



IE UNIVERSIDAD

TESIS DOCTORAL/ DOCTORAL DISSERTATION

**DONAR Y PENSAR EN DONAR: UN ANÁLISIS DE LAS CONDUCTAS DE
DONACIÓN DE LOS CONSUMIDORES Y LAS IMPLICACIONES EN LA
CONSIDERACIÓN DE DONACIÓN/
GIVING AND THINKING OF GIVING: AN EXAMINATION OF CONSUMERS'
DONATION BEHAVIOR AND THE IMPLICATIONS OF DONATION CONSIDERATION**

XIAOZHOU ZHOU

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ABSTRACT

Individual donors play an important role in philanthropy as their contributions make up the majority of the funds raised (Alonzi, 2016). This dissertation presents three essays that study the psychology of giving with an emphasis on the individual donors. It also aims to provide solutions to problems that non-profits face or to use donations to solve problems of for-profit organizations. Essay 1 explores why individual donors prefer to make in-kind donations even though nonprofits have been raising concerns about how the harm of making an in-kind donation could outweigh its benefit. The essay demonstrates that in-kind donations allow people to better imagine how their donations can be used, which thus increases their perceived donation efficacy and donation intention. Essay 2 focuses on delinquent beneficiaries, or those who made mistakes in the past, as this group often faces obstacles when asking for help and proposes a new strategy to increase donations. By making donors experience a sense of self-discontinuity, nonprofits could prime them with a change oriented mind-set that allows them to believe that the delinquent recipients could also change, which then increases their donation intention. Essay 3 examines how being asked to donate a possession influences the owners' willingness-to-accept (WTA) price if they later decide to sell the same possession. Studies demonstrate that owners are willing to accept a lower price when they are first asked to consider donating the same object. Taken together, they contribute to the literature on consumer donation and disposal behaviors, and provide implications to nonprofits, policy makers, and C2C marketplace platforms.

RESUMEN

Los donantes individuales desempeñan un papel de gran importancia en la filantropía, dado que sus contribuciones constituyen la mayor parte de los fondos recaudados (Alonzi, 2016). Esta tesis presenta tres ensayos que estudian la psicología de la donación con el acento en los donantes individuales. Asimismo, busca ofrecer soluciones a los problemas que afrontan las organizaciones sin ánimo de lucro o para emplear donaciones para resolver los problemas de las organizaciones con ánimo de lucro. El primer ensayo explora los motivos de que los donantes individuales prefieran hacer donaciones en especie aun cuando las organizaciones sin ánimo de lucro hayan expresado su preocupación por que una donación en especie suponga más inconvenientes que ventajas. Este ensayo demuestra que las donaciones en especie permiten a las personas imaginar el destino de su donación, lo que mejor la eficiencia percibida de la donación y la intención de esta. El segundo ensayo se centra en los beneficiarios con historial delictivo, o aquellos que han cometido errores en el pasado, dado que este grupo suele enfrentarse a dificultades cuando solicita ayuda, y propone una nueva estrategia para incrementar las donaciones. Al hacer que los donantes experimenten una sensación de discontinuidad propia – esto es, que su percepción de lo que son en la actualidad no está vinculada a lo que eran en el pasado–, las organizaciones sin ánimo de lucro podrían inculcarles una mentalidad orientada al cambio que les permita creer que los receptores con un historial delictivo también pueden cambiar, lo que a su vez podría reforzar sus intenciones de donar. El tercer ensayo analiza la forma en que la solicitud de donar una posesión influye en el precio que está dispuesto a aceptar (WTA, por sus siglas en inglés) el propietario si más adelante decide vender esa misma posesión.

Los estudios demuestran que los propietarios están dispuestos a aceptar un precio menor cuando se les pide de antemano que consideren donar ese mismo objeto. Tomados en su conjunto, contribuyen a la literatura académica sobre la donación y las conductas de renuncia de los consumidores, y ofrecen implicaciones para las organizaciones sin ánimo de lucro, los diseñadores de políticas y las plataformas de mercados C2C.

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INTRODUCTION

According to Giving USA 2019, total charitable giving made to U.S. non-profit organizations was estimated at \$427 billion, of which 68% was made by individual American donors (Giving USA, 2019). In the past, researchers from marketing, psychology, economics, and sociology have all examined the behaviors of individual donors from different perspectives and proposed strategies for non-profits to increase donations. Nonetheless, non-profit organizations still face numerous challenges, many of which remain relatively underexplored.

First, while researchers have exerted a great effort understanding the themes of time donation (volunteering) and cash donation (Liu & Aaker, 2008; Macdonnell & White, 2015), they have not given enough attention to that of in-kind donation. Meanwhile, non-profits have long been concerned about receiving in-kind donations as a significant amount of costs could be incurred due to logistics or a failure to meet the needs of the recipients. In an attempt to address this problem, essay 1 examined the distinctive influence of in-kind donation. Across seven studies (including a field study, and online and lab experiments), the results suggest that people prefer to make in-kind donations rather than cash donations because in-kind donations allow them to better imagine how their donations can be used to help people. Unlike past research which focuses on the paternalistic motivation donors have when making in-kind donations (Schroeder, Waytz, & Epley, 2017), we propose a new mechanism that utilizes the positive influence of in-kind donations on eliciting imagination.

Second, certain non-profit organizations or campaigns might inherently face more difficulties when raising donations as donors could be reluctant to help the recipients. Compared to innocent recipients who were born into a less fortunate situation or who could attribute their less favorable situation to external factors, individual donors are more reluctant to help

delinquent recipients who caused their own sufferings. Researchers have shown the important role empathy plays in increasing donation and helping behaviors (Bagozzi & Moore, 1994; Cialdini et al., 1987; Fisher, Vandenbosch, & Antia, 2008). However, it is less likely that donors will experience empathy towards delinquent recipients. Thus, essay 2 proposes a strategy that would allow non-profits to increase donors' donation intention. It utilizes the concept of self-(dis)continuity and suggests that nonprofits could potentially build donors' confidence about the capability of delinquent recipients to change and learn from their mistakes by reminding them of their own personal changes. It also explores how individual characteristics, self-construal in this case, could moderate such expectation.

Lastly, donation behaviors have mainly been studied on their own in the consumer research without interacting with other research streams. Specifically, as two of the most common ways for people to dispose of possessions that they no longer need, donation and secondary market resale have, to the best of my knowledge, only been examined in isolation and their interplay has been mostly ignored. Essay 3 fills in the gap and studies how asking owners to simply consider donating a possession can later lower their WTA for the same object when they try to sell it. Past research has found that owners tend to demand a selling price that is much higher than the price buyer is willing to pay, and the price gap could potentially hinder a transaction from closing. Thus, this research also provides a viable solution to the WTP-WTA price gap by decreasing a seller's asking price.

In summary, this dissertation first explores two problems non-profit organizations are facing by proposing new theoretical frameworks and identifying new strategies for non-profits to collect and increase the donation they desire. Then, it examines how donation considerations can

influence people's decisions in selling their possessions. Chapter 1 to 3 present three essays respectively.

INTRODUCCIÓN

De acuerdo con Giving USA 2019, el total de donaciones caritativas a organizaciones sin ánimo de lucro en EE. UU. se estima en 427 000 millones de dólares, de los cuales el 68 % corresponde a donantes estadounidenses individuales (Giving USA, 2019). Los investigadores de marketing, psicología y economía han analizado en el pasado las conductas de los donantes individuales desde distintas perspectivas, y han propuesto estrategias para que las organizaciones sin ánimo de lucro obtengan mayores donativos. No obstante, las organizaciones sin ánimo de lucro siguen afrontando numerosos desafíos, muchos de los cuales siguen sin ser estudiados.

En primer lugar, si bien gran parte de los esfuerzos de los investigadores se han encaminado a comprender los aspectos de la donación de tiempo (voluntariado) y donación de dinero (Liu & Aaker, 2008; Macdonnell & White, 2015), las donaciones en especie no han recibido la atención suficiente. Mientras tanto, a las organizaciones sin ánimo de lucro les ha preocupado desde hace mucho tiempo la posibilidad de recibir donaciones en especie, dado que podrían incurrir en costes logísticos significativos o ser incapaces de atender las necesidades de los receptores. En un intento de afrontar este problema, el primer ensayo examinó la influencia característica de las donaciones en especie. A lo largo de siete estudios –incluyendo un estudio de campo y estudios en línea y en laboratorio–, los resultados indican que las personas prefieren hacer donaciones en especie antes que dinerarias debido a que las donaciones en especie les permiten imaginar mejor la forma en que estas ayudarán a los demás. A diferencia de las investigaciones pasadas, que se centraban en las motivaciones paternalistas de los donantes al hacer donaciones en especie (Schroeder, Waytz, & Epley, 2017), proponemos un nuevo mecanismo que utiliza la influencia positiva de las donaciones en especie a la hora de estimular la imaginación.

En segundo lugar, ciertas organizaciones o campañas sin ánimo de lucro se enfrentan de forma inherente a más dificultades al recaudar donativos debido a que los donantes pueden sentirse reacios a ayudar a los receptores. Comparados con los receptores inocentes que nacieron en situaciones menos privilegiadas o que podrían atribuir su situación desfavorable a factores exógenos, los donantes individuales son más reacios a ayudar a los receptores con historial delictivo que son responsables de sus propios sufrimientos. Los investigadores han señalado el importante papel que desempeña la empatía a efectos de aumentar las donaciones y las conductas de ayuda (Bagozzi & Moore, 1994; Cialdini et al., 1987; Fisher, Vandenbosch, & Antia, 2008). No obstante, es menos probable que los donantes experimenten empatía hacia los receptores con historial delictivo. Así, el segundo ensayo propone una estrategia que podría permitir a las organizaciones sin ánimo de lucro mejorar la intención de donación de los donantes. Utiliza el concepto de (dis)continuidad propia e indica que las organizaciones sin ánimo de lucro podrían reforzar la confianza de los donantes en la capacidad de los receptores con historial delictivo para cambiar y aprender de sus errores recordándoles los cambios que ellos mismos han experimentado personalmente. También explora la forma en que las características individuales, en este caso autodefiniciones, pueden moderar semejantes expectativas.

Por último, la investigación del consumidor ha estudiado las conductas de donación principalmente de forma aislada, sin interactuar con otros factores. Concretamente, hasta donde sé, como dos de las formas más habituales en que las personas se desprenden de las posesiones que ya no necesitan, la donación y la reventa en los mercados secundarios solo se han examinado de forma aislada y su interacción se ha pasado por alto casi por entero. El tercer ensayo cubre esta laguna y estudia la forma en que el simple hecho de pedir a los propietarios que consideren donar una posesión puede reducir su WTA para ese mismo objeto cuando intenten venderlo más

adelante. Las investigaciones anteriores han constatado que los propietarios tienden a exigir un precio mucho más elevado del que el comprador está dispuesto a pagar, y que la brecha de precio puede obstaculizar la culminación de la transacción. Así, esta investigación también propone una solución viable para la brecha de precio WTP-WTA al reducir el precio exigido por el vendedor.

En resumen, esta tesis explora en primer lugar dos problemas a los que se enfrentan las organizaciones sin ánimo de lucro proponiendo dos nuevos marcos conceptuales e identificando nuevas estrategias para las organizaciones sin ánimo de lucro que les permitan obtener e incrementar las donaciones que buscan. Luego examina la forma en que considerar una donación puede influir en las decisiones de las personas a la hora de vender sus posesiones. Los capítulos 1 al 3 presentan tres ensayos respectivamente.

CHAPTER 1

Give a Man a Fish, but Not Money: How In-Kind Donations Increase Perceived Donation

Efficacy and Donation Likelihood

How do consumers prefer to give to charity? By contributing in-kind (e.g., food, clothes) or cash? Empirical evidence has documented that donors have a strong preference for in-kind donations over cash donations (Gangadharan et al. 2018; Gangadharan, Grossman, and Jones 2014; Jacobsson, Johannesson, and Borgquist 2007). In an attempt to explain such preference, researchers have mainly focused on donor's paternalistic concerns (Schroeder et al. 2017). Compared to cash donations, in-kind donations place more restrictions on how they could be used by the recipients. In this way, donors could guide the behaviors of recipients, particularly when donors believe they know what is better for the recipients more than the recipients do. However, paternalism itself might not be enough to explain why donors always prefer in-kind donation. First, the variation of recipients and charity causes does not always guarantee that donors will draw an inference about whether the recipients have the capability to use the donations. Previous studies were mainly field and lab experiments to raise donations for recipients who were at risk for homelessness, suffering from serious mental health issues, addicted to smoking, or in poverty – all of which could cause donors to infer a lack of capability to use donations appropriately. However, not all recipients will cause the same inferences. For those who are not at fault for causing their unfavorable situation, such as those who lost a job due to COVID-19 or a home due to an earthquake, donors may be less likely to cast doubts on their capability. Moreover, the paternalism explanation may not be suitable for donors with different motivations. An important assumption underlying the paternalism explanation is that

donors' motivations are to improve the welfare of the recipients. However, research on donors' motivations reveals that donors do not always make donations for the benefits of the recipient. A "warm glow" donor (Andreoni 1989) whose main concern is to maximize his/her own utility or a donor who contributes to charity under social pressure might not be encouraged by paternalistic motivation to make in-kind donations. As a result, we cannot fully rely on paternalism to explain the current findings that donors with different donation motivations constantly prefer in-kind donations.

