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Donations to beggars: investigating the impact of an increasing number of donation alternatives

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Abstract

The presence of poverty on the streets in the form of begging is a growing social dilemma, and understanding what factors that influence our willingness to help the poor is of importance. This paper examines altruistic behaviour in the context of street begging. An experiment is conducted to test whether an increased number of donation alternatives have impact on donor behaviour. Our results suggest that the number of donation alternatives has no impact on donation patterns. We discuss our findings' theoretical implications and elucidate areas of prospective research.

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1 Introduction

‘Begging has been around as long as there
has been poverty.’ (The Local, 2015)
— Dick Harrison, author and historian

As a consequence of the European Union principle of free movement of people, street begging has increased across Sweden during the last couple of years (Magnusson, 2014; Arbman, 2015). How is this augmented presence of poverty affecting people’s willingness to help the poor? More precisely, what impact does an increased number of street beggars have on donor behaviour? By conducting a dictator game we investigate what impact an increasing number of donation alternatives have on altruistic behaviour in the context of street begging.

The growing number of street beggars raises the question whether greater exposure to poverty has implications on people’s benevolence. Does the increased confrontation with poverty on a daily basis affect our inclination to help the poor? The theoretical explanations are rather ambiguous. Within the field of psychology recent studies show that people’s affective feelings and willingness to donate are higher for a single child than for a group of children (Västfjäll et al., 2014). In contrast, within the field of economics Andreoni (2007) examines how donations to groups depend on their size, and concludes that donations slightly increase with the number of recipients.

Furthermore, increased street begging unfolds another implication. Not only a decision whether to give or not has to be taken. An additional element in the decision-making process is also present, namely whom to give to. In modern society people constantly have to make decisions that comprise an active choice between numerous alternatives. The most obvious example would be decisions that a consumer has to make regularly in day-to-day life. More alternatives and the freedom of choice might allow for the consumer to find a good that better matches his preferences and thus increase the likelihood of him consuming (Oppewal and Koelemeijer, 2005; Diehl and Lamberton, 2010). On the other hand, if there are too many alternatives, the consumer might perceive the choice as being too extensive, feel dissatisfied with his decision or even refuse to buy. This is

commonly known as the choice overload effect (Iyengar and Lepper, 2000; Diehl and Lamberton, 2010).

Hence, increased street begging implies more donation alternatives which might affect donors' decision-making processes. The question of our interest is what impact this has on donor behaviour. The topic has not yet been examined in its entirety. Soyer and Hogarth (2011) explore how donor behaviour changes when donors can choose between an increasing number of charitable organisations. They conclude that donations grow when the number of donation alternatives increases, albeit at a decreasing rate. However, their investigation focuses on donations to charity organisations and not individuals. On the contrary, Västfjäll et al. (2014) finds the opposite effect when examining donations to 'single children in need': decreasing donations as the number of recipients grows. Modifying the experiment of Soyer and Hogarth (2011), we test for donations to individuals in a different context than that of Västfjäll et al. (2014). In an aspiration to bring clarity to the current state of research our intention is to analyse what impact an increasing number of donation alternatives have on altruistic behaviour in the context of street begging.

2 Current state of research

2.1 Altruism

The French philosopher Comte (1798-1857) was the first to utter the expression 'altruism', which today is commonly defined as a genuine care for others without any underlying motives (Granström, 2007). Before him philosophers such as Hume (1711-1776) argued that humans have a natural inclination of doing good, as well as Smith (1723-1790) who put emphasis on the importance of moral deeds and feelings in human behaviour in 'The Theory of Moral Sentiments' (Ashraf et al., 2005). Even though altruism as a concept has been around for many hundreds of years it was not until later, with the rise of behavioural economics, that economists started to discuss its implications (Becker, 1974). Instead the concept of Homo economicus - the rational economic agent

- has been one of the main tenets throughout the evolution of economic theory. Many theories are based on the assumption that individuals are acting in a purely selfish way in order to satisfy their own self-interests. However, this approach has been criticised, and during recent years attention has been drawn towards expanding the notion of utility-maximisation to also allow for other-regarding preferences such as fairness and justice. These other-regarding preferences are often referred to as altruistic preferences. The key idea is that an individual also takes altruistic preferences into account when making pecuniary decisions, and the objective of research regarding altruism is to investigate its role in a decision making process (Lunati, 1997).

The research on altruism within economics is usually conducted in an experimental setting in the form of a dictator game. The dictator is assigned a monetary allocation and given the task of distributing the money between himself and a recipient. Altruistic behaviour is measured by observing how much of the allocation the dictator keeps for himself and how much he chooses to allocate to the recipient (Eckel and Grossman, 1996). However, the notion of altruism is wide and the exact definition is a frequent subject of philosophical discussions. Nevertheless, since practice constitutes that research on altruism is done in terms of monetary donations, we will hereafter use the phrase ‘altruistic behaviour’ synonymously with donor behaviour.

2.2 Assortment sizes

One of the views on assortment sizes is ‘the more the merrier’. It argues that people are attracted by greater assortment sizes that in turn yield a higher probability of preference matching, enhanced freedom of choice, a sense of control and thus higher life satisfaction (Reibstein et al., 1975; Diehl and Lamberton, 2010). Research suggests that larger, rather than smaller, assortment sizes are usually preferred within the retail sector (Oppewal and Koelemeijer, 2005). Company slogans such as ‘have it your way’, customised offers and the vast product variety in retail stores are indications of this.

Another view on assortment sizes is that an increased number of alternatives may aggravate decision making. If presented with too many alternatives, a consumer might

perceive the choice as being too extensive, feel dissatisfied with his decision or even refuse to buy. This phenomenon is known by various names: ‘choice overload’ (Diehl and Lamberton, 2010; Iyengar and Lepper, 2000), ‘tyranny of choice’ (Schwartz, 2000) and ‘the overchoice effect’ (Gourville and Soman, 2005). We will hereafter refer to this phenomenon as choice overload. The fundamental idea was first introduced by the French philosopher Jean Buridan (c. 1300-1358) who presented the paradox of Buridan’s ass (Scheibehenne et al., 2010). A donkey, equally hungry and thirsty, placed in the middle of a stack of hay and a tank of water will be unable of making a rational choice and therefore starve to death or perish of thirst.

