Charity Bundling:

Offering Donation Increasing Signals

Master Thesis

Erasmus School of Economics Economics and Business, Marketing Marketing Specialization

Author: Lars Sessink, 4537251s@eur.nl Supervisor: dr. Florian Deutzmann Date: July 2017

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Gift Received When Contributing to Charity

No Signalling Opportunity > Signalling Opportunity

Master Thesis Economics & Business Charity Bundling – Offering Donation Increasing Signals



Preface

The last months, I enjoyed the opportunity to work on a challenging, but very interesting topic. The basis for this thesis stemmed from my passion of understanding the real motives underlying consumer choice, especially in the realm of (charitable) giving behaviour. This thesis is part of my graduation program at the Erasmus University Rotterdam on Economics and Business, specialization Marketing.

I would like to express my gratitude towards my thesis supervisor, Dr. Florian Deutzmann, for the direction and his useful feedback on this piece of work. In addition, I want to say a great 'Thank You' to my parents, sister and girlfriend for their constant support from the first day till the final page. I would also like to take this opportunity to thank my classmates for listening to me and especially for helping me to critique my own work.

Rotterdam, July 26st 2017 Lars Sessink



Abstract

This thesis contributes to the understanding of the motives underlying consumer choice. The online and field experimental setup with 338 respondents provides evidence that the altruism we observe is often impure. The data shows us that an increase in the signalling opportunity of a positive self- and social-image positively influences our willingness to contribute to charity.

The results of this thesis are consistent with previous research that indicated that framing the donation request in the form of a commercial transaction results in a higher donation intent than a regular request (our control group), even when the product itself possesses little to no value for the consumer. However, in our study <u>only</u> when the individual has a relatively low level of self-esteem. The consecutive increases in the level of donation intent from a regular request, to a bundle with a regular product, to a bundle with a product suitable for signalling the donation, are caused by the increasing possibility to conditionalize giving behaviour. In the 'Product Bundle' the individual experiences a less intense conflict between moral intuitions and material values by the physical cover of the transaction. In the 'Signalling Bundle' this individual is provided with another self-interested justification - that the contribution can be used to enhance a pro-social self- and social-image.

As mentioned, the research design indicated that the responsiveness to request type is dependent on the individual's level of self-esteem. Where the one confident about his identity has little need for a (costly) signal to prove his altruistic attitude, the low self-esteem individual is more responsive to the donation that can be used to maintain and increase his self- and social-image. Further, our data indicates a direct relation between self-image concerns, which in our field research are strengthened through the involvement of an interviewer, and the contribution rate to charity. In the online experiment, we were the first to test if the perceived simplicity of the solution to the social cause influences the donation intent. Only a trend was found and no significant increase. However, in the 'Signalling Bundle' the social cause with a simple solution generated a significantly higher contribution than the organisation targeting a cause difficult to solve. It is expected that the feeling of being able to provide effective help is an attractive and credible trait to signal. In the Netherlands, the effect of offering a signalling opportunity on the level of donation intent is not moderated by gender. However, in the field experiment an increase in altruism from men is indicated when they are approached by the other sex. Master Thesis Economics & Business



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1. Introduction – The Emergence of Charity Bundling

In recent years brand promotions and marketing campaigns with a social dimension have become more and more visible. The use of a promised charitable donation as an additional purchase incentive is nowadays common throughout many product categories. To give a reflection of the increase in cause-related (hereafter referred to as CR) marketing campaigns, the expenditures for CR-marketing programs doubled between 1995 and 2015 (IEG Sponsership Report, 2015). Which is in line with and can be contributed to the raise of consumer interest in social responsibility (Marquis & Park, 2014). However, most CR-marketing campaigns are expected to serve a dual purpose: support in a social cause, but at the same time improve overall brand performance through increasing the consumer goodwill.

The range of brands making use of CR-marketing formats is quite diverse with industries including consumer packaged goods, retailing and financial services that implemented promotions that linked them to all kinds of social causes, ranging from protecting wildlife to cancer research. For example, the brands Hersey's and Cottonelle recently bundled their products with donations to respectively UNICEF and the Ronald McDonald House. For every purchase, these brands donated a percentage or fixed amount to the charitable organisation. Another frequently used CR-promotion format is the Buy-one Give-one format. Used by among other TOMS Shoes, which donates a pair of shoes for every pair purchased. These practices indicate that combining products with charitable donations can be used as an effective marketing tool. Because in general, CR-marketing campaigns are resulting in a greater purchase likelihood for otherwise similar products through more positive consumer attitudes towards the brand (Brown & Dacin, 1997) (Ross, Patterson, & Stutss, 1992) (Arora & Henderson, 2007).

Today's marketplace is characterized by an abundance of choices and thereby a great number of products that possess a similar quality, price and service. CR-marketing can be one marketing communication tool to differentiate the brand from its direct competition. With the goal to engage potential customers that through their purchase are able to make some social difference (Brønn & Vrioni, 2001). One way to approach these "Charity Bundles" is to view them as the offering of two distinct outcomes for one set price. Where acquiring the product provides the customer with a utility gain, while the charitable donation is able to provide an additional gain through the positive feeling he or she is helping in a worthy social cause. This without having to pay for the full amount of the donation's cost.



1.1 Inconclusive Theory

Through the raise of cause-related marketing campaigns the traditional fund-raising market developed into a huge, competitive and sophisticated environment (Andreoni, 2006). But despite this increase in charity-linked programs and promotions due to favourable consumer response and increased interest in social responsibility, the influencing factors for the effectiveness of bundling products with charitable donations are surprisingly not that highlighted. Previous research that covered the bundling of the public and private goods, focussed only on donations to charity as a traditional form of promotion through viewing it as an additional purchase incentive to eventually maximize profit, e.g. (Hamby, 2016) (Strahilevitz & Myers, 1998) (Arora & Henderson, 2007). If and to what extend 'Charity Bundles' can influence the charity's donation income is still unclear and not covered before.

Most non-profit organisations are experiencing an increasingly intense battle for a share of the money donated to charity each year (National Philanthropic Trust, 2016). For these organisations, there is little data collection on and literature about possible fund-raising strategies to increase the willingness to donate and thereby their income, the demand side of the transaction. Previous research consistently focussed on bundles with charitable donations as one purchase incentive to increase the brand's profits, which is understandable due to the high managerial relevance. The thesis forms an exception and targets the previously uncovered impact of bundling public and private goods on consumer choice and willingness to donate. Hereby, this study is the first that investigates if bundling social cause and a (physical) product is also beneficial for the charitable organisation.

1.2 Research Objectives

Every day of the year consumers are making financial contributions to charitable organizations and volunteering time for the good of known and unknown others. Many economic and social psychological academics have attempted to fully understand the sacrifices to charity from the supply side of the transaction. "Why would people sacrifice for others?". Common seems the desire to help others in need because of triggered empathy when confronted with their suffering. But from the traditional economic view, where consumers are seen as selfish utility maximizers this phenomenon seems perplex and very contradictory. Several explanations have been proposed. This thesis focusses on examining these proposals and bringing clarity.



Especially about the recent argumentation that consumers may be able to derive value beyond their consumption from choices that enhance their social- and self-image (Gneezy, Riener, & Nelson, 2012). Charitable donations can be seen as one of these choices because their possible use of signalling a pro-social attitude (e.g. more altruistic, trustworthy, cooperative). Which can indirectly give back additional benefits as reciprocity and a more positive reputation (Milinsky, Semmann, & Krambeck, 2002). This proposal is reinforced by various laboratory and field experiments that showed that respondents who donated generously are treated significantly better by others than the respondents that did not or just a little (Albert, Güth, Kirchler, & Maciejovsky, 2007). The ones interested in such reputation are most likely increasingly willing to pay the costs of donating. But beside this enhancement of a desired self-image. Achieving this desired self-image is often described as one of the core motives for human (Fiske, 2009).

The main focus of this thesis is to indicate if and to what extent specific bundled products (e.g. a pencil with the charity's logo) are able to ensure an increase in the self- and social-signalling opportunity and thereby increase donation intent. Which is examined by comparing the donation intent of three groups: Group 1 (Regular Donation Request), Group 2 (Bundled with normal physical product) and Group 3 (Bundled with product suitable for signalling others a charitable donation is made). Hereby, the willingness to pay for the physical product in a separate condition. This to test to which extend the provided possibility to self- and social-signal the charitable donation, instead of the value of the product influences the donation intent. No research yet, juxtaposed these different donation requests with a regular donation request.

To summarize, this thesis examines the effects of request type on the level of donation intent, taking into account possible moderating effects. In particular, how the perceived simplicity of the charitable cause is influencing the willingness to donate and determining the responsiveness to the combination of donation request and signalling-product. Thereby, possible moderation factors to give direction to charitable fund-raising strategies are examined. The contributor's level of self-esteem, but also the competition for the other sex are appearing to underlie the public good contribution. This because charitable donations are one way to convey personal traits like caring and reliability (Farrelly, 2010). This thesis combines two experimental setup's to indicate if these effects differ across private/online and public/offline situations.



Hereby, the thesis examines the proposal by Cueva & Dessi (2010) that self-image concerns are the underlying reason behind an increase in donation intent for individuals with a low to medium self-esteem, because their possibility to be used as identity investments. Which is especially relevant in the realm of products that are suitable for signalling a pro-social attitude and can be used to enhance self- and social-image. The research also looks into the differences between man and women and how these are influencing the responsivity to the 'Charity Bundles' with physical products that can be used to signal the made contribution.

1.3 Academic Relevance

Previous research treated consumers' choice mostly as a pursuit of only a consumption related goal. However, there are insights that the motives for choice often extend beyond direct consumption (Gneezy, Riener, & Nelson, 2012). In the realm of charitable donations, consumers may donate to acquire reputational benefits through showing their personality and traits (Ariely, Bracha, & Meier, 2009). Bundling with (physical) products is possibly one way to increase the visibility and signalling opportunity of a made contribution to a specific charitable cause. This study tests if the ones interested in possessing and signalling this altruistic behaviour to increase social- and self-image, are more willing to pay the costs of donating.

Previous research already indicated an increase in donation intent when the donation appeal is observed by the public (Bereczkei, 2010) and when the donation is framed as an exchange (Holmes, Miller, & Lerner, 2002). However, it only examined the effect of bundling donation requests with physical products and the increase of a signalling opportunity (using the donation to provide a reliable signal to others of an altruistic attitude and thereby indicating personal traits as caring and reliability) in separate conditions. This thesis is the first that allows us to compare the effects of when the donation request is framed as an economic transaction and the additional effect due the possibility to use the donation as a signal of a pro-social attitude. If offering a product suitable for self- and social-signalling the made contribution, induces a different outcome than the comparable product not suitable for signalling is never examined. By previous research the donation is most often seen as the incentive to increase brand performance and maximize profit. This thesis is the first to view the "Charity Bundle" from the other side and examine if and to what extent bundling the donation request with a physical, but near worthless product is able to increase donation intent in a pay/give-what-you-want setting.



Hereby the research contributes to the understanding of the motives underlying consumer choice, especially in the realm of self- and social-signalling and how these are different in private and public situations. The study tests an extension of the impure altruism; if and to what extend individuals are able to derive egoistic benefits through increases in their social- and self-image and/or prestige by his or her giving behaviour and if this possible increase in image is also able to increase the level of donation intent. Hereby, the relevant moderation effects that have influence on the impure altruism concept are examined.

1.4 Managerial Relevance

The growing amount of established companies that are tying charitable donations to their products is somewhat conforming that bundling with charity can be an effective strategy to improve associations and increase purchases. One other common appearance are companies contributing to non-profits to showcase their caring. However, this thesis in comparison to most research e.g. (Strahilevitz & Myers, 1998) (Strahilevitz, 1999) (Hamby, 2016), focuses not on the consumption-related goals and maximizing profit, but on the possibility that these bundles may lead to a higher donation income. The research contrasts the donation intent when the donation request is bundled with a physical product to a regular request to discover the occurring effects, which is especially relevant for non-profit organisations that are struggling to create an effective promotional format. This thesis provides a practical view to decide if and how bundling physical, but near worthless products to the donation request is able to help with achieving a higher donation income. Through combining previous relevant insights out of different fields and 2 new (field) experiments this thesis is capable of providing guidelines how to implement a product bundling strategy to increase donation income.

1.5 Thesis Outline

First, the theoretical background of giving behaviour is presented. Starting from the supply side, which discusses the motives for charitable giving. Followed by "How to Surpass Donating Barriers", that focusses more on the fund-raising tactics of the demand side. Hereafter, the main hypothesis and possible moderation effects are discussed, presented alongside the conceptual model. Followed by the 'Research Methodologies' transforming the theoretical model into measurable methods. Which allow the: 'Analysis & Results' of both, the field and online experimental setup before the last chapter gives the important conclusions and implications.



2. Theoretical Background – "Charity Bundles"

Product bundling describes the practice of offering several components for a set price as one product (Stremersch & Tellis, 2002). These bundles could be of complements, substitutes or even independently valued components (Schmalensee, 1984). According to this universal definition the combination of product and donation is as a way of offering consumers multiple distinct outcomes for one set price. By obtaining the product the consumer is provided with a gain, while the 'purchased' donation can offer additional utility, from the pleasure of good feelings generated from knowing he or she is helping others. Previous research by (Arora & Henderson, 2007) indicated that a low percentage of the selling price going to charity is often more effective as a sales promotion than an equivalent discount. Research from (Frackenpohl & Pönitzsch, 2015) even showed super additivity in the willingness to pay (Hereafter: WTP) for bundles consisting of public and private goods. The WTP for the bundle exceeded the WTP for both separate components combined. This higher valuation attributed to these bundles are showing that these may be more beneficial for both sectors than generally acknowledged.

This chapter starts from the supply side of the transaction. "Why Do/Do not We Donate to Charity?, which discusses the many different motives. Before "How to Surpass Donating Barriers" focuses on the demand side and different fund-raising strategies, hereby the opportunities of bundling physical products with charitable donations are described.

2.1 Why Do We Donate to Charity?

Every day of the year consumers are making financial contributions to charitable organizations and volunteering time for the good of known and unknown others. This altruism, by most seen as pro-social behaviour, exists in many forms and is observed in every culture. Which raises the question "Why are we willing to sacrifice for others"? These motives are crucial for understanding giving behaviour, in order to know how to enhance consumers' compassion and reinforce the total charitable giving. A great number of researches have attempted to fully understand these sacrifices to charity from the supply side of the transaction. People are giving money and are sacrificing time for all kinds of reasons. Common seems the desire to help others that are in need. Plausible some people are donating an extreme amount out of this motive and this motive alone. Charities seem to know and are designing fund-raising strategies directly targeted at this motive. For example, they show visuals of starving children to trigger our



empathy. Where in this commercial the charitable organisation talks about specific individuals, rather than the thousands that are in need of help, because our empathy is more triggered when we can think about a specific case in which we can help rather than an anonymous mass (Slovic, 2007). But especially from an economic point of view where consumers are seen as selfish utility maximisers this phenomenon seems perplex and very contradictory. Several explanations have been proposed to provide clarity. These include the need to view ourselves as good and kind (Walster, Berscheid, & Walster, 1973), a negative-state relief (Cialdini, et al., 1987), an aspiration to do 'the right thing' (Dawes & Thaler, 1988), the desire to experience a 'warm glow' (Isen & Levin, 1972) and the quest for moral satisfaction (Kahneman & Knetsch, 1992). What all these proposals have in common is the underlying assumption that giving to charity leads to positive utility, in the form of an emotion, in return. Due this appearance, one way to view the potential contributors is to see them as consumers that are seeking some utility from donating in return. Which is more consistent with the traditional economic view.

This utility in return is directly in line with the more recent proposal that consumers possibly use charitable donations to signal their social reliability and indirectly gain back reciprocity or political reputation (Milinsky, Semmann, & Krambeck, 2002). Although reciprocity is a common motive in our everyday life to interact and help others, it is on the first sight not the case when it comes to charitable donations because of the unlikely position that the recipient will be able to return a favour to the donor. However, when others know you donated resources they will often view you as more altruistic, trustworthy and fair-minded (Bereczkei, 2010). Which is helpful in engaging, maintaining and developing different kinds of relationships. Multiple controlled experiments are showing that respondents who have donated to a charitable cause are treated significantly better by others than the ones that did not donate or just a little (Albert, Güth, Kirchler, & Maciejovsky, 2007). This perspective shows that giving up resources for charity also gives positive utility in return for the ones interested in this kind of reputation.

If donations are done from the motive of signalling the possession of a pro-social attitude, the expectation is that donations are more frequently made when the offer is in public rather than in private. Multiple papers are providing evidence for this e.g. (Rege & Telle, 2004). Here (Harbaugh, 1998) was to our knowledge the first to show that individual donors have a taste for having their charitable donations made public. Through studying charities that publicized their received donations in consecutive categories, rather than in the exact amount of money received



the research indicated that the donors were in turn tending to give the required minimum amount to get into one of these categories and possibly acquire additional public prestige besides the private experienced 'warm glow' by knowing he or she is helping in a worthy cause.