The objective of this research is to examine another mechanism that complements the current understanding of donors' preference for in-kind donations. We propose that in-kind donation allows donors to better imagine how their donations can be used to help people in need, which then increases donors' perceived contribution efficacy that they are actually contributing to the cause. When donors are more confident that their donation will be used to help the cause, they demonstrate a higher likelihood to donate. Our mechanism applies to a wide range of causes and recipients, including those which do not normally elicit donors' paternalistic concerns. It also closes the theoretical gap by including donors with both intrinsic and extrinsic motivations. In-kind donations, which increase perceived donation efficacy, should be highly desirable for donors with different motivations. Not only altruistic donors, who sincerely care about the recipients will prefer in-kind donations, but warm-glow donors who only want to maximize their own utility will prefer in-kind donations over cash because the feeling that they are really helping from imagining such scenario will provide them with the "warm glow" they want.

We also explore two possible moderators that may influence donors' ease of imagination and perceived donation efficacy which, in turn, may strengthen or weaken the effect of donation type (cash vs. in-kind) on donation likelihood. Because we theorize that in-kind donation

increases donors' perceived donation efficacy through better imagining how their donations can be used, we expect that individual differences in imaginal ability may moderate such effect. Moreover, we expect that donors' preference for in-kind donation can also be moderated by donors' construal level induced by nonprofit campaigns. Construal level theory suggests that individuals with low-level construal tend to focus on feasibility when making choices and individuals with high-level construal tend to focus on the desirability of options (Liberman and Trope 1998). Low-construal could highlight the logistic difficulties caused by in-kind donation, consequently, we expect that people with low-level construal will prefer in-kind donations to a lesser extent than those with high-level construal.

This research also provides strong practical implications. Although donors prefer to make in-kind contributions, they might not be the most optimal type of donations in any given scenario. Indeed, nonprofit organizations have been raising concerns for years through numerous news articles about the donation of supplies shipped to disaster-affected areas, which can displace more urgent and better-targeted aid shipments, and can often go to waste (Piper 2019). For example, charities may have shelves of boxed stuffing and canned corn while baby food may be critically needed and nutritional shakes for seniors are in short supply (Merzenich 2017). Another shortcoming of in-kind donation is the high costs incurred in their collection, shipment, and distribution (Brooks 2018). The president and CEO of the Center for Disaster Philanthropy once described this problem by saying “This is not the time to be donating products or even services. [...] With the floods blocking off streets, when warehouses are not available, there's no place for these products — there's no place to store anything, there's no place to distribute anything. And that's going to be the case for some time.” (Dholakia 2017).

Our findings provide an explanation to donors' willingness to incur high costs to make in-kind donations, a problem that concerns and puzzles the nonprofits. Our proposed mechanism is important because nonprofits have not been paying enough attention to the influence of in-kind donations. Indeed, we reviewed the website of the top 10 largest charities (rated by Charity Navigator, 10 super-sized charities). All of them only collect cash donations on their website, whereas only one (Feeding America), tries to convert cash donations into a hypothetical number of meals in order to demonstrate their impact. Moreover, the common belief is that nonprofits (or any for profit organizations) should provide consumers with the easiest option that costs minimum effort. However, our findings add to the evidence that donors do not always choose the easiest option and they are willing to spend extra effort to donate in the form that they consider to be the most helpful. We also outline the important role imagination plays in determining how people choose to donate. Connecting research in imagination and research in how people choose to donate, we provide a new direction for nonprofits who want to create targeted advertisements.

Theoretical Background

Extant Research on In-kind Donation

Earlier literature on consumer's donation behavior has mainly focused on the motivational factors that encourage consumers to make donations (Andreoni 1989; Andreoni and Petrie 2004; Glazer and Konrad 1996; Kingma 1989) and strategies to increase donation amount (Basil, Ridgway, and Basil 2008; Gourville 1998; Howard 1990; Kogut and Ritov 2005; Small, Loewenstein, and Slovic 2007). It was not until recently that researchers started to examine how donation types can influence donation behaviors. In one stream, researchers studied the

difference between donating money and donating time (volunteering) and found that considering donating money or time activated different mindsets. Specifically, asking donors to donate time activates an emotional mindset while asking donors to donate money activates a value maximization mindset (Liu and Aaker 2008). Macdonnell and White (2015) also studied donations of money and time. They proposed that money is construed relatively more concretely than time, and it is essential for charitable appeal to be framed in the same level of construal to increase donation intention.

Relatively little research focuses on the difference between donating cash and in-kind goods. However, among the few existing studies it has been found that donors have a strong preference for donating in-kind over cash (Gangadharan et al. 2018; Jacobsson et al. 2007). For example, Jacobsson and colleagues (2007) found that more than 90% of the participants chose to make in-kind donations (donating nicotine patches to a diabetes patient) when they could choose between making an in-kind or cash donation. The traditional and widely accepted explanation for making an in-kind donation is paternalism (Currie and Gahvari 2008), as donors restrict their donations to a certain set of goods to guide the consumption of the recipients. Empirical evidence also supported the paternalistic justification. Schroeder, Waytz, and Epley (2017) found that donors are more likely to offer in-kind aid than cash because they believe those who need help are less mentally capable and in-kind aid will be more effective. Gangadharan et al. (2018) also discovered a similar result as participants in their experiment were more likely to restrict their donations to in-kind goods if they believed that recipients' poverty was caused by substance abuse or lack of personal effort.

Donors' motivation is also linked to their preference for paternalistic donation. In the study conducted by Gangadharan and colleagues (2018), compared to a warm-glow donor whose

main goal was to maximize his own utility, a pure altruistic donor who wanted to maximize the welfare of the recipients was more likely to impose paternalistic restrictions on donations in the form of in-kind goods. Under the paternalism justification, a donor chooses to make an in-kind donation if he wants to improve the recipients' position and believes that he knows better about how to improve the recipients' position than the recipients themselves. As a result, a warm-glow donor who is only concerned with his own utility should be indifferent about how he makes a donation. However, their experiment revealed that donors with different motivations all preferred paternalistic in-kind donation over cash donation. The empirical evidence suggests that paternalism cannot fully account for donor's preference for in-kind donations and there could be other mechanisms that simultaneously drive donor's choice in how to contribute to a charitable cause. In the following sections, we build on past research in imagery and propose a new mechanism that could also explain donors' preference for in-kind donation.

In-kind Donation Encourages Imagination and Increases Perceived Donation Efficacy

Earlier studies of imagery characterized it as “a process by which sensory information is represented in working memory” (MacInnis and Price 1987, p. 473). More recently, researchers conceptualized consumer imagery as information flow where incoming sensory information about a product is joined by existing episodic memory (Spears and Yazdanparast 2014). These studies recognize that a stimulus containing sensory information plays an important role in eliciting imagination. Numerous studies successfully induced imagery by using different stimuli, such as pictures or concrete words (see Lutz and Lutz 1978 for a review). Instructions or guidance were also used for participants to develop imagery invoking scenarios. Moreover, other studies suggest that imagination may be suppressed if a stimulus is not present. For example,

Spears and Yazdanparast (2014) found that missing haptic information could hinder the effect of imagination on purchase intention and participants who had a high need for touch were less likely to be influenced by imagination if they could not touch the product.

Connecting the literature on imagery and consumer donation behavior, we propose that in-kind goods may work as a stimulus to elicit donors' imagination in their decision making process. We argue that physical donations, which are high in tangibility and specificity, can induce donors' imagination about how their donation can be used to help people. Cash donations, on the other hand, are less specific since they can be used to purchase any type of in-kind object. As a result, cash donations should be less effective at eliciting imagination compared to in-kind donations. Considering the case of donating to a disaster-affected area, when donors are contemplating whether to donate bottled water, the concrete concept of water allows them to imagine that the people who live in the disaster-affected area have a shortage of drinking water and how their water donation can be of use to those in need. Donors who have high imaginal ability might even picture a more vivid scenario where people are suffering a water shortage after an earthquake because the earthquake caused damage to wells and water systems, and the arrival of their donation of bottled water provides disaster-impacted residents with access to clean water. On the other hand, when the same donors contemplate whether to donate cash, they are less likely to experience the same imagination process. Cash, itself, cannot be used to help people unless it is used to exchange for tangible goods.

We further propose that donors' imagination process sparked by the in-kind donation will increase their perceived donation efficacy. Donors' perceived efficacy captures whether donors perceive their contributions can make a difference to the nonprofit's cause they are supporting (Bekkers and Wiepking 2011). It has been shown that perceived efficacy is of great importance in

predicting donation results and donors are less likely to contribute to a nonprofit's cause if they believe their donation does not make a difference (Diamond and Kashyap 1997; Duncan 2004; Gneezy, Keenan, and Gneezy 2014; Zhou et al. 2021). We hypothesize that because in-kind donation allows donors to easily and vividly imagine that the concrete physical objects they donate can be used to help the recipients, donors who make in-kind donations will demonstrate a higher confidence that their donation matters. Our hypothesis converges with prior research on imagination inflation, which shows that people indicate higher confidence about the likelihood of an event happening if they have imagined the same situation in their mind first (Anderson 1983; Carroll 1978; Gaesser, Keeler, and Young 2018; Garry et al. 1996; Green and Brock 2000; Gregory, Cialdini, and Carpenter 1982; Kahneman and Tversky 1982; Koehler 1991; Schwarz 2004). In-kind donation increases the ease of imagination process, which is crucial for imagination inflation (Jia et al. 2017; Kahneman and Tversky 1982; Sherman et al. 1985; Tversky and Kahneman 1973).

The Moderating Role of Imaginal Ability

Consumers vary in their ability to imagine events (Galton 1880; Marks 1973). Individual differences of imaginal processing ability have a wide range of impact on cognitive functions, such as learning, memory, and perception (see Ernest 1977 for a review). Studies that examined the effect of imagery-eliciting strategies on advertising consequences found that the positive effect of asking participants to imagine a positive product experience on brand and product attitude was conditioned on the imaginal processing ability (Burns, Biswas, and Babin 1993; Petrova and Cialdini 2005). In a study conducted by Burns and colleagues, the imagery-eliciting strategies included using concrete description as a stimulus to instruct participants to imagine a

scenario when they enjoyed using the product in the advertisement. Compared to participants with low imaginal ability, those with high imaginal ability indicated a more positive attitude towards the brand when the advertisement included instructions that induced imagination. In a similar vein, we expect that the extent to which in-kind requests will induce imagination and affect donations will depend on donors' levels of imaginal ability. If donors have high imaginal ability, we predict that they will show a stronger preference for in-kind donations because they are better at using the stimulus to imagine how the in-kind donations can help the recipients. Low imaginal ability donors, on the other hand, have limited ability to use physical donation stimuli and imagine how it will help recipients. Consequently, they should not have a strong preference for in-kind donations because they have little ability to imagine how their donation will help recipients. Therefore, we hypothesize that donors' imaginal ability will moderate the effect of donation type on donors' perceived donation efficacy.

The Moderating Role of Construal-Level

We further propose that donors' preference for in-kind donation can be attenuated by low-level construal. Construal level theory describes the role of desirability and feasibility concerns in predicting people's choices under different levels of construal (Liberman and Trope 1998; Trope and Liberman 2010). Abundant empirical evidence suggests that people consider feasibility as more important when making near future (low-construal) decisions. One of the main problems in-kind donation can bring is the difficulty caused during logistics, which falls under the concern of feasibility, and we expect that this concern could be more highlighted to donors with low-level construal. On the other spectrum, high-level construal donors pay more attention to the desirability aspect of the options when deciding between in-kind and cash

donations. In-kind donations, which induce imagination and increase perceived donation efficacy, should be highly desirable for donors with different motivations.