The substance of Buridan’s paradox illustrates how introducing alternatives may obstruct decision making. The choice overload effect is not limited to basic consumer products. For instance, Iyengar and Lepper (2000) demonstrate that students write higher quality essays if they have less topics to choose from. They argue that when people are confronted with too many options, they tend to go for a ‘merely satisfactory’ choice instead of the optimal one, since deliberating between an extensive amount of choices requires an effort greater than the presumptive increase in utility that the optimal choice would bestow.

Through a meta-analysis of 63 conducted experiments, Scheibehenne et al. (2010) analyse what impact an increasing number of alternatives have on consumption behaviour. They find a mean effect of zero, indicating that the number of alternatives on average has no effect on consumption behaviour. However, they find great variance between the studies suggesting that some situations seem to elicit a strong choice overload effect while others do not. To determine exactly what conditions and circumstances that give rise to the choice overload effect is still a subject of research. Up to now, suggestions of such conditions are lack of familiarity and previous preferences (Iyengar and Lepper, 2000), no dominant options (Dhar, 1997) and some level of cognitive effort in the decision-making process (Reutskaja and Hogarth, 2009; Mogilner et al., 2008). Even though the actual size of the assortment is a focal problem within the choice overload theory, there is no exact definition of what elicits the effect. Research so far suggest that the main contributors are the preconditions rather than the actual size of the assortment

(Scheibehenne et al., 2010). Furthermore, Mick et al. (2004) discuss how an excessive amount of choices might have deleterious effects on human behaviour. They argue that it might reduce altruistic and pro-social engagement, and propose that further research on the topic could provide reliable insights to whether the choice overload effect affects altruistic behaviour or not.

2.3 Assortment sizes in an altruistic context

An increasing number of alternatives in connection with the concept of altruism have been examined in previous studies. First of all, Andreoni (2007) analyses donations to groups and shows how altruistic behaviour alters as the size of the group changes. The study reveals that when donations buy private goods, total donations increase with the number of recipients. However, the average donation that each recipient receives decreases, which implies that the utility that the giver obtains from the act of giving does not grow proportionally with the size of the group. The study did not involve any element of an active choice between alternatives, but the findings are an indication of how altruistic behaviour is affected when the number of recipients increases.

Within the field of economics, three other studies build upon the findings of Andreoni (2007). Firstly, Scheibehenne et al. (2009) investigate what factors that evoke a choice overload effect and how the willingness to donate to charities depends on the number of alternatives the donors are facing. In an experiment the donors could either choose to donate a single dollar to a charity of choice, or keep the dollar for themselves. Three different scenarios were manipulated. In each treatment the size of the assortment list presented to the donors varied and three different moderators were tested: prior preferences, cultural differences and ‘the need to justify the choice’. Neither prior preferences nor cultural differences seemed to call forth any tendency of choice overload, instead the percentage of participants that chose to donate increased with the number of alternatives. However, in the third case scenario the donors were forced not only to choose whether to donate or not, they also had to write a justification about their choice. In this way the situation for the donors was made more complex, increasing their cognitive effort, and the percentage of participants that donated decreased when confronted with

larger assortment sizes. Hence, when forced to justify their choice, the choice overload effect was detectable.

Secondly, Soyer and Hogarth (2011), examine how charitable giving is affected by an increasing number of donation alternatives. In an experiment the participants could choose to donate an amount of their potential winnings from a lottery. The donors were facing either 3, 8 or 16 different charities, and they could spread their donations across various alternatives. Their results indicate that average donations grow with the number of alternatives present. In an additional experiment a variation of the first experiment was executed. Instead of different charities, the participants could choose amongst different charity campaigns undertaken by a single organisation. This time 7 and 13 different campaigns were tested against having one alternative, and both a scenario in which the donors could spread their donations between all campaigns and a scenario where the donors had to pick a single campaign were simulated. The results of the second experiment are similar to those of the first: average donations grow with the number of alternatives, albeit at a decreasing rate. Although, when constrained with not being able to spread the donations between different campaigns the absolute values of the donations sank slightly, but were still higher than the case with only one option. However, tests for differences in mean donations between having one alternative and 13 alternatives could not be proven statistically significant.

Thirdly, Carroll et al. (2011) investigate choice overload in relation to altruism from a somewhat different perspective, namely how an excessive number of alternatives affect people's willingness to commit themselves to volunteer work. An experiment where people had to choose which organisations they could imagine volunteering for from a list of either 10 or 30 alternatives was set up. The results show that with a higher number of alternatives decisions are perceived as more difficult, and the likelihood of deferment is higher when encountered with more alternatives. This is similar to the notion of Mick et al. (2004) indicating that an increasing number of alternatives might demotivate altruistic engagement.

Finally, within psychology studies show that people tend to feel stronger positive affect for a single identified victim compared to a group of individuals (Kogut and Ritov, 2005).

In four separate experiments Västfjäll et al. (2014) further explores ‘the single identified victim’ effect. In an experiment participants were shown pictures of a varying number of children in need. The participants that were shown pictures of a single child were most willing to donate money, and also indicated the highest positive affect. Already when pictures of two children were introduced donations and reported affect started to decrease, and when showed pictures of eight children there was a further decline. Västfjäll et al. (2014) denote this effect as ‘compassion fade’, which implies that as the number of individuals in need grows positive affect decreases, which in turn yields lower donations. Thus, adverse to the findings of Soyer and Hogarth (2011), the study indicates that donations tend to decrease as the number of recipients increases. However, Västfjäll et al. (2014) reveal that if individuals are conceived as an entity, by being described as belonging to a family or shown at the same photograph, willingness to donate and positive affect are similar to that of a single individual.

Hence, research so far diverge and does not provide uniform answers to how an increased number of donations alternatives affect altruistic behaviour. We replicate, with some adjustments, the experiment by Soyer and Hogarth (2011). However, instead of donations to charity organisations we focus on donations to individuals, namely street beggars. By doing so we aspire to clarify how an increased number of donation alternatives affect altruistic behaviour in the context of street begging.