Apart from this signalling to the social environment the importance of a favourable self-image is often emphasized by psychologists. Which is about being able to view yourself as a morally upright person. The maintenance and enhancement of a desired self-image is frequently described as one of the core motives of humans, e.g. (Fiske, 2009). Concerns about the self-image may induce charitable behaviour because remembering a charitable donation can reassure the individual he or she is indeed altruistic. These insights are enforcing the proposal that consumers are able to derive value beyond consumption from making choices that are enhancing their reputation or self-image (Gneezy, Riener, & Nelson, 2012).

As a final note after these self-oriented motives for donating, it is important to emphasize that it is a mistake to think that all people that are using donations to signal are completely insensitive to others in need. Most likely, the people that are donating are heterogeneous. Some may donate out of compassion alone, where others care more about signalling an altruistic attitude. Usually the reason is a mix of different motives – real compassion for others and the opportunity to gain back a pro-social appearance through signalling.

2.2 What Stops Us from Expressing the Compassion We Feel for Others?

Although people certainly care about the well-being of others (Batson, 1991), some keep refusing to express their compassion for others by not contributing to charity. One widely accepted explanation is the justice motive, first proposed by (Lerner, 1975). The justice motive tells us people have a basic motive to help eliminating injustice, but when others experience innocent suffering there often occurs a conflict. The effect of helping is threating due the fact that it could undermine the ability to preserve the 'just-world'. This just-world is the believe that one will get what one deserves, whereby an injustice is rationalized by naming things the 'victim' might have done to deserve the occurring situation. By offering unconditional help this helping individual will be confronted with questions like: "If this person is worth my help, are the similar victims I regularly experience, not also worth my help?" Anyone who have ever asked themselves questions like these, knows it is not easy to answer them negatively and deny further contribution to the victim's group. The justice motive argues that this reason is



stimulating people to come up with various psychological approaches to provide reasons why their help is unwarranted. This explanation is supported by the relationship between the suffering of innocent others and the experience of preconscious threats, e.g. (Hafer, 2000).

Another possible explanation is the individual's desire to not reveal or recognize the pro-social motivation to its full extent. Even individuals that are experiencing extremely strong feeling of compassion can be hesitant to act, if their help is inconsistent with their self-interest (Miller & Ratner, 1996). Because the average individual thinks that the vast majority is mainly driven by self-interest, he or she expects them to behave selfish (Miller & Ratner, 1998), which results in preferring self-interested behaviour before pro-social actions to avoid exploiting by more self-interested others and possible social disproval for behaving irritational (Miller D. T., 1999).

This effect seems to even hold in an anonymous setting, which might occurs because we have internalized the believe this norm of self-interest is rational and appropriate (Tyler, Huo, & Lind, 1999). The desire to keep the ability of achieving self-interested outcomes and not revealing or even recognizing pro-social motivation is likely to also account for that although consumers contribute to charity their motives are commonly impoverished (Wuthnow, 1991). Most people seem more comfortable with a language that emphasizes their self-interest, instead of affirming that their behaviour is motivated by compassion for the victims.

2.3 Surpassing Donation Barriers

As with all choices, the different options are evaluated relative to the other possible options. (Kahneman & Miller, 1986). This results in a greater percentage of consumers willing to make the charitable donation when the appeal is a reference against the donation with a hedonic product (e.g., 'Please donate \in 8. Note, \in 8 is how much it costs to buy a bottle of wine). Because not donating with an equally priced utilitarian, neutral or no reference will be more of a functional motive for not donating, which is less likely to induce guild feelings and lead to a negative self-image (Savary, Goldsmith, & Dhar, 2015). This is again in line with the proposal that consumers are able to derive value beyond consumption from choices that enhance their reputation or self-image (Gneezy, Riener, & Nelson, 2012). Without a reference in the choice context the decision to not donate is more of a weak, uninformative signal of someone's personal traits. With the hedonic product reference consumers are more likely to give, because the appeal likely changes the self-signalling utility, associated with the giving behaviour.



When consumers are confronted with a 'regular' donation request, without asking a specific amount, apart from to decide to give or not to give, also the amount of the donation needs to be considered. Research from Fraser, Hite, & Sauer (1988) proposes that potentially interested contributors first form an impression of the donation amount that is socially acceptable. Where amounts smaller than this amount are considered as socially unacceptable; and greater amounts as (too) generous. The problem here is that due a lack of salient costs of goods sold consumers have difficulties with determining the right price of the service (Bolton, Warlop, & Alba, 2003). When potential contributors experience trouble determining the socially acceptable donation this will often lead to choice deferral, due the difficulty of the decision. Where a small contribution is perceived as for their reputation inappropriate, a too large donation is not desirable out of economic perspectives. When having trouble determining the social acceptable amount the potential contributor may end up not contributing at all (Dahr, 1996).

These examples are clearly showing that the choice of donating is mostly a conflict between moral intuitions (helping as many as possible) and material values (the use of time and money). At the root of increasing donations seems the need to find ways to help consumers perceive a less intense conflict between these intuitions. Research from (Holmes, Miller, & Lerner, 2002) shows us that consumers are more likely to act upon their feelings of compassion if they are able to find a way to conditionalize their giving behaviour. Which is about finding a psychological cover to minimize the risks for their ability to keep self-interested outcomes and preserve the just-world. Their experiment indicated that the potential contributor experiences less hurdles and is more often willing to make the donation if he or she is provided with a selfinterested justification. In this case, the charitable donation was framed as an economic purchase to provide an excuse for helping. This significantly increased the percentage of respondents that were willing to make a donation, while the product itself (a small candle) had little to no value for them. This likely occurs because the request for the charity in the form of a commercial transaction does not generate the same amount of moral commitment than donating fully out of compassion would generate. Which helps the potential contributor to preserve his or her ability to keep self-interested outcomes, avoid exploiting by more selfinterested others and possible social disproval for behaving irritational. Thereby, framing the donation request as an economic transaction helps the potential contributors to more easily determine the socially acceptable donation (Fraser, Hite, & Sauer, 1988).



3. Hypotheses – Signalling The Contribution

Charitable organisations could further help conditionalize giving behaviour by making the donation more suitable for self- and social-signalling the possession of a pro-social attitude, which helps the potential contributor with achieving and maintaining trustworthy, altruistic and fair-minded appearance. Consequently, people that have interest in this kind of reputation are more likely to pay the costs of donating. For a signal to be reliable it should be costly in terms of (monetary) risk, time expenditure or energy (Smith & Bliege Bird, 2000). One reliable signal of a pro-social attitude benefits the contributor from being favoured more by others as a friend or partner (Albert, Güth, Kirchler, & Maciejovsky, 2007).

The signalling opportunity of a pro-social attitude through a charitable donation can be enlarged by offering one physical product that is easily associated with the social cause in exchange for the contribution, enabling the contributor to signal him- or herself and the environment he or she made a (monetary) contribution to the social cause. Consequently, it helps the contributor with the enhancement and maintenance of a desired self- and social-image. In addition, framing the donation as a purchase helps minimizing the moral commitment needed to contribute. Thereby, the framing as an economic transaction is able to provide the potential contributor a psychological cover to show his or her compassion, which helps with preserving the 'justworld'. This is because an economic transaction limits the powerful social norm of self-interest, that inhibits altruistic behaviour through a self-interest justification (Holmes, Miller, & Lerner, 2002). This justification helps the contributor to perceive his actions as more self-interested and avoid social disapproval for being irritational and exploiting by more self-interested others.

The receiving of a physical product when contributing to charity likely increases the selfsignalling opportunity through extending the privately experienced 'warm glow' that is caused by contributing to charity (Isen & Levin, 1972). By seeing and using the received product it is likely that the positive association with the charitable donation is triggered again. Resulting in a longer lasting enhancement of self-image. At the same time, the ones interested can use the product to signal others their contribution in order to enhance their pro-social reputation. Furthermore, combining donations and goods may be able to raise consumers' understanding of the charity and their cause, Resulting in an increasing WTP for the bundle. Research of (Mazar, Amir, & Ariely, 2008) showed an increase in awareness of the externalities of one's actions with strong feelings of personal responsibility is making consumers act less selfishly.



In this bundle with charity, the physical product is likely to serve as an anchor that can be used by potential contributors to determine the socially acceptable donation and as an anchor to which the contribution can be compared (Biers, Pandelaere, & Warlop, 2007). Similar to the finding that first offers in a negotiation situation often serve as anchors and strongly predict final settlement prices (Galinksy & Mussweiler, 2001). This fact makes it likely the bundling influences the decision. However, providing potential contributors with an anchor does not necessarily mean it will increase donation intent. Combining donation requests with overpriced exchanges may even decrease the amount of donations compared to a regular donation setting, because it makes potential contributors fear their personal and economic outcomes are at stake. On the other hand, a low-priced exchange may be able to signal the consumer a price that is lower than the perceived price of a donation in a regular donation setting. Which legitimize small contributions and make most excuses for not donating socially inappropriate (Cialdini & Schroeder, Increasing compliance by legitimizing paltry contributions: When even a penny helps, 1976). This is in line by one of the earliest assumptions that self-presentation concerns are able to lead to an increase in donation intent (Cialdini & Schroeder, 1976). However, low priced exchanges of course will come with considerable costs for any charitable organization.

To summarize, the foundation of the main hypothesis and the research framework rests on the concept of impure altruism, first proposed by (Adreoni, 1989). Which provides an explanation of charitable giving behaviour and hereby states that the utility of the individual contributor depends on the donation amount, where higher amounts provide more additional benefits. The concept thereby suggests that individuals are driven by both altruistic and egoistic motives. Where the altruistic component reflects the benefits to society and the egoistic component the benefits the individual is able to derive from feeling better about him- or herself through the experience of a 'warm glow' from giving. Recent research from among others (Crumpler & Grossman, 2008) (Videras & Owen, 2006) confirmed the existence of both components.

Hereafter extensions of the impure altruism concept identified further egoistic benefits through increases in the individuals' social- and self-image and/or prestige by his or her giving behaviour (Isaac, Pevnitskayay, & Salmon, 2008) (Gneezy, Riener, & Nelson, 2012). This makes it likely that providing a signalling opportunity in the form of a physical product in exchange for the charitable donation is able to raise the total amount of donation intent, even when the product itself in a separate condition has very little to no value.



When requesting donations for one charitable organisation it can be assumed there is a baseline in donations out of altruistic motives alone, dependent on multiple variables as the level of compassion generated by the recipients and the story of the cause of the charitable organisation. Offering an increase in the opportunity to signal the made contribution through a physical product is likely able to increase the donation intent through an increase in the utility coming from the egoistic benefit component, compared to the same charity that combines the donation request with one comparable product not suitable for signalling or using a regular donation request that offers no physical product in return. The expected positive utility from a signalling opportunity through our interest in a positive reputation results in the following main hypothesis.

3.1 Main Effect - Offering Donation Increasing Signals

*H*1: One charity that through bundling offers a signalling opportunity is able to increase donation intent <u>in comparison to</u> the same charity that offers a 'non-signalling' product or no product.

3.2 Effect - The Simplicity of The Problem

From the theoretical background on donations it is clear that when the consumer feels like he or she does not have the ability to help effectively, they more often turn away from the ones in need (Trout, 2009). One common explanation is that our empathy is triggered more when we can think about a specific case in which we can offer help compared to helping more of an anonymous mass (Slovic, 2007). Hereby the evoked nagging feeling and frustration that comes from the impression that the donations are poorly spent is difficult to fix (Brokensha, Eriksson, & Ravenscroft, 2016). An increase in the cause's probability of being solved likely dampens the value of the signal and warm-glow feeling of the donation. Which makes it quite likely that the potential contributors interested in signalling their pro-social attitude choose charitable causes that offer more of a quick and clear solution, rather than charitable organisations that address more complex causes with problems that have a lower probability of being solved.

This assumption is enforced by a recent study that showed contributors to charity self-report significantly lower ratings of 'feeling good about themselves' when the donation is combined with large promotional discount (Dubé, Luo, & Fang, 2017). This lower rating of feeling good crowded out the demand for the offered product with a promised fixed percentage of the selling price going to the charitable cause.



Self- and social-signalling theory suggests most potential contributors to charity are (partially) motivated by the ability to signal others a pro-social attitude and derive a warm-glow feeling from supporting the cause to view themselves as a morally upright person. That the increase of the offered discount, decreased the 'feeling good about themselves' provides us with evidence that the ego utility is an important determinant of choice for the potential contributor. The structural estimates from this study quantified the contributor's preferences and hereby showed a relatively small and negative utility from the donation consumption, which reflects that the average contributor gets little direct consumption benefit from the donation. In contrast, they found that the average contributor highly values the perception of being altruistic. With a cause that is perceived to have a relatively easy solution it is more likely that the potential contributor perceives his or her donation as helpful to the recipients, due the simple solution and feeling of being able to provide effective help. This may increase the self-perception of being altruistic, resulting in an increasing willingness to make the donation (Burger & Caldwell, 2003).

The Simplicity of The Problem

H_{2c}: When the solution of the charitable cause is perceived as simple it results in a higher donation intent, compared to when the charitable cause is perceived as more difficult to solve.

When a charity focuses on a cause with an obvious and achievable solution, contributors are more likely to be viewed as proactive and practical, besides the trustworthiness and altruistic part (Brokensha, Eriksson, & Ravenscroft, 2016). It is expected that the feeling of being able to provide effective help is most likely an attractive and credible trait to use as a signal.

H_{2b}: *This increase in donation intent is greater when the donation request is combined with a signalling product, compared to a non-signalling product or regular request*

3.3 Effect – Sexual Selection

Chapter 2.1 "Why Do We Donate To Charity" indicated our preference in a public charitable contribution to help achieving a more positive social-image. Insights from the costly signalling and sexual selection theory are suggesting that this preference is likely caused by men's competition for females and vice versa. The costly signalling theory proposes that certain traits emerge because they are able to convey reliable information about the individual (Zahavi, 1997). Charitable donations are often seen as one way to convey personal traits as caring and reliability, e.g. (Farrelly, 2010). The sexual selection theory explains us that men and women



compete for members of the opposite sex with members of the same sex by providing signals to showcase their expected reproductive success. However, men and women are evaluating potential partners by different signals (Buss, 1989). Women are usually tending to be more demanding when considering potential partners. Thereby, they are expressing strong preferences for partners that signal their ability to take care of others (Waynforth & Dunbar, 1995), Which makes sense from the perspective of evolution because women, relative to men, have a lower variance in their lifetime reproductive success and therefore have more to lose from choosing the wrong partner, that fails to take care of them and their offspring (Trivers, 1972). Since the average female perceives kindness and helpfulness as important indicators of attractiveness (Miller G. F., 2007) (Barclay, 2010), it is expected that men are more sensitive to donation requests combined with products that can be used to signal these traits and qualities.

This hypothesis is supported by various examples of increased altruism when men are in presence of women. For example, on average men tip more to female servers, especially the ones that possess a high physical attractiveness (Lynn & Sunibs, 2000). But even without the personal interaction men are conspicuously more altruistic to females. Research by (Goldberg, 1995) provides evidence by indicating that lone men give significantly more to female panhandlers. Contradictory, when men are in presence of women they give more to beggars of both sexes compared to when they are alone (Latané, 1970). Recent research also showed an increase in charitable contributions when men are in presence of women, but found no parallel effect for women (Van Vugt & Iredale, 2013). This finding suggest that men may use donations to compete with other men by signalling their pro-social traits as kindness and helpfulness.

The fact that men may use charitable donations to signal their possible reproductive success is also reflected in the notable differences between the domains in which men and women cooperate. The efforts of women to help are more often made in small social networks like friends, relatives and long-term relationships. Where men's efforts are more likely to be apparent and in public, often targeted at strangers (Benenson, 1990) (Van Vugt, De Cremer, & Janssen, 2007). This behaviour reflects men's necessity to prove themselves to possible partners and others. Charitable donations may be one way to do so.

Sexual Selection

H_{2c}: *The increase in donation intent through combining the donation request with a physical product suitable for signalling is greater for men than for women.*



3.4 Effect – Self-Esteem & Concerns About Social Image

Previous research by Cueva & Dessi (2010) showed that self-image concerns are able to increase donation intent for individuals with a low and medium level of self-esteem. They proposed that identity investments have a direct relation with the level of self-esteem. Stating that the one who is very confident about his identity, has little to no need for (costly) signals to prove he is indeed altruistic. However, the ones with less confidence or imperfect self-knowledge may value a more positive self-image for instrumental or hedonic reasons.

Self-Esteem

H2d: A lower level of self-esteem results in a higher level of donation intent.

In the self-signalling model, individuals that receive information about their identity through introspection and value a more altruistic image, likely want to signal their future selves by choosing identity-relevant actions (Benabou & Tirole, 2011). From this perspective, it is likely that these individuals have a preference for the charity that provides them with a more credible and longer lasting signal for their future selves to increase and extend the positive associations with donating and help with achieving a more positive self-image. Combining the request and signalling product is likely able to extend the 'warm-glow' feeling of donating by seeing and using the product again, which helps the individual with levering an altruistic identity.

H_{2e}: *The increase in donation intent is stronger when combined with a signalling product.*

3.5 Effect – The Value of The Bundled Product

It is expected that the product itself has a positive utility which increases the donation intent compared to the 'simple or no product' request. However, by offering a signalling opportunity to the potential contributor it is expected that the increase in donation intent is significantly more than the WTP for the physical product in a separate condition. This hypothesis is based on the proposal that although the signal has no real value, consumers are willing to pay for it because they prefer signalling an altruistic reputation for their own good and indirectly gain back reciprocity and (political) reputation (Milinsky, Semmann, & Krambeck, 2002).