The difference in predicting donors' choices under high and low construal is important for nonprofit organizations. Our prediction suggests that donors prefer to donate in an in-kind form to help people who are far away from them. This is particularly problematic for nonprofits due to the logistical difficulties arising from long distance shipments. It also explains why the disaster-affected area is often inundated with physical donations such as water, canned food, toothpaste, or toilet paper although the media has repeatedly reported that the best thing to give is not goods, but rather money. The most recent case involves both the Australian government and nonprofits sending out warnings that they could no longer store physical items anymore, instead, they advise donors to make cash donations to charities assisting those affected by the bushfires (Tan 2020).

Nonprofits' advertisements can affect donors' construal level. Consequently, the role construal level plays in determining donors' preferred donation type can guide nonprofits' campaign in many ways. For instance, nonprofits can create social or spatial distance by targeting donors from a different social background or a different country than the recipients of the donations. International nonprofits could focus on donors in North America who are at a close distance if an earthquake happens in California or it could choose to focus on donors that are in Europe or Asia who are spatially or socially far away.

Studies 1A to 1C

Overview of Studies 1a to 1c

In studies 1a to 1c we tested donors' preference for in-kind donation when the recipients are less likely to elicit donors' paternalistic consideration. We chose recipients who needed help because of a natural disaster and found evidence that donors still preferred to make in-kind donations over cash donations. In order to demonstrate that the preference for in-kind donation existed among donors with a wide range of backgrounds, we conducted our studies on Amazon Mechanical Turk, which allowed us access to a large pool of participants in the U.S. (Mason and Suri 2012). Participants were provided different scenarios where they could either make a cash or in-kind donation and we asked them to indicate their donation likelihood.

Our second goal was to understand whether donors' preference for in-kind donation is due to the experimental design. We found that participants constantly indicated higher donation likelihood for in-kind donation under both between-subjects and within-subjects designs. This finding showed that participants' preference for in-kind donations was not due to a joint evaluation mode which could highlight the differences between cash and in-kind (Hsee 1996).

Grocery stores are one of the most common places for nonprofits to raise donations. According to the latest survey by Engage for Good (2019), 79 of the largest retailer campaigns raised more than \$486 million from consumers at the checkout counter in 2018. Thus, in studies 1a to 1b, participants were provided a scenario where the donation was requested at a grocery store. However, providing such a background story can remind people of the importance of physical goods such as food or water. Thus, we wanted to examine whether participants would still prefer in-kind donations when buying physical goods and donating them was not as convenient as when they are at the grocery store. Study 1c addressed this question.

Study 1a: The Impact of Donation Types on Donation Likelihood (Within-Subject Design)

Design. All participants were told that a small town in Indonesia just suffered a serious earthquake. In this case, the shipping costs are higher and there is a higher probability of a mismatch between what is donated and what is needed due to cultural differences and a lack of knowledge about the disaster-affected area. We restricted the participants' location to the United States to ensure that the natural disaster happened in a location that was far away from where the participants lived. We chose a country towards which most of the residents in the United States have a relatively neutral attitude or slightly positive attitude. A pre-test with 60 participants who live in the United States was conducted to measure attitudes towards Indonesia in the MTurk population. Participants indicated their attitudes towards Indonesia on a seven-point scale (1 = "extremely bad", and 7 = "extremely good"). The mean score was 4.73 ($SD = 1.12$) and it was significantly different ($t(59) = 5.08, p < .01$) than 4 ("neither good nor bad"). Participants also indicated why they made such choice and many people disclosed that they are not very familiar with Indonesia and hold a neutral attitude towards it.

Procedure. Eighty-one participants took part in the within-subjects design in exchange for a small payment (41.98% male; $M_{age} = 38.62$ years, $SD = 12.33$). They read the following scenario: "A small town in Indonesia just suffered a serious earthquake. You were about to go to a supermarket to buy groceries when an international charitable organization approached you and asked whether you would like to make donation to help the people in Indonesia. You can choose to either donate money directly, or you can buy some food and water at the supermarket. If you choose to buy food and water, you can leave them at the supermarket and the charity will collect everything and send it to Indonesia." Participants were then asked how likely they were to donate cash and how likely they were to donate water and food on two separate five-point scales.

Results. A paired-samples t-test revealed a preference for in-kind donations similar to the previous studies. Participants indicated a significantly higher donation likelihood for physical donations over cash donations ($M_{in-kind} = 3.40, SD = 1.37; M_{cash} = 2.78, SD = 1.46; t(80) = -3.04, p = .003$) even though the recipients of the donation were in Indonesia.

Study 1b: The Impact of Donation Types on Donation Likelihood (Between-Subjects Design)

Procedure. Past research documented preference reversals between joint and separate evaluations of alternatives (Bazerman, Tenbrunsel, and Wade-Benzoni 1998; Hsee 1996). Stimulus options that were presented side-by-side to one person were rated differently than those that were presented separately and evaluated by two different groups of people. As a result, in this study we employed a between-subjects design to rule out the possibility that donors' preference for in-kind donation was due to a within-subjects design used in study 1a.

One-hundred and sixty participants (41.25% male; $M_{age} = 36.74$ years, $SD = 12.98$) were recruited on MTurk and offered a small payment to participate in the study. They were randomly assigned to a cash donation condition or to an in-kind donation condition in a between-subjects design. In the cash donation condition, participants were told that they were about to go to a supermarket to buy groceries when an international charitable organization approached them and asked whether they would like to make a cash donation to help the people in Indonesia. In the in-kind donation condition participants were approached by the same international charity when they were about to buy groceries in the supermarket. However, the charity asked whether they would like to donate food and water to help the people in Indonesia. If they chose to make this donation, they could buy food and water at this supermarket and leave them there and the charity

would collect everything and send them to Indonesia. All participants then indicated their donation likelihood on a five-point scale.

Results. We performed an independent-samples t-test to see if there was any difference in the donation likelihood between the cash donation condition and the in-kind donation condition. Similar to the previous studies, participants were more likely to make in-kind donations (water and food) than to donate cash to the disaster-affected people in Indonesia ($M_{in-kind} = 3.81$, $SD = 1.06$; $M_{cash} = 3.19$, $SD = 1.24$; $t(158) = -3.43$, $p = .001$).

Study 1c: The Impact of Donation Types on Donation Likelihood When Donation is Requested Online

Design. Because we told the participants that they were approached by a charity when they were on their way to a supermarket to shop for groceries in studies 1a and 1b, one possible explanation for the donors' preference for in-kind donation could be that the supermarket setting primed them with getting food and water. They may also have been more likely to choose to make in-kind donations while they were shopping for groceries for themselves because their own needs for food and water reminded them how important those necessities are. Another possible interpretation of previous studies is that participants avoided giving cash because they may not usually carry much cash or they simply may have expected to need whatever cash they were carrying. This study addresses these potential alternative explanations of food/water priming or cash availability. To that effect, in this study participants read about a charity's post while browsing social media and were asked to make a donation online. We expected that they would demonstrate the same preference for in-kind donations.

Procedure. Seventy-nine participants joined the within-subjects study for a small payment (53.16% male; $M_{age} = 37.76$ years, $SD = 14.07$). All participants were told about the following scenario: “Your neighboring county just suffered a serious earthquake. You see a post from a local charity shared by a friend today on Facebook and the charity is asking for donations to help people in your neighboring county. You can donate food and water at Walmart's online store or the charity also provides you a choice to make a cash donation. If you choose to buy food and water, you will have an option to indicate this is for donation when you check out. The charity will then collect everything from Walmart and send it to the neighboring county.” Then, we measured participants’ donation likelihood for cash and physical goods separately in the same way as the prior within-subject studies.

Results. A paired-samples t-test showed that participants were significantly more likely to make in-kind donations than cash donations ($M_{in-kind} = 3.58$, $SD = 1.36$; $M_{cash} = 3.19$, $SD = 1.35$; $t(78) = -2.11$, $p = .038$). Thus, this study replicates the preference for in-kind donations over cash donations.

Discussion

Past research demonstrated that donors prefer to make in-kind donation when they believe the recipients are not mentally capable to help themselves. However, across studies 1a to 1c, we showed that donors still preferred to make in-kind donations in a situation in which recipients have no reason to be inferred as incompetent.

Study 2

Design

Study 2 was a field study that examined how people react to nonprofits' ads that requested either cash or in-kind donations. Google Adwords allows marketers to publish advertisements on Google search webpages. An advertisement is displayed to potential customers when they search for certain keywords. Google records how many people are shown each ad and charges marketers only when customers click the ad. Thus, we were able to observe real behaviors of consumers when they were exposed to different ads by tracking whether they clicked on such ads. Moreover, we argued that imagination is one of the factors that encourages people to make in-kind donations, thus, another goal of this field experiment was to show that donors' intention to make cash donations could be increased if the advertisement led them to engage in a similar imagination process as when the donation was requested in the form of physical goods.

Procedure

Two short advertisements were created on Google Adwords that attempted to raise donations for Chinese residents living in the epidemic area during the COVID-19 outbreak in February 2020 (see appendix A). The advertisements differed only in the first headline where we manipulated the donation request as either in cash ("Donate cash") or in physical goods ("Donate face masks"). One additional advertisement was created to induce imagination. Although the donation request was still made in the form of cash, we instructed people to imagine how their cash donation could be used to get face masks in the description lines that read "Imagine how your cash donation can be used to get face masks and help those who live in the epidemic area

from getting infected.” A set of 11 keywords (e.g., “charity”, “coronavirus”, etc.) was created and our advertisements were shown to people when they searched for anything related to the keywords. Five countries (Australia, Canada, New Zealand, United Kingdom, and United States) whose official language is English were included as the target locations. The keywords and locations were identical across the 3 advertisements. We posted the advertisements online for two weeks between mid-February to early-March 2020 and each ad was rotated and displayed for 2-hour periods from 12pm (EST) to 12am (EST).

Results

The advertisements were displayed a total of 5,912 times and generated 150 clicks (click rate = 2.54%). On Google Adwords, click rates vary by advertisement type and industry. However, some online marketing companies have suggested that the average click-rate across all industries in Google Adwords is 1.91% (Laubenstein 2019) and our click-rate was slightly higher than average. Consistent with prior research, we measured the click rate per display rather than the absolute number of clicks because the frequency of display is not random (Kronrod, Grinstein, and Wathieu 2012; Sussman, Sharma, and Alter 2015). The overall click-rate (total clicks divided by total impressions throughout the advertisement campaign) for the advertisement that requested donations in the form of cash was 1.70%. The overall click-rate was 3.60% for the advertisement that requested donations in the form of in-kind goods, and 2.91% for the advertisement that requested cash and encouraged imagination. We used chi-square tests to examine the difference of click-rate between all pairs of conditions. As predicted, the likelihood of clicking on the advertisement was higher when the donation was requested in the form of in-kind goods than in the form of cash ($\chi^2 = 16.89, p < .01$). People were also more

likely to click an advertisement requesting cash when the advertisement encouraged imagination ($\chi^2 = 6.13, p < .02$) compared to when the advertisement simply requested a cash donation without instructing people to imagine how their donations can be used to help. We did not observe any significant difference in click-rate between the ad that required in-kind donation and the advertisement that encouraged imagination ($\chi^2 = 1.07, p = .30$).

COVID-19 did not become a global epidemic until the end of February when Italy started to report an increase in the number of people infected. Previously, COVID-19 had been treated as a regional disease mainly in China, Japan, and Korea, which did not concern the regions where we displayed our ads to. On February 23rd, Italy reported a total of over 100 cases. The number has increased exponentially since then, and has spread to most of Europe (as of the second week of March 2020). The number of patients also surged at the end of February in the United States. As the number of cases has increased, there has been a shortage of face masks, especially for medical workers. In order to rule out the possibility that people prefer to donate face masks because of the saliency of a face mask shortage, we performed chi-square tests using only the data collected before February 23rd (7 days in total) and the results remained unchanged. People were more likely to click on the advertisement if the donation was requested in in-kind goods than cash ($\chi^2 = 20.06, p < .001$) or if the advertisement encouraged imagination ($\chi^2 = 14.40, p < .001$). We did not find a significant difference in click-rate between in-kind condition and cash condition with imagination ($\chi^2 = .05, p = .83$).

Study 3

Design

Study 3 had two main goals. Our first goal was to show that the preference to make in-kind donations persisted when making actual donations. In this study, participants had the chance to win a bonus payment of \$5 and we asked if they would be willing to donate part of the bonus to a nonprofit. Another goal was to test the effect of imagination more directly. We argued that people prefer in-kind donation (vs. cash) because it allows them to better imagine how their donation can be used. Consequently, we expected that the difference between in-kind donation and cash donation should disappear if those who were asked to donate cash were instructed to engage in the same imagination process. In order to test such a prediction, we added another manipulation where participants were told to imagine how their cash donation could be used to help before they decided on how much cash they wanted to donate.