3 Methodology

3.1 Experimental design

In order to reduce the social-esteem effect of giving, meaning that respondents donate their entire allocation solely to demonstrate generosity towards the experimental leader, the experiment was designed as a double-blind dictator game (Eckel and Grossman, 1996). With respect to the resources at our disposal, the experiment was conducted using an internet survey tool, and the respondents were randomly assigned into either the control group or any of the two treatment groups. In the control group (CG) the

respondents faced the possibility of donating to a single street beggar, while in the treatment groups the respondents were asked not only to make a decision of how much to donate, but also to whom. In treatment group 1 (TG₁) the respondents had to choose between three street beggars and in treatment group 2 (TG₂) they had to choose between ten. In all groups the respondents had the opportunity to refrain from donating.

Overview of the design of the experiment

Control Group (CG)	Randomisation		Observation ₁
Treatment Group 1 (TG ₁)	Randomisation	Exposure to Treatment ₁	Observation ₂
Treatment Group 2 (TG ₂)	Randomisation	Exposure to Treatment ₂	Observation ₃

The selection of three and ten alternatives was based on Haynes (2009) who in an experiment proved an assortment size of ten alternatives as ‘large enough’ in order to call forth the choice overload effect. With two treatment groups (TG₁ working as a bridge between the two others) we are able to detect trends in the data. However, as mentioned in the previous section, the core of the choice overload phenomenon is not within the actual number of alternatives, rather it depends on the circumstances (Scheibehenne et al., 2010).

The standard dictator game involves a \$10 stake (Engel, 2011) and in an ideal test each respondent would have been given a fixed sum to allocate freely. However, this was not possible due to budget constraints. Instead, as in the study by Soyer and Hogarth (2011), the respondents took part in a lottery with a potential winning of 1000 SEK (\$114.76 per 2015-03-13) which functioned as the stake in the dictator game. The relatively large sum was chosen to impose a feeling of wealth, raising the expected value from the lottery and averting the respondents from perceiving the stake as negligible.

3.2 Participants

Using mean values and standard deviations from Soyer and Hogarth (2011) and Ben-Ner et al. (2004), the number of respondents needed in each group to statistically ensure any detectable effect was calculated. With a significance level of 5% and a power of 80%, the minimum number of respondents required in order to conduct desired tests between groups was a priori determined to 38 (Faul et al., 2007).

Due to feasibility reasons the experiment was mainly aimed towards students living in Sweden and the experiment yielded a dropout ratio of 2%. One respondent identified himself as retired and one indicated his main occupation as ‘other’. These two observations stood out and were therefore eliminated from the sample. Out of the remaining 168 respondents, 153 were students (91%) and 15 were from the working population (9%). The average age of the respondents was 23 years, 45% were female and 56% were male. Previous studies have determined that variables such as disposable income, age and social background affect altruistic behaviour (Bennet, 2003). Since our sample mainly consists of students living in Sweden, it will best represent that particular population. The working population in our sample is underrepresented and therefore the results will not necessarily reflect the total population of Sweden. In order to test for such population, a broader and more heterogeneous sample would be required.

3.3 Recipients

The recipients of the donations were recruited through Ny Gemenskap, a Stockholm-based politically and religiously unattached charity organisation. The recipients were recruited based on the following description:

‘The recipient is a woman, whose main income comes from begging on the streets of Stockholm’.

Since the purpose of this study is to examine what effect an increasing number of donation alternatives have on altruistic behaviour, the recipients were recruited on the basis of being as close substitutes to each other as possible. All the potential recipients were

women in the same age (27-35 years) with names indicating similar origin. This was done in order to avoid any dominant alternatives within the group.

Ny Gemenskap held the responsibility of distributing the donation to the recipient described in the experiment.¹ With respect to the integrity of the recipients, all personal information in the experiment was presented with aliases.

3.4 Conduct

The survey was launched on the 13th of March 2015 and ran for two weeks.² The respondents were recruited via email and given a link which directed them to the online survey. When recruiting the respondents they were given limited information about the experiment. The only information they received briefed them about their anonymous participation in a lottery of 1000 SEK in exchange for answers to a few questions.

In the first stage of the experiment the respondents were asked to provide answers to demographical questions regarding age, gender, main occupation and current city. Thereafter questions regarding altruistic preferences were introduced. These questions were included in order to validate the randomisation process, ensuring that prior altruistic preferences were equally distributed across the groups. In the next stage the dictator game was presented to the respondents. The profile of the street beggar(s) the respondents faced were randomly selected out of a pool of profiles. The respondents could not split their allocation and spread it to numerous recipients, they had to donate to a single street beggar or refrain from donating. The decision of each respondent was binding and they could not change their choice in a later stage. In previous experiments, the respondents' freedom of choice has varied. Both cases with respondents being able to spread their donations to numerous alternatives as well as cases where the donations have been limited to one subject have been executed. We chose the second alternative, since it would impose an active element of choice for the respondents, increasing their cognitive effort. Lastly, before completing the survey, the respondents were asked to answer questions related to the satisfaction with their choices.

¹See appendix 2 and 3 for certifications

²See appendix 1 for transcription of the survey

4 Hypotheses and tests

In order to test what implications an increasing number of donation alternatives have on individuals' altruistic behaviour we formulate the following hypotheses:

1, Increasing the number of donation alternatives has no effect on the respondents' total donations.

2, Increasing the number of donation alternatives has no effect on the fraction of people donating.