Value of The Product

*H*₃: The increase in donation intent when the donation request is combined with a 'signalling product' is significantly more than the WTP for the 'signalling product' in a separate condition.



3.6 The Expected Difference Between The Experimental Setup's

As mentioned in the research objectives, this thesis combines an online and offline experimental setup in order to indicate if and to what extent the donation request type is able to influence the willingness to donate. Here the field experiment has the advantage that the outcomes are from a more natural setting, providing high managerial relevance for the charitable organisations making use of street recruitments and the high external and ecological validity through more realistic data. Where the online controlled experiment provides us the possibility to perform a more reliable check for the moderation effects. Through the use of these different experimental setup's to test the hypotheses, the data will most likely show multiple deviations, which are caused by the environment (Online vs. Offline, Private vs. Public) and the incentive for the respondents (Donating through Random lottery vs. Losing own money).

Based on previous research by Cialdini & Schroeder (1976) it is the expectation that more subjects are 'willing' to donate, resulting in a higher contribution rate in the field experiment. This because the public situation in the field experiment is expected to induce a higher level of concerns for the subjects about the maintenance of their self- and social-image. Where it is for the respondent in the online experiment easier to refuse the request and keep self-interested outcomes without the involvement of an interviewer. The request by an interviewer in the field experiment is expected to imposing additional social pressure and thereby increasing compliance. (Reeves, Macolini, & Martin, 1987) (Jackson & Latane, 1981). Unfortunately, the difference in how the respondents are able to donate between the online (through random lottery) and field (with own money) experiment, alongside the difference in strength of the signalling opportunity are forming the disadvantage that we are not able to have a reliable comparison of the average donation between the online approach.

The conducted online experiment is discussed in Chapter 4 and 5. Before Chapter 6 and 7 provides the field experiment approach and results. Chapter 8 concludes with the comparison of outcomes, implications, and limitations of both methodologies.

Chapter 4. Research Methodology – Online Experiment Chapter 5. Results – Online Experiment Chapter 6. Research Methodology – Field Experiment Chapter 7. Results – Field Experiment Chapter 8. Comparison of the results – Conclusion & Implications



4. Research Methodology - Online Experiment

This chapter describes the experimental setup that is used to test the hypotheses in a (to a high extent) private situation. Paragraph 4.1 starts with the essential pre-tests, followed by paragraph 4.2 that describes the experimental setup. Paragraph 4.3 gives a summery how the (in)dependent variables are operationalized in the online controlled experiment, where 4.4 provides the used sources for the data collection. Paragraph 4.5 concludes with a summary.

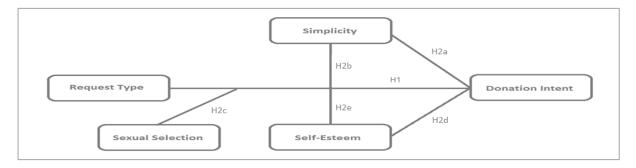


Figure 1: Graphical representation literature review and hypotheses

4.1 Necessary Pre-testing

For the examination of Hypothesis 2a/b it was essential to conduct a pre-test, examining the degree of 'simplicity'. This test gives us a reflection to what extent the cause of the charitable organisation is perceived to have an obvious and achievable solution. It is not possible to determine this perceived simplicity from the respondents that are also part of the main experiment, due to the fact that it most likely influences the outcomes. For example, asking the respondents if the solution to the charitable cause is achievable before the donation request is somewhat of a persuasion technique, increasing donation intent because of self-image concerns (Tonin & Vlassapoulos, 2013). Asking the question after the request also influences the reliability of the data, because the perceived simplicity of the solution to the charitable cause is expected to differ from the initial situation when asked after the request. Contributors will likely be more reluctant to admit the solution is difficult to realize to prevent negative feelings.

Furthermore, to capture the potentially moderating 'simplicity' variable it is not sufficient to simply ask whether people think the solution is simple. Because of the risk of biases towards the proposed hypothesises. For example, asking: "Do you think the problem of homeless people in Rotterdam has an easy solution, because today there are just a lot of vacant properties?" already suggest the answer direction that could be given. To keep the data as clean as possible an online pre-test is conducted. For the complete pre-test, see Appendix B.



4.1.1 Pre-test Design 1 – Simplicity of the Solution (Appendix B1)

In the field, it is hard to obtain clean data allowing a test of the perceived simplicity, therefore this variable is determined through a web-based questionnaire. The advantage here is that this questionnaire reduces social pressures associated with face-to-face interviews (Chang & Lee, 2009) and induces honest answers about how the charitable causes are perceived. The level of 'simplicity' is indicated through a pre-test, where the respondents are confronted with multiple compact summaries, that covered the philanthropic goal and social well-being focus of a charitable organisation, without naming this organisation. This approach is deliberately chosen to allow tweaking of the mission and problem the charity encounters, without the respondents recognizing the change. Thereby, this method helps avoiding any possible brand effects because there are no logo's/visuals of any charity or brand names incorporated in the questionnaire.

The summary of the fictional charity is edited in multiple different versions to provoke differing levels of perceived simplicity of the solution to the different charitable causes. These summaries all have a generic message and are neutral in the sense that they do not contain any form of statistical (e.g. with your $\in 2$ we can provide one vaccination) or anecdotal evidence (e.g. talking about a specific person), because of the high likelihood that it influences the attitude towards the cause (Das, Kerkhof, & Kuiper, 2008) (Reynolds & Reynolds, 2002). To ensure the different versions are perceived as realistic as possible, the current missions, visions and other information from various charitable organisations are used, alongside current existing problems in the world and previous campaigns by these organisations. With the exception of the text, the layout of the versions in the questionnaire is held constant.

The survey started with the introduction that provided a false purpose, which told the respondents the research is conducted to select the charities that should receive the proceeds from a food market, the Erasmus University was going to organize. This introduction is used to evoke feelings of influence, in order to encourage honest and thoughtful answers. After the introduction, there followed 4 pages with 4 edited versions of the fictional charity's cause. Each page consisted of a summary and 4 questions to determine how the cause is perceived. The order of summaries is randomized in each questionnaire to ensure every version is addressed in various positions and avoid order effects, due to the loss of concentration and attention paid to each summary. The survey concluded with a test of the respondent's familiarity with the fictional charity called: 'Helpfulness', to test the usability of this charity in the main research.



4.1.2 Pre-test Results 1 – Simplicity of the Solution (Appendix B2)

Before the analyses of the results were performed the collected data of the questionnaire is explored. Hereby, 16 respondents are excluded from the analyses because they did not finish the whole questionnaire. Only the respondents that completed the full questionnaire (36) were included in the research to ensure all 4 versions are compared relative to each other. Since to our knowledge no previous research indicated a scale to measure the perceived simplicity of the solution to a charitable cause, a reliability analysis is conducted to measure the internal consistency and determine the suitability of using the variable 'Simplicity'.

The variable 'Simplicity' is measured through a 3-item scale that gives us a reflection of the perceived possibility that the charitable cause has an achievable solution. The respondents rated the time and resources needed to solve the cause, alongside the overall perceived difficulty using seven-point Likert scales ranging from 1 (very few) to 7 (excessive amounts) and 1 (extremely easy) to 7 (extremely difficult). Respondent's responses to the 3 items were averaged for the analyses making the variable "Simplicity". The reliability analysis showed that these three items concerning consumers' level of perceived simplicity of the cause were consistent. For all versions the Cronbach's α reached an .819 - .894). Which proves that these items measured the intended construct (Streiner, 2003). This reliability analysis also revealed that deleting one item would not increase the reliability. Therefore, all three items are used in the further analysis.

After designing the fictional summaries and running checks, the pre-test indicated differing levels of the variable 'Simplicity' (Full results in Appendix B2). Concluding that the framing of the charitable causes is successfully processed by the respondents and satisfactory. This eventually made it possible to rank the summaries of the charitable causes based on their level of perceived simplicity and pick the versions with most difference: 'Low' (M: 3.97, SE: 1.06) and 'High' (M: 5.71, SE: 0.98), which significantly differ from each other (p < .001). The category 'Low' is the framing where the solution to the charitable cause of the fictional charity is perceived by the respondents as most difficult to achieve.

The additional question in the questionnaire covered for each cause to which extent the recipients of the related charitable organisation deserve support, on a scale from 1 (very few) to 7 (excessive amounts). This to legitimize the false introduction a give an impression how the summary of the fictional charity's cause is perceived, without revealing the true concept.



Based on the pre-test there is no significant difference (p: .606) in the amount of help the recipients of different charitable causes deserve between the versions 'Low' (M: 5.49, SE: 0.94) and 'High' (M: 5.38, SE: 1.396). This enables us to test the influence of the variable 'simplicity', without possible occurring effects from the different recipients in the two causes.

The pre-test concluded with questioning the familiarity with the fictional charity's name and designed logo; 'Helpfulness'. All 39 respondents indicated they were unfamiliar with the organisation, which makes 'Helpfulness' a suitable fictional charity for in the main research.

4.1.3 Pre-test Design 2 – The Value of the Product

A second pre-test is necessary to be able to correctly test H3; If combining the donation request with a product increases the average donation significantly more than the WTP for the physical product alone. To test this hypothesis, it is essential to have reliable data on both components in separate conditions. The average WTP for the physical product is determined through approaching Dutch consumers in the shopping mall and showing them the product. Hereafter they were asked to indicate the maximum price they were willing to pay for the product.

Due to the fact that both men and women of all ages are participating in the main research it was of great importance to select one product that is of the same value to both sexes, but also among demographic variables as age and education. Therefore, a simple ballpoint pen is selected, assuming that men and women of different ages all use this product in the same way and the product thereby generates more or less the same value for everyone.

4.1.4 Pre-test Results 2 – The Value of the Product (Appendix C)

A total of 46 respondents have stated their maximum price they would pay for the product. The WTP for the product is operationalized as a ratio variable (amount of euros) the respondents were willing to pay for the product in a separate condition. It was assumed the product itself has little to no value, enabling the main research to test to which extend the signal, instead of the value of the product increases donation intent. The pre-test conforms this assumption with a mean willingness to pay for the ballpoint of $\in 0.22$ (SE: 0.263).

Thereby, there no difference is found in the WTP between Men (M: 0.23, SE: 0.26) and Female (M: 0.22, SE: 0.27) (p: .913) or between the different age groups 15-29 (M: 0.24, SE: 0.31), 30-44 (M: 0.21, SE: 0.27), 45 – 64 (M: 0.23, SE: 0.25), 65+ (M: 0.21, SE: 0.28) > (p: .989)



4.2 Experimental Setup

After pre-testing indicated 2 fictional charitable causes with a different level of perceived simplicity, it was possible to test the main hypothesis and other possible moderation effects in a private situation through a between-subjects experimental setup. All the respondents were randomly assigned to only one type of donation request to discover the effects of combining the request with a physical product (un)suitable for signalling the charitable donation on the level of donation intent compared to the control group of a regular donation request. The groups are further mentioned as: Group 1 (Regular Request), Group 2 (Product Bundle) and Group 3 (Signalling Bundle). The test design can be summarized in a table as follows.

Research Groups	Group 1	Group 2	Group 3
Based on level of Simplicity	Regular Request	Product Bundle	Signalling Bundle
Charitable Cause 1 – 'Low'	Donation Intent ?	Donation Intent ?	Donation Intent ?
Charitable Cause 2 – 'High'	Donation Intent ?	Donation Intent ?	Donation Intent ?

Group 1: Able to donate any specific amount to the charity, they receive nothing in return.Group 2: Receive a 'Non-Signalling Product' for the donation, all proceeds go the charity.Group 3: Receive a 'Signalling Product' for the donation, all proceeds go the charity.

The effect of request type on donation intent is tested through a controlled online experiment where the respondents are asked to allocate an endowment of $\notin 25$,- between products they would like to receive and the fictional charity 'Helpfulness'. As described above, Group 1 received nothing in return from their donation to charity. Group 2 was at any donation amount rewarded with a simple white ballpoint, where group 3 was rewarded with the same ballpoint, the exception here is that this ballpoint had the logo of the fictional charity 'Helpfulness' printed on it (Appendix A1). The charitable organisation being fictional enabled us to use both summaries with differing philanthropic goals for the same charitable organisation, because the respondents never heard the 'real' mission of the charity before. Hereby, we were able to avoid any possible brand effects, due to the absence of a brand-attitude.

This online experiment provided us with a constant environment to measure the influence of bundling the donation request with a physical product (un)suitable for signalling on the average donation intent in a private setting. The control and accurate measurement of relevant variables in the experiment is achieved by implementing the 5 necessary 'precepts' (Smith V. L., 1982).



1. Non-Satiation

Because the allocation of the endowment is an economic experiment form it is necessary that if for any amount of a good, more is preferred to less, then more will be preferred to less also at all larger amounts of that good (The respondent keeping $\notin 10$ for himself, will have a higher utility than keeping $\notin 1$, but $\notin 100$ will always have a higher utility than $\notin 10$). The precept nonsatiation is needed to achieve an accurate measurement through realistic answers. Monetary value is included in the experiment to control the preferences of the respondents.

2. Saliency

Before starting the experiment, the respondents were informed that their allocation is possibly carried out through a lottery to evoke more realistic choices by giving a feeling of possible 'wins and losses' through their allocation choices. This test design is previously used by among others (Grossman, 2015) (Tonin & Vlassapoulos, 2013), mainly because it is able to limit the over-reporting of 'good' and under-reporting of 'bad' behaviour. Often described as the social desirability bias, which is the tendency to give socially desirable answers instead of answers that reflect the true feeling of the individual (Grimm, 2010). This response bias results in a problem for the reliability of self-reports and forms an issue because studies of giving behaviour involve personal and social sensitive issues (Miller & Ratner, 1996).

In this experiment, there is no clear standard of performance, an incentive is used to ensure respondents move away from favourable 'self-presentation' behaviour to more realistic choices. (Camerer & Hogarth, 1999). To ensure the respondent's reward has motivational relevance, the reward has to go up when he or she makes the 'right' choices. In this case the reward goes up when the respondent fills in the allocation to his or her desires, which provides this individual a higher utility and thereby gives us with more realistic answers for testing the hypotheses.

Thereby, the research design of an online allocation helps to avoid the social desirability bias to some extent due a data collection method that does not require the presence involvement of an interviewer. The possibility of the allocation being carried out gives a situation where the respondent is able to give to charity, but this will come with increasing costs (less money to spend on the things the respondent also wants). Which provides the respondent an incentive to think more about him- or herself and less about what is socially desired. Hereby, the research method simulates the conflict known to play a role in giving behaviour: the conflict between moral intuitions and material values.



3. Dominance

To ensure the respondents do not react randomly to given incentives the rewards structure needs to dominate any subjective costs associated with the participation. Giving the possibility to win the allocation instead of providing a fixed incentive has two main benefits. It allows us to collect a great amount of data from more respondents, through lowering the costs of recruiting respondents. Thereby, it helps with avoiding the problem of a specific reference point and possible wealth effects when paying the respondents according to their performance on the tasks (Starmer & Sugden, 1991). The random lottery incentive is widely used in experimental economics and most often appear unbiased when applied to choices among simple prospects. As this online experiment can be easily completed by everyone and is relatively short it is expected that the random lottery incentive has general validity and is in this case unbiased compared to a lower but fixed incentive. In this case, winning the lottery is getting exactly the options the individual respondent chose during the experiment.

4. Privacy

The 4th precept ensures the allocation is based on the respondent's own earnings only. In a microeconomic experiment privacy is needed for control because the possibility of the respondent not being an autonomous maximiser of own-reward. Therefore, each respondent is given information only on his or her own payoff alternatives, whereby he or she is told the information is required for the experiment and kept private. This approach prevents the respondent's utility being dependent on attached weight to the earnings of others. This privacy allows a precise measurement of the relevant variables in the experiment.

5. Parallelism

Implementing the first 4 precepts allows us to study the influence of donation request type on donation intent through a controlled microeconomic experiment. To be able to use the results of this setup to indicate significant effects and propose meaningful new insights to the current literature it is necessary to have transferable results, which can be marked as the final precept: Parallelism, often described as external validity. Meaning that the general behaviour of the respondents in the controlled experiment also needs to apply to a non-experiment situation in the field where a similar situation occurs. To test the precept; Parallelism, one field experiment is conducted (Chapter 6 & 7) after the controlled online experiment to indicate if the behaviour evoked by different request types in private also applies in a more natural public situation.



Design of the Online Controlled Experiment

The recruited participants for the online experiment were asked to go to the allocation page through research software by Qualtrics. The complete experiment consisted out of 3 pages and was accessible by both mobile and desktop (For full version please see Appendix D).

Page 1 – Introduction – Appendix D1

The first page started with providing the false purpose, which told the respondents the experiment was about background colour effects on consumer choice. This to prevent a different response to the donation request by the respondent knowing this specific variable is observed. Hereafter, it provided the participants the instructions needed to understand how the endowment of $\in 25$ could be allocated to the products they would like to 'buy' and the charitable organisation. Thereby it made clear there was a possibility that their allocation would be carried out to move the respondents away from favourable 'self-presentation' behaviour to more realistic choices. Besides the introduction and explanation, there was no information nor any questions that could have had influence on the allocation of the endowment.