Procedure

Three hundred and thirty-nine participants were recruited on MTurk (53.39% male; *M*_{age} = 37.41 years, *SD* = 11.32). All participants were told that we were conducting research on attention and we would randomly draw 5 participants and give each a bonus of \$5. They were first asked to complete a few filler tasks (appendix B). After the filler tasks were finished, participants were told the following: “We are a group of researchers collaborating with nonprofit organizations. Besides conducting research, we also try to raise donations for good nonprofit organizations. If you receive the bonus payment, we’d like to know whether you would be willing to donate part of your bonus to Feeding America, our nation’s largest domestic hunger-relief nonprofit organization. 37 million people face hunger in the U.S. today — including more than 11 million children and nearly 5.4 million seniors.” Then, all participants were randomly assigned into one of the three conditions (cash donation vs. in-kind donation vs. cash donation

with imagination). In the cash donation and cash donation with imagination conditions, we told the participants that “Feeding America is looking for donors who are prepared to make a difference by contributing cash. If you are one of the winners and choose to donate part of your bonus, we will make a donation on your behalf in cash and email you a receipt.” Then, in the cash condition, we measured the percentage of the bonus that participants would be willing to donate on a slider from 0% to 100%. In the imagination condition, participants were first asked to imagine a scenario and describe how their cash donation could be used to get food and to help recipients. After they wrote down what they had imagined, they indicated the percentage of the bonus that they were willing to donate using the same scale as those in the cash condition. In the in-kind donation condition, we told the participants that “Feeding America is looking for donors who are prepared to make a difference by contributing food. If you are one of the winners and choose to donate part of your bonus, we will make a donation on your behalf in the form of food that is requested by the nonprofit and email you a receipt.” Then, participants indicated the percentage of the bonus they would be willing to donate. In order to reduce the noise that is due to individual differences, all participants disclosed how much they donate to charity annually besides the demographic questions. After the data collection was completed, we randomly selected 5 participants and made the donation and/or bonus payments based on their choices.

Results

A one-way ANCOVA with donation amount ($M = 43.43\%$ / \$2.17, $SD = 32.61\%$ / \$1.63) as the dependent variable and donation type manipulation (cash donation, in-kind donation, and cash donation with imagination) as the independent variables, and annual donation amount (log-transformed, skewness = 15.71) as a covariate revealed a significant main effect for donation

type manipulation ($F(2, 335) = 4.27, p < .02$). Annual donation amount was also significant ($F(1, 335) = 46.34, p < .001$). Planned contrasts revealed that the donation amount of cash donation condition was significantly lower than in-kind donation condition ($M_{cash} = 36.91\%$, $M_{in-kind} = 45.05\%$; $p < .05$) and lower than cash with imagination condition ($M_{imagination} = 48.50\%$; $p < .01$). No statistically significant difference was observed between in-kind donation condition and donation with imagination condition ($p = .40$). Age and Gender did not significantly influence participants' donation amount (age: $p = 0.99$; gender: $p = 0.6$).

In study 3 all participants were asked to give up cash and the only things that varied were (1) how we framed the donation request, and (2) how we promised to deliver the donation. As a result, the design of the study accounts for donors' concern that cash donation might not ultimately be used for the charity cause. In the next study, we formally rule out this alternative explanation by measuring donors' trust and their perception of the percentage of donations used for the actual cause.

Study 4

Design

The purpose of study 4 was to examine the moderated mediation framework. Thus, we tested whether imaginal ability moderated the effect of donation type on perceived donation efficacy, which in turn increased donation likelihood. We predicted that, for individuals with high imaginal ability, in-kind donations (compared to cash donations) would increase their perceived donation efficacy, which would then increase their likelihood of making a donation. On the other hand, for individuals with low mental imaginal ability, in-kind donations would

have a smaller impact on perceived donation efficacy, thus, the likelihood of making an in-kind donation would increase to a lesser extent.

Moreover, it is possible that donors have a higher donation likelihood for in-kind donations because they believe charities that collect physical donations are more legitimate. Donors might also develop higher trust with those charities because there is a higher chance that physical goods will be used for the charities' actual cause. Cash donations could be used to pay for what people need, but could also be used in ways that donors tend to avoid. For example, researchers showed that donors were less likely to make donations if they knew that their donation would be used to cover administrative and fundraising costs (Gneezy et al. 2014). Cash donations also have a higher probability of being misused or stolen compared to physical donations. Because trust and legitimacy play important roles in donors' decision-making process (Sargeant and Lee 2001, 2004), we measured participants' trust and perceived legitimacy of the nonprofit organization that was seeking a donation to examine whether donation type had an effect on trust or/and legitimacy, which then influenced donation likelihood.

Researchers also observed an "overhead aversion" effect among donors (Bowman 2006; Gneezy et al. 2014; Keenan and Gneezy 2016) and their studies showed an inverse relationship between donation willingness and the percentage of administrative costs. Unless specified by nonprofits, cash donations can be used for the actual cause or to cover nonprofits' administrative expenses while in-kind donations are less likely to be used to cover administrative expenses. In order to address the potential overhead aversion caused by a request of cash donations, we measured and controlled participants' perception of the percentage of donations used for actual causes.

Procedure

Two hundred and three participants were recruited on MTurk (42.86% male; $M_{age} = 37.11$ years, $SD = 12.19$). Participants were randomly assigned into one of two conditions (cash donation vs. in-kind donation). They were presented with a mostly identical advertisement from a charitable organization (see appendix C). The charitable campaign came from a real nonprofit called “Children’s Literacy Initiative.” We collected materials on their website to construct the advertisements. The advertisements stated that this nonprofit was a 501(c)(3) nonprofit working with Pre-K through 5th grade teachers in the US to improve early literacy so that children became powerful readers, writers, and thinkers. Their goal was to close the literacy achievement gap between disadvantaged children and their more affluent peers. In order to increase the legitimacy of this nonprofit, we specified in the ad that the Children’s Literacy Initiative received a 4-star rating from Charity Navigator, a major charity assessment organization in the United States, and it meant that this organization was accountable, transparent, and financially healthy. The ad also disclosed that this nonprofit improved children’s literacy by coaching teachers, providing workshops and seminars, and stocking classrooms with books. The only difference between the two aforementioned conditions was the type of donation the nonprofit sought. In the cash donation condition participants were told that “we (the nonprofit) particularly need donors who are prepared to make a difference by contributing cash”, and in the physical donation condition participants were told that “we particularly need donors who are prepared to make a difference by contributing physical objects, such as books or stationery.” Participants’ donation likelihood was measured by asking them to indicate how likely they were to donate physical objects or cash on a seven-point scale (1 = “extremely unlikely”, and 7 = “extremely likely”). After participants disclosed their donation likelihood, we assessed their perceived donation

efficacy. Donation efficacy was measured as in Macdonnell and White (2015) and participants rated their agreement level on the item “ I am confident that I can help improve early literacy by donating to Children’s Literacy Initiative” on a seven-point scale (1 = “strongly disagree”, and 7 = “strongly agree”).

Two items were used to measure the perceived legitimacy and trust of the nonprofit, including “how legitimate do you think Children’s Literacy Initiative is” and “to what extent do you trust Children’s Literacy Initiative.” Participants rated the items on the seven-point scale (1 = “not at all” and 7 = “to a very great extent”). We also asked participants to estimate the percentage of their donations that will be used for actual cause by answering the question “what percentage of your donation do you believe will be used for the actual causes.”

Participants’ imaginal ability was measured using the scale developed by Childers, Houston, and Heckler (1985). Participants rated the options that best described them on eight items (see appendix D). Examples of items include “I find it helps to think in terms of mental pictures when doing many things” and “When I have forgotten something, I frequently try to form a mental picture to remember it.” We reverse-scored one item (item 5) such that higher numbers meant higher imaginal ability. Then, we averaged each participants’ ratings across the eight scale items (Cronbach’s $\alpha = .73$).

Results

Table 1 reports descriptive statistics and the correlation matrix for the data collected in study 4. Age was not significantly correlated with our key variables, however, we found that gender was positively correlated with imaginal ability ($r = .17, p < .05$) and donation likelihood ($r = .15, p < .05$). Compared to male participants, female participants had a better mental

imaginal ability and indicated a higher donation likelihood. Thus, we added both age and gender as control variables in our analysis. The correlation matrix also indicated that donation type was positively correlated with donation likelihood ($r = .33, p < .01$). A t-test showed that when participants received an ad campaign from the nonprofit, those who were in the in-kind donation condition, and thus were asked to make physical donations, had a higher donation likelihood compared to the participants who were asked to make cash donations ($M_{in-kind} = 5.30, SD = 1.39$; $M_{cash} = 4.10, SD = 1.94$; $t(201) = -5.03, p < .001$). The mean perceived percentage of contribution used for actual cause is 69.60% ($SD = 30.30\%$), this is consistent with the past survey result that most Americans believe at least 70% of the spending should go to the actual cause (Bowman 2006). There is a positive correlation between donation type and percentage of contribution used ($r = .26, p < .01$). When donations are requested in the form of in-kind goods, participants perceived that a higher percentage of their donation will be used towards the actual cause ($M_{in-kind} = 77.71\%, SD = 26.95\%$; $M_{cash} = 62.02\%, SD = 31.40\%$; $t(201) = -3.81, p < .001$).

Insert Table 1 about here

We did not find a significant correlation between donation type and perceived legitimacy of the nonprofit ($r = .05, p = .56$), nor a significant correlation between donation type and perceived trust of the nonprofit ($r = .05, p = .50$). Two independent-samples t-tests were run with perceived legitimacy and trust as the dependent variables. The perceived legitimacy did not significantly differ between the cash donation condition and the physical donation condition ($M_{in-kind} = 5.30, SD = 1.36$; $M_{cash} = 5.16, SD = 1.47$; $t(201) = -.67, p = .50$). We also did not find a

significant difference in trust between the two donation types ($M_{in-kind} = 4.98, SD = 1.36; M_{cash} = 4.84, SD = 1.59; t(201) = -.68, p = .50$).

Insert Figure 1 about here

To test the hypothesized moderation of imaginal ability and the mediation of perceived donation efficacy, we followed the procedures proposed by Preacher, Rucker, and Hayes (2007). Results are displayed in table 1. In the first step, we examined the effect of the independent variable (donation type), the moderator (imaginal ability) and their interaction on the mediator (donation efficacy). The results revealed a significant main effect of donation type on donation efficacy ($\beta = -2.94, p = .03$) and a significant interaction between donation type and imaginal ability on donation efficacy ($\beta = 1.21, p = .01$). We plotted the interaction in figure 1. As predicted, participants who had low mental imaginal ability showed the same level of donation efficacy when they were asked for in-kind donations or cash donations. Only those who had high mental imaginal ability demonstrated higher perceived donation efficacy when donations were requested in the form of physical goods compared to cash. In the second step, the dependent variable (donation likelihood) was regressed on the mediator (donation efficacy), while controlling for the independent variable (donation type), the moderator (imaginal ability), and their interaction. The result revealed a positive and significant relationship between perceived donation efficacy and donation likelihood ($\beta = .75, p < .001$). As hypothesized, participants with higher perceived donation efficacy indicated a higher donation likelihood. The last step

examined the significance of the conditional indirect effect. We used Model 7 of Hayes' PROCESS macro in SPSS (Hayes 2013) with a bootstrapping of 5,000 samples. The moderated mediation was significant (indirect effect = .91, $SE = .40$; 95% CI [.1852, 1.7617]). The conditional indirect effect of donation type on donation likelihood was significant when participants had average or higher imaginal ability, whereas the indirect effect of donation type was not significant when participants' imaginal ability was low (table 2). When we added age, gender, and contribution percentage as covariates, the conditional indirect effect became nonsignificant when imaginal ability was at its mean or lower. However, it remained significant when imaginal ability was high (1SD above the mean). Nonetheless, the results for the full model remained essentially unchanged and the moderated mediation was significant (indirect effect = .87, $SE = .31$; 95% CI [.2727, 1.4932]).

