Duquette 2016, Almunia et al. 2020). But allowing donors to select from a broader range of programmes within a charity and enabling donations to multiple causes can significantly boost overall contributions. Donors would be able to choose to whom their money went, would donate more, and would be more satisfied with the decision overall. Back-of-the-envelope calculations using our coefficients and the donation information from Charities Aid Foundation (2023) indicate that allowing people to donate to multiple charities could increase donations by as much as £2.5 billion. This could serve a role in public goods provision where government funding is not an option.

Our results also relate to economic theories of giving (Vesterlund 2016). Specifically, they lean toward a consequentialist interpretation of donor behaviour (Becker 1974) rather than an impure altruism or warm glow framework (Andreoni 1990). Participants who were given more options, and the ability to donate to multiple charities, gave more and reported greater satisfaction with their choices. However, the increase in options did not appear to act as a signal of social importance. Rather, it prompted more deliberation, likely due to higher perceived opportunity costs. If giving were solely driven by the desire to donate, independent of context, we would expect participants to donate a fixed amount to the first available option or default charity. Yet, the selection of the default was uncommon, and giving patterns varied significantly with the structure of the decision task.

We must note that we do not interpret this as evidence against warm glow (Andreoni 1990) motivations. Instead, it is plausible that warm glow is enhanced when donors can better align their choices with personal values or feel a greater sense of agency. Null (2011) shows that donors often distribute gifts across multiple similar charities, even when doing so reduces overall impact, suggesting that the act of giving itself, rather than strict efficiency, plays a central role. Similarly, our findings suggest that having more choices may increase the satisfaction of giving. We therefore do not rule out warm glow as a driver of behaviour, but interpret it as interacting with structural features of the choice environment, such as flexibility and alignment.

A key question is the extent to which our findings generalise beyond the experimental context to real-world charitable giving. While the study employed real monetary donations and a large, diverse sample, several factors support its external validity. First, the online experimental format closely mirrors digital fundraising platforms such as JustGiving, GoFundMe, and CAF. The ability for participants to browse and allocate donations across multiple charities reflects typical user interactions on these platforms, suggesting the findings are highly applicable to online giving environments. However, generalisability to offline contexts, such as direct mail appeals, in-person events, or corporate giving programmes, remains uncertain. Second, self-selection bias is a

potential concern, as participants opted into the donation task after selecting a philanthropic category. This likely resulted in a sample more predisposed to giving, helping explain the high donation rates observed. Nonetheless, our focus lies not on absolute donation levels but on the direction and consistency of treatment effects. By analysing donations within and across treatments, we mitigate the influence of baseline generosity and better isolate the impact of choice architecture on giving behaviour. Finally, while our experiment tested option expansion from 5 to 40 charities, it remains unclear whether these effects scale indefinitely. Although increased choice was associated with higher total donations, prior research warns that very large choice sets (e.g., 100+ options) may reintroduce cognitive burden and reduce giving (White 2021). Determining whether there is an optimal threshold for choice set size would require field experiments in live donation settings with systematically varied options.

While our study provides strong evidence that expanding choice increases charitable giving in an online setting, further research is needed to validate these findings in field experiments, offline donation environments, and cross-cultural contexts. By doing so, we can refine best practices for designing effective, choice-optimised fundraising platforms that enhance both donor engagement and total contributions to charitable causes.

## 7 Conclusion

This study investigates how choice architecture shapes charitable giving in an online setting. In an online, incentivised experiment with 2,398 participants allocating real money to UK charities, we varied the number of options, the ability to donate to multiple charities, and the presence of a default. measures captured subjective experience, including satisfaction, regret, and perceived difficulty. The factorial design enables a broad analysis of behavioural and psychological responses to different choice structures.

We find that greater choice, both in terms of more charities and the ability to donate to multiple recipients, leads to higher donations, consistent with the notion of choice deprivation rather than choice overload (Reutskaja et al. 2022). Increasing the number of available programmes within a charity, especially allowing donations to multiple recipients, enhances giving without undermining subjective well-being. Donors do not appear to rely on default options to simplify their decisions, nor does a larger set signal greater need in a way that drives behaviour. Rather, our analysis suggests that expanded choice encourages more thoughtful engagement, as reflected in increased deliberation and reported difficulty, without leading to disengagement or decision fatigue.

The contributions of our study are empirical, methodological, and conceptual. Empirically, we show that in online charitable settings, expanding the choice set can increase contributions without negative emotional consequences. Methodologically, we present a pre-registered, scalable design that incorporates orthogonal manipulations of option set size and choice flexibility. Conceptually, we engage with the ongoing debate between choice overload and choice deprivation, offering new evidence that supports the latter, particularly in prosocial contexts such as charitable giving.