Page 2 – Allocation of the endowment – Appendix D2

When the respondent started the experiment by clicking the button on the introduction page they went straight to the allocation page which again showed the offered endowment of $\in 25$. This page further provided the participant with the prices and possibilities of their allocation choices. For the successful completion and being able to progress to the final page the respondent had to allocate the exact amount of $\in 25$.- between the provided options. At the top of the list, all buyable products were accumulated in one list of titles, with an additional product picture to ensure clarity. This list contained a wide range of different products to ensure an appealing offer for every participant. Which all knew that they were allowed to use their entire endowment to 'buy' their desired products. The listed buyable products can be seen as a decoy to hide the real purpose of the experiment, while it at the same time provides a more realistic situation (limiting the social desirable answers) to test the influence of request type on the giving behaviour of the participants. The possibility to 'buy' items and the possibility to 'buy' more than one of the same product are used to stimulate rethinking about the allocation choices.

The last option on the allocating page was using the endowment to make a charitable contribution to Helpfulness and thereby receive a physical product in return 'as sign of thanks', depending on the research group of the participant.

This final option on the allocation page displayed the fictional charity's logo, alongside the compact summary and the physical product. It was allowed to fill in any monetary amount.

To summarize, the \in 25.- endowment could be used for:

- Buyable products e.g. € 1 chocolate bar, € 3 bicycle lights, € 10 earphones, € 5 beer
- Donate to Charity possible amount of ${\ensuremath{\,\in\,}} 0$ ${\ensuremath{\,\in\,}} 25$

All participants are randomly assigned to only one type of donation request: Regular Request, and thus no product / Product Bundle / Signalling Bundle and filled in a single allocation. Thereby they saw only one version of the edited summary about the charitable cause, which provokes differing levels of 'Simplicity' (Low / High). The variance in donation intent between the 6 research groups (3 Donation Type x 2 Simplicity) allowed us to test the main hypothesis (H₁), and how the perceived simplicity (H_{2a} H_{2b}) influences the donation intent among these different request types. The second pre-test gave us the possibility to compare the influence on donation intent with the WTP for the physical product in a separate condition (H₃).

Page 3 – Closing Page – Appendix D3

After successful completion of the allocation, the participant is redirected to the final page of the experiment where he or she encountered a survey covering the demographic variables (gender, age, education, living situation) and the attributes to measure the individual's level of self-esteem, adapted from the established Rosenberg self-esteem scale (Rosenberg, 1965). These questions are marked as required to be able to participate in the lottery. These additional variables enabled us to test the hypothesis H2c, how the competition for the opposite sex underlies the public good contribution and the proposal that the level of self-esteem moderates the donation intent, especially when combined with a product suitable for signalling (H2d H2e).

The level of self-esteem is measured after the allocation because our imperfect self-knowledge and valuing of a positive (e.g. altruistic, honest) self-image for instrumental or hedonic reasons. When an individual receives "soft" private information about his or her identity by for example introspection, this individual may want to signal his or her future self by carrying out "hard" observable and identify-relevant actions (Benabou & Tirole, 2011). Questioning this individual about his or her valuation of own worth may result in more examining of own mental state, thoughts and feelings. Thereafter, this increase in introspection may provoke a higher level of willingness to preform identity-relevant actions, like donating to charity.



4.3 Definition of Measures

Two dependent variables are used to accurately test the main hypothesis, these are: the percentage of respondents in the specific research group that have chosen to contribute to the fictional charitable organisation and the mean value of this contribution. Combined it was possible to calculate a comparable value of the amount of contributions if all groups had an exact total of 100 participants. This reflection of the donation intent gives us the possibility to compare the influence of a physical (signalling) product in exchange for the charitable donation on the amount of donation intent.

Request Type - H1

The main independent variable: "Request Type", is obtained through manipulation of the donation request. Confronting the respondent either with a normal donation request (Regular Request), which can be seen as the control group providing a baseline or the ability to purchase a physical product and thereby directly donate to the charitable organisation (Product Bundle). The last group received a physical product suitable for signalling a donation is made in return (Signalling Bundle). This variable is incorporated in the data set as an indicator variable.

Self-Esteem - H2d / H2e

The level of self-esteem is measured through a 10-item scale, adapted from the established Rosenberg self-esteem scale (Rosenberg, 1965), widely used in social-science research. The questions are measuring global self-worth by both positive and negative feelings of the respondents about him- or herself. This scale quantifies the hypothetical construct as a sum of evaluations across salient attributes of the respondent's personality. The level of self-esteem forms as reflection of the evaluation of own worth, importance or value. In more common parlance, self-esteem is the extent to which the respondent values, likes or approves him- or herself (Robinson, Shaver, & Wrightsman, 2013). All questions are answered using a five-point Likert scale ranging from "strongly disagree" to "strongly agree". After closing the online experiment, the items 3, 5, 8, 9, 10 are reversed before the sum of all 10 items are averaged for the analyses. (Cronbach's $\alpha = .86$).

Gender / Sexual Selection - H_{2c}

This variable is measured through the demographics part on the last page of the experiment. The variable is incorporated in the data set as an indicator variable where 1 = man, 2 = women.



Background Demographics – Possible effects

Questions about age, education, relationship status and living situation are incorporated in the final part of the experiment to explore which segments are more sensitive to Charity Bundles.

Pre-Test 1 - Simplicity of The Problem - H2a / H2b

The "Simplicity" is measured through the first pre-test, with a 3-item scale that gives a reflection of the perceived possibility that the charitable cause has an achievable solution. All questions are answered using a seven-point Likert scale. The time, money and other resources needed to solve the cause are taken into account alongside the overall difficulty. Respondents responses to the 3 items are averaged for the analyses. This score created the variable "Simplicity", where the maximum score of 7 reflects the meaning that the solution to the cause the fictional charity addresses is extremely difficult to achieve. On the opposite side, the minimum score of 1 reflects an obvious and achievable solution. (All Cronbach's $\alpha \ge 0.82$). In the main test design, this variable in converted into an ordinal scale where 1 represents a simple solution and 2 a difficult solution to the cause of the charitable organisation.

Pre-Test 2 - The Influence of The Bundled Product - H3

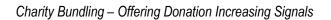
The willingness to pay for the physical product combined with the donation request in a separate condition is measured in pre-test 2. The amount of money is operationalized as a ratio variable.

4.4 Data Collection

The data of the pre-tests 1: Simplicity, is collected during May 2017 through a web-based questionnaire using Qualtrics. Eventually, 55 consumers participated, without a particular group being targeted. All participants are recruited through asking for help by the false purpose.

The face-to-face survey, covering the WTP for the physical product in a separate condition is conducted in the Netherlands, Nieuw-Vennep, near the main Shopping Centre. Eventually, 49 consumers participated, without any particular group being targeted.

The main research lasted one week, 20 - 27 May. Eventually, 225 consumers participated in the online experiment. The research was aimed at consumers with different demographic characteristics, so no specific group was targeted. All respondents are contacted and recruited through social media, e-mail and text massages, where being asked to participate in a survey about how background colour effects on consumer choice.





4.5 Summary of Measures

Variable Name	Description	Measurement	Туре			
- Dependent Variable						
Contribution	The amount donated to charity by the respondent	Scale (measured in €'s)	Ratio			
- Independent Variable	- Independent Variables					
Request Type	Indicator of Request Type	 1 = Regular Request; 2 = Product Bundle; 3 = Signalling Bundle 	Nominal			
Simplicity (Dependent in Pre- test)	The perceived simplicity of the solution to the charity's cause	1 = Simple Solution;2 = Difficult Solution	Ordinal			
WTP (Dependent in Pre- test)	The WTP for the physical product in a separate condition	Scale (measured in €'s)	Ratio			
Self-Esteem	Level of self-esteem	Range from 1 to 5 <i>Higher scores indicate</i> <i>higher levels of self-esteem</i>	Interval			
Gender	Indicator of gender	Male = 1; Female = 2	Dummy			
Age	Indicator of age	1 = 15 - 29 2 = 30 - 44 3 = 45 - 59 4 = 60 +	Ordinal			
Education	Level of education	 1 = High school; 2 = Mid-level applied education; 3= Higher education; 4 = University 	Ordinal			
Relationship	Indicator of relationship status	 1 = Single; 2 = Dating; 3 = In a relationship; 4 = Married 	Nominal			
Language	Indicator of spoken language	0 = Dutch; 1 = English	Dummy			



5. Analysis and Results – Online Experiment

This chapter starts with providing the data exploration and a reliability check. Chapter 5.2 continues with the validity of the experimental setup. Hereafter, the individual hypotheses are discussed on basis of the acquired data. The chapter concludes with the additional findings.

5.1 Data Exploration + Reliability Check

Before the analyses of the hypotheses were performed, the collected data is explored. Firstly 53 respondents were excluded from the analyses because they not finished the allocation. The remaining sample size is mixed by gender (40.9% Men and 59.1% Women), with relatively many respondents in the age bracket 15 - 29 (71.6%), followed by 30 - 44 (12.1%), 45 - 59 (14.9%) and 60 + (1.4%). Of the sample size 33.6% is single, 4,0% dating, 41.2% in a romantic relation and 16,4% married. The level of education is relatively high with 34.1% being postgraduate, 30.5% undergraduate, 20.8% completed college and 9.7% completed high school. 11 respondents (4.9%) did not fill in these demographic variables but were still included in the results. For the complete demographics of all 225 respondents, please see Appendix D4. All included variables and the correlations among them are displayed in Appendix D5.5

The examination (Kolmogorov-Smirnov tests) whether the obtained data met the assumptions needed to use parametric tests indicated that the dependent variable followed a significantly non-normal distribution, even after transforming the data by the means of the log and square root transformations. Therefore, non-parametric tests are used to test all hypotheses. Because all items were translated into Dutch, a reliability check is conducted to verify these items measured the intended construct. The 10-item Rosenberg's self-esteem scale showed a consistent Cronbach's $\alpha = .86$, whereby deleting an item not increased the reliability. Therefore, all items are used to calculate the mean score, representing the consumers' level of self-esteem.

5.2 Validity

This experimental setup of consumers allocating the endowment to their preferred options, with a random lottery incentive to win these options is a relatively new and unknown research method. It has the advantage that it provides us a clear overview of the most desired options. Unfortunately, this comes with the disadvantage of possible effects from a (related) prior gain, in this case the endowment of a 'free' \in 25.- to spend on the respondent's desired options.



This 'house money' is likely to increase the willingness to seek risks and accept gambles (Thaler & Johnson, 1990), as losing this money does not hurt as much as losing one's own cash. Which hereby reinforces non-normal distributed variables through many 0's and outliners of the maximum allocation of \notin 25.- on the right. This experimental setup accurately measures the desires and intentions of every individual, where the obtained data provides us with a clear ranking of the preferences. However, on first sight there is no easy numerical interpretation.

Due to this non-normal distributed data, we violate a parametric tests assumption, by the mean of a Kolmogorov-Smirnov test (Lilliefors, 1967). Resulting in non-parametric tests being required that do not have assumptions over the probability distribution of the selected variables (Siegel & Castellan, 1998). Through non-parametric tests using ranks that are assigned to values instead of the absolute value, the non-normally distributed data can still be analyzed. However, this results in the situation that although there are clear patterns evoked by request type, there are no parameters to describe and it becomes more difficult to make quantitative statements about the actual differences between groups. Finally, it is important to note that through the use of 'house money', the obtained data cannot be used to generalized.

5.3 Hypotheses

All hypotheses are discussed in order of the proposed effects in Chapter 3. For the full distribution of results and additional tests please take a look at Appendix D5.

5.3.1 Main Effect (H1) - Offering Donation Increasing Signals

According to the main hypothesis, donation intent will be higher, when the donation request is combined with a product suitable for signalling the made contribution. The Mann-Whitney test is used to determine the correctness of this proposal. The given contributions levels are the mean of all responses in that research group to both charitable causes. With the Mann-Whitney test both Charity Bundles are compared to the control group of a regular request.

Request Type	% of contributions	Mean donation	N = 100	P-Value	P-Value
Regular Request	46,2%	€ 3.78 (6.15)	€ 174.64	-	-
Product Bundle	55,3%	€ 4.93 (7.16)	€ 272.63	.264	.292
Signalling Bundle	50,2%	€ 4.50 (7.03)	€ 225.90	.706	.693

Table 1: Results effectiveness of combining donation requests with physical (signalling) products



As the trend presented in Table 1 show, more respondents are willing to make a contribution to charity when the request is framed as an economic transaction. This finding is in line with previous research conducted in a public situation (Holmes, Miller, & Lerner, 2002). However, in this private situation the effect of request type on the percentage of people that are willing to donate is not significant. This could be explained partly by the limited power of non-parametric testing and partly by the decrease of the mode effect 'social desirability'.

Recent research by (Zhang, Kurchinke, Woud, Velten, & Margraf, 2017) indicated that faceto-face samples are significantly different from online samples on many scales, especially the ones targeting desirable versus undesirable issues. To illustrate, it is more difficult to tell the interviewer face-to-face that 'I do not donate to charity' than to admit 'I can get upset by all donation requests on the street'. Through the fact that our respondents were able to provide answers from behind their screen, it becomes easier to refuse the request compared to with presence involvement of an interviewer. This finding shows that offering a product in a public situation makes it harder for the consumer to decline the donation request, however in a private setting without the personal interaction, this effect loses its powers, making it for the consumers easier to ignore the request, resulting in no significant difference between request types.

Beside the percentage of contributors, the mean contribution of both bundle treatments are not significantly different from the control group. In the private situation, there are increases of mean contribution in the 'Product Bundle and 'Signalling Bundle' of respectively \in 1.15 and \in 0.75, but due to the high deviation of the sampling distribution this effect is not significant.

5.3.2 Effects (H2a/b) - The Simplicity of The Problem

The hypothesis following the main effect, stated that the perceived simplicity of the cause generally influences the donation intent through an increase in the perceived helpfulness to the recipients, which may increase the self-perception of being altruistic, expected to result in a higher level of donation intent. A Mann-Whitney test is used to compare the means.

Table 2: Results effectiveness from framing the charitable cause to have an easy solution

Charitable Cause	% of contributions	Mean donation	N = 100	P-Value	P-Value
Low Simplicity	51.7%	€ 3.85 (5.73)	€ 199.05	-	-
High Simplicity	48.6%	€ 4.98 (7.71)	€ 242.03	.643	.880



As the difference is not significant we reject this hypothesis and progress to the second part, that proposed that the charitable organisation that provides a signalling opportunity benefits most from a solution that is perceived to be simple, through the expectation that the ability to provide effect help is most likely an attractive and credible trait to use as signal.

Where the overall donation intent at 'Low' and 'High' perceived simplicity is not significantly different. There occurs an interesting effect when combining the donation request with a physical product, that can be used to signal the made contribution. As the blue line in the graph displays, the charitable cause that has a high perceived simplicity, or in other words an easy solution, benefits most from combining signalling Fig product and donation request.

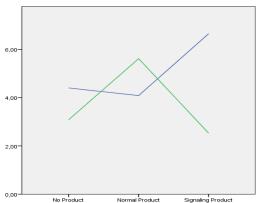


Figure 2: Influence from 'Simplicity' on Donation Intent High Perceived Simplicity vs. Low Perceived Simplicity

The charitable cause with the high perceived simplicity in the 'Signalling Bundle' reached the highest mean contribution of \notin 6.65, where in this research group the cause with the low perceived simplicity only generated a mean contribution of \notin 2.53. When building a regression model to indicate a possible moderation effect (Request Type*Simplicity), it is worth mentioning we cannot generalize the results, because the violated assumptions. Here our experimental setup forms the disadvantages that there are limited ways to correct for these violations, making it difficult to indicate the real significance of this moderation effect (Field, 2009). With this reason, an additional Mann-Whitney tests is used that provides us more robust statistics and can be generalized. This test indicated a significant moderation effect (p: .089) between the means of both groups. The regression model indicated a significant moderation effect (p: .054), when comparing the Signalling Bundle with both other treatments. We can hereby accept H2b, and assume this difference is caused by the increase in the feeling of being able to provide effective help, which is most likely an attractive and credible trait to use as a signal.

Table 3: Mean donation of the respondents that donated to the charitable organisation

Request Type	Low Simplicity	High Simplicity	N = 100	N = 100	P-Value
No Product	€ 3.08 (6.92)	€ 4.40 (5.16)	€ 142.73	€ 202.18	.605
Product Bundle	€ 5.61 (6.99)	€ 4.08 (7.37)	€ 365.32	€ 174.87	.071*
Signalling Bundle	€ 2.53 (3.97)	€ 6.65 (8.86)	€ 105.43	€ 382.91	.089*



Contrary to the expectation, that the 'High Simplicity' cause would generally generate the most donation intent, the cause with the solution that is perceived as difficult, evoked a higher level of donation intent from the respondents in the 'Product Bundle' (p: .071), where the respondents received the physical product without the signalling opportunity.