Given the design of the experiment mean comparisons will be conducted in order to test the first hypothesis, and proportional comparisons will be set up in order to test the second. The hypotheses can be expressed as follows:

H_0 : There are no differences in mean donations between the groups ($\mu_{CG} = \mu_{TG_1} = \mu_{TG_2}$)

H_1 : There are differences in mean donations between the groups ($\mu_{CG} \neq \mu_{TG_1} \neq \mu_{TG_2}$)

H_0 : There are no proportional differences between the groups ($p_{CG} = p_{TG_1} = p_{TG_2}$)

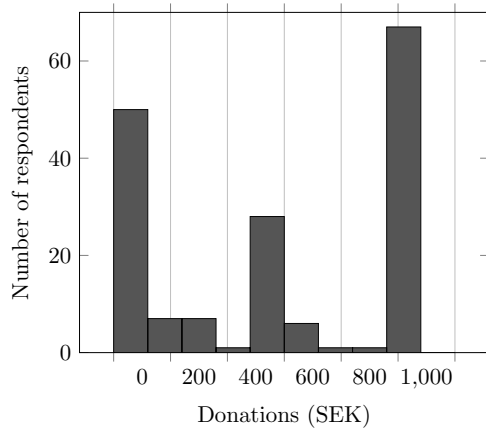
H_1 : There are proportional differences between the groups ($p_{CG} \neq p_{TG_1} \neq p_{TG_2}$)

As the choice overload theory implicitly suggests a negative correlation between donations and the number of donation alternatives, and its counterpart suggests a positive correlation since larger assortment sizes facilitate decision making, both theories would imply rejections of the hypotheses. Rejections of the hypotheses would also be in line with the research of Soyer and Hogarth (2011) and Västfjäll et al. (2014). If instead the hypotheses hold, it would suggest that the number of donation alternatives has no impact on donor behaviour in our particular setting.

5 Results

5.1 Descriptive statistics

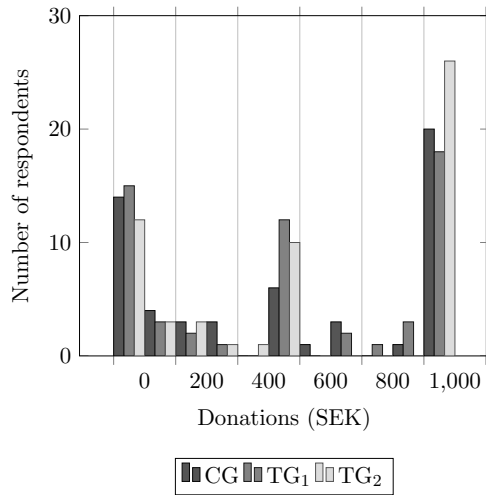
The sample shows a multi-modal distribution with distinct peaks. The individual distributions per group, just as the total sample, follow multi-modal distributions. The mean donation in the total sample amounts to 542.80 SEK.



Mean donation	542.80 SEK
Std. Deviation	419.90 SEK
Proportional donations	21.90% donating 0 SEK 16.00% donating 500 SEK 37.90% donating 1000 SEK

Figure 1: Histogram of donations - total sample

Table 1: Descriptive statistics - total sample



	CG	TG1	TG2
Mean donation	523.60 SEK	528.40 SEK	575.50 SEK
Std. Deviation	426.30 SEK	415.25 SEK	422.61 SEK
Proportions			
0 SEK	23.64%	24.56%	17.86%
500 SEK	9.09%	21.05%	17.86%
1000 SEK	36.36%	31.58%	46.43%

Figure 2: Histogram of donations - by group

Table 2: Descriptive statistics - by group

A graphical observation indicates no signs of normality in the sample. In addition, tests for normality show no support for normal distributions. Therefore non-parametric tests will be conducted to test the hypotheses.

Table 3: Test of Normality

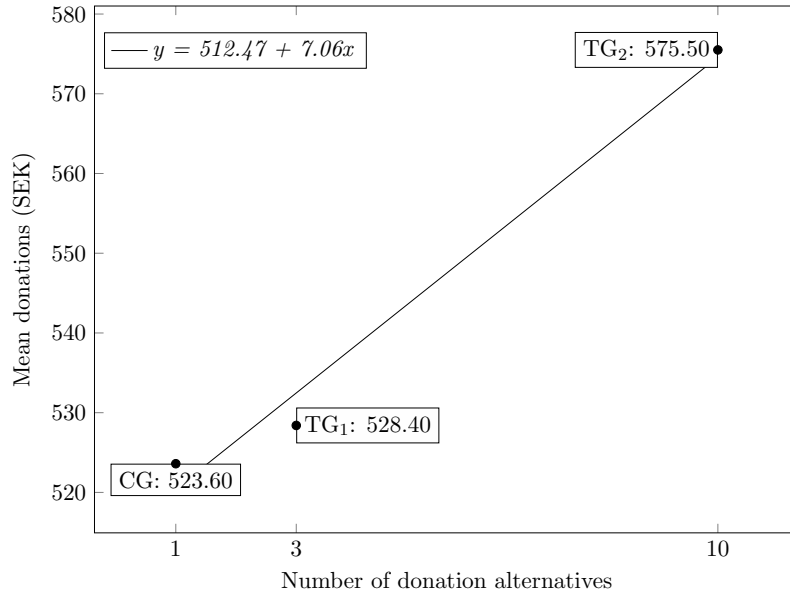
Treatment Group		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Donations	CG	0.249	55	0.000	0.800	55	0.000
	TG ₁	0.207	57	0.000	0.813	57	0.000
	TG ₂	0.302	56	0.000	0.778	56	0.000

*** The significance level for Shapiro-Wilk is less than 0.05, indicating that the distributions significantly differ from normal distributions. ***

5.2 Testing for differences in mean donations

There is a positive correlation between mean donations and number of donation alternatives. Figure 3 displays the positive trend.

Figure 3: Mean donations per group



To test if the differences in mean donations between the groups are significant, we use a non-parametric Kruskal-Wallis test.