# Appendices

## A Summary of the key findings

Table A.1: Summary of the Results

Measure	Treatment	Key Finding	Table No.
Satisfaction	Option	More options significantly increase satisfaction	Table 8
	Choice	No significant effect on satisfaction	Table 8
	Option $\times$ Choice	No significant interaction effect on satisfaction	Table 8
	Default	No significant effect on satisfaction	Table B.6
Regret	Option	More options increase regret	Table 9
	Choice	No significant effect on regret	Table 9
	Option $\times$ Choice	No significant interaction effect on regret	Table 9
	Default	No significant effect on regret	Table B.7
Perceived Difficulty	Option	Increases significantly with more options	Table 10
	Choice	No significant effect	Table 10
	Option $\times$ Choice	Increases significantly with more Options $\times$ Choice	Table 10
Deliberation	Option	Increases significantly with more options	Table 11
	Choice	No significant effect	Table 11
	Option $\times$ Choice	No significant interaction effect	Table 11
Decision Avoidance	Option	Increases with more options	Table 12
	Choice	No significant effect	Table 12
	Option $\times$ Choice	Slightly reduces avoidance (negative interaction effect)	Table 12
Familiarity	Option	Increases significantly with more options	Table B.8
	Choice	No significant effect	Table B.8
	Option $\times$ Choice	No significant interaction effect	Table B.8
Mediator Role: Thought	Option $\times$ Choice	“Amount of thought” is the only difficulty component positively predicting donations	Table B.15

## B Further analysis

### B.1 Descriptive data

Table B.1: Participant Characteristics

Variable	Mean (Dummy)	Standard Deviation
<b>Ethnicity</b>		
White British	0.78	0.41
<b>Marital Status</b>		
Married	0.52	0.50
Never Married	0.34	0.47
Divorced	0.06	0.23
<b>Employment</b>		
Full-Time Employment	0.65	0.48
Part-Time Employment	0.17	0.37
Retired	0.88	0.28
Not Employed	0.03	0.18
<b>Gender</b>		
Male	0.49	0.50
Non-binary/Prefer Not to Say	0.01	0.10
<b>Age</b>		
18-25	0.02	0.15
26-33	0.22	0.43
34-41	0.18	0.38
42-49	0.16	0.36
50-57	0.11	0.36
58-65	0.11	0.32
66-73	0.05	0.22
74-81	0.13	0.12
82-89	0.00	0.04
90+	0.00	0.02
<b>Income</b>		
£1-£19,999	0.18	0.38
£20,000-£39,999	0.40	0.49
£40,000-£59,999	0.23	0.42
£60,000-£79,999	0.08	0.37
£80,000-£99,999	0.04	0.19
£100,000+	0.03	0.16
<b>Qualifications</b>		
Higher Degree	0.30	0.46
Degree	0.44	0.50
High School	0.24	0.43
<b>Religion</b>		
Atheist	0.52	0.50
Christian	0.37	0.48
Muslim	0.05	0.22

The table reports the means and standard deviations of demographic variables measured in the experiment ( $N = 3,200$ ). All variables are coded as binary indicators, where the mean represents the proportion of participants belonging to each specified category.

Table B.2 Shows the demographic characteristics of those who chose to leave the experiment at the beginning ( $N = 200$ ) i.e., participants who did not chose any category of giving. All variables are dummies, and the mean is the proportion of those in the specified category.

Table B.2: Leavers Characteristics

Variable	Percent
White British	75
Married	53
Employed	84
Male	64
34-41, or younger	64
£20,000-£39,999 or less	62
Degree and High School	65
Atheist	63

Table B.3 summarises the frequency and percentage of participants donating in Round 1 only, Round 2 only, neither round, or both rounds, across four treatment conditions: Low-High, High-Low, Low-Low, and High-High ( $N = 2,248$ ). Participants were randomly allocated to complete one of the four treatments. Low-High refers to participants starting with fewer charity options in Round 1 and more in Round 2, while High-Low reverses this order. Low-Low and High-High maintain consistent numbers of charity options across both rounds.

Table B.3: Donation Behaviours in Option Treatment Across Two Rounds

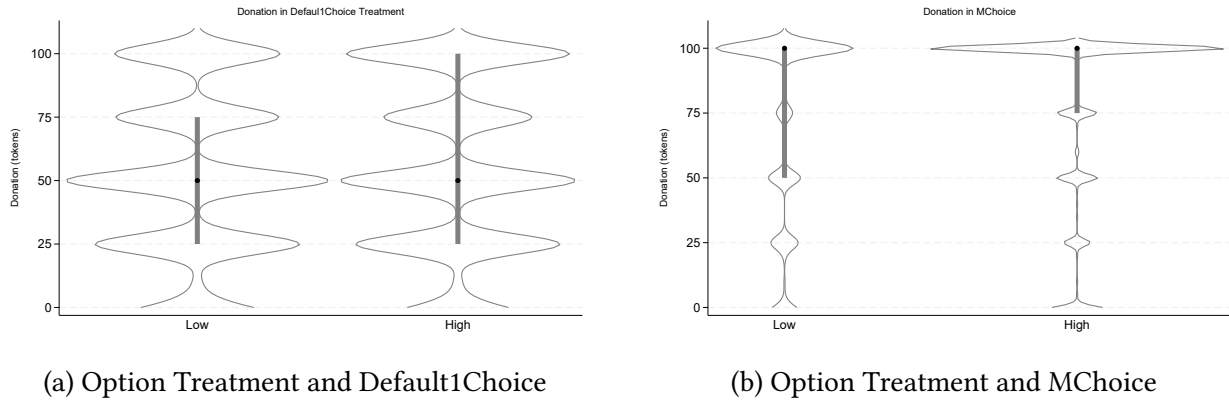
Donation Patterns	Low-High		High-Low		Low-Low		High-High	
	freq	%	freq	%	freq	%	freq	%
Both Rounds	499	89.75	465	82.30	493	86.80	491	87.84
Round 1 Only	19	3.42	63	11.15	45	7.92	35	6.26
Round 2 Only	18	3.24	5	0.88	4	0.70	4	0.72
Neither Round	20	3.60	32	5.66	26	4.58	29	5.19
N	556	100.00	565	100.00	568	100.00	559	100.00

Table B.4 displays the frequency and percentage of participants' donation behaviours across three treatment conditions, 1Choice, Default1Choice, and MChoice. Participants were randomly allocated to one of the three treatment conditions. Donation Patterns include donating in both rounds, donating only in Round 1 or 2, and not donating in either round (Neither Round). Results are based on 2,248 participants.