5.3.3 Effect (H2c) - Sexual Selection

It is expected that men, relatively to women are more sensitive for signalling opportunities, because these could be used to showcase a pro-social attitude, which women generally see as an important indicators of attractiveness (Miller G. F., 2007) (Barclay, 2010). The following overview provides a comparison of the differences in the percentage of men and women that contributed and the mean contribution in the different donation request types.

Table 4: Differences between sexes in the research group – Control Group

Gender	% of contributions	Mean donation	N = 100	P-Value	P-Value
Men	20.7%	€ 1.81 (4.93)	€ 37.47	-	-
Women	60.0%	€ 4.64 (6.03)	€ 278.40	.001***	.002**

Table 5: Differences between sexes in the research group - Product Bundle

Gender	% of contributions	Mean donation	N = 100	P-Value	P-Value
Men	51.6%	€ 4.92 (6.67)	€ 253.87	-	-
Women	60.5%	€ 5.07 (6.65)	€ 306.74	.451	.877

Table 6: Differences between sexes in the research group - Signalling Bundle

Gender	% of contributions	Mean donation	N = 100	P-Value	P-Value
Men	35.7%	€ 3.59 (7.399)	€ 127.45	-	-
Women	64.9%	€ 5.73 (6.93)	€ 371.88	.021**	.033**

The most extreme difference between the contributions of men and women is found in the regular request, where the difference in participation is almost 40%. This finding supports previous research, that indicated that men's efforts are more likely to be apparent and in public, often targeted at strangers, e g. (Van Vugt, De Cremer, & Janssen, 2007). Our research design does not generate the option for the effort to be apparent and in public, which makes it less attractive for men to pay for the costs of donating. Where women's efforts to help are more often made in small social networks, or in this case stayed private (Benenson, 1990).



Overall, this result in a significant difference between the percentage of men that contributed (36.4%) compared to women (60.6%)(p: < .001). With men having an average contribution of $(M: \notin 3.44, SE: 6.45)$ against women with (M: 5.03, SE: 6.82)(p: .003). Especially, in the control group that is not offered any physical product for the contribution, the difference between men and women is highly significant.

In the second treatment 'Product Bundle' no significant difference is found between men and women. Where in the 'Signalling Bundle', the results of our experiment are contradictory with the hypothesis derived from previous field research. The expectation was that men are more interested in the signalling opportunity, because the possibility to use this product to compete with other men by signalling their pro-social traits as kindness and helpfulness. However, this option may have been seen as relative intangible for our respondent's due to the random lottery incentive instead of a certain given signal opportunity. The additional field research in Chapter 6/7 provides if and to what extent Hypothesis 2c differs across a public and private situation and with the use of a different product.

5.3.4 Effects (H2d/e) - Self-Esteem & Concerns About Social Image

Previous research indicated that self-image concerns often increase the individual's level of donation intent. The ones with a low/medium level of self-esteem may use donations to positively increase their self-image through donating for instrumental or hedonic reasons. To test this hypothesis, all respondents were first divided in an ordinal scale with 2 categories by their level of self-esteem: Low and High. This is done through to the mean of 3.92, every individual under is placed in the category 'Low', where every individual above in the category 'High' level of self-esteem. This gives us the following results.

Self-Esteem	% of contributions	Mean donation	N = 100	P-Value	P-Value
Low	51.9%	€ 4.50 (6.65)	€ 233.55	-	-
High	49.5%	€ 4.28 (6.78)	€ 211,86	.732	.717

Table 7: Total influence of self-esteem on contributions to charity

This data shows, in general, no significant difference in donation intent between the respondents with a low, compared to a high level of self-esteem. This changes when we take a closer look at how donation intent moderates between the different request types.



In the 'Simple Request' treatment the individual with a high level of self-esteem makes a significantly larger contribution than the individual with a relatively low self-esteem.

Table 8: Influences of a low self-esteem on contributions to charity in the research group – Control Group

Self-Esteem	% of contributions	Mean donation	N = 100	P-Value	P-Value
Low	36.8%	€ 2.26 (3.84)	€ 83.17	-	-
High	52.8%	€ 4.88 (6.53)	€ 257.66	.098*	.171

However, the 'Regular Request' is the only treatment where the individual with a high selfesteem contributes more compared to the one with a relatively low self-esteem.

When offered a product in exchange for the donation this effect changes, which is in line with hypothesis H2e that stated that the effect of selfesteem is stronger when the donation request is combined with a (signalling) product. This because the physical product is able to help the contributor with levering his or her altruistic identity and thereby provides a psychological cover to conditionalize giving behaviour. Which has likely more influence on the one that is less confident about his or her actions.

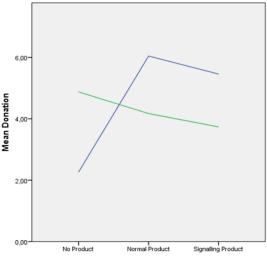


Figure 3: Influence from 'Self-Esteem' on Donation Intent Low Self-Esteem vs. High Self-Esteem

A Mann-Whitney test shows that the request type makes a significant difference for the low self-esteem individual. The 'Signalling Bundle' (M: 5.46, SE: 7.48) is more effective than the 'Regular Request' (M: 2.26, SE: 3.84) but <u>only</u> when the individual has a relatively low self-esteem (p: .067). The same applies in the 'Product Bundle' (M: 6.05, SE: 7.68)(p: .010).

In the High Self-Esteem group there is no parallel effect. Hereby, we provide prove for previous research by (Cueva & Dessi, 2010) that proposed that identity investments have a direct relation with the level of self-esteem. Our research shows that the one confident about his or her identity, has indeed less need for (costly) signals to prove he or she is indeed altruistic. Where the ones with less self-esteem are more influenced by the request types, that can be used to achieve and/or maintain a more positive self-image and the request types that make it more difficult to decline the donation request for more self-interested behaviour.



5.3.5 Effect (H3) - The Value of The Bundled Product

According to the second pre-test, the bundled physical product has a positive utility, which is indicated with an average WTP of $\notin 0.22$ to obtain the product. H3 proposes that the increase in donation intent is significantly more than the WTP for the product in a separate condition. Combined with the average donation of a regular request this forms a total willingness of exactly $\notin 4$.-. However, since the overall donation intent for the 'Signalling Bundle' in this research design is not significantly higher than the 'Regular Request' this hypothesis can be rejected.

5.4 Other Findings

Knowing which group is more responsive to charity bundling provides managerial relevance for charitable organisations, because their market segmentation is often based on these variables such as age, education or living situation. In this chapter only significant effects are discussed.

5.4.1 Gender – Level of Self-Esteem

Although H2d, the expectation that a lower self-esteem generally results in a higher level of donation, could not be accepted, an interesting relationship is found in our data. It turned out that the influence of self-esteem is highly dependent on being men or women. For both, the percentage of contributions (p: .004) and the mean contribution (p: .011) the Kruskal-Wallis test indicates there is a significance difference between the groups.

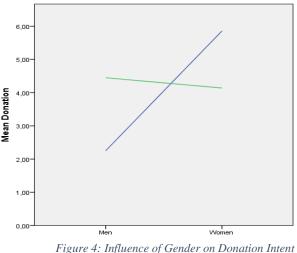


Figure 4: Influence of Gender on Donation Intent Low Self-Esteem vs. High Self-Esteem

Individual Mann-Whitney tests between both independent samples proves there is no significant difference between the donation intent of men with a low self-esteem (M: 2.25, SE: 4.30), compared to men with a high self-esteem (M: 4.45, SE: 7.71, p: .309). This is also the case with women that possess a low level of self-esteem (M: 5.86, SE: 7.43), compared to women with a high self-esteem level (M: 4.14, SE: 6.02, p: .260). However, when comparing low self-esteem individuals, the difference in mean donation is highly significant between men



(M: 2.25, SE: 4.30) and women (M: 5.86, SE: 7.43, p: .002). Also, the percentage of female respondents that donated is significantly higher (63.6%) than men (32.5%)(p: .002). There is no parallel effect when the individual has a relatively high level of self-esteem

5.4.2 Level of Education

The non-parametric Kruskal-Wallis test provides us proof that the percentage of contributors and the mean contribution differ across the level of completed education. The education levels are transferred from the Dutch system: 'Dutch Secondary School, MBO, HBO and WO.

Education	% of contributions	Mean donation (SE)	N = 100
High School	54.6%	€ 4.55 (6.60)	€ 248.43
College	42.6%	€ 3.26 (6.01)	€ 138.88
Undergraduate	42.0%	€ 3.84 (6.78)	€ 161.28
Postgraduate	62.3%	€ 4.50 (7.03)	€ 280.35
Asymp. Sig.	.055*	.046**	

Figure 5: Influence of Education Level on donation intent

5.4.3 Living Situation – Level of Self-Esteem

In turns out that the living situation has a great impact on the response to donation requests, but only when the individual has a relatively low self-esteem. The 'Single' individual with a relatively low self-esteem (M: 6.09, SE: 7.49) donates significantly more than the individual with a low self-esteem that is in a relationship (M: 2.83, SE: 3.86, p: .033) or the one married

(M: 4.42, SE: 9.11, p: .072). The single (65.3%) also donates more often than the one in a relation (M: 46.2%, p: .073) or the one married (M: 28.6%, p: .015). No parallel effect is found for the ones with a high self-esteem. These results are an indication that the ones with less confidence about their identity are more sensitive to donation requests, which can be used to compete for the opposite sex by showcasing personal traits as caring and reliability.

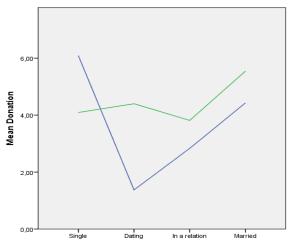


Figure 6: Influence of Living Situation on Donation Intent Low Self-Esteem vs. High Self-Esteem



6. Research Methodology - Additional Field Research

The online controlled experimental setup indicated the influence of donation request type on donation levels in a (to a high extent) private situation. The aim of this additional field experiment is to indicate if and to what extent the different types of donation requests evoke the same consumer behaviour in a more neutral public situation. In order to add meaningful insights to the current literature, this field research is an extension that tests to which extent the allocation setup provides transferable results and has external validity.

6.1 Field Experiment Setup & Data Collection

The following field experiment is conducted in the Netherlands (June 2017) and particularly in Hoofddorp, at a lake known to attract all different kinds of people. In the Netherlands, the beach is a natural environment where a majority of the people go when the temperature is high regardless of demographic variables as age, education and income. An additional assumption here is that at this place people are more likely to be in a relaxed state and thereby willing to spend time listening (Xenikaki & Stoop, 2013). This beach is visited for two weekends in a row, by the same male and female interviewers, when the temperature was attracting a lot of people. These weekend visits enabled us to achieve a sample from the common population.

In this field experiment a bottle of water is offered in exchange for a contribution to charity, instead of the previously used pencil. This is done out of the expectation that people not easily trust a stranger actually donating the sum of money he or she receives to charity, which may hold them back from donating. Providing the subjects with a cold drink on a hot day is helping to make it more probable that they accept the product and thereby are willing to make a contribution. To ensure the field research is perceived by the subjects as a situation where they can make a real contribution, the well-known charitable organisation UNICEF is used.

In this experiment the research design is limited to two treatments groups, due to the fact that previous field research already indicated that people's willingness to contribute is greater when the act is presented as an economic transaction compared to presented as an act of pro-social behaviour, e.g. (Holmes, Miller, & Lerner, 2002). To test the hypothesis that an increase in the self- and social-signalling opportunity through product bundling is able to increase donation intent in a pay/give-what-you-want setting, the bottle of water is labelled with the UNICEF logo in the treatment group: 'Signalling Bundle', where the other group received a comparable



plastic bottle of water without any logo or brand, by which it could be identified. For a picture of both versions of the product see Appendix E1. All subjects in both research groups where asked for a charitable contribution by the same neutral approach:

Hello, I have this bottle of cold water for you. You can have it for any amount of money you are willing to donate to UNICEF.

When requesting the donation, we made sure the subjects saw the offered product. After they indicated the amount of money (above $\in 0$.-) they were willing to spend on the product combined with the request they received the water bottle. This in order to indicate the average 'willingness to pay' for the bottle of water (with/without the opportunity to signal the made contribution). Which allowed us to compare the percentage willing to contribute and the mean of this contribution, reflecting the level of donation intent. After the subject's reaction to the request, we filled in the demographic details of this individual to be able to perform the hypotheses tests. Hereafter, we gave back their contribution alongside the information needed how to donate to UNICEF. This in order to prevent any violation of the Dutch 'Reclame Code Fieldmarketing'.

Variable Name	Description	Measurement	Туре
- Dependent Variable	-		-
Contribution	The amount donated to charity by the respondent	Scale (measured in €'s)	Ratio
- Independent Variab	les	-	-
Request Type	Indicator of Request Type	0 = Product Bundle; 1 = Signalling Bundle	Dummy
Gender	Indicator of Gender	0 = Male; 1 = Female	Dummy
Age	Indicator of age	1 = 15 - 29; 2 = 30 - 44; 3 = 45 - 59; 4 = 60 + 1000000000000000000000000000000000	Ordinal
Relationship	Indicator of relationship status	 1 = Single; 2 = Dating; 3 = In a relationship; 4 = Married 	Nominal

6.2 Definition of Measures



7. Analysis and Results – Additional Field Research

This chapter again starts with providing the data exploration and validity of the experimental setup. Hereafter, the hypotheses are discussed individually on basis of the acquired data. The results are followed by Chapter 8, that compares the results with the findings out of the online experiment and concludes with the general conclusion, managerial implications and limitations.

7.1 Data Exploration

Before the analyses of the hypotheses were performed, the collected data is explored. This field study includes two different samples/treatments. First is the 'Product Bundle' with 54 subjects, where the 'Signalling Bundle' contains 59 subjects.

Product Bundle

The demographics of the sample size is mixed by gender: 46.3 % Men53.7 % Women andAge 15 - 29 (48.1%), 30 - 44 (18.5%), 45 - 59 (18.5%), 60 + (14.8). Of this sample size 24.1% is single, 5.6% dating, 42.6% in a romantic relation and 27.8% married. The level of education is 11.3% postgraduate, 29.6% undergraduate, 39.6% college and 18.9% completed high school.

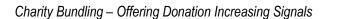
Signalling Bundle

The demographics of the sample size is mixed by gender: 47.6% Men and 52.4% Women and Age 15 - 29 (40.7%), 30 - 44 (23.7%), 45 - 59 (23.%), 60 + (11.9%). Of this sample size 32.8% is single, 8.6% dating, 31.0% in a romantic relation and 27.8% married. The level of education is 10.3% postgraduate, 25.9% undergraduate, 36.2% college and 27.6% completed high school.

Before the analysis, the appropriateness of parametric tests is examined. The Kolmogorov-Smirnov test indicated the contributions are non-normally distributed, making parametric test unsuitable for testing the hypotheses. The population variances are equal in both treatments. All included variables and the correlations among them are displayed in Appendix E3.1

7.2 Validity

This field experiment indicated the consumer behaviour induced by donation request type in a more neutral public situation, compared to the controlled and to high extent private online experiment. Which allows us to compare the increase when the donation request is framed as an economic transaction and the additional effect of an increase in the possibility to use the





donation as a signal of a pro-social attitude in a public situation. That the experimental setup is comparable with a regular recruitment by a charitable organisation to acquire contributions, provides us with a high managerial relevance and thereby allow generalizing of the findings to similar fields. The consistent approach of subjects by the same interviewers on comparable days prevented any selection or interviewer bias. Through using the same donation request every time, which is neutral in the sense that it not contains any form of statistical or anecdotal evidence that might influence the decision, we were able to prevent subjects giving consciously, or subconsciously the responses they thought the interviewers might have wanted to hear.

All subjects were randomly approached by the researchers. The data exploration hereby confirms the treatments are not significantly different from each other in terms of demographic, and thus can be basically seen as the same. At the same time, there are no remarkable outlines of age, education or living situation in the demographic variables of the research sample, most likely through the beach being a neutral place, attracting all different kinds of people in terms of age, education and living situation.

7.3 Hypotheses

All hypotheses are discussed in order of the proposed effects in Chapter 3, with the exception of the perceived simplicity and level of self-esteem proposal. For the full distribution of results and additional tests please take a look at Appendix D3.

7.3.1 Main Effect (H1) - Offering Donation Increasing Signals

The main hypothesis proposes that the level of donation intent will be higher, when the request is combined with a (physical) product suitable for signalling the made contribution, in this case the bottle of water labelled with the UNICEF logo. In the field experiment we found 44 subjects in the 'Product Bundle' group were willing to donate money to UNICEF, while 11 were not. In the 'Signalling Bundle' 48 subjects were willing, where 11 were not. A Mann-Whitney test is used to compare the percentage of subjects. This test provides us a p-value of .986 indicating that the request type has no significant effect on the percentage of people that are willing to make any contribution.

Secondly, we compared the mean donation in the 'Product Bundle' with the 'Signalling Bundle' group. In the 'Signalling Bundle' treatment the request generated a mean donation of \in 1.79, where the 'Product Bundle' treatment generated only a mean donation of \in 1.01.