Table 4: Kruskal-Wallis test

Treatment Group	N	Mean Rank
Prop.sum	1	55
	2	57
	3	56
Total	168	

Table 5: Test Statistics

Total Donations
Chi-Square
df
Asymp. Sig

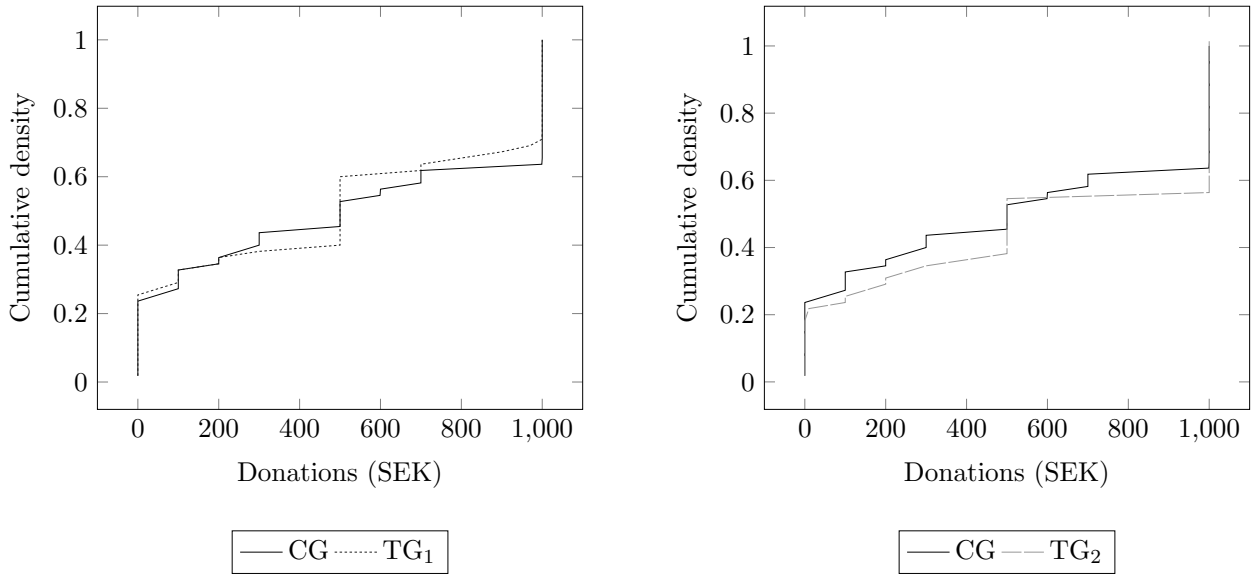
****Since the Chi-Square is 1.204 and the p-value is 0.548 the hypothesis cannot be rejected****

The Kruskal-Wallis test indicates that there are no significant differences between mean

donations in the different groups. Thereby the first null hypothesis cannot be rejected. Yet, a linear trend analysis renders a R^2 of 0.98 and a p-value for the slope coefficient of 0.09, indicating evidence, although weak, for a positive correlation between the number of donation alternatives and mean donations.

Since our distributions are multi-modal, mean comparisons might not be the most relevant measure as the majority of the observations are accumulated on the two extremes and not around the mean. Therefore, to further test for differences in donor behaviour between the groups we compare the cumulative densities of each distribution. Figure 4 shows the cumulative density functions of the control group and treatment group 1, and the control group and treatment group 2 respectively.

Figure 4: Cumulative density plot of mean donations per group



In order to test the equality of the distributions, whether donor behaviour differs across groups, we state the following additional hypotheses:

H_0 = The distributions of CG and TG₁ are equal.

H_1 = The distributions of CG and TG₁ are not equal.

H_0 = The distributions of CG and TG₂ are equal.

H_1 = The distributions of CG and TG₂ are not equal.

To test for distributional differences we use a Kolmogorov-Smirnov test, testing for distributional differences between the control group and the treatment groups respectively.

Table 6: Kolmogorov-Smirnov test

Null Hypotheses	Test	Sig.	Decision
The distributions of CG and TG ₁ are equal	Kolmogorov-Smirnov Test	1.000	Retain the null hypothesis
The distributions of CG and TG ₂ are equal	Kolmogorov-Smirnov Test	0.941	Retain the null hypothesis

As can be seen in table 6, none of the hypotheses can be rejected. Hence, the Kolmogorov-Smirnov test for equality of distributions show no support for any differences in donor behaviour across the groups.

5.3 Testing for proportional differences

To test the second main hypothesis, whether the proportion of respondents engaging altruistically differs across the groups, a Chi-square test is conducted.

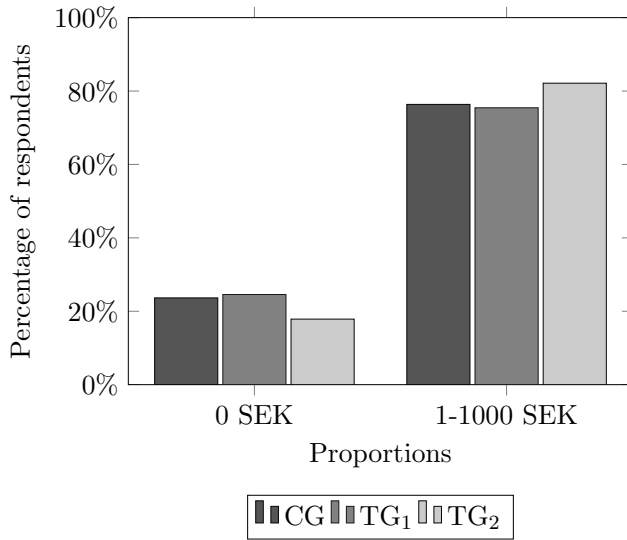


Figure 5: Proportional differences

	Value	df	p-value
Chi-square	0.863	2	0.649
Cramer's V	0.072	-	-

Table 7: Chi-square test

As can be seen in figure 5, the percentage of respondents donating 0 SEK is lower and the percentage of respondents donating 1-1000 SEK is higher in treatment group 2 compared to the other groups. However, the Chi-square test shows that these proportional differences are too small to be statistically significant.

6 Discussion

6.1 Analysis of the results

The purpose of this study has been to examine what impact an increasing number of donation alternatives have on altruistic behaviour in the context of street begging. In order to statistically test altruistic behaviour, two main hypotheses were set up. Firstly, we hypothesised that an increasing number of donation alternatives have no impact on total donations. Even though an upward pointing trend was traceable (\$523.60 in CG against \$528.40 in TG₁ and \$575.50 in TG₂) the differences in mean donations could not be proven statistically significant. Secondly, we hypothesised that an increasing number of donation alternatives have no impact on the proportion that chooses to donate. The number of respondents refraining from giving was lowest in the group with the most alternatives (17.86% in TG₂ against 24.56% in TG₁ and 23.64% in CG). However, the differences were not large enough to be proven statistically significant and neither the first nor the second main hypotheses could be rejected.