Insert Table 2 about here

Study 5

Design

In studies 1 to 4, we established that in-kind donation requests elicited higher intentions to donate than cash donation requests and that this effect was mediated by the perception that the donation would be helpful to recipients. Furthermore, we showed that imaginal ability moderated the effect of in-kind donation requests on perceived donation efficacy. This is in line with our theorizing that in-kind requests provide a cue that can be used to imagine the donation being

used by the recipients. In study 5, we examined whether construal-level acts as another moderator. We manipulated the social distance by creating a charity advertisement that was either aimed at collecting donations for an area that was socially proximal to participants (low-level construal) or distant from participants (high-level construal). We hypothesized that the preference for in-kind donations would be stronger under high levels of construal. That is because donors with high construal level place greater importance on desirability considerations when choosing the type of donation they make, and in-kind donation is highly desirable as it induces donors' imagination that their donations will be helpful.

Researchers have established the relationship between social distance and construal level. In one study, Liviatan, Trope, and Liberman (2008) found that students who were exposed to a similar target person used lower level construal and identified that person's actions in relatively more subordinate means-related terms. Those who were not familiar with the target person used higher level construal and expressed the target person's actions in superordinate ends-related terms. Thus, in our study, social distance was manipulated by how familiar participants were to the disaster-affected areas. Participants were told that the disaster had occurred either in their hometown or in Jakarta (the capital of Indonesia). Again, even though it would be more beneficial if the donation were to be made in cash if the donors were trying to help people who lived far away from them (i.e., in Jakarta), we expected that participants would show a higher likelihood to donate to help people in Jakarta if the donation was requested in the form of physical goods. A pre-test revealed that American participants, on average, held a slightly positive attitude towards Jakarta ($N=60$; $M = 4.35$, $SD = 1.06$) as its mean was significantly higher than 4 ($t(59) = 2.57$, $p < .02$). Our participants also expressed that they were not very familiar with Jakarta.

Procedure

Three hundred and one participants (31.56% male; $M_{age} = 38.23$ years, $SD = 12.67$) were assigned at random to one experimental condition in a 2 (donation type: cash vs. in-kind) x 2 (construal-level: high vs. low) between-subjects design. Participants in the low level of construal condition were first asked to tell us something about their hometown. Those in the high level of construal condition were first asked to tell us something about Jakarta (the capital of Indonesia). An examination of their answers showed that all participants wrote something that was consistent with the manipulations.

After participants were done writing about either their hometown or Jakarta, we gave them a scenario to evaluate whether or not they would like to make donation. Participants were told “Imagine your hometown/Jakarta just suffered a serious earthquake. You were about to go to a supermarket when the American Red Cross approached you and asked whether you would like to make a donation to help the people in your hometown/Jakarta.” Then, the participants in the cash donation condition disclosed how likely they were to make a cash donation and those in the in-kind donation condition disclosed how likely they were to make an in-kind donation on a seven-point scale. Two items were used as manipulation checks: participants rated how close they felt to their hometown/Jakarta on a seven-point scale (1 = “not close at all”, and 7 = “to a very great extent”) and how familiar they were with their hometown/Jakarta on a similar seven-point scale (1 = “not familiar at all”, and 7 = “to a very great extent”) ($r = .74, p < .001$).

Results

Manipulation checks showed that our manipulations were successful. Participants in the low level of construal (i.e., hometown) condition rated higher familiarity ($M_{hometown} = 5.80, SD = 1.30; M_{Jakarta} = 2.28, SD = 1.47; t(299) = 22.06, p < .001$) and higher closeness ($M_{hometown} = 4.74, SD = 1.71; M_{Jakarta} = 2.25, SD = 1.56; t(299) = 12.99, p < .001$) to the focal city than participants in the high level of construal (i.e., Jakarta) condition.

Donation type was significantly correlated with donation likelihood ($r = .12, p = .03$) and social distance was significantly correlated with donation likelihood ($r = -.20, p < .001$). All descriptive statistics and correlations are displayed in table 3. Participants were more likely to donate if the donation was requested in physical forms. They were also more likely to donate if the earthquake happened in their hometowns.

Insert Table 3 about here

To test the moderated mediation model, we first regressed donation efficacy (the mediator) on donation type (the independent variable), social distance (the moderator) and their interaction. We observed a significant main effect of social distance on donation efficacy ($\beta = -.83, p = .002$) and a significant interaction effect (figure 2) of social distance and donation type on donation efficacy ($\beta = .96, p = .01$). The main effect of donation type on donation efficacy was not significant ($\beta = -.02, p = .95$). Next, donation likelihood (the dependent variable) was regressed on donation efficacy, controlling for donation type, social distance, and their interaction. The relationship between donation efficacy and donation likelihood was positive and

significant ($\beta = .75, p < .001$). The overall moderated mediation was supported (indirect effect = .71, $SE = .27$; 95% CI [.1929, 1.2589]) by using Hayes' PROCESS macro Model 7. The conditional indirect effect of donation type to donation likelihood was significant when social distance was high (indirect effect = .70, $SE = .21$; 95% CI [.3105, 1.1227]). It was not significant when social distance was low (indirect effect = -.01, $SE = .18$; 95% CI [-.3646, .3427]). These results support our predictions. When considering a donation for people in their hometown (i.e., low social distance/low construal-level), participants' likelihood to donate did not differ for in-kind and cash requests. However, when considering a donation for people in Indonesia (i.e., high social distance/high construal-level), participants were more likely to make physical in-kind donations than to make cash donations. Table 2 summarizes the results for the moderated mediation analysis.

Insert Figure 2 about here

General Discussion

Our research aims to provide a new psychological mechanism to explain how consumers make donation decisions. Across 7 studies, we demonstrated donors' preference for in-kind donations — regardless of the identities of the recipients or fundraising channels — and provided process evidence for such a preference. In studies 1a to 1c we created different scenarios where participants were asked to make donations. The results showed that participants tended to prefer in-kind donations over cash donations. Study 2 used a field experiment to demonstrate that a

nonprofit's advertisement that requests in-kind donations is more effective and consumers are more likely to click on the ad compared to an advertisement that asks for cash donations. Moreover, we showed that people's preference for cash donations can be increased if the cash donation advertisement encourages donors to imagine how their cash donation can be used to get physical goods and help people. Study 3 added more evidence that people donated more when the donation was requested in in-kind by having participants make real donations. It also added evidence that imagination was the factor that influenced their donation amount. Both studies 4 and 5 tested the moderated mediation framework with perceived donation efficacy as a mediator. Study 4 supported the moderating role of imaginal ability. Participants with high imaginal ability showed higher perceived donation efficacy and donation likelihood when the donation was requested in kind (vs. cash) while participants with low imaginal ability indicated no difference in perceived donation efficacy and donation likelihood between cash or in-kind donations. These findings support our theory that consumers prefer to make in-kind (vs. cash) donations because in-kind donations make it easier for donors to imagine how their donations can be used by people in need. We also ruled out alternative explanations that nonprofits who request in-kind donations are treated as more legitimate by donors or earn higher trust from donors. Moreover, we showed that our explanation held when controlling for overhead aversion that might be caused by cash donations. Lastly, study 5 tested participants' construal-level as a moderator by using manipulations of construal-level induced by nonprofits' ads. In this study, participants with high construal-level (vs. low construal-level) showed a stronger preference for in-kind donations. This is consistent with real-life situations, such as the Australian bushfires in 2020 and a Puerto Rican hurricane in 2019, where donors from all over the world sent physical objects hoping to help the

disaster-impacted areas while governments and nonprofits advocated for cash donations for their flexibility and low costs.

While past literature has mainly focused on how much consumers donate, this research contributes to the stream of literature that studies how consumers donate. Researchers in this stream examined the difference between donating time and cash and the difference between donating cash and in-kind. Compared to donating time, physical donations can be entirely substituted by cash donations most of the time. Nonprofits will enjoy much more flexibility if the donation is made in the form of cash as they can decide where and what to purchase in order to make the most of the cash donated. Notwithstanding, our findings revealed that donors would rather make in-kind donations than contribute cash. Although literature has largely adopted the paternalistic consideration when explaining such preference, we believe that it could not fully explain why donors almost always prefer in-kind donation. We examined another potential reason that could account for donors' preference for in-kind contributions and proposed that physical goods encourage donors' imagination about how their contribution can be used to help the cause and people. The imagined scenario increased donors' perceived donation efficacy and they believed that the imagined scenario would actually happen, which then increased donors' donation likelihood. Our results complement recent findings Gershon and Cryder (2018). They examined how low-warmth donors were perceived by others and found that donating goods allowed low-warmth donors to receive more charitable credits. Our research was conducted from the perspective of the donors and suggest that donors, including but not limited to low-warmth donors, donate goods with the intent to help the recipients.

Our work also adds to the literature of consumer imagination, particularly in the area of charitable giving. While a great effort has been spent on understanding how imagination can be

elicited by advertising and increasing brand evaluation and purchase intention (Burns et al. 1993; Escalas 2004; Walter, Sparks, and Herington 2007), little attention has been given to the role imagination plays in a donation decision. To the best of our knowledge, we are the first to show the positive role of imagination plays in donors' decision about how to donate. Moreover, our findings provide support for a more general phenomenon about the positive effect of tangibility on generosity. The "identified victim effect (IVE)" suggests that people are more willing to spend resources to save the lives of identified victims compared to the same number of unidentified or statistical victims (Jenni and Loewenstein 1997; Small et al. 2007). One explanation for IVE is the tangible details the identified victims provide (Cryder, Loewenstein, and Scheines 2013). This paper outlined another situation where the tangibility of the form of donation can also increase donation likelihood.

We also provide practical implications to nonprofit managers. The results of study 3 revealed that although nonprofits might not be able to collect in-kind donations, they could increase donors' cash donation likelihood by specifying that their cash donations will be converted into some forms of in-kind donations and making them feel like they are contributing goods. Currently, it is not common practice for nonprofit organizations to specify how cash donations will be used. While nowadays more and more nonprofits raise donations via online channels, our research points out that nonprofits can significantly increase donations by converting cash donation into concrete in-kind forms. Our studies also point out that stimulated imagination from concrete physical donation is the reason behind donors' increased donation intention (Hung and Wyer 2009). In order to encourage cash donations, marketing managers can focus on creating advertisements that elicit imagination about how the cash donation can be used. For example, the advertisement can specify a scenario where people need water after an

earthquake and donors' cash donations will be used to buy water. The more details nonprofits can share such as to how and where they will purchase water and how the water will be delivered, the more effective their advertisement will be to induce imagination. More generally, we found that consumers were more likely to donate when they were more confident about how their contributions could help. When designing their campaigns, nonprofits should also pay attention to building potential donors' donation efficacy. Our findings revealed that specific instructions about how their donation could be used were effective at increasing donors' efficacy. We also believe that proving legitimacy, such as by showing a rating received by third-party assessment organizations (e.g., Charity Navigator) or credentials given by the government could also be used for such purposes.

Although most of the time it is more beneficial for donors to make cash donations, there are situations where nonprofits would prefer physical donations. Our results that construal levels can influence people's preferred donation type also provide guidance to nonprofits who target a wide range of potential donors. Different advertisements might need to be designed for different donors. Depending on the type of donation the nonprofit is seeking, strategies that elicit imagination might not be necessary (or even beneficial) for potential donors who are spatially or socially close. However, imagination is of importance to spatially or socially far away donors if the nonprofit hopes to collect cash rather than physical goods.

Limitations and Future Research

Studies that found donors' overhead aversion behavior normally manipulated the overhead amounts by stating a high (vs. low) percentage of participants' donations will be used to cover nonprofits' administrative expenses. However, like most nonprofit advertisements, our

studies did not specify the amount of donations used for admin purposes in order to avoid any negative attributes induced by such information. It is not clear whether donors will proactively consider overhead expenses when they encounter an ad that does not emphasize such information. Nonetheless, in study 4 we showed that our results were still supported when we controlled for participants' overhead aversion though our data revealed that participants estimated that a lower percentage of their donations will be used towards the actual program when nonprofits requested cash donations (vs. in-kind donations). Future studies can focus on increasing participants' cash donations by tackling the fungibility characteristic of cash and the potential misuse due to such characteristic. One solution provided by Gneezy, Keenan, and Gneezy (2014) was to use donations from major philanthropists to cover overhead costs and promise smaller donors to make overhead-free donations. Alternatively, nonprofits can redirect donors' attention from potentially using cash donations to cover overhead to how cash donations (vs. in-kind) can reduce overhead costs such as shipping or storing.