Table B.4: Donation Patterns When Choosing One or Multiple Charities

Donation Patterns	1Choice		Default1Choice		MChoice	
	freq	%	freq	%	freq	%
Both Rounds	653	87.07	652	86.24	643	86.66
Round 1 Only	44	5.87	60	7.94	58	7.82
Round 2 Only	11	1.47	11	1.46	9	1.21
Neither Round	42	5.60	33	4.37	32	4.31
N	750	100.00	756	100.00	742	100.00

Figure B.1: Comparison of Donations Across Option Treatments: Default1Choice vs MChoice



Donations in  $N = 756$ . The y-axis shows donated tokens: 0 to 100. The x-axis compares 5 charities (Low) vs 40 (High). Median donation: Low = 50.0, High = 50.0.

Donations in  $N = 742$ . Y-axis: tokens donated. X-axis: Low = 5 charities, High = 40. Median donation: Low = 100.0, High = 100.0.

## B.2 Default analysis

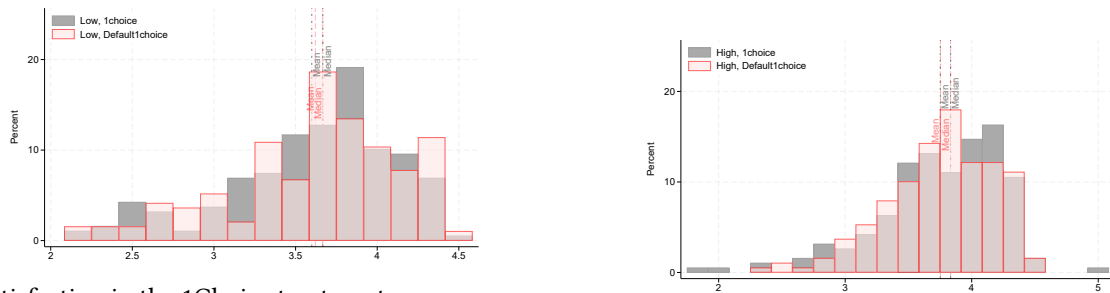
Table B.5 reports the percentage of participants who selected the first-listed charity across two rounds, split by treatment condition. In both Round 1 and Round 2, a slightly higher proportion of participants chose the first charity in the Default1Choice condition (12.7% and 12.2%, respectively) compared to the 1Choice condition (10.5% and 12.1%). This pattern suggests that the presence of a default may have had a modest influence on participants' selections, although the vast majority still opted for other charities in both conditions.

Table B.5: of Participants Choosing the First Charity

	Round 1		Round 2	
	1Choice	Default1Choice	1Choice	Default1Choice
First charity = Yes	10.5%	12.7%	12.1%	12.2%
First charity = No	89.5%	87.3%	87.9%	87.9%
	100.0%	100.0%	100.0%	100.0%

**Satisfaction and regret** Figure B.2 compares satisfaction with donation decisions across the option and default treatments, where higher scores indicate greater satisfaction. Overall, satisfaction levels do not differ significantly between the default and no-default conditions.

Figure B.2: Comparison of Satisfaction with Donation Decision under Default1Choice Treatment



(a) Satisfaction in the 1Choice treatment

( $M = 3.60$ ,  $SD = 0.52$ ) and Default1choice ( $M = 3.62$ ,  $SD = 0.53$ ) treatments, in small number of donation options. A two-sided  $t$ -test for equality of means yields  $t = -0.40$ ,  $p = 0.6882$ , indicating no significant difference.

(b) Satisfaction in the 1Choice ( $M = 3.75$ ,  $SD = 0.49$ ) and Default1choice ( $M = 3.75$ ,  $SD = 0.43$ ) treatments in a large number of donation options. A two-sided  $t$ -test for equality of means yields  $t = -0.03$ ,  $p = 0.9776$ , indicating no significant difference.

Table B.6 examines the effects of treatment conditions and donation amount on satisfaction. The option treatment has a positive and significant effect on satisfaction across all models ( $\beta = 0.152$ ,  $p < 0.01$  in Column 1). Controlling for the amount donated slightly attenuates the effect and remains significant. The donation amount itself is a strong positive predictor of satisfaction, with coefficients around 0.0018 ( $p < 0.001$ ). In contrast, Default and Default  $\times$  Options show no statistically significant effect on satisfaction, suggesting that the default did not meaningfully influence how satisfied participants felt after donating.