The same percentage of subject are willing to contribute, but according to a second Mann-Whitney test, the average amount contributed is significantly higher (p: .003) in the research group that is provided with a signalling opportunity. This finding is consistent with our expectation and thereby we are able to accept H1, that although the signal has no real value, individuals are willing to pay for it because they prefer signalling a pro-social attitude to indirectly gain back a more positive reputation and reciprocity.

Table 9: Results effectiveness of combining donation requests with physical (signalling) products

Request Type	% of contributions	Mean donation	N = 100	P-Value	P-Value
Product Bundle	81.5%	€ 1.01 (.95)	€ 82.32	-	-
Signalling Bundle	81.4%	€ 1.79 (1.68)	€ 145.71	.986	.003**

7.3.2 Effect (H2c) – Sexual Selection

According to hypothesis H2c, the Signalling Bundle will have a greater effect on men because this bundle can be used to signal personal traits as kindness and helpfulness, which are often viewed as important indicators of attractiveness by females, e.g. (Miller G. F., 2007) (Barclay, 2010). The following overview provides a comparison of the differences in the percentage of men and women that made a contribution and the mean contribution between both treatments.

Table 10: Differences between sexes in the research group - Product Bundle

Gender	% of contributions	Mean donation	N = 100	P-Value	P-Value
Men	72.0%	€ 1.09 (1.17)	€ 78.48	-	-
Women	89.7%	€ 0.94 (.72)	€ 84.32	.099*	.930

Table 11: Differences between sexes in the research group - Signalling Bundle

Gender	% of contributions	Mean donation	N = 100	P-Value	P-Value
Men	89.3%	€ 1.77 (1.28)	€ 158.06	-	-
Women	74.2%	€ 1.80 (1.99)	€ 133.56	.141	.565

First, the percentage of men and women that contributed and the mean of this contribution are compared with each other in both treatments individually. As above tables show, the sex of the individual only has a significant effect when combined with a regular non-signalling product. In this treatment women are more often willing to make contribution. However, the average contribution is the same for men and women in this treatment.



Secondly, we conducted a regression analysis to determine if the relationship between request type and donation is moderated by the sex of the individual. This is done through the addition of an interaction term (Gender * Request Type) in the regression model, which indicated the relationship between donation and request type is not dependent on gender (p: .691). Hereby we reject H2c, that men are more responsive to the offer of signaling products. However, we found an interesting effect of the gender of the interviewer on the level of donation intent, but only when men are approached.

The Presence of The Other Sex – In Addition to H2c

Previous research indicated that men are more altruistic to females, especially to the ones with a high physical attractiveness (Lynn & Sunibs, 2000). Our field experiment provides additional evidence for this proposal by comparing the mean donations received by the female interviewer from approaching men to the mean donation received by the male interviewer from approached men with a Mann-Whitney test. Hereby, we indicate a significant difference in mean contribution (p: .017), where there is no parallel effect found when approaching women. The participation rate in the 'women to men' situation is 88.5%, where the 'men to men' situation

only reaches a rate of 74.1%. However, this effect is not significant (p: .185). In total, the female interviewer received a higher donation from men (M: 1.92, SE: 1.46) than from women (M: 1.44, SE: 1.83, p: .083). Where the male interviewer received the same donation from men (M: 0.96, SE: 0.83), compared to from women (M: 1.35, SE: 1.10). Overall, the male and female interviewer generated a similar participation rate (p: .461) and average contribution (p: .178)

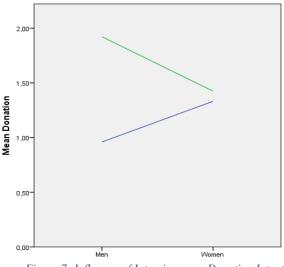


Figure 7: Influence of Interviewer on Donation Intent Men Interviewer vs. Female Interviewer

7.4 Other Findings

Knowing which group is more responsive to the donation request combined with a product (suitable for signalling) provides relevance, especially for the organisations using a streetapproach to collect their contributions. In this chapter only the significant effects are discussed.



7.4.1 Level of Education

A Kruskal-Wallis test provides us proof that the percentage of contributors and the mean contribution are different between the groups based on the highest level of completed education. The education levels are transferred from the Dutch system: Dutch Secondary School, MBO, HBO and WO. The data indicates that on average, the higher educated the individual, the more he or she is willing to make a contribution to charity.

Education	% of contributions	Mean donation	N = 100 € 84.80	
High School	73.1%	€ 1.16 (1.13)		
College	73.8%	€ 1.02 (1.16)	€ 72.28	
Undergraduate	96.8%	€ 2.05 (1.85)	€ 198.44	
Postgraduate	100%	€ 1.93 (.93)	€ 193	
Asymp. Sig.	.001*	.013**		

7.4.2 Living Situation

In turns out that the individual's living situation has a great impact on the response to the donation request. A Kruskal-Wallis test indicated that the percentage of contributors and the mean contribution differs significantly across living situations. The 'Single' individual (M: 2.09, SE: 1.36) donates significantly more than the individual that indicated he or she is dating with someone (M: 2.09, SE: 1.36, p: .043), in a relationship (M: 0.78, SE: 0.84, p: < .001) or the one married (M: 1.70, SE: 1.81, p: .089). Individuals that are single (93.8%) also donate more often than the one in a relation (M: 70.7%, p: .014). The participation rate of the individual that is Single is the same for the individual that is 'Dating' (p: .434) or 'Married' (p: .372). This effect of living situation is the same for men and women.

Living Situation	% of contributions	Mean donation	N = 100
Single	93.8%	€ 2.09 (1.36)	€ 196.04
Dating	75.0%	€ 1.06 (1.02)	€ 79.50
Relation	70.7%	€ 0.78 (0.84)	€ 55.15
Married	82.1%	€ 1.70 (1.81)	€ 137.57
Asymp. Sig.	.063*	<.001**	



8. Discussion & Conclusions

In today's market, charitable organisations experience a highly competitive and sophisticated environment, where they have to compete for the limited attention. Hereby, fundraising is becoming increasingly difficult. To provide support, the aim of both experimental setups was to indicate if and to what extent the request type is able to influence the level of donation intent. This data shows us that the bundling of private and public goods is often a win-win situation and more beneficial for both, charity and company than generally acknowledged. Cause-related marketing can be a way to increase brand performance through an increase in goodwill (Arora & Henderson, 2007), but on the other side also increase the total amount of contributions to a charitable organisation, struggling to create an effective promotional format.

8.1 General Discussion – Main Effect

H1: One charity that through bundling offers a signalling opportunity is able to increase donation intent in comparison to the same charity that offers a 'non-signalling' product or no product. The combining of request and physical product induced no general participation or mean donation increase in the online experiment. In contrast to our field experiment, where the average donation is highly dependent on request type. When using a Mann-Whitney test to compare the on-the-spot contribution rate (81.4%) of our field experiment, the contribution rate in the online experiment (50.2%) is as hypothesized significant lower (p: < .001), providing evidence that the donation request is differently perceived and processed in a public environment, compared to an online and private situation. Which provides proof that it is for the individual easier to refuse the donation request and keep self-interested outcomes in the online and impersonal approach than with presence involvement of an interviewer and in public.

The explanation here are the different levels of image-maintenance concerns of the subjects induced by the request types (Cialdini & Schroeder, 1976). In our experiment, the subjects were allowed to donate any amount they could afford (in exchange for a physical product), making noncompliance difficult by rendering most excuses inapplicable. Refusing this minimal request is likely perceived as socially undesirable behaviour and thereby more difficult to execute in a face-to-face situation. (Reeves, Macolini, & Martin, 1987). This finding indicates that self-image concerns, which are in our case strengthened through the presence involvement of an interviewer, have a direct relation with the level of donation intent.



In the online experiment, the 'Product Bundle' generated the same level of donation intent as the 'Signalling Bundle'. Where in the field experiment the signalling opportunity significantly increased the contribution. Which is expected to be caused by the differing strength and thereby value and effect of the signalling opportunity, due the use of a well-known and fictional charity. But also the signal being more tangible in the field, because the product was in sight and obtainable while getting the request, ensuring quick recognition of the advantages. The public environment enabled the contributor to directly use the contribution to showcase a pro-social attitude to the environment, compared to the online experiment where the contribution was mostly in private and the individual did not directly receive the physical product.

The clear possibility to signal the made contribution raised the average contribution from \notin 1.01 to \notin 1.79 in the field study (p: .003). Hereby, we display an egoistic benefit through the individual's giving behaviour, providing proof for the proposal that the giving behaviour of an individual is based on the utility of both altruistic and egoistic motives, first proposed by (Adreoni, 1989). When comparing the donation intent of the 'Signalling Bundle' with the 'Product Bundle' that received the exact same product, the increase in the signalling opportunity increased the level of donation intent. Here the signal, in the form of added logo on the bottle, has no real value. The positive utility stems from the interest in a more altruistic reputation, useful for engaging, maintaining and developing different kinds of relationships.

8.2 General Discussion – Moderating Effects

H_{2a}: When the solution of the charity's cause is perceived as obvious and achievable it results in a higher donation intent, compared to when the cause of the same specific charity is perceived as more complex with a lower probability of being solved.

H2b: This effect is stronger when the donation request is combined with a signalling product.

Our study is the first test whether framing the charity's solution to their charitable cause simpler has a significant effect on the donation intent. This hypothesis is tested through our online experiment, enabling us to make use of the fictional organisation 'Helpfulness', with 2 different version of the summary describing their philanthropic goal and social well-being focus. In the framing where the solution to their social cause is perceived as relatively simple (M: \notin 4.98, SE: 7.71) the donation intent is comparable with the framing where the solution to the cause is perceived as difficult (M: \notin 3.85, SE: 5.73). Hereby, we had to reject hypothesis H2a.





However, the difference between the different framings becomes significant in the 'Signalling Bundle' treatment, where the cause with the perceived simple solution generated a significantly higher mean donation of \notin 6.65, compared to the cause with the perceived difficult solution that generated a mean donation of \notin 2.53. As all the variables where the same in both groups, we propose that this increase is caused by the feeling of being able to provide effective help, which is for the individual interested in signalling most likely an attractive and credible trait to signal.

H_{2c}: The increase in donation intent through combining the donation request with a physical product suitable for signalling is greater for men than for women.

The online controlled experiment, simulated a private situation where the outcomes are contradictory with our hypothesis. Overall, women are more willing to contribute to charity. Especially in the control group (Regular Request, without product), the percentage of women that contributed and the average contribution is significantly greater than that of men (p: .002). But this effect also holds in the Signalling Bundle (p: .033). One possible explanation stems from previous research by among others (Benenson, 1990), that indicated that men's efforts are more likely to be apparent and in public, often targeted at strangers. Where women's efforts to help are more often made in small social networks, or in this case stayed private. Our online experimental setup not provided the option to make the donation apparent and public.

In our field experiment we found no significant difference in the overall donation intent of men, compared to women. In the 'Signalling Bundle' the average contribution of men and women only differed \in 0.03. Thereby, we had to reject H2c. In a neutral situation, it seems that men and women are equally responsive to the signalling opportunities that can be used to showcase the made contribution. However, we did find men contributing significantly more to charity when approached and requested for a donation by a female interviewer, compared to a male interviewer (p: .017). No parallel effect is found when approaching women.

With this data, we provide evidence for previous research that indicated an increase in altruism when men are in presence of the other sex. This behaviour somewhat reflects men's necessity to prove themselves to possible partners. However, it seems that in our research this is more done towards the female interviewer asking for a charitable contribution, instead of signalling the contribution towards other women at the beach. One possible explanation here is the Dutch society and culture, which has a value system where success is not defined by being the best in



the field. Instead, the Dutch society can be marked as highly feminine were standing out from the crowd is most often not admirable (Hofstede, 1983). Signalling the made charitable donation to others in a public situation can be seen as trying to improve standing or status, which is much more common and appreciated in a high masculine society as for example the United States, known for the high level of competition to show how good you are (both in work and in life) and the overall admiration for the 'winner' of this competition. In a feminine society as the Netherlands, everyone is perceived equal and thinking you are better or actually being 'better' than others will not get you more money, neither more people liking you. Emphasizing or exaggerating the made contribution is not appreciated, where showing you care is. Another characteristic of a feminine society is the overlap in social gender roles (Hofstede, 2001).

H2a: A lower level of self-esteem results in a higher level of donation intent.*H2e*: This effect is stronger when the donation is combined with a signalling product.

In was hypothesized that the low self-esteem individual would generally donate more to maintain and achieve a more positive self- and social-image. Unfortunately, we were only able to test this in the private environment of the online experiment, where the Rosenberg's self-esteem scale is used to measure global self-worth by the individual's feelings about himself.

Here no general effect of self-esteem on the level of donation intent is found. However, a closer look at the subjects with a low level of self-esteem shows multiple interesting relations. The first data that stands out, are both bundles generating a higher average donation than the regular request, but only when the individual has a relatively low self-esteem. No parallel effect is found for the individuals with a high self-esteem. Hereby, our research confirms that the one confident about his or her identity, has little need for (costly) signals to prove he or she is indeed altruistic. The individuals with a relatively low self-esteem are more responsive to the request types that can be used to maintain or achieve a more positive self-image. This finding provides evidence for a direct relation between self-image concerns and the level of donation intent.

That the individual with a low-esteem, that is single and thus has no romantic relation, donates significantly more and more often than the one with a low self-esteem in a relation or married, provides additional evidence that charitable donations can be used in order to try increase social-image and compete for potential partners by showcasing attractive traits as kindness and helpfulness. Again no parallel effect is found for the group with a high level of self-esteem.



8.4 Managerial Implications

As more and more charitable organisations are struggling to generate donation income through the large organisations making use of an extensive amount of (mass)media and paid donation recruiters at high traffic places. The possibility to provide a signalling opportunity through product bundling provides an opportunity to create a successful promotion format at relatively low costs. This thesis indicates that on one side there are the profit-orientated brands, which are able to link their product to a social cause, in order to increase goodwill, brand performance and profits. But on the other hand, bundling with products also offers great opportunities to increase contributions for small non-profit organisations, which are limited in their financial resources. This of course, provides the opportunity of beneficial collaborations for both parties.

However, not every organisation should and would be able to use these appeals to consistently increase contributions. Pushing the signalling opportunity as far as possible will definitely not come without risks for multiple reasons. The main problem being that the signalling motive tends to undermine the real signalling effect of charitable contributions. When it becomes obvious that contributions are made out of the signalling purpose, the efficiency is undermined. This creates an upper limit how much charitable organisations can increase their contributions through offering possible signalling opportunities. The finding that individuals see anonymous contributions as a more honest indication of the charity's quality than publicly made donations (Peacey & Sanders, 2012), is conforming the fact that the consumer recognizes and knows other individuals or brands are making donations with different motivations than only promoting the social cause. But as with the difference between sexes, the extent to which anonymous and public contributions are perceived differently may be dependent on culture. Where one could see the local library named after the most important contributor as a way to improve his or her social-image, another may see this contribution to the library as very altruistic.

But nevertheless when providing signalling opportunities becomes the main strategy to increase donations, it can create the impression that the signal is most people's motivation to donate - Why would it otherwise be emphasised? Undermining the real effect of the signal. Especially when there is no barrier to stop the individual that is not trustworthy, but only attempting to assure others of their attitude or trustworthiness through charitable donations. Ultimately, this will likely lead to a decrease in willingness to help by the ones that are truly motivated out of the desire to care for others, if their help is likely to be seen as proof that they are self-interested.



Recent research by (Engelmann, Munro, & Valente, 2012) even showed that an impure public good can crowd out the total charitable giving by creating a moral wiggle room. They propose that the intrinsic motivation associated with the donation from a 'regular' contributor is reduced when everyone is forced to contribute, for example through a product with a fixed percentage going to this charity. That the impure good may generate less generous behaviour overall, is consistent with the concept of moral licensing. This concept tells us that with the presence of an impure public good, the individual is more easily able to increase his or her confidence in self- and social-image through a purchase, making this individual less worried about the consequences of behaving immoral in the near future. Increasing the likelihood of immoral choices, e.g. refusing coming donation requests (Sachdeva, Iliev, & Medin, 2009).

On the other side, if these individuals stay unaffected and the signalling opportunity makes noncontributors increase their donation intent, the strategy is able to have a positive impact on the total amount of donation income. Therefore, providing a signalling opportunity should be more about removing the obstacle that inhibits the individual to make the charitable contribution instead of providing additional reasons to take the action. Here the ideal signal is one that only all reliable individuals can send. However, this signal is most likely not available at reasonable costs. A more towards optimal system can be achieved if acquiring the signal is costly, but less costly for the individuals that are really altruistic and fair-minded.

A decrease in the signal's strength, that can be caused by the signalling opportunity being too obvious will make it harder to increase brand performance and raise donations. This decrease can be partly prevented by using a bundle of social cause and product that possesses a high level of perceived similarity. Previous research where the charitable donation is used as an purchase incentive, indicated a more favourable consumer attitude towards the brand of the bundled product when this bundle has high level of brand/cause fit, compared to the low fit bundle (Nan & Heo, 2007). Through the perceived similarity, the consumer is less likely inclined to think about the possible reasons the product and charitable donation are bundled. Hereby, the bundle is somewhat able to hide the real target of increasing product sales or donation income, which helps with maintaining the 'warm-glow' and the value of the signal from the donation, which has a positive effect on the total WTP for the bundle. The fit also helps with persuading the potential contributors already interested in the social cause, and not attracting individuals only interested in the signalling part.