Our results suggest that donors engage in positive imagination about how in-kind donations can be used to help rather than negative imagination about how cash donations can be misused or stolen because of the positivity bias found that is often associated with imagery (Aydinoğlu and Krishna 2012; MacInnis and Price 1987). Imagination processes are more likely to be related to the positive elements of the stimulus than to the negative ones. However, it might be interesting to examine conditions under which donors could perform negative imagination. Any information about the nonprofit that may contain a negative signal could potentially lead donors to imagine or to consider the least desirable scenario, for example, donors might be more likely to imagine how their donations would be misused by nonprofits who do not yet have a

well-established reputation or are less known. In these cases, engaging in imagination may have a negative effect on donation likelihood.

Our mechanism of how physical objects can increase perceived donation efficacy through ease of imagination might also shed light on the role that imagination plays in the valuation effect (Lewin 1935) and devaluation effect (Brendl, Markman, and Messner 2003) during goal pursuit. The valuation and devaluation effect suggest that activating a goal can increase people's preference for goal-related objects and decrease people's preference for goal-unrelated objects. In the study conducted by Brendl and colleagues, they found that students were more willing to pay for a raffle with a tuition discount as prize than a raffle with a cash prize when the goal of paying tuition is salient. Although a cash prize can be used towards paying the tuition, students in the study did not perceive cash as an instrument for satisfying such goal. Our research suggests that the fungibility of cash may hinder people's imagination of how it can fulfill the activated goal of helping, which then decreases cash's instrumentality towards such goal. As a result, we can expect that whether an object will be perceived as goal-related or goal-unrelated could be determined by how easy it is for people to imagine it to fulfill the goal. Future research can examine this prediction.

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Figure 1: Donation Types X Imaginal Ability Interaction on Perceived Donation Efficacy (Study 4)

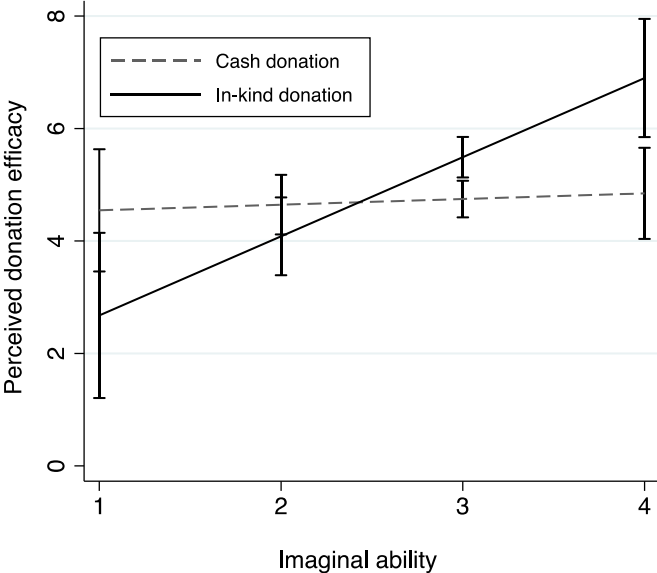


Figure 2: Donation Types X Social Distance Interaction on Perceived Donation Efficacy (Study 5)

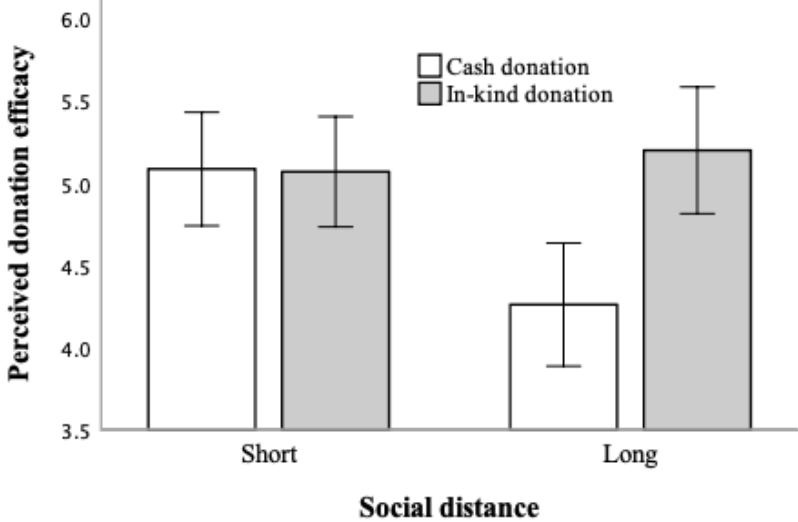


Table 1: Descriptive Statistics and Regression Results (Study 4)

A. Descriptive Statistics and Correlations

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. Age	37.11	12.19	1								
2. Gender	1.57	0.50	.003	1							
3. Donation type ^a	0.48	0.50	-.054	.040	1						
4. Imaginal ability	2.77	0.43	-.131	.167*	.049	1					
5. Perceived donation efficacy	4.96	1.48	-.085	.126	.153*	.179*	1				
6. Donation likelihood	4.67	1.80	.046	.154*	.334**	.165*	.649**	1			
7. Contribution percentage	69.60	30.30	-.023	.080	.259**	.147*	.472**	.445**	1		
8. Legitimacy	5.23	1.42	-.053	.146*	.047	.184**	.682**	.523**	.462**	1	
9. Trust	4.91	1.49	-.040	.093	.048	.145*	.728**	.550**	.493**	.771**	1

B. Regression Results

	Coefficient	SE	Coefficient	SE	Coefficient	SE
Dependent Variable: Perceived donation efficacy						
Model 1						
Constant	4.35 **	0.82	4.41 **	0.91	3.69 **	0.83
Donation type ^a	-2.94 *	1.36	-3.22 *	1.36	-3.47 **	1.23
Imaginal ability	0.14	0.29	0.02	0.30	-0.17	0.27
Donation type X Imaginal	1.21 *	0.48	1.31 **	0.49	1.28 **	0.44
Age			-0.01	0.01	-0.01	0.01
Gender			0.35	0.21	0.29	0.19
Contribution percentage					0.02 **	0.01
<i>R</i> ²	0.08		0.1		0.28	
Dependent Variable: Donation likelihood						
Model 2						
Constant	-0.34	0.80	-1.29	0.88	-1.24	0.87
Perceived donation efficacy	0.75 **	0.07	0.75 **	0.06	0.68 **	0.07
Donation type	1.92	1.26	1.74	1.26	1.45	1.26
Imaginal ability	0.32	0.27	0.20	0.27	0.26	0.27
Donation type X Imaginal	-0.38	0.45	-0.31	0.45	-0.32	0.45
Age			0.02 *	0.01	0.02 *	0.01
Gender			0.20	0.19	0.20	0.19
Contribution percentage					0.01	0.01
<i>R</i> ²	0.48		0.5		0.51	

Note.

^a Donation type was coded as follows: 0 = cash donation, 1 = in-kind donation; the results remained unchanged when -1 = cash donation and 1 = in-kind donation

*. Correlation is significant at the 0.05 level.

** . Correlation is significant at the 0.01 level.

Table 2: Conditional Indirect Effect of Donation Types on Donation Likelihood (study 4 & Study 5)

A: Study 4

Level of imaginal ability	DV: donation likelihood			
	Without covariates		With covariates (age, gender, and contribution percentage)	
	Estimate (SE)	CI	Estimate (SE)	CI
-1 SD	-.08 (.24)	[-.5497, .3946]	-.32 (.20)	[-.7219, .0406]
Mean	.31 (.15)	[.0414, .6172]	.05 (.13)	[-.1950, .3115]
+1 SD	.70 (.21)	[.3115, 1.1469]	.42 (.17)	[.1022, .7796]

B: Study 5

Social distance	DV: donation likelihood			
	Without covariates		With covariates (age and gender)	
	Estimate (SE)	CI	Estimate (SE)	CI
Short	-.01 (.18)	[-.3587, .3439]	-.01 (.18)	[-.3803, .3389]
Long	.70 (.21)	[.3015, 1.1197]	.70 (.21)	[.3021, 1.1229]

Table 3: Descriptive Statistics and Regression Results (Study 5)

A. Descriptive Statistics and Correlations

Variable	M	SD	1	2	3	4	5	6
1. Age	38.23	12.67	1					
2. Gender	1.68	0.47	.023	1				
3. Donation type ^a	0.50	0.50	.030	.024	1			
4. Social distance ^b	0.45	0.50	.003	-.039	-.030	1		
5. Perceived donation efficacy	4.92	1.62	-.048	.085	.130*	-.011	1	
6. Donation likelihood	5.13	1.89	.023	.057	.123*	-.201**	.642**	1

B. Regression Results

	Coefficient	SE	Coefficient	SE
Dependent Variable: Perceived donation efficacy				
Model 1				
Constant	5.09 **	0.18	4.82 **	0.46
Donation type ^a	-0.02	0.25	-0.02	0.25
Social distance ^b	-0.83 **	0.26	-0.81 **	0.26
Donation type X Social distance	0.96 **	0.37	0.95 **	0.37
Age			-0.01	0.01
Gender			0.29	0.20
R^2	0.05		0.06	
Dependent Variable: Donation likelihood				
Model 2				
Constant	1.42 **	0.31	1.19 *	0.48
Perceived donation efficacy	0.75 **	0.05	0.75 **	0.05
Donation type	0.49 *	0.22	0.47 *	0.22
Social distance	-0.10	0.24	-0.11	0.24
Donation type X Social distance	-0.79 *	0.33	-0.77 *	0.34
Age			0.01	0.01
Gender			-0.03	0.18
R^2	0.44		0.44	

Note.

^a Donation type was coded as follows: 0 = cash donation, 1 = in-kind donation; similar results were obtained when -1 = cash donation

^b Spatial distance was coded as follows: 0 = short distance, 1 = long distance; similar results were obtained when -1 = short distance

*. Correlation is significant at the 0.05 level.

**. Correlation is significant at the 0.01 level.

Appendix A: Google AdWords Advertisement (Study 2)

A: Cash Donation Condition

Donate Cash | Coronavirus in China | Help Today
Ad www.projecthope.org ▾
Donate cash to help those who live in the epidemic area from getting infected. Click the link to make a difference today.

B: In-kind Donation Condition

Donate Face Masks | Coronavirus in China | Help Today
Ad www.projecthope.org ▾
Donate face masks to help those who live in the epidemic area from getting infected. Click the link to make a difference today.

C: Cash Donation Condition with Imagination

Donate Cash to Buy Face Masks | Coronavirus in China | Help Today
Ad www.projecthope.org ▾
Imagine how your cash donation can be used to get face masks and help those who live in the epidemic area from getting infecte...

Appendix B: Study 3 Filler Tasks

Task 1: Please take a look at the image below. Which did you see first? A crocodile or a boat?



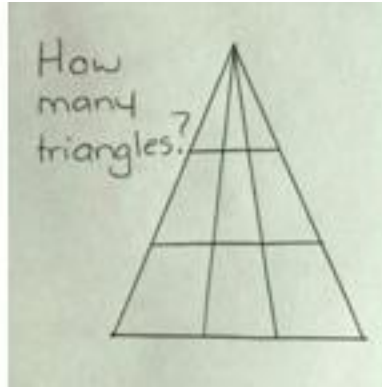
Task 2: How Many Elephants Do You See in This Picture?



Task 3: What did you see first? An old man or a woman.



Task 4: How many triangles do you see in the picture?



Appendix C: Charitable Organization Advertisements (Study 4)

A: Cash Donation Condition



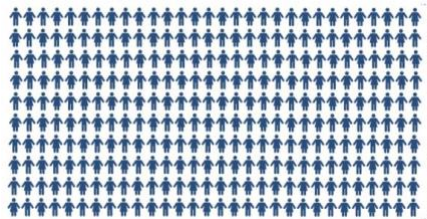
Children's Literacy Initiative is a 501(c)(3) non-profit working with pre-k through 5th grade teachers to improve early literacy instruction so that children become powerful readers, writers, and thinkers. Our goal is to close the literacy achievement gap between disadvantaged children and their more affluent peers.

We have received a 4-star rating from Charity Navigator, which means we are accountable, transparent, and financially healthy!

We particularly need donors who are prepared to make a difference by contributing money.



Two thirds of american children cannot read proficiently at the end of 3rd grade.



In low-income neighborhoods there is only 1 age appropriate book for every 300 children.



Coaches & mentors are found to be highly effective in helping teachers implement a new skill.

In coaching, teachers work with a master educator before, during and after a lesson, getting feedback on their implementation of a newly learned teaching skill.

Numerous studies have shown coaching to be successful at changing teacher practice and improving student learning.



We Coach Teachers

One-on-one and in small groups in the classroom – providing demonstrations and feedback that help teachers incorporate effective literacy practices into their daily work



We Stock Classrooms

We provide curated collections of high-quality children's literature and a variety of other learning materials important to successful literacy instruction.