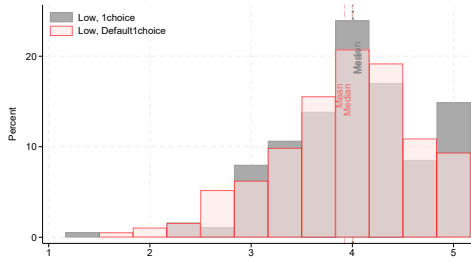
Table B.6: of Default Treatment and Donation Amount on Satisfaction

	Choice Satisfaction		
	(1)	(2)	(3)
Options	0.152*** (0.0519)	0.137*** (0.0510)	0.137*** (0.0508)
Amount of Donation		0.00181*** (0.000477)	0.00175*** (0.000331)
Default			0.0225 (0.0524)
Default $\times$ Options			-0.0144 (0.0702)
Observations	378	378	760

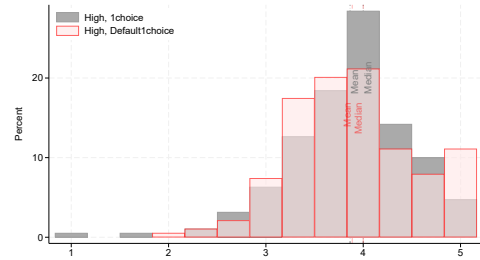
OLS regressions using a dependent variable measuring the satisfaction reported after donating to charity.

Figure B.3 compares regret associated with donation decisions in the presence and absence of a default charity, where higher scores reflect lower regret. Statistical tests reveal no significant differences in regret between the default and no-default conditions, regardless of the size of the charity set.

Figure B.3: Comparison of Regret with Donation Decision in Default1Choice



(a) Regret in the 1Choice ( $M = 4.01$ ,  $SD = 0.67$ ) and Default1Choice ( $M = 3.92$ ,  $SD = 0.70$ ) treatments in a small number of donation options. A two-sided  $t$ -test for equality of means yields  $t = 1.26$ ,  $p = 0.2091$ , indicating no significant difference in regret.



(b) Regret in the 1Choice ( $M = 3.86$ ,  $SD = 0.63$ ) and Default1Choice ( $M = 3.89$ ,  $SD = 0.64$ ) treatments in a large number of donation options. A two-sided  $t$ -test for equality of means yields  $t = -0.34$ ,  $p = 0.7331$ , indicating no significant difference in regret.

Table B.7 presents regression models estimating the effect of the Options and Default treatments on participants' reported regret after making a donation decision. These results indicate that pre-selecting a charity did not influence regret, while the number of available options had a robust positive effect.



Table B.7: of Default Treatment and Donation Amount on Regret

	Choice Regret		
	(1)	(2)	(3)
Options	-0.146** (0.0668)	-0.167** (0.0652)	-0.165** (0.0652)
Amount of Donation		0.00245*** (0.000553)	0.00223*** (0.000412)
Default			-0.0872 (0.0695)
Default $\times$ Options			0.118 (0.0938)
Observations	378	378	760

OLS regressions using a dependent variable measuring the regret reported after donating to charity. Standard errors are in parentheses and are clustered at the participant level.

### B.3 Choice familiarity in option and choice treatments

Table B.8 reports regression models testing the effect of treatment conditions on participants' familiarity with the listed charities. The Options treatment has a consistently strong and statistically significant positive effect across all specifications, indicating that participants who were shown more charity options felt more familiar with the list. This effect remains robust after controlling for the amount donated and the inclusion of the Choice treatment. In contrast, the Choice treatment and the interaction term (Options  $\times$  Choice) are not statistically significant in any specification, suggesting that familiarity is driven primarily by the number of charities shown rather than the flexibility in the donation decision. These findings reinforce the view that perceived familiarity increases with exposure to a broader set of options.

Table B.8: Mediation of the Effect of Treatments on Familiarity

	Choice Familiarity					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	0.324*** (0.0916)	0.330*** (0.0922)			0.324*** (0.0916)	0.327*** (0.0919)
Amount of Donation		-0.000636 (0.000770)		-0.0000932 (0.000494)		-0.000270 (0.000487)
Choice			-0.0342 (0.0631)	-0.0311 (0.0650)	0.00373 (0.0931)	0.0125 (0.0948)
Options $\times$ Choice					-0.0692 (0.124)	-0.0686 (0.124)
Observations	378	378	745	745	745	745

OLS regressions using a dependent variable measuring the choice familiarity reported after donation.

### B.4 Further test on perceived importance treatment

Table B.9 shows the results from a Kolmogorov-Smirnov test for whether experimental participants in the perceived importance treatment chose similarly to the rest of the experiment across the four charity categories ("Animal welfare", "Children and young people", "Health and medicine", and "Housing and hunger"). In the perceived importance treatment, the number of charities within a given category is shown to the participants beforehand, whereas in the rest of the experiment, they are not. Column 2 of table, D, measures the maximum distance between the cumulative distribution function and the reference distribution. The p-value is the probability that D would be observed by chance.