Thus, our results suggest that an increasing number of donation alternatives have no effect on altruistic behaviour in the context of street begging. This is contradictory to the choice overload theory as well as its counterpart that larger assortment sizes facilitate decision making. To seek further support to our findings we performed additional tests for distributional differences across the groups. The Kolmogorov-Smirnov tests confirmed our prefatory results and strengthened the notion that an increasing number of alternatives have no impact on altruistic behaviour in our particular context. As our results do not comply with existing theories on assortment sizes as well as previous research conducted within the field (Västfjäll, 2014; Soyer and Hogarth, 2011), we ask ourselves - why?

First of all, it is important to highlight that one explanation to why we did not see any differences in donation patterns between the groups might simply be due to the fact that we had little variation between the donation alternatives. We presented the recipients as close substitutes, and it is arguable that the participants did not perceive any difference between the alternatives, and therefore increasing the number of alternatives

had no effect. However, it was an active choice from our side to attenuate the variation between the alternatives since we believed that variation could cause a bias since people might possess domination preferences for certain recipients, which could have made it hard to distinguish any potential effects from having more alternatives. Our intention was to isolate the actual choice process as much as possible, and decrease the risk of incorporating any bias in our results.

Furthermore, in the on-going societal debate street begging is an infected and widely discussed issue. Usually it is discussed in terms of fighting street begging as a phenomenon, and not expressed as a way of aiding individuals. This, in combination with the fact that the majority of the people begging on the streets have similar demographic backgrounds, might create an inclination to cluster individuals into entities. In turn this might cause a tendency to conceive street beggars as a unit rather than individuals. In a sub-experiment Västfjäll et al. (2014) demonstrate what impact entitativity has on giving behaviour. Portraying a group of recipients as a single unit rather than separate individuals eliminates the compassion fade effect and elicits constant donations, independent of the number of individuals. If the donors in our experiment conceived the street beggars as a single unit instead of individuals, the results of Västfjäll et al. (2014) could explain the respondents' indifference between the number of donation alternatives.

Moreover, since street begging is a frequently discussed issue people generally possess strong preconceptions about the phenomenon. These preconceptions might work as the donors' prior preferences. Not necessarily towards the recipients themselves, but towards the societal issue as such. Theory regarding the choice overload effect underlines that having no prior preferences is one of the prerequisites in order for the effect to appear (Iyengar and Lepper, 2000). Strong prior preferences in the form of preconceptions might be an additional explanation to why altering the number of donation alternatives in our experiment had no impact on the respondents' donor behaviour.

This line of reasoning awakes new and intriguing questions. Would our experiment yield a different result if executed within a different context not as stigmatised? Västfjäll et al. (2014) discuss 'single children in need' and Jacobsson et al. (2007) analyse donations to diabetes patients. Would our experiment render another result if the donations instead

were aimed at poor children in developing countries, diabetes patients unable to pay their necessary treatment costs or other contexts where the donors might have more neutral beliefs and less prejudices about the recipients? Research so far emphasises that the choice overload effect is strictly dependent on the particular context and that it is not yet clear what factors that elicit the effect. Our findings indicate that donations to street beggars is not such a context. However, the theory's contextual dependency makes it difficult to generalise our findings to other types of donation situations. To more rigorously understand how donor behaviour is affected by an increased number of alternatives, future research within adjacent contexts is needed.

Although tests for differences in means as well as tests for proportional differences and equal distributions univocally indicate that the number of donation alternatives has no effect on altruistic behaviour in the context of street begging, there is an identifiable positive trend in mean donations across the groups. When testing the relationship we find that the positive linear trend is significant on a 9%-level which indicates weak evidence for a relationship between the two variables, adverse to the results of our hypotheses testing. By analysing the shape of our distributions, we notice that our sample consist of two diverse types of personalities: individuals donating their entire allocation and individuals not donating anything. This might be a reflection of the fact that street begging itself is a provocative issue and that people generally possess strong opinions about whether donations to street beggars do good or do harm. Unfortunately this propensity of donating all or nothing makes the standard deviations soar. The standard deviations in our sample exceed those in previous research (Ben-Ner et al., 2004). Consecutively, the relatively high standard deviations make it difficult, given our sample size, to statistically secure any differences in donor behaviour by testing our main hypotheses. Therefore it is intriguing that we find evidence, although weak, for a positive relationship between the variables using a linear trend analysis. Even though the trend is significant only on a 9%-level and should be regarded as such, the trend is in line with parts of previous research. Soyer and Hogarth (2011) noted a similar trend, although statistically stronger, between donations and the number of donation alternatives in the context of charitable giving. Often times greater assortment sizes improve preference matching (Diehl and Lamberton, 2010; Reibstein et al., 1975) and

thus the probability of a donor finding a recipient that matches his preferences should be higher when given more alternatives. In the case of Soyer and Hogarth (2011) this is likely to have aroused their positive trend, as they tested for donations to charity organisations for which people tend to possess prior preferences. In our experiment this explanation is less plausible, since the potential recipients were presented as close substitutes. Since the beggars were all women differing only by name and age, it is less likely that better preferences matching might have occurred.

However, there is another theory supporting the positive linear trend in our results, similar to that of Västfjäll et al. (2014). But instead of conceiving street beggars as an entity, it might be that donors conceive street beggars as part of a group. Note the important distinction between an entity and a group. If donors conceive street beggars as part of an entity, it would only be the magnitude of the societal issue that matters for willingness to donate. The number of individuals would be irrelevant since they are just conceived as an entity that represents the societal issue as such. Conversely, if street beggars instead are conceived as independent subjects belonging to a group, donations would increase with the size of the group, i.e. the number of individuals (Andreoni, 2007). An explanation to our positive trend could be that donors conceive street beggars as individuals constituting a group, consistent with Andreoni (2007). However, once again it should be noted that our trend is significant only on a 9%-level, and should be interpreted in the light of this. Nevertheless, these two theories bring a broader perspective to the discussion about donations and the number of alternatives. Instead of focusing on the actual number of alternatives, focus should instead be shifted towards how the donors conceive the increasing number of alternatives: whether they conceive street beggars as individuals making up a group or as an entity representing a more profound societal issue.