According to our data, the value of the signal and thereby the value of the total bundle could be further enhanced by framing the cause and possible solution in a relatively simple way. Hereby, it is possible to provide the potential contributor with the feeling he or she can help effectively in the social cause, an attractive and credible trait to self - and social-signal. This preference for the feeling of providing effective help and the finding that the consumer is more inclined to donate when having a low self-esteem or being approached by an (female) interviewer than online are conforming our need for a positive self- and social-image. This motivation could be implemented in a promotional format to increase donation income.

However, here it is needed to mention that this motivation can be mainly based on signalling to show that you are more pro-social than most others or based on signalling that you are not less pro-social than most others. This signalling motive should be considered, because the great effect on the strength and thereby value and effect of the signalling opportunity. To illustrate, when a small group of individuals are the only ones contributing to the charity that offers a signalling opportunity, they are able to provide a clear signal that they are more pro-social than most others. However, when (almost) everyone contributes to this charity, the group has to make contribution to signal they are not less pro-social than the vast majority. Where many often desire to be viewed 'better' than others and not achieving this feels is unpleasant, it even more undesirable to be considered less than the 'average' person. This shows us that the strength of the signal is especially strong when only a few people contribute or when the vast majority is contributing to charity. Resulting in the signal's strength being a U-curve function based on the number of contributors in a culture. Possible indication of the position on the curve should be used to determine the right strategy in order to increase donation income.

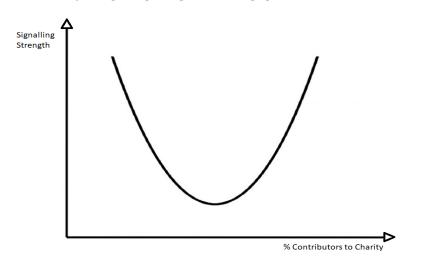


Figure 8: U-Curve of the Signalling Strength (Note, this graph is not based on the obtained data)



8.5 Limitations and Directions for Future Research

As with all research, this study has some limitations which should be acknowledged. Alongside these limitations, suggestions for further research are proposed. Hereby, the growing consumer interest in social responsibility and favourable response to CR-marketing provides a great potential for further research with a high level of managerial and academic relevance. The raise of promotions and campaigns with a social dimension is not expected to stop anytime soon.

First of all, the results of both studies should be interpreted with some caution through the fact that the request type, level of self-esteem, gender and the simplicity of the social cause are not the only variables influencing the level of donation intent. As the additional findings show more (demographic) variables are having a significant influence on the level of donation intent, dependent on the type of request and the situation in which the request is made. It is clear that more research is needed to be able to form a better understanding of the factors underlying the (charitable) giving behaviour induced by the different request types.

Controlled Experiment – Average Age of Research Group 'Product Bundle'

The questionnaire software Qualtrics randomly assigned the respondents to a specific research group, which resulted in the group 'Product Bundle' being on average significantly older than the relatively young sample in the 'Control Group' or 'Signalling Bundle' (p: .023). In our research sample around 70% of the respondents are from the age bracket 15-29. When comparing the average donations across age groups, it seems that the older the respondent the higher the contribution. Which is also indicated by multiple reports of among others the Charities Aid Foundation. However, in our research no significant (moderation) effect of age is found. Nevertheless, the results should be interpreted with caution.

Controlled Experiment – Intangible Random Lottery Incentive

When examining the donation intent of the different request types in the controlled experiment we were due budget constraints not able to spend more on the research than \in 50.-, and therefore could only provide a small random lottery incentive. Through the high amount of respondents and thereby small change to win, the possible reward may have felt intangible for the individual compared to conducted field experiment, which is expected to have had influence on the results by decreasing the expected gain. The respondents most likely perceived that amount of participants as relatively high because they were all recruited with the use of social media.



Controlled Experiment/Field Research – The Physical Products

In the online experiment, the assumption is made that all respondents valued the white ballpoint in the same way offline versus online. However, we did not check this assumption. Thereby, the products used in our study were both relatively cheap and for short-term use. The effect of a product that can be used to signal may be different depending on the type of product and the perceived similarity it has with the charitable organisation.

Controlled Experiment/Field Research – The Charitable Organisations

In the online controlled experiment the fictional organisation: 'Helpfulness' is used, where in the field experiment, the well-known charitable organization UNICEF is combined with the physical product. Using two different organisations comes with the disadvantage that it becomes impossible to provide a reliable comparison of the outcomes. The fictional charity is used to avoid possible effects by a previously formed brand attitude and allow a correct test of the perceived 'simplicity' on the level of donation intent. Where in the field experiment a well-known organisation is used to ensure the experimental setup was perceived by the subjects as a normal recruitment for donations by a real charity.

As mentioned in the discussion, UNICEF is one of the largest charitable organisations, which in the Netherlands possesses a high level of consumer knowledge. This might have increased the strength of the signalling opportunity, through more people recognising the logo of UNICEF and where it stands for, compared to the logo of the fictional organisation Helpfulness. The strength of the signal influences the value of the signal for the potential contributor, which likely resulted in a stronger donation intent increase in the field research, compared the online experiment. Additional research that looks into the factors determining the strength of the signal is needed to indicate the possible importance of consumer knowledge on the demand for the signalling opportunity.

Field Research – Biased Subjects

Although the field experiment is conducted in a natural environment, some of the subjects may have been biased. This because some randomly selected subjects were able to watch others around them making the donation and thus had more time to think about what their response would be if approached. We tried to avoid this and make the subjects react intuitively, by approaching new subjects who were at some distance of the previously approached subjects.



Field Research – The 'Average' Dutch Consumer

In the Netherlands, requesting or recruiting in public places is often mentioned as one of most annoying recruitment methods. The method received a lot of negative media coverage since 2013, mainly about the high costs, resulting in less money going to the actual charity and the excessive amount of recruiters in shopping centres. As expected in our field experiment, we often got responses as 'No Time', 'I am in a hurry', to cut us off before we were able to indicate the goal of our conversation. In our results, we only incorporated the subjects that took the time to let us indicate the reason of our approach. Thereby, we also approached individuals sitting / resting on the beach to avoid these responses. The effectiveness of the donation request may be influenced by this tactic. Internal validity of this study could be strengthened by replicating the research for both treatments in other public environments and especially in other countries and cultures to indicate the possible moderating effect of environment and culture.

Conclusion Limitations

Altogether, our research setup provides initial and clear evidence that increasing the signalling opportunity of the made contribution is able to increase the donation intent through providing higher egoistic benefits for the potential contributor. Hereby, we are conforming the potential of bundling public and private goods for both sides.

Where for the private sector the research how and when a social demission is able to increase brand performance is quite extensive, the research how to use this bundling to increase the amount of charitable contributions was not highlighted before, despite the growing interest in social responsibility. This research area would benefit from extensions that consider additional tests for the variables moderating the effect of bundling donations and (physical) products on the donation intent. But also which factors are determining the strength of the signal and how this effects the donation intent.



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Charity Bundling – Offering Donation Increasing Signals



Appendix A1: Examples of (Non-)Signalling Products

Product A. Example of a physical product that can be used to signal yourself and others you made a charitable contribution to a specific charitable cause.



Product B. Comparable product not suitable for signalling the made contribution.



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Charity Bundling – Offering Donation Increasing Signals

Appendix B1: Pre-Test 1 – Survey – Simplicity of the problem

English v
Welcome to the Erasmus University Food Market Survey. Thank you! For agreeing to take part in this important survey to determine the charity's that should receive the proceeds from a food market we are going to organize this year.
Today we like to receive your thoughts and opinions in order to give our proceeds to the right cause. This survey should only take a maximum of 3-4 minutes to complete. Be assured that all answers you provide will be kept anonymous and confidentiality. Please select your language in the top right corner and below.
Click 'Next' to begin. Please select your language
25



				in South /	nnua.		
Ve should help thi	is charity as	much as	possible				
	Definitely No	No	More No, than Yes	Neutral	More Yes, than No	Yes	Definitely Yes
Your Meaning	0	0	0	0	0	0	0
The difficulty of so	Extremely easy	Far Far below average	Below average	Average level	Above average	Far above average	Extremely difficult
The level of difficulty	0	0	0	0	0	0	0
he time needed to	very Very short amount	Far below average	f this chai Below average	Average amount	Above average	Far above average	Excessive amount
The amount of time needed	0	0	0	0	0	0	0
The resources nee	eded to solve Very short amount	Far		Average	Above average	Far above average	Excessive amount
	arrivers						

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						Eng	jish 🔻
We are an interna provides relief ar those with disabiliti	nd helps sup ies. Our mis	oport ALL sion is to	children i	in ALL dei ne civil, ci	veloping c ultural, ec	ountries,	including
We should help this	s charity as	much as	possible	of this ch	arity		
	Definitely No	No	More No, than Yes	Neutral	More Yes, than No	Yes	Definitely Yes
Your Meaning	0	0	0	0	0	0	0
The difficulty of so	lving the pro	oblem of t	this charity	y			
	Extremely easy	Far below average	Below average	Average level	Above average	Far above average	Extremely difficult
The level of difficulty	0	0	0	0	0	0	0
The time needed to	solve the p	problem o	f this cha	rity			
	Very short amount	Far below average	Below average	Average amount	Above average	Far above average	Excessive amount
The amount of time needed	0	0	0	0	0	0	0
The resources need	ded to solve	e the prot	olem of thi	s charity			
	Very short amount		Below average				Excessive amount
The amount of resources needed	0	0	0	0	0	0	0
							>>



English V

We provide long-lasting insecticide-treated nets for protection against malaria, primarily in Congo and Nigeria, where most of the malaria-related deaths occur. Even when nonfatal, malaria can damage children's cognitive development. With a simple protection method we can prevent these unnecessary deaths. We purchase these nets in bulk and coordinate the distribution through local partner organizations, while ensuring that communities are educated in malaria prevention, proper net use, and treatment.

			More		More		
	Definitely No	No	No, than Yes	Neutral	Yes, than No	Yes	Definitely Yes
Your Meaning	0	0	0	0	0	0	0
The difficulty of solving the problem of this charity							
	Extremely easy	Far below average	Below average	Average level	Above average	Far above average	Extremel difficult
The level of difficulty	0	0	0	0	0	0	0
The amount of time	amount	below average	Below average	Average amount	Above average	above average	amount
The amount of time	0	0	0	0	0	0	0
Incoded I							
he resources nee	ded to solve Very	e the prob Far	olem of thi	is charity	_	Far	
			blem of thi Below average	is charity Average amount	Above average	Far above average	Excessiv

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English ¥. We provide lifesaving food, secure housing, clean water, healthcare, emergency relief, micro-enterprise projects and education opportunities to the poor. This way we are giving the poor a chance at a better future, and showing them God's love. Our focus is on the poorest of the poor in 17 countries throughout the Caribbean and Latin America. We should help this charity as much as possible More More Definitely Definitely No, than Yes, No No than No Yes Neutral Yes Yes 0 Ο Ο 0 Your Meaning Ο Ο The difficulty of solving the problem of this charity Far Far Extremely below Below Average Above above Extremely average easy average level average average difficult The level of difficulty 0 0 0 0 0 0 The time needed to solve the problem of this charity Far Far Very short below Below Average Above above Excessive average amount amount amount average average average The amount of time Ο Ο 0 Ο Ο Ο needed The resources needed to solve the problem of this charity Very Far Far Below above below Average Above Excessive short amount average average amount average average amount The amount of 0 0 0 Ο 0 0 resources needed

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Helpfulness	English 🔻
Are you familiar with the charitable organisation Helpfulne	255?
Yes	
No	
	55



Appendix B2: Pre-Test 1 – Results – Simplicity of the problem

Appendix B2.1 - Individual level of variables

Should help as much as possible	Mean Score	Std. Deviation	N-statistic
Charity 1	5.9	1.142	39
Charity 2	5.38	1.369	39
Charity 3	5.49	.942	39
Charity 4	4.72	1.276	39

Overall perceived level of Difficulty	Mean Score	Std. Deviation	N-statistic
Charity 1	4.51	1.295	39
Charity 2	5.62	1.115	39
Charity 3	3.69	1.104	39
Charity 4	5.28	1.075	39

Time needed to solve the Cause	Mean Score	Std. Deviation	N-statistic
Charity 1	5.13	1.196	39
Charity 2	5.90	1.021	39
Charity 3	4.26	1.229	39
Charity 4	5.28	.972	39

Resources needed to solve the Cause	Mean Score	Std. Deviation	N-statistic
Charity 1	4.67	1.402	39
Charity 2	5.64	1.112	39
Charity 3	3.97	1.287	39
Charity 4	5.49	1.048	39

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Appendix B2.2 - Calculated level of 'Simplicity'

Level of Simplicity	Mean Score	Std. Deviation	N-statistic
Charity 1	4.77	1.137	39
Charity 2	5.72	.984	39
Charity 3	3.97	1.061	39
Charity 4	5.35	.890	39

Appendix B2.3 – Paired Sample Test – 'Simplicity'

Pairs	Mean	Std. Deviation	df	Sig, (2-tailed)
Charity 1 – Charity 2	949	1.482	38	.000**
Charity 1 – Charity 3	.795	1.149	38	.000**
Charity 1 – Charity 4	581	1.476	38	.019**
Charity 2 – Charity 3	1.744	1.562	38	.000**
Charity 2 – Charity 4	.368	.911	38	.016**
Charity 3 – Charity 4	-1.376	1.425	38	.000**

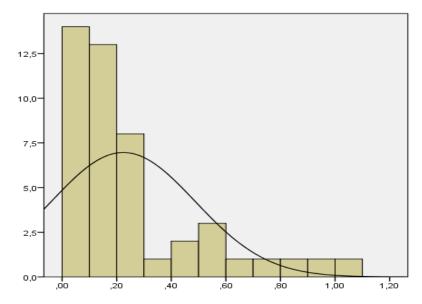
Appendix B2.3 – Paired Sample Test – Help as much as possible

Pairs	Mean	Std. Deviation	df	Sig, (2-tailed)
Charity 1 – Charity 2	.513	1.430	38	.031**
Charity 1 – Charity 3	.410	1.312	38	.058*
Charity 1 – Charity 4	1.176	1.275	38	.000**
Charity 2 – Charity 3	103	1.231	38	.606
Charity 2 – Charity 4	.667	.955	38	.000**
Charity 3 – Charity 4	.769	1.111	38	.000**



Appendix C: Pre-Test 2 – **Results** – **Value of the product**

Willingness to Pay	Frequency	Percent	Cumulative Percent
€ 0	12	26.1	26.1
€ 0.05	2	4.3	30.4
€ 0.10	10	21.7	52.2
€ 0.15	3	6.5	58.7
€ 0.20	3	6.5	65.2
€ 0.23	1	2.2	67.4
€ 0.25	3	6.5	73.9
€ 0.26	1	2.2	76.1
€ 0.30	1	2.2	78.3
€ 0.49	2	4.3	82.6
€ 0.50	3	6.5	89.1
€ 0.60	1	2.2	91.3
€ 0.79	1	2.2	93.5
€ 0.85	1	2.2	35.7
€0.90	1	2.2	37.8
€1	1	2.2	100.0
Total	46	100.0	



<u>Histogram</u>

Mean: € 0.22 Std. Dev: .264 N: 46

Charity Bundling – Offering Donation Increasing Signals



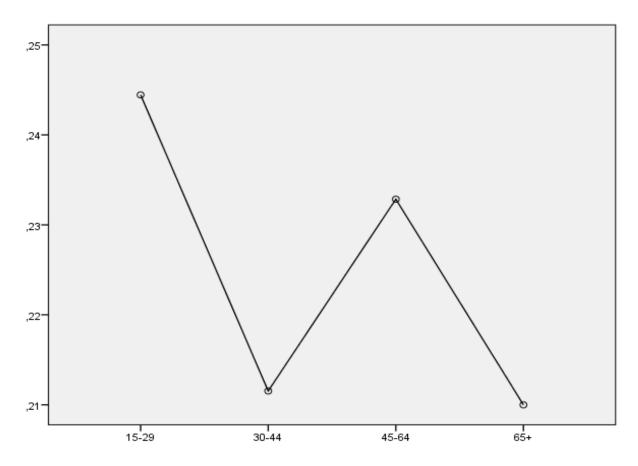
Appendix C1.1 – Gender - WTP

Gender	Ν	Mean	Std. Deviation	Sig. (2-tailed)
Men	22	.229	.264	-
Female	24	.220	.269	.913

Appendix C1.2 – Comparisons- Age – WTP

WTP	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.009	3	.003	.040	.989
Within Groups	3.118	42	.074		
Total	3.127	45			