Table B.9: Two-sample Kolmogorov–Smirnov test for equality of distribution functions

Treatment Comparison	D	p-value
<b>Perceived Importance vs. Rest of Experiment</b>		
Perceived Importance	0.04	0.25
Rest of Experiment	-0.01	0.96
Combined K-S	0.04	0.49
<b>NoSignal vs. 4H</b>		
NoSignal	0.00	1.00
4H	-0.02	0.90
Combined K-S	0.02	1.00
<b>NoSignal vs. 4L</b>		
NoSignal	0.05	0.39
4L	-0.00	1.00
Combined K-S	0.05	0.73
<b>4H vs. 1H3L</b>		
4H	0.07	0.40
1H3L	-0.03	0.82
Combined K-S	0.07	0.74
<b>4L vs. 1H3L</b>		
4L	0.02	0.90
1H3L	-0.06	0.53
Combined K-S	0.06	0.91
<b>4L vs. 4H</b>		
4L	0.00	1.00
4H	-0.07	0.40
Combined K-S	0.07	0.74
<b>1L3H vs. 1H3L</b>		
1L3H	0.00	1.00
1H3L	-0.07	0.42
Combined K-S	0.07	0.78

Shows the results of multiple Kolmogorov-Smirnov tests for the equality of the distribution of choices across various treatment groups. The null hypothesis is that the two distributions are the same for each comparison, while the alternative hypothesis is that the distributions differ.

## B.5 Which factors moderate donations?

**Donation habits and traits** We regressed donations on the four treatment variables with potential moderators included. Six moderator variables measure fixed traits that may interact with the treatment effect: altruism, avoidant decision-making, maximising versus satisfying behaviour, prior involvement in charitable giving, and preferences for giving versus donating.

Table B.10: Effect of option treatment on Donations Using Selected Moderators

	Donations (Tokens)					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	0.534*** (0.129)	-0.246 (0.574)	1.298*** (0.353)	-0.107 (0.682)	0.598*** (0.169)	0.430 (0.224)
Altruism (SRA)		0.0326 (0.149)				
Options×Altruism		0.249 (0.176)				
Avoidance			0.219* (0.104)			
Options×Avoidance			-0.289* (0.124)			
Maximiser				-0.282 (0.170)		
Options×Maximiser				0.204 (0.211)		
Money Donated					0.000124 (0.000425)	
Options×Money Donated					-0.000278 (0.000488)	
Prefers Volunteering						-1.811*** (0.392)
Prefers Donating						0.122 (0.234)
Options×Prefers Volunteering						0.458 (0.482)
Options×Prefers Donating						0.121 (0.279)
Observations	2984	2984	2984	2984	2982	2984

OLS regressions of the amount experimental participants donated to on the option treatment variable. Standard errors are in parentheses, clustered by individual.

Table B.11 runs regression using the option treatment, including individual fixed effects. Due to the fixed effects, the effect of the moderator variables is not estimable on its own, as those variables are measured once for each individual. Column (2) shows that the treatment is insignificant with the inclusion of the SRA variable, similar to Table B.10. In contrast, in Column (4) of Table B.11, the option treatment is rendered insignificant by the inclusion of the maximising/satisficing variable. This underscores the important differences when using between-subject versus within-subject variation. Generally, the interaction effects remain statistically insignificant. Column (6) shows that the only exception is that those who state a preference for donating to charity seem to be driving part of the effect of the treatment as they donate more.

Table B.11: Effect of option treatment on Donations Using Selected Moderators with Fixed Effect

	Donations (Tokens)					
	(1)	(2)	(3)	(4)	(5)	(6)
Options	5.884*** (0.951)	5.765 (4.578)	8.448** (2.679)	4.582 (5.330)	6.589*** (1.276)	4.118** (1.447)
Altruism (SRA)		- (-)				
Options×Altruism		0.0378 (1.391)				
Avoidance			- (-)			
Options×Avoidance			-0.964 (0.948)			
Maximiser				- (-)		
Options×Maximiser				0.411 (1.667)		
Money Donated					0 (-)	
Options×Money Donated					-0.00294 (0.00314)	
Prefers Volunteering						- (-)
Prefers Donating						- (-)
Options×Prefers Volunteering						1.331 (3.567)
Options×Prefers Donating						2.993 (1.970)
Observations	2984	2984	2984	2984	2982	2984

OLS regressions of the amount experimental participants donated to on the option treatment variable. There are six moderator variables: altruism, avoidant decision-making, maximising versus satisficing behaviour, and prior involvement in charitable giving, both volunteering and donations. These regressions include individual fixed effects.

Standard errors in parentheses, clustered by individual.

Table B.12: Effect of Choice Treatment on Donations Using Selected Moderators

	Donations (Tokens)					
	(1)	(2)	(3)	(4)	(5)	(6)
Choices	1.634*** (0.162)	0.827 (0.715)	1.488*** (0.446)	1.175 (0.825)	1.307*** (0.212)	1.620*** (0.284)
Altruism (SRA)		0.0661 (0.148)				
Choices×Altruism		0.260 (0.220)				
Avoidance			0.0216 (0.111)			
Choices×Avoidance			0.0534 (0.155)			
Maximiser				-0.263 (0.171)		
Choices×Maximiser				0.146 (0.255)		
Money Donated					-0.000740 (0.000455)	
Choices×Money Donated					0.00146** (0.000612)	
Prefers Volunteering						-1.588*** (0.391)
Prefers Donating						0.129 (0.240)
Choices×Prefers Volunteering						0.0525 (0.625)
Choices×Prefers Donating						-0.0230 (0.350)
Observations	2984	2984	2984	2984	2982	2984

OLS regressions of the amount experimental participants donated to on the choice treatment variable. Choices = 1 when participants can choose multiple charities and = 0 when participants can only choose one. There are six moderator variables: altruism, avoidant decision-making, maximising versus satisficing behaviour, and prior involvement in charitable giving, both volunteering and donations. Standard errors in parentheses, clustered by individual.