We Provide Workshops & Seminars

to build teacher's knowledge of literacy content and pedagogy. We also extend our services with online professional development resources.

B: In-kind Donation Condition



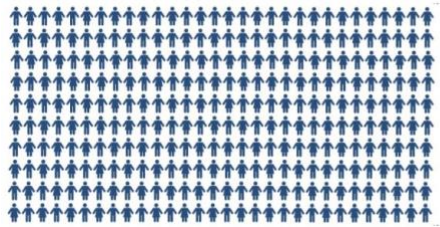
Children's Literacy Initiative is a 501(c)(3) non-profit working with pre-k through 5th grade teachers to improve early literacy instruction so that children become powerful readers, writers, and thinkers. Our goal is to close the literacy achievement gap between disadvantaged children and their more affluent peers.

We have received a 4-star rating from Charity Navigator, which means we are accountable, transparent, and financially healthy!

We particularly need donors who are prepared to make a difference by contributing physical objects, such as books or stationery.



Two thirds of American children cannot read proficiently at the end of 3rd grade.



In low-income neighborhoods there is only 1 age appropriate book for every 300 children.



Coaches & mentors are found to be highly effective in helping teachers implement a new skill.

In coaching, teachers work with a master educator before, during and after a lesson, getting feedback on their implementation of a newly learned teaching skill.

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Appendix D: Imaginal Ability Scale Questions

- 1) I like to "doodle".
- 2) I find it helps to think in terms of mental pictures when doing many things.
- 3) After I meet someone for the first time, I usually can remember what they look like, but not much about them.
- 4) There are some special times in my life that I like to relive by mentally "picturing" just how everything looked.
- 5) I seldom day-dream. (R)
- 6) When I have forgotten something, I frequently try to form a mental "picture" to remember it.
- 7) I like to picture how I could fix up my apartment or a room if I could buy anything I wanted.
- 8) My thinking often consists of mental "pictures" or "images".

CHAPTER 2

If I Can Change, So Can They: The Sense of Self-Discontinuity in Increasing Donation

Intention

Recipients of a charity campaign can be bifurcated between two groups according to the origin of their problems: innocent victims who are not personally responsible for their current unfortunate situations and those whose unfavorable situations can be attributed to their own actions. The first group includes recipients who were born into a less privileged background or suffered from natural disasters. The latter group, such as ex-offenders or people with a history of addiction, on the other hand, often made mistakes in the past that have caused their own miseries. Receiving support and assistance from the public is the first step for them to reintegrate into society. However, nonprofits often find themselves facing pushback from donors when raising donations for this group, as donors cast doubts on whether they are capable of changing or learning from their past mistakes.

Research in self-continuity might provide insights into donors' resistance as it suggests that people believe their core self remains unchanged. Chandler (1994) defines this sense of self-continuity as the ability to view oneself as an entity that "extends temporally both backwards into the past and forwards into the future". In contrast, people experience self-discontinuity when they perceive that who they are now is not connected to who they were in the past. The sense of self-continuity is essential for individuals because it allows them to feel a sense of coherence, particularly after experiencing difficult life changes (Sani 2008). Conventional wisdom also agrees with the concept of self-continuity and it is commonly said that one cannot snap their fingers and change who they are overnight.

Empirical evidence shows that individual donors are concerned with whether their donation can make a difference to the cause they are supporting (Bekkers and Wiepking 2011; Diamond and Kashyap 1997; Zhou et al. 2021) and donors are not willing to make a donation if they hold the perception that their donation will probably not make an impact (Duncan, 2004; Gneezy et al., 2014). Thus, the common belief of self-continuity could pose a challenge for nonprofits to overcome when they are raising donations for certain groups. If donors believe that the true self could never change, they are less likely to help those who have made mistakes in the past because their donation could be perceived as not meaningful or even wasteful. For example, in order for people to help someone who had a history of drug abuse, it is important for them to believe that the recipient could change from the past and put the money into good use. Otherwise, people might question whether the money donated would simply be used to continue along the existing path and, for example, for purchasing more drugs. Since self-continuity might add to the belief that people do not change, we propose that nonprofits could potentially benefit from a sense of self-discontinuity. By making donors experience that their current self is different from their past self, nonprofits could prime them with a changed mind-set that allows them to believe that the delinquent recipients could also change.

The current research contributes to theoretical and practical knowledge. It tests the hypothesis that self-discontinuity could have a positive influence in increasing donation intentions, particularly for delinquent groups who were blamed for their unfortunate situations. Studies in self-(dis)continuity mainly studied how a sense of self-continuity contributes to a consumer's welfare, such as increasing saving for the future (Bartels and Urminsky 2011), coping with job loss (Sadeh and Karniol 2012), or managing anxiety from death awareness (Sani, Herrera, and Bowe 2008). They found that feeling discontinued from the self could have a

negative consequence as it is a state that people often find psychologically distressing (see Sani 2008 for a review). However, we explore the bright side of self-discontinuity and suggest that making people feel discontinued from their past or future selves could increase their prosocial intentions. More importantly, we provide implications to nonprofits who are raising donations for delinquent recipients, such as those with addictions or criminal backgrounds. Empirical findings suggest that people are unwilling to help those who are perceived as responsible for their plight (Kogut 2011). Thus, our findings point a new direction for nonprofits when designing fundraising campaigns.

Study 1

In the first study, we aimed at providing initial evidence that the feeling of self-discontinuity could increase donations for delinquent recipients. Participants were asked to evaluate their donation likelihood for a beneficiary who needed help because of his gambling addiction. Gambling addiction was found to have a high relapse rate. A study with recovering gamblers revealed that only 8% of the sample was free from gambling after one year (Hodgins and el-Guebaly 2004). As a result, it is important for donors to believe that their donation will be put into good use and that the recipients will not gamble again in order for them to be willing to help. We expected that a sense of self-discontinuity could be effective at increasing participants' donation intention.

Method

One hundred and thirty participants took part in this study via Amazon Mechanical Turk. One participant did not finish the study and was excluded, leaving a final sample of 129

participants (48.84% male; $M_{\text{age}} = 39.09$ years, $SD = 12.29$). At the beginning of the study, we told the participants that the study included several tasks and each task was independent from the others. Participants were randomly assigned into one of two conditions (self-discontinuity vs. self-continuity). We followed the manipulation used by Zhang and Aggarwal (2015) and asked participants to first finish a writing task. In the self-discontinuity condition, we instructed them to “write down some fundamental aspects of yourself that will probably be different 5 years from now”. Those in the self-continuity condition were told to write down some fundamental aspects of themselves that would probably stay the same 5 years from now.

After participants finished the writing task, they proceeded to the second task. In this task, participants read about someone who needed help and indicated their willingness to help. They were told that “your community is raising money for Dan, a young man who lost his house because of his gambling addiction”. Then, we measured their willingness to donate by disclosing how likely they were to donate money to help Dan on a seven-point scale (1 = “extremely unlikely”, and 7 = “extremely likely”) and how much money they would be willing to donate on a scale from \$0 to \$100. We performed a Shapiro-Wilk test on the money they would be willing to donate and the result rejected the normality assumption ($p < .001$). Because the variable was skewed (skewness = 1.29), a logarithmic transformation was applied ($x_{\text{transformed}} = \ln [x+1]$). In the end, we collected participants’ demographic information and whether they have experienced an addiction (0 = no addiction history, and 1 = with an addiction history).

Results and Discussion

An independent-samples t-test was run to examine if the donation likelihood was different between self-discontinuity and self-continuity conditions. Consistent with our

expectation, donation likelihood was significantly lower for the self-continuity condition ($M_{sc} = 2.89$, $SD = 1.98$) than for the self-discontinuity condition ($M_{sdc} = 3.62$, $SD = 2.04$; $t(127) = 2.05$, $p = .04$). We also performed an ANCOVA with donation likelihood as the dependent variable and continuity manipulation (self-continuity vs. self-discontinuity) as the independent variable, and addiction history ($M = .4$, $SD = .49$) as a covariate. The result revealed that addiction history had a significant main effect on donation likelihood ($F(1,126) = 10.99$, $p < .01$; $\eta^2 = .08$). The self-discontinuity variable remained significant after controlling for participants' addiction history ($F(1,126) = 4.27$, $p = .04$; $\eta^2 = .03$).

Donation amount (log-transformed) indicated by the participants was significantly correlated with donation likelihood ($r = .88$, $p < .01$), and those who indicated a higher donation likelihood also indicated that they would donate more money. We performed a similar independent-samples t-test with the donation amount as the dependent variable. Participants in the self-discontinuity condition were willing to donate a significantly higher amount of money to the beneficiary ($M_{sc} = 1.58$ (\$16.98), $SD = 1.70$, $M_{sdc} = 2.26$ (\$22.95), $SD = 1.58$; $t(127) = 2.32$, $p = .02$). The ANCOVA with addiction history showed that the main effect of self-discontinuity on donation amount remained significant ($F(1,126) = 5.61$, $p < .02$; $\eta^2 = .04$) controlling for addiction history ($F(1,126) = 14.25$, $p < .01$; $\eta^2 = .10$).

Study 2: The Role of Self-Construal

In the first study we demonstrated that a sense of self-discontinuity could increase prosocial intention for delinquent beneficiary, however, we expect that the effect is conditioned by individual factors. People, especially those with strong attitudes, often resist attitude change (Ahluwalia 2000; Raju, Unnava, and Montgomery 2009). When facing information that is

contrary to what they believe, they generate counterarguments (Ahluwalia, Burnkrant, and Unnava 2000; Pratap and Maheswaran 2000) to reject the counter-attitudinal information and defend their position. Research in self-construal suggests that people with independent self-construal and interdependent self-construal might hold different views about self-discontinuity. Individuals with an independent self-construal tend to value consistency (Markus and Kitayama 1991). In this view, they believe that there is one true self that has stable characteristics and traits; on the contrary, people with a more interdependent self-construal perceive the self as part of the social group and are willing to adapt themselves to fit in (Cross, Gore, and Morris 2003). Moreover, western cultures, where people are mostly described as independent, tend to reject duality and contradiction while Asian cultures perceive them as common and natural (see Williams and Aaker 2002 for a review). Consequently, we propose that people's willingness to donate to delinquent recipients could differ between individuals with a more independent self-construal and individuals with a more interdependent self-construal when they are primed with a sense of self-discontinuity. Since independent individuals perceive the core self as not changeable, they are less likely to be affected by our manipulation and adopt a mindset that people could change. Furthermore, they may also experience psychological reactance and generate counter-arguments to defend their beliefs, further decreasing their donation intentions. On the other hand, we expect interdependent individuals to increase their donation intentions when primed with self-discontinuity. We do not expect a difference in willingness to donate when people are primed with a sense of self-continuity. We tested the moderating role of self-construal in study 2.

Method

We recruited a total of 102 participants for study 2 (42.16% male; $M_{\text{age}} = 39.66$ years, $SD = 14.87$). Participants were told at the beginning of the study that we were conducting research on a variety of topics and they would be performing a number of different tasks. In the first task, we manipulated self-discontinuity by having participants read a paragraph that discussed the instability (versus stability) of adulthood. The manipulation was previously developed and pre-tested by Bartels and Urminsky (2011). Participants were instructed to read the paragraph carefully and answer some questions about it later. We randomly assigned participants into the self-discontinuity or self-continuity conditions and displayed the paragraph as followed:

*“Recent research suggests that young adulthood is characterized by **instability / stability** in identity. Day-to-day life events change appreciably after entering into adulthood, but what changes the **most / least** is the person’s core identity. The important characteristics, which make you the person you are right now, **are different from those when you were a teenager / are established early in life and fixed by the end of adolescence**. Several studies conducted on people before and after adulthood **have found large fluctuations in these important characteristics / have shown that the traits that make up your personal identity remain remarkably stable.**”*

In the second task, participants were asked to evaluate a donation scenario. We told them that “we are a group of researchers who work with nonprofit organizations in Spain and the U.S. to understand people's donation choices. Meanwhile, we also try to collect donations for specific victims who are in need. We recently learned a story about a young man, Jason Campbell, from The National Center on Addiction and Substance Abuse, a nonprofit organization which is based in New York that received a rating of 88 out of 100 on Charity Navigator. Jason lost his

job due to alcohol addiction and now he is trying to fight his addiction and find a new job.” We also included a link to the National Center on Addiction and Substance Abuse on Charity Navigator to increase legitimacy. Our dependent variable was whether participants are willing to donate their payment earned from this study to the recipients. We stated that if their answer was yes, we would make a donation on their behalf.