6.2 Future research and limitations

Hence, we have mean comparisons, proportional comparisons and tests for equal distributions that univocally indicate no relationship between the number of alternatives and donor behaviour. Still we identify a positive trend indicating support, albeit weak, for

a positive relationship between the two variables. The ambiguous results undoubtedly demand for future research in order to determine whether a change in donation alternatives has any impact on donor behaviour in the context of street begging. Moreover, our sample is rather homogenous in terms of demography. The participants were relatively young (average age of 23 years old) and the sample consisted mainly of students (91% students and 9% working). As we discussed in the section explaining the conduct of the experiment, the first part of the experiment consisted of questions relating to general altruistic behaviour, and was introduced in order to validate the randomisation process. We saw no statistically significant differences in how the participants responded to these questions, and we thus concluded that the randomisation of the participants into the different treatment groups was successful. Nevertheless, the discussion above is representative for the tested population and not necessarily for the Swedish population as a whole. The reason for focusing on a more homogenous sample was mainly a consideration between internal and external validity. Due to feasibility and the resources at our disposal the experiment was primarily aimed at students. In this way we could secure the internal validity of the study, which comes at the cost of losing some of its external counterpart. We are aware of the shortcomings of a homogenous sample and we therefore advice future researchers that conduct similar experiments to do so on a more heterogenous sample. That would entail more plausible results valid for a broader population and allow for a more thorough deduction of its implications. Lastly, the relatively large standard deviations might also be due to the actual design of the experiment. It is possible that conducting the experiment through an online survey reduced the strength of it. In real-life dictator experiments the value of money becomes more palpable, making the participants less inclined to donate their whole allocation. The lottery aspect of the experiment might have influenced their behaviour as well. The respondents were not made aware of the number of participants in the lottery, making it impossible for them to calculate their expected stake. However, since all respondents were acting on the same set of information, no individual differences in expected pay-off should have appeared. These experimental issues came as no surprise, but due to resource constraints a more authentic setting was not possible. However, we urge future researchers to take these experimental issues into consideration.

7 Conclusion

As poverty in the form of street begging is a growing social dilemma, the intention of this study was to inquire into how increased presence of poverty affects people's benevolence and inclination to help the poor. To explore our question of interest we examined how an increased number of donation alternatives affect altruistic behaviour in the context of street begging. We formulated two main hypotheses: that a growing number of donation alternatives have no effect on neither the size of donations nor the proportion of people that chooses to donate. Tests for mean, distributional and proportional differences were not proven statistically significant. Thus our results suggest that altruistic behaviour is not affected by the number of donation alternatives that donors are confronted with. Regarding the choice overload-theory, these results either imply that street begging is not a context that elicits the effect or that the setting in which our experiment was executed did not fulfill the necessary preconditions. The non-existent choice overload effect is contradictory to the proposition of Mick et al. (2004) as well as the results of Carroll et al. (2011) who suggested that a context with an increasing number of alternatives demotivate altruistic engagement. If anything, our results points to the contrary. A linear trend analysis revealed support, although weak, for a positive correlation between donations and the number of donation alternatives, significant on a 9%-level. Such an ascending trend is consistent with parts of research on altruistic behaviour (Andreoni, 2007; Soyer and Hogarth, 2011), but contradictory to other parts of research (Västfjäll et al., 2014). Since the trend deviates from our main results and as the current state of research provides ambiguous interpretations, as well as investigations aimed specifically at donations in the context of street begging are scarce, we propose further research on the topic in order to accurately conclude what factors that moderate willingness to donate to street beggars. Furthermore, our experiment was aimed at a relatively homogenous sample, more precisely at university students living in Sweden. In order to come to more distinct and exhaustive conclusions about what implications an increased number of donation alternatives have on donor behaviour, a more extensive and heterogeneous sample is needed.

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Appendix 1

Transcribed Survey - Control Group (CG)

Welcome!

You will be asked to answer 10 questions and it will take approximately 3 minutes of your time. The survey is part of a bachelor thesis at the Stockholm School of Economics.

By taking part of this survey you are participating in a lottery and have the chance of winning a prize of 1000 SEK.

Your answers will be treated anonymously.

Thank you for your participation.

1. How old are you?
 - Select age
2. What is your gender?
 - Male
 - Female
 - Prefer not to answer
3. What is your main occupation?
 - Studying
 - Working
 - Retired
 - Other
4. What city do you live in?
 - Type city
5. When given the opportunity, I enjoy aiding others who are in need.
 - Strongly Disagree
 - Disagree
 - Neither Disagree nor Agree
 - Agree
 - Strongly Agree
6. Helping people does more harm than good because they come to rely on others and not themselves.
 - Strongly Disagree
 - Disagree
 - Neither Disagree nor Agree
 - Agree
 - Strongly Agree

7. What is your attitude towards donating money to street beggars?

- Very Negative
- Negative
- Neutral
- Positive
- Very Positive

By taking this survey you are participating in a lottery and have the chance of winning 1000 SEK. If you win, you will have the possibility to donate a part of your prize to a street beggar. You can donate any amount between 0-1000 SEK. The amount you don't donate you may keep for yourself.

The money you choose to donate will be distributed through Ny Gemenskap¹, a Swedish non-religious and politically unattached organisation that helps homeless people in Stockholm.

The street beggar is a woman whose main income comes from begging on the streets of Stockholm*. How much of the 1000 SEK would you donate?

Recipient²

*With respect to the integrity of the street beggar, personal information is presented with alias. Ny Gemenskap certifies that the recipient correspond to a real person. See certification here³.

8. Please indicate the amount you would like to donate:

- Enter any amount between 0-1000 SEK.

9. How satisfied are you with your donation?

- 1-5 scale (1 corresponds to not very satisfied and 5 to very satisfied)

10. In case you win the lottery, how happy would you be?

- 1-5 scale (1 corresponds to not very satisfied and 5 to very satisfied)

¹ A hyperlink directed the respondents to Ny Gemenskap's website.

² The recipients were randomly selected out of a pool of profiles.

³ A hyperlink directed the respondents to the certificate, see appendix 2.

Transcribed Survey - Treatment Group 1 (TG₁)

Welcome!