**Demographic Moderators** Tables B.13 and B.14 show moderator regressions for eight demographic variables: whether the participant has a degree (baseline is only high school) has no effect on donation. White participants (baseline rest of sample) donate 5-7 tokens more. Those employed full-time or part-time (baseline unemployed for any reason) donate 3-4 tokens less. Whether they are an atheist (baseline rest of sample) has no effect. Income (recoded to be continuous) has a small negative effect, with £1,000 more reducing donations by 0.03 tokens, though this is only significant in Table B.14. Participants donate over one token more for every year of life. Men (baseline rest of sample) donate 4-5 tokens less. The moderation results are easily summarised: none of these variables moderates the relationship between the four treatments and the amount donated, as all of the interaction terms are statistically insignificant at all conventional levels.

Table B.13: Effect of Options on Donations Using Demographic Moderators

	Donations (Tokens)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Options	5.096*** (0.966)	7.393*** (1.908)	3.114 (2.076)	5.035** (1.654)	4.152* (2.205)	6.048*** (1.388)	5.476*** (1.579)	5.348** (2.501)	5.117*** (1.319)
Degree or Higher		2.509 (1.727)							
Options×Degree		−3.067 (2.220)							
White			5.218** (1.816)						
Options×White			2.591 (2.344)						
Married				0.117 (1.643)					
Options×Married				1.085 (2.123)					
Employed					−4.196** (1.915)				
Options×Employed					1.166 (2.452)				
Atheist						2.223 (1.505)			
Options×Atheist						−1.862 (1.931)			
Income (£)							−0.00002 (0.00003)		
Options×Income							0.0000061 (0.00003)		
Age								1.509*** (0.450)	
Options×Age								−0.0937 (0.586)	
Male									−4.310*** (1.509)
Options×Male									−0.345 (1.935)
Observations	6000	5888	6000	5168	6000	6000	5764	6000	5946

OLS regressions of the amount experimental participants donated to on the option treatment variable. There are eight demographic variables used as moderators: whether participant has a bachelor's degree or higher (versus high school or less); whether they are White British (versus all other ethnicities); whether they are employed (part-time or full-time versus out of employment for any reason); whether they are married (versus never married); whether they are an atheist (versus any religion); their income; their age; and whether they are male (versus female). In columns (2), (4), and (7), some data is lost as ambiguous categories are coded as missing to facilitate a clear interpretation of the dummy variable.

Standard errors in parentheses, clustered by individual.

Table B.14: Effect of Choices on Donations Using Demographic Moderators

	Donations (Tokens)								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Choices	19.07*** (1.343)	21.56*** (2.684)	21.34*** (2.938)	18.09*** (2.387)	19.00*** (2.797)	18.89*** (1.899)	16.53*** (2.107)	15.04*** (3.509)	18.30*** (1.814)
Degree or Higher		1.806 (1.489)							
Choices×Degree		−3.651 (3.110)							
White			7.239*** (1.539)						
Choices×White			−2.883 (3.302)						
Married				0.0156 (1.401)					
Choices×Married				1.382 (2.995)					
Employed					−3.272** (1.634)				
Choices×Employed					0.0152 (3.186)				
Atheist						1.629 (1.278)			
Choices×Atheist						0.432 (2.687)			
Income (£)							−0.00003** (0.00002)		
Choices×Income							0.00006 (0.00004)		
Age								1.100*** (0.379)	
Choices×Age								0.982 (0.797)	
Male									−4.772*** (1.276)
Choices×Male									1.435 (2.714)
Observations	6000	5888	6000	5168	6000	6000	5764	6000	5946

OLS regressions of the amount experimental participants donated to on the choice treatment variable. There are eight demographic variables as moderators: whether a participant has a bachelor's degree or higher (versus high school or less); whether they are White British (versus all other ethnicities); whether they are employed (part-time or full-time versus out of employment for any reason); whether they are married (versus never married); whether they are an atheist (versus any religion); their income; their age; and whether they are male (versus female). In columns (2), (4), and (7), some data is lost as ambiguous categories are coded as missing to facilitate a clear interpretation of the dummy variable.

Table B.15 shows results from regressing tokens donated on the option (40 v.s. 5) and choice (1 v.s. Many) treatments, using all three moderators, totalling four regressions, none has a significant effect. Column (4) of Table B.15 investigates the difficulty moderator by breaking it into four component questions. For difficulty, the positive and marginally significant coefficient on “the amount of thought” suggests that greater cognitive engagement in the decision-making process is associated with higher donation amounts. One mechanism for choice deprivation may be greater thought prompted by greater choice, which is contrary to existing literature which links choice difficulty with choice overload (Chernev et al. 2015).



Table B.15: Moderation Effect in Choice and Option Treatments

	Donations (Tokens)			
	(1)	(2)	(3)	(4)
Options	8.228 (6.303)	8.445 (6.169)	9.241 (6.191)	9.013 (6.339)
Choice	32.50*** (6.754)	32.37*** (6.738)	32.35*** (6.743)	32.33*** (6.730)
Options $\times$ Choice	2.102 (9.396)	2.264 (9.351)	2.303 (9.348)	1.446 (9.390)
Deliberation over Choices		1.688 (3.054)		
Familiarity with Charities			-1.510 (2.722)	
Difficulty of Choices	1.558 (3.954)			
Level of difficulty				-0.885 (2.746)
Amount of effort				0.449 (2.938)
Amount of time				-2.705 (3.980)
Amount of thought				5.987* (3.340)
Observations	745	745	745	745

This table presents regression results estimating the impact of choice availability, decision difficulty, and familiarity with charities on the amount donated (in tokens). Interaction terms and subjective decision-related factors, such as difficulty, deliberation, and familiarity with charities, are included to assess their role in donation behaviour. Standard errors are in parentheses, clustered at the individual level.