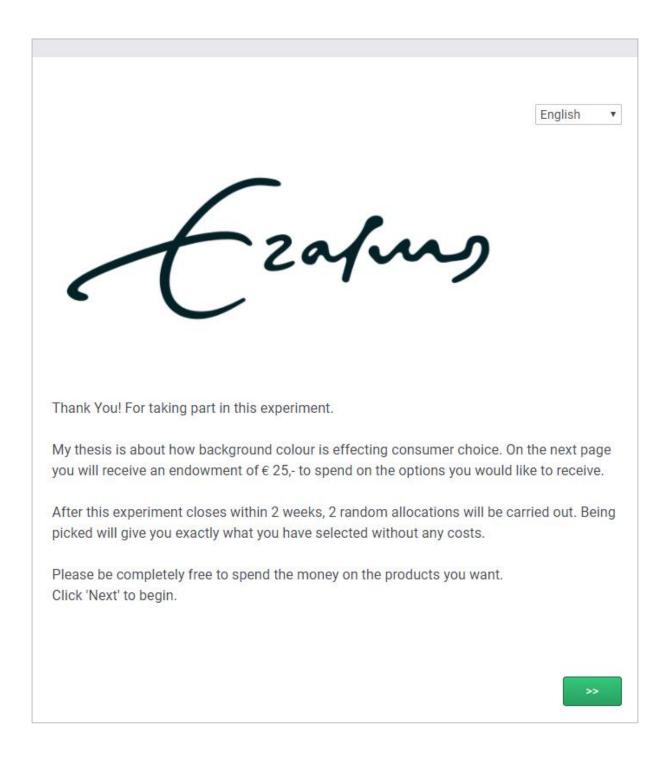
Appendix C1.3 – Comparisons- Age – WTP





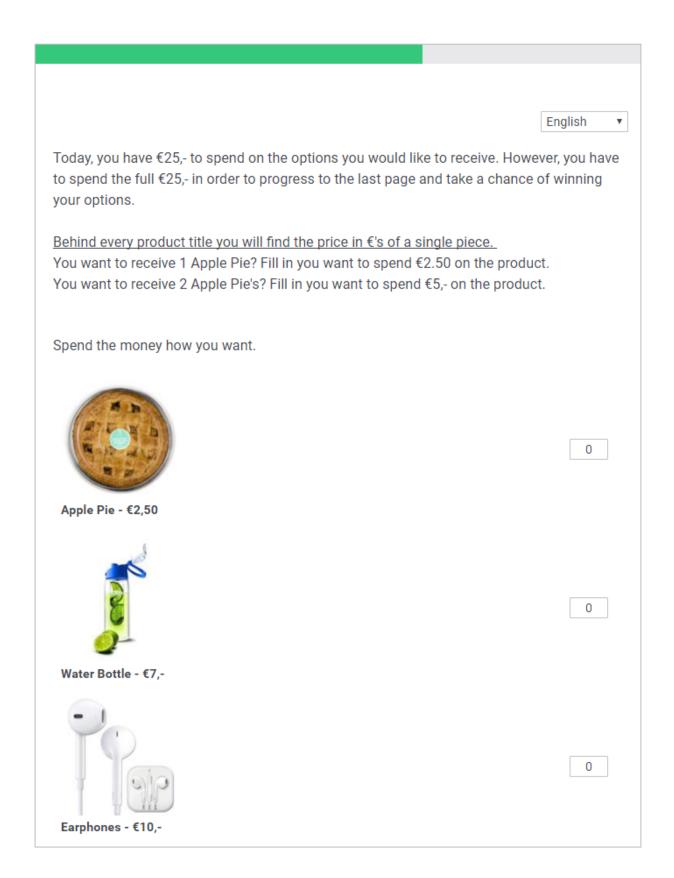
Charity Bundling – Offering Donation Increasing Signals

Appendix D1: Online Experiment – Introduction





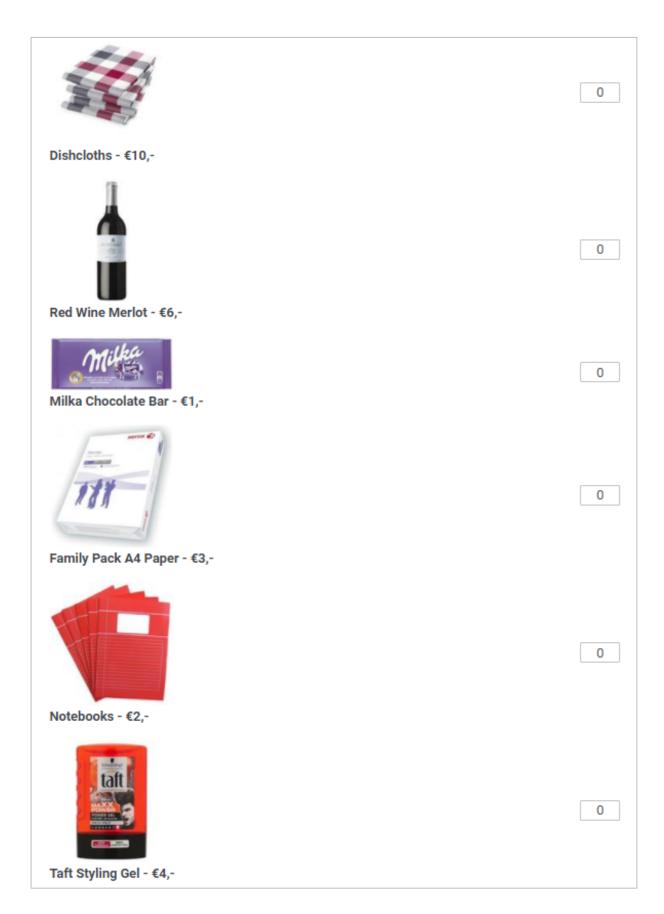
Appendix D2: Online Experiment – Allocation Page





Hand Soap - €1,50	0
Leffe Blond Beer - €5,-	0
USB Stick 4GB - €7,50	0
Bicycle Lights - €3,-	0
Haybelline Volum'Express - €7,-	0





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Spotify Giftcard - €10,-	0
Excellence	0
Toiletpaper - €3,-	
	0
Flowers - €5,-	
Helpfulness	
Donate to the Charity: Helpfulness - €0 till €25	
If your alloction is picked we will donate this amount of money.	0
Helpfullness is an international non-governmental organization that promotes children's rights, provides relief and helps support ALL children in ALL devloping countries, including those with disabilities. Their mission is to uphold the civel, cultural, economic, political and social rights of ALL girls and boys.	
Total	0
	~

2 afrag erasmus universiteit rotterdam **C**.

Spotify Giftcard - €10,-	0
Excellence	0
Toiletpaper - €3,-	
Flowers - €5,- Kelpfulness	10
Donate to the Charity: Helpfulness - €0 till €25 If your alloction is picked we will donate this amount of money.	
Helpfullnes is an intenational non-governmental organization that promotes children's rights, provides relief and helps support ALL children in ALL developing countries, including those with disabilities. Our mission is to uphold the civil, cultural, economic, political and social rights of ALL girls and boys.	15
As a sign of thanks, Helpfulness will bestow you with this ballpoint pen at any donation amount.	
Helpfulness -	
Total	25
	~~



Charity Bundling – Offering Donation Increasing Signals

Appendix D3: Online Experiment – Closing Page

English ••••••••••••••••••••••••••••••••••••	7
Fill in your email and a few final questions to possibly win your chosen options	
Your Email Address	
Please select your gender	
Male	
Female	
Please select your age	
15-29	
30-44	
45-59	
60+	

2 afrag erasmus universiteit rotterdam **C**...

Please select your current living situation
Single
Dating
In a relation
Married
Please select the highest degree or level of school you completed
High School
College
Undergraduate
Postgraduate

ERASMUS UNIVERSITEIT ROTTERDAM **C**..

Final Question					
	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I feel that I am a person of worth, at least on an equal plane with others.	0	0	0	0	0
I feel that I have a number of good qualities	0	0	0	0	0
All in all, I am inclined to feel that I am a failure.	0	0	0	0	0
I am able to do things as well as most other people.	0	0	0	0	0
I feel I do not have much to be proud of.	0	0	0	0	0
I take a positive attitude toward myself.	0	0	0	0	0
On the whole, I am satisfied with myself.	0	0	0	0	0
I wish I could have more respect for myself.	0	0	0	0	0
I certainly feel useless at times.	0	0	0	0	0
At times I think I am no good at all.	0	0	0	0	0
					>>



Appendix D4: Online Experiment – Demographics

Gender	Frequency	Percent	Cumulative Percent
Men	88	39.1	40.9
Female	127	56.4	100.0
Missing	10	4.4	-
Total	225	100.0	

Age	Frequency	Percent	Cumulative Percent
15-29	154	68.4	71.6
30-44	26	11.6	83.7
45-59	32	14.2	98.6
60+	3	1.3	100.0
Missing	10	4.4	-
Total	225	100.0	

Living situation	Frequency	Percent	Cumulative Percent
Single	76	33.8	35.3
Dating	9	4.0	39.5
In a relation	93	41.3	82.8
Married	37	16.4	100.0
Missing	10	4.4	-
Total	225	100.0	

Education	Frequency	Percent	Cumulative Percent
High School	22	9.8	10.2
College	47	20.9	32.1
Undergraduate	69	30.7	64.2
Postgraduate	77	34.2	100.0
Missing	10	4.4	-
Total	225	100.0	



Appendix D5: Online Experiment – Results

Donation	Mean	Ν	Std. Deviation
Regular Request	3.78	78	6.146
Product Bundle	4.93	78	7.157
Signalling Bundle	4.50	69	7.026
Total	4.40	225	6.769

Donation	Mean N		Std. Deviation
Men	3.45	88	6.453
Women	5.03	127	8.819
Total	4.38	215	6.701

Donation	Mean	Ν	Std. Deviation
Single	5.38	76	7.146
Dating	3.06	9	3.600
In a relation	3.40	93	5.471
Married	5.12	37	8.698
Total	4.38	215	6.701

Donation	Mean	Ν	Std. Deviation	
High School	4.55	22	6.604	
College	3.27	47	6.013	
Undergraduate	3.84	69	6.782	
Postgraduate	5.51	77	7.004	
Total	4.38	215	6.701	

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Donation	Mean	Mean N	
15-29	4.27	154	6.225
30-44	4.75	26	7.260
45-59	5.11	32	8.586
60+	.000	3	0.000
Total	4.38	215	6.701

Donation	Mean	Ν	Std. Deviation
Low Self-Esteem	4.50	106	6.646
High Self-Esteem	4.28	109	6.785
Total	4.38	215	6.702

Donation	Mean	Ν	Std. Deviation
High Simplicity	4.98	109	7.706
Low Simplicity	3.85	116	5.731
Total	4.40	225	6.769

Appendix D5.1 – Research Group* Simplicity

Mean	Ν	Std. Deviation
4.40	41	6.922
3.08	37	5.158
4.09	35	7.374
5.62	43	6.987
6.65	33	8.863
2.53	36	3.966
4.40	225	6.769
	4.40 3.08 4.09 5.62 6.65 2.53	4.40 41 3.08 37 4.09 35 5.62 43 6.65 33 2.53 36





Appendix D5.2 – Research Group * Level of Self-Esteem

Donation	Mean	Ν	Std. Deviation
Regular Request – High Self-Esteem	4.88	36	7.067
Regular Request – Low Self-Esteem	2.26	38	3.848
Product Bundle - High Self-Esteem	4.17	41	6.779
Product Bundle - Low Self-Esteem	6.05	33	7.677
Signalling Bundle - High Self-Esteem	3.73	32	6.631
Signalling Bundle - Low Self-Esteem	5.46	35	7.481
Total	4.38	215	6.702

Appendix D5.3 – Gender * Level of Self-Esteem

Donation	Mean	Ν	Std. Deviation
Man – High Self-Esteem	4.39	49	7.640
Man – Low Self-Esteem	2.25	40	4.301
Woman – High Self-Esteem	4.14	61	6.019
Woman – Low Self-Esteem	5.92	65	7.476
Total	4.38	215	6.702

Appendix D5.4 – Living Situation * Level of Self-Esteem

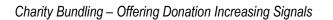
Donation	Mean	Ν	Std. Deviation
Single – High Self-Esteem	4.09	27	6.400
Single – Low Self-Esteem	6.09	49	7.495
Dating – High Self-Esteem	4.40	5	3.896
Dating – Low Self-Esteem	1.38	4	2.750
In a Relation – High Self-Esteem	3.81	54	6.391
In a Relation – Low Self-Esteem	2.83	39	3.865
Married – High Self-Esteem	4.43	14	9.110
Married – Low Self-Esteem	4.09	27	6.396
Total	4.38	215	6.702



Appendix D5.5 – Data Description Summary

The correlation coefficient matrix is used as an initial check for the underlying conceptual assumptions. The Pearson correlation coefficients are showing multiple significant relationships between the included variables. However, it is important to note that the relations between variables as Age and Living situation are normal in the population. As one becomes older, it is more likely he or she is getting married. In addition, the ample sample size ensures the relationships between variables are relatively quick significant. The absolute values are telling us how much of the variable Y is explained by variable X.

	Correlations						
<u>Variables</u>	Donation	Research Group	Self- Esteem	Gender	Age	Living Situation	Education
Donation	1	.045	029	.116	.014	069	.093
Research Group	.045	1	0.14	022	.009	081	.038
Self-Esteem	029	.014	1	154*	.142*	.262**	.207**
Gender	.116	022	154*	1	077	.002	.022
Age	.014	.009	.142*	077	1	.443**	068
Living Situation	069	081	.262**	.002	.443**	1	0.041
Education	.093	0.038	.207**	.022	068	.041	1
		Sur	nmary Statis	stics			
М	4.40	1.96	3.92	1.59	1.46	2.42	2.93
SD	6.769	0.809	.546	.493	.795	1.141	.993
Min	0	1	2.2	1	1	1	1
Max	25	3	5.0	2	4	4	4





Appendix E1: Field Research – Products of Treatment Groups





Appendix E2: Field Research – Demographics

Gender	Frequency	Percent	Cumulative Percent
Men	53	46.9	46.9
Female	60	53.1	100.0
Total	113	100.0	

Age	Frequency	Percent	Cumulative Percent
15-29	50	50 44.2	
30-44	24	21.2	65.5
45-59	24	21.2	86.7
60+	15	13.3	100.0
Total	113	100.0	

Education	Frequency	Percent	Cumulative Percent	
High School	26	23.0	23.4	
College	42	37.2	61.3	
Undergraduate	31	27.4	89.2	
Postgraduate	12	10.8	100.0	
No Answer	1	0.9		
Total	112	100.0		

Living Situation	Frequency	Percent	Cumulative Percent
Single	32	28.6	28.6
Dating	8	7.1	35.7
In a relation	41	36.6	72.3
Married	31	27.7	100.0
No Answer	2	1.8	
Total	111	99.1	



Appendix E3: Field Research – Results

Donation	Mean	Ν	Std. Deviation
Product Bundle	1.01	54	0.946
Signalling Bundle	1.79	59	1.679
Total	1.42	113	1.427

Donation	Mean	Ν	Std. Deviation
Men	1.45	53	1.265
Women	1.39	60	1.565
Total	1.42	113	1.427

Donation	Mean	Ν	Std. Deviation
15-29	1.27	50	1.240
30-44	1.99	24	2.139
45-59	1.11	24	.977
60+	1.50	15	1.000
Total	1.42	113	1.427

Donation	Mean	Ν	Std. Deviation
Single	2.09	32	1.240
Dating	1.06	8	2.139
In a relation	0.78	41	.977
Married	1.70	31	1.000
Total	1.42	112	1.427

Donation	tion Mean		Std. Deviation
Male interviewer	1.14	51	0.976
Female interviewer	1.64	62	1.686
Total	1.42	113	1.427

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Age	Mean	Ν	Std. Deviation
High School	1.16	26	1.135
College	1.02	42	1.160
Undergraduate	2.05	31	1.853
Postgraduate	1.93	12	0.928
Total	1.42	112	1.426

Mean	Ν	Std. Deviation
1.16	26	1.135
1.02	42	1.160
2.05	31	1.853
1.93	12	0.928
1.42	112	1.426
	1.16 1.02 2.05 1.93	1.16 26 1.02 42 2.05 31 1.93 12

Donation	Mean	Ν	Std. Deviation
Signalling Bundle - Men	1.77	28	1.281
Signalling Bundle - Women	1.80	31	1.993
Product Bundle - Men	1.09	25	1.170
Product Bundle - Women	0.94	28	.715
Total	1.42	112	1.426



Appendix D1.1 – Data Description Summary

The correlation coefficient matrix is used as an initial check for the underlying conceptual assumptions. The Pearson correlation coefficients are showing multiple significant relationships between the included variables. The absolute values are telling us how much of the variable Y is explained by variable X.

Correlations							
<u>Variables</u>	Donation	Research Group	Gender	Age	Living Situation	Education	Interviewer
Donation	1	.273	023	.015	167	.259**	175
Research Group	.273**	1	012	.031	088	080	049
Gender	23	012	1	.079	.132	.050	.074
Age	0.015	0.031	0.079	1	.589**	.235*	101
Living Situation	167	088	.132	.589**	1	027	036
Education	.259*	080	.050	.235*	027	1	.001
Interviewer	.175	049	.074	101	036	.001	1
		Sur	nmary Statis	stics			
М	1.42	1.52	1.53	2.04	2.63	2.26	1.55
SD	1.427	.502	.501	1.093	1.170	.941	.500
Min	0	1	1	1	1	1	1
Max	10	2	2	4	4	4	2