You will be asked to answer 10 questions and it will take approximately 3 minutes of your time. The survey is part of a bachelor thesis at the Stockholm School of Economics.

By taking part of this survey you are participating in a lottery and have the chance of winning a prize of 1000 SEK.

Your answers will be treated anonymously.

Thank you for your participation.

1. How old are you?
 - Select age
2. What is your gender?
 - Male
 - Female
 - Prefer not to answer
3. What is your main occupation?
 - Studying
 - Working
 - Retired
 - Other
4. What city do you live in?
 - Type city
5. When given the opportunity, I enjoy aiding others who are in need.
 - Strongly Disagree
 - Disagree
 - Neither Disagree nor Agree
 - Agree
 - Strongly Agree
6. Helping people does more harm than good because they come to rely on others and not themselves.
 - Strongly Disagree
 - Disagree
 - Neither Disagree nor Agree
 - Agree
 - Strongly Agree

7. What is your attitude towards donating money to street beggars?

- Very Negative
- Negative
- Neutral
- Positive
- Very Positive

By taking this survey you are participating in a lottery and have the chance of winning 1000 SEK. If you win, you will have the possibility to donate a part of your prize to a street beggar. You can donate any amount between 0-1000 SEK. The amount you don't donate you may keep for yourself.

The money you choose to donate will be distributed through Ny Gemenskap¹, a Swedish non-religious and politically unattached organisation that helps homeless people in Stockholm.

The street beggars are women whose main income comes from begging on the streets of Stockholm*. You can only donate to one of the three.

8. Please indicate to whom², and how much of the 1000 SEK you would like to donate.

- I don't want to donate
- Recipient 1
- Recipient 2
- Recipient 3

*With respect to the integrity of the street beggars, personal information is presented with aliases. Ny Gemenskap certifies that the recipients correspond to a real person. See certification here³.

9. How satisfied are you with your donation?

- 1-5 scale (1 corresponds to not very satisfied and 5 to very satisfied)

10. In case you win the lottery, how happy would you be?

- 1-5 scale (1 corresponds to not very satisfied and 5 to very satisfied)

¹ A hyperlink directed the respondents to Ny Gemenskap's website.

² The recipients were randomly selected out of a pool of profiles.

³ A hyperlink directed the respondents to the certificate, see appendix 2.

Transcribed Survey - Treatment Group 2 (TG₂)

Welcome!

You will be asked to answer 10 questions and it will take approximately 3 minutes of your time. The survey is part of a bachelor thesis at the Stockholm School of Economics.

By taking part of this survey you are participating in a lottery and have the chance of winning a prize of 1000 SEK.

Your answers will be treated anonymously.

Thank you for your participation.

1. How old are you?
 - Select age
2. What is your gender?
 - Male
 - Female
 - Prefer not to answer
3. What is your main occupation?
 - Studying
 - Working
 - Retired
 - Other
4. What city do you live in?
 - Type city
5. When given the opportunity, I enjoy aiding others who are in need.
 - Strongly Disagree
 - Disagree
 - Neither Disagree nor Agree
 - Agree
 - Strongly Agree
6. Helping people does more harm than good because they come to rely on others and not themselves.
 - Strongly Disagree
 - Disagree
 - Neither Disagree nor Agree
 - Agree
 - Strongly Agree

7. What is your attitude towards donating money to street beggars?

- Very Negative
- Negative
- Neutral
- Positive
- Very Positive

By taking this survey you are participating in a lottery and have the chance of winning 1000 SEK. If you win, you will have the possibility to donate a part of your prize to a street beggar. You can donate any amount between 0-1000 SEK. The amount you don't donate you may keep for yourself.

The money you choose to donate will be distributed through Ny Gemenskap¹, a Swedish non-religious and politically unattached organisation that helps homeless people in Stockholm.

The street beggars are women whose main income comes from begging on the streets of Stockholm*. You can only donate to one of the ten.

8. Please indicate to whom, and how much of the 1000 SEK you would like to donate².

- I don't want to donate
- Recipient 1
- ...
- Recipient 10

*With respect to the integrity of the street beggars, personal information is presented with aliases. Ny Gemenskap certifies that the recipients correspond to a real person. See certification here³.

9. How satisfied are you with your donation?

- 1-5 scale (1 corresponds to not very satisfied and 5 to very satisfied)

10. In case you win the lottery, how happy would you be?

- 1-5 scale (1 corresponds to not very satisfied and 5 to very satisfied)

¹ A hyperlink directed the respondents to Ny Gemenskap's website.

² The recipients were randomly selected out of a pool of profiles.

³ A hyperlink directed the respondents to the certificate, see appendix 2.

Appendix 2

Certification of recruitment of recipients

Hereby Ny Gemenskap verifies that Jonas Bergman and Christoffer Persson have been in contact with us regarding their bachelor thesis in economics at Stockholm School of Economics. We attest that the recipients have been recruited by one of our employees and that the donation from the experiment will be distributed by our organisation.

We also vouch that the money you choose to donate will go to an individual matching the following description:

"The recipient is a woman, whose main income comes from begging on the streets of Stockholm"

We will also sign a certification when the potential donation has been collected and distributed by our organisation. This document will be included in the appendix of the thesis.

Stockholm 11/3 2015

Date and location

Anna Malmqvist

Signature

Anna Malmqvist

Clarification of Signature

Verksamhetsansvarig Ny Gemenskap

Ny Gemenskap
Västberga Gårdsväg 30
126 30 Hägersten
Tel. 08-22 17 09

Appendix 3

Certification of acceptance of donation

Hereby Ny Gemenskap verifies that Jonas Bergman and Christoffer Persson, students at the Stockholm School of Economics, have submitted a sum corresponding to the results of the experiment.

The total donation received by Ny Gemenskap amounts to: 1000 SEK.

Ny Gemenskap vouches that said donation has been distributed and that the recipient of the donation matches the description of the individual selected by the respondent.

16/4 2015 Stockholm
Date and location

Anna Malmqvist
Signature

Anna Malmqvist
Clarification of Signature

Ny Gemenskap
Västberga Gårdsväg 30
126 30 Hägersten
Tel. 08-22 17 09