## C Mediator/Moderators questionnaires

### 1. Choice Satisfaction ([Fitzsimons 2000](#)):

- I was very satisfied with the experience of deciding which charity to choose. (Extremely dissatisfied, Somewhat dissatisfied, Neither satisfied nor dissatisfied, Somewhat satisfied, Extremely satisfied)
- I found the process of deciding which charity to choose frustrating. (as above) [Reverse coded]
- Several good charities were available for me to choose between. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
- I thought the choice selection of charities was good. (as above)
- I would be happy to choose from the same set of charities the next time I choose to donate money. (as above)
- I found the process of deciding which charity to choose interesting. (as above)

### 2. Regret ([Scheibehenne et al. 2009](#)):

- Do you regret your choices? (Definitely not, Probably not, Might or might not, Probably yes, Definitely yes)
- Do you think that a different charity from that assortment would have been better than the ones you chose? (as above)
- If you could repeat the choice, would you choose the same charitable organisation(s) again? (as above) [Reverse coded]

### 3. Perceived choice difficulty ([Raghubir & Menon 1998](#)):

- How would you rate the level of difficulty you experienced when making the choices? (Extremely difficult, Somewhat difficult, Neither easy nor difficult, Somewhat easy, Extremely easy)
- How would you rate the amount of effort it took for you to make your choices? (Extremely effortful, Somewhat effortful, Neither effortless nor effortful, Somewhat effortless, Extremely effortless)
- How would you rate the amount of time it took you to make your choices? (No time at all, A little time, A moderate amount of time, A lot of time, A great deal of time)
- How would you rate the amount of thought you had to put into making your choices? (No thought at all, A little, A moderate amount, A lot, A great deal)

### 4. Familiarity: How familiar do you consider yourself to be with the listed charities? (Not familiar at all, Slightly familiar, Moderately familiar, Very familiar, Extremely familiar)

### 5. Deliberation: How much did you deliberate about your choices? (Not at all, A little, A moderate amount, A lot, A great deal)

### 6. Self-Report Altruism (SRA, [Penner et al. \(2014\)](#))

- In the past, I have helped carry a stranger's belongings (e.g., books, parcels, etc.). (Never, Once, More than Once, Often, Very Often)
- In the past, I have allowed someone to go ahead of me in a line (e.g., supermarket, copying machine, etc.). (as above)
- In the past, I have let a neighbour whom I didn't know too well borrow an item of some value (e.g., tools, a dish, etc.). (as above)
- I have, before being asked, voluntarily looked after a neighbour's pets or children without being paid for it. (as above)
- In the past, I have offered to help people with disabilities or elderly strangers across a street. (as above)

7. Avoidant decision making ([Scott & Bruce 1995](#)):

- I avoid making important decisions until the pressure is on. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
- I postpone decision making whenever possible. (as above)
- I often procrastinate when it comes to making important decisions. (as above)
- I generally make important decisions at the last minute. (as above)
- I put off making many decisions because thinking about them makes me uneasy. (as above)

8. Maximising vs. satisficing ([Nenkov et al. 2008](#)):

- When I am in the car listening to the radio (or podcast or similar), I often check other stations to see if something better is playing, even if I am relatively satisfied with what I'm listening to. (Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree)
- No matter how satisfied I am with my job (work or daily chores), it's only right for me to be on the lookout for better opportunities. (as above)
- I often find it difficult to shop for a gift for a friend. (as above)
- Finding a new series or movie (on Netflix or similar platforms) is really difficult. I'm always struggling to pick the best one. (as above)
- No matter what I do, I have the highest standards for myself. (as above)
- I never settle for second best. (as above)

## **D Instructions**

## **Task instructions**

You are participating in decision-making in philanthropy.

Please ensure you are using a widescreen to complete the study. If texts are muddled on your screen, you need to change the screen orientation to landscape.

### **(1) Choose one category of giving.**

First, you will be asked to choose *one* category of giving among "Animal welfare", "Children and young people", "Health and medicine", and "Housing and hunger". You are also given the option of "None of the above".

**Note:** By selecting "None of the above", you will not make any donation decisions, and will be directed to the end of the study. This means you will keep all the tokens as your bonus payment (as described below) upon completion of the end questionnaires.

### **(2) Complete two donation decisions.**

You will be presented with two donation decisions in your chosen category. You are given a total of 200 tokens, equivalent to £2.5, to complete the two donation decisions. Tokens are split equally between two donation decisions. Hence, you will receive 100 tokens for each donation page.

#### **Donation decisions**

On donation pages, you will see several charities and their activities. The number of charities might vary on the web pages. While a charity might show up in both donation pages, its activity will not be the same across the two donation pages.

All listed charities are registered with either the Charity Commission for England & Wales, Scottish Charities Register, or Northern Ireland Register of Charities.

For each donation page, a total of 100 tokens, equivalent to £1.25, is available to you. You can select only (*or* at least) one charity from the list, and decide how many tokens to donate to the charity. The amount of donation can be 0, or any amount up to (and including) 100 tokens. We will facilitate the transfer of your donations to the selected charity.

**Note:** On each donation page, you have the option of choosing "No, I will not donate on this occasion." and move on to the next page. This means that no donation will be made, and you will keep all 100 tokens as part of bonus payments.

#### **Payments and Bonus payments**

By participating and completing the study, you will receive a fixed amount of £2.5. To complete the donation tasks, we allocate an additional £2.5, expressed in terms of tokens. During the study, you have the opportunity to collect them as bonus (each 200 tokens are equivalent to £2.5).

**Note :**

- All the tokens that you do not donate are your bonus payments which will be paid to you.
- All the tokens that you donate will be given on your behalf, to the charities you have selected.

### (3) Answer the end questionnaires.

After completion of two donation pages, you will be directed to the study end-questionnaires. Upon completion of the questionnaires, your donations and bonus payments will be presented to you and processed as you have decided.

Example of a donation decision web page

Below, you can see a screenshot of a donation web page. This example has five charities to choose from.

**Donation page 1 out of 2**

You have 100 tokens which can be used for donation to one of the listed charities.

I would like to donate to:

- ☐ **Ace Of Clubs** for providing laundry and shelter for those who are homeless.
- ☐ **Homeless Friend** for providing raising training, and guidance and signposting.
- ☒ **Lancaster & District Homeless Action Service (LDHAS)** for providing breakfast and lunch, telephone showers and laundry facilities.
- ☐ **Paper Cup Project** for supporting with food and drink for people experiencing homelessness.
- ☐ **Renewal North West** for providing accommodation to the homeless.
- ☐ I will not donate on this occasion.

25 tokens   50 tokens   75 tokens   Other amounts 0-100

**Submit**

- The donation page displays the total amount of tokens available to you. This is always equal to 100 tokens.
- Then, the list of charities is presented.
- Once a charity is selected, you can indicate the number of tokens intended for donation: 25, 50, 75 or the open-ended box where you may input 0-100 tokens (including 0 and 100 tokens).

To learn more about a charity's objectives, you can hover your mouse over the charity's name, as shown in the example above.

The last option is always "No, I will not donate on this occasion." You may use this option if you wish, and click on "Submit" to move on to the next donation page.

Figure D.1: Screenshots from the donation interface showing different stages and conditions of the task.

**Categories of Giving**

Please choose one of the following categories of giving\*

- Animal welfare  
40 charities
- Children and young people  
40 charities
- Health and medicine  
40 charities
- Housing and hunger  
40 charities
- None of the above

\*By selecting Step 1 of 2, you will make no donation decision, and will be directed to the end of the study questionnaire.

(a) Choosing a category of giving with charity count.

#### Donation page 1 out of 2

You have 100 tokens which can be used for donation to one of the listed charities.

I would like to donate to

- ☐ Mrs Murray Home For Stray Dogs & Cats for providing refuge and shelter for lost and stray dogs and cats in the city.
- ☐ Blakiewell Animal Sanctuary for providing a home to over 50 horses and ponies, four pigs and three cows as well as dogs, cats and any other animal or bird that needs a safe place.
- ☐ Stray Aid Ltd for caring for lost and abandoned dogs and unwanted cats in their licensed kennels and cattery.
- ☐ Powys Animal Welfare for working closely with social services to help their clients with mental health issues care for their companion animals.
- ☐ Fair Isle Bird Observatory Trust for providing ranger services, walks and talks to visitors.
- ☐ I will not donate on this occasion

Submit

(b) Donation task – 1Choice with few charities.

#### Donation page 1 out of 2

You have 100 tokens which can be used for donation to one of the listed charities:

I would like to donate to

- ☒ Pro Paws for providing veterinary training on latest sterilisation techniques.

25 tokens 50 tokens 75 tokens Other amounts 0-100

- ☐ The Donkey Sanctuary for running a weekly lottery to fund vital work rescuing donkeys and mules.
- ☐ Mayhew Animal Home for running a Pet Refuge programme that provides shelter and care for the pets of people in crisis.
- ☐ Association of Dogs and Cats Homes for providing access to grant funding for dog and cat rescues.
- ☐ Compassion in World Farming for campaigning and advocating for policy and legislation that will support the highest standards of farmed animal welfare, including farmed fish.
- ☐ I will not donate on this occasion.

Submit

(c) Donation task – Default1Choice with few charities.

#### Donation page 1 out of 2

You have 100 tokens which can be used for donation to as many charities as you wish from the listed charities.

I would like to donate to

- ☐ Unitas for helping young people with their resume, mock interviews, career paths and work experience through our partners.
- ☐ Young Leaders Academy for providing one to one mentoring to young black youth struggling in school or home life.
- ☒ LAYC for offering advice, support, training, funding opportunities for young people.
- ☐ Become for informing and supporting young people in care and care leavers via their publications and learning and skills workshops.
- ☐ Disability Challengers for running Play and Youth schemes so that young people can come to their preschool to experience the same fun and friendship as their non-disabled peers.
- ☐ I will not donate on this occasion

Submit

(d) Donation task – MChoice with few charities.



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