Self-construal was measured by Singelis’ scale (Singelis 1994). This scale uses two sets of 12 items to measure chronic independent (Cronbach’s $\alpha = .78$) and interdependent (Cronbach’s $\alpha = .82$) self-construal. Participants indicated their agreement with each of the items on a 7-point Likert-type scale (1 = “strongly disagree”, and 7 = “strongly agree”). We created a self-construal index (Escalas and Bettman 2005) where a higher number represented higher interdependence.

Results and Discussion

Among all participants, 44% agreed to donate the payment they earned from participating in this study. To examine the effect of self-discontinuity and self-construal on the donation decision, we conducted a binary logistic regression of donation decision (coded 1 if the participant agreed to donate and 0 otherwise) with the following predicting variables: self-discontinuity manipulation (1 = “self-discontinuity”), self-construal index, and their interaction. There was no significant main effect of self-discontinuity on donation decision ($\beta = -.11$, $\chi^2(1) = .07$, $p = .80$) nor a significant main effect of self-construal on donation decision ($\beta = -.67$, $\chi^2(1) = .05$, $p = .82$). Nonetheless, we found a significant interaction of self-construal and self-discontinuity on donation ($\beta = 11.01$, $\chi^2(1) = 4.53$, $p = .03$). To interpret the interaction, we plotted the predicted probability of making a donation (figure 1). When participants experienced

self-continuity, the probability of agreeing to make a donation remained unchanged regardless of their self-construal. However, in the self-discontinuity condition, those who scored low on the self-construal index (thus more independent) had a lower probability of making a donation and those who scored higher on the self-construal index (thus more interdependent) had the highest probability of agreeing to donate their payments.

Study 1 manipulated self-discontinuity by making participants feel disconnected with their future self. Study 2 used a new manipulation and had participants experience discontinuity with their past self. Taken together, we showed that past self-discontinuity and future self-discontinuity could increase donation intentions for delinquent beneficiaries. Moreover, study 2 also supported our prediction that self-construal could moderate the effect of self-discontinuity on donation behavior. The findings demonstrated that a sense of discontinuity increased donation intention only for participants who had a more interdependent self-construal. Lastly, while study 1 measured donation intention, participants in study 2 had to face a donation decision with real economic consequence. Nonetheless, we obtained consistent results that supported our expectation.

Insert Figure 1 about here

Study 3: The Role of The Valence of Self-Change

Study 3 had two main goals. The first goal was to formally test the mediating role of the belief that one can change. In this study, we measured participants' perception about whether

they believe people can change. We expect that a sense of self-discontinuity could lead to a stronger belief that people could change, which would then increase donation intention.

Another goal of study 3 was to examine the influence of the valence of self-change. When experiencing self-discontinuity, the past or the future self could be either better or worse, as compared to the current self, depending on various factors such as manipulations or situational factors. It is unclear how the valence of self-change could have an effect on donation intention. On one hand, if self-discontinuity could remind people about the general idea that people can change, the direction of change might not matter. That is, even though people might experience discontinuity that is perceived as negative or positive, it could still make them believe that the change could happen for others. On the other hand, however, people might not be willing to help a delinquent recipient if they experience negative self-change. Consequently, we included the direction of change as an additional factor to test its role in increasing donation intention. In study 1 participants were faced with an open-ended question and listed how the future self could be different than the past self. However, because people tend to hold an optimistic view about the future, the change of themselves could be mostly positive. Indeed, we reviewed participants' answers and found that most of the answers described a change that was either positive or neutral. Only one participant noted something negative, stating that he will become slower as he ages. Participants in study 2 were primed that the core self could change by reading a paragraph and the valence of change might not be activated. Thus, in study 3 we manipulated the valence of self-change to test its role in predicting change beliefs and donation intention.

Method

Two hundred and forty participants (36.25% male; $M_{\text{age}} = 38.97$ years, $SD = 13.70$) were assigned at random to one experimental condition in a 2 (self-discontinuity vs. self-continuity) x 2 (change valence: positive vs. negative) between-subjects design. Participants in the self-discontinuity condition were asked to “give an example about one aspect of yourself that has changed over the last ten years” and participants in the self-continuity condition were asked to “give an example about one aspect of yourself that has stayed the same over the last ten years”. Moreover, depending on the change valence condition, the change they listed had to be something that they considered as positive or negative.

After participants finished the writing task, we showed them a scenario where someone needed help and asked them to indicate their willingness to help this person. The scenario was modified from a manipulation that was developed by Kogut (2011). All participants read the following case:

“Your community is raising money for Tom, a young man who has AIDS and is being treated at a medical center. Tom caught the disease while using intravenous drugs. His life is in danger. Recently, a new cocktail of medicines was developed that may improve his life expectancy and quality. Unfortunately, this cocktail is extremely expensive and is not covered by his medical insurance.”

After reading the scenario, participants indicated their willingness to help by answering the question “how likely are you to donate money to help Tom” on a seven-point scale (1 = “extremely unlikely”, and 7 = “extremely likely”). The change belief was measured by 3 items: “I believe that people can change”, “Because I can change from my past self, I believe Tom can change too”, and “I would not help Tom because I think he will probably start using drugs again”. We reverse-scored the last item such that higher numbers meant stronger belief that

people could change and averaged each participants' ratings across the three scale items (Cronbach's $\alpha = .74$). Lastly, we measured participants' self-construal (independent sub-scale Cronbach's $\alpha = .77$, interdependent sub-scale Cronbach's $\alpha = .81$) and constructed the self-construal index the same way as study 2.

Results

Regression results are reported in table 1. We first analyzed regression results with change belief as the dependent variable. We found a significant main effect of self-discontinuity ($\beta = .30, p = .05$) and a significant interaction effect of self-discontinuity and self-construal ($\beta = 3.88, p < .01$) when we added change valence ($\beta = .27, p = .06$) as a control variable (model 1). The interaction is plotted in figure 2. We did not find a significant three-way interaction when we added change valence as another factor ($\beta = -.80, p = .75$, model 2). We also split our data by change valence and found a significant interaction effect of self-discontinuity and self-construal both when the change was positive ($\beta = 3.86, p = .01$; model 3) and when the change was negative ($\beta = 4.66, p = .02$; model 4). Overall, we found that, regardless of whether the primed change was positive or negative, when reminded of self-change and experiencing self-discontinuity from their past self, those who were more interdependent indicated a stronger belief that people could change.

Insert Table 1 about here

Insert Figure 2 about here

We analyzed donation likelihood with self-discontinuity, change valence, and self-construal index as independent variables (model 6). We did not find a significant main effect of self-discontinuity ($\beta = .17, p = .57$) nor a significant main effect of self-construal ($\beta = 1.39, p = .37$). The main effect of change type was also not significant ($\beta = .46, p = .12$). However, we found a significant three-way interaction effect ($\beta = 8.75, p = .01$). To interpret the result, we plotted the results in figure 3. Specifically, when participants considered a positive change, the interaction of self-discontinuity and self-construal was significant ($\beta = 6.33, p < .01$; model 7). In the self-discontinuity condition, those who were more interdependent indicated a higher donation likelihood compared to those who were more independent ($\beta = 4.24, p < .01$); We failed to find a significant relationship between self-construal and donation likelihood in the self-continuity condition ($\beta = -2.09, p = .25$). This result is also consistent with study 2. When the change type was negative, we did not find a significant interaction effect of self-discontinuity and self-construal on donation likelihood ($\beta = -2.26, p = .40$; model 8). In summary, a sense of self-discontinuity significantly increased donation likelihood for participants with a more interdependent self-construal (vs. independent self-construal) when the discontinuity was considered as positive. Moreover, when people experienced a change from the past self where the past self is better than the current self (thus a negative change), a sense of self-discontinuity no longer increased interdependent individuals' donation likelihood to the delinquent beneficiary.

Insert Figure 3 about here

To test the mediating role of change belief and the moderating role of self-construal, we used Hayes' PROCESS macro model 7 in SPSS (Hayes 2013) with a bootstrapping of 5,000 samples and added the change type as a covariate. The overall moderated mediation was significant (indirect effect = 3.01, $SE = 1.24$; 95% CI [.8365, 5.7655]). The conditional indirect effect of self-discontinuity on donation likelihood was significant only when participants scored higher (thus more interdependent) on the self-construal index. The moderated mediation was also significant with the sub-sample that includes positive change only (indirect effect = 3.38, $SE = 1.80$; 95% CI [.1121, 7.1360]). It was not significant when the change was negative (indirect effect = 3.38, $SE = 1.93$; 95% CI [-.0467, 7.6751]).

In this study, we found that people demonstrated a stronger belief that people could change when they experienced a disconnection from their past self, no matter whether the disconnected past self is better or worse than their current self. However, when people considered a negative change and were reminded that the past self used to be better, those who were more interdependent did not increase their donation intention the same way as people who sensed a positive change. We expect that although a disconnection from the superior past self could prime people with the idea that people could change, making people realize that their current situation was somehow inferior to their past could also have negative effects on their donation intentions. For example, psychological discomfort or certain negative emotions could be invoked when people realize that their current situation is not as good as their past. They might also expect that the declining trend would carry over to their future, which could

encourage them to save more resources (money in this case) for the future self and prevent them from spending resources (such as giving money to other people) in the present.

General Discussion

Our research provides important contributions to the literature that studies donation behaviors. In the past, researchers in this area have mostly overlooked the beneficiaries who made mistakes in the past and, at least partly, caused their own suffering. Common belief suggests that people might not be willing to make donations to help delinquent recipients, as supported by recent studies (Kogut 2011). Another stream of literature demonstrates that donors often consider recipients as less mentally capable (Schroeder, Waytz, and Epley 2017) and we expect such belief to be stronger when the recipients are delinquent. Thus, it is essential, both theoretically and practically, to explore how to encourage donations for those recipients. Our studies provide one solution; to make donors experience a sense of self-discontinuity and prime them with a belief that people can change. Future research can examine more solutions to achieve the same goal. Furthermore, we believe that whether the recipients are innocent or delinquent could moderate many empirical findings in donation behaviors. For example, Kogut (2011) found that a recipient's identity could moderate the identified victim effect. Self-signaling theory reveals that people could derive utility from making donations by signaling their prosocial self-image (Andreoni and Petrie 2004) and we expect that targeting delinquent recipients (vs. innocent recipients) could strengthen such effect. Thus, researchers could re-examine existing findings by taking recipients' type into consideration.

Our research also extends the understanding of self-continuity in various ways. While research in this stream mostly studied past or future self-discontinuity separately, we introduced

a more comprehensive examination that included both future and past self-discontinuity. Moreover, existing studies mainly studied self-discontinuity when the past self is better than the current self. Iyer and Jetten (2011) propose that nostalgia has a negative influence on individuals' well-being if they experience self-discontinuity because it could serve as a painful reminder of what they have lost. Kim and Wohl (2015) identified a situation where self-discontinuity enabled people's readiness to change back to the better past self via longing for the past (nostalgia). Our research extends the discussion and provides a glimpse into the consequence of self-discontinuity with self-change in both directions. Specifically, we found that self-discontinuity could strengthen people's belief that people could change regardless of the direction of change, but it only increased people's donation intention for delinquent groups when they experienced disconnection from the inferior past self, which represented a positive change. Researchers found that individuals were more likely to make decisions that benefit the future self (such as saving money or eating healthily) when they feel connected with their future selves (Ersner-Hershfield, Wimmer, and Knutson 2009; Rutchick et al. 2018). By the same token, when people realize that their current self is declining, it may remind them that their future self might be not as good as the current self and increase the likelihood of making decisions that benefited their future self. This could also explain why participants did not increase their donation when they experienced negative self-discontinuity as they might try to save money for their future. Furthermore, past research has not studied whether self-continuity and self-discontinuity could result in similar consequences. Combining our findings with the existing findings, it seems that disconnection from the superior past self might produce the same effect as connecting with the future self. Future research could explore those questions in more details.

Our findings provide important practical implications to nonprofit and social work organizations, particularly those who work with delinquent groups. Gaining support and help from the community is the first step for them to reintegrate into society. Common fundraising strategies often attempt to induce the empathy of donors to encourage donation, however, it might be less effective for delinquent recipients. The nonprofits our research examined can pay attention to ensuring donors that the beneficiaries could change and get themselves out of their current unfortunate situation. Politicians and lobbyists who tried to pass bills (e.g., prison reform or managing opioid crisis) that benefit certain delinquent groups can also focus on building the confidence of the public. They can design campaigns that aim at making the public believe that people can change and their bills can bring value to the society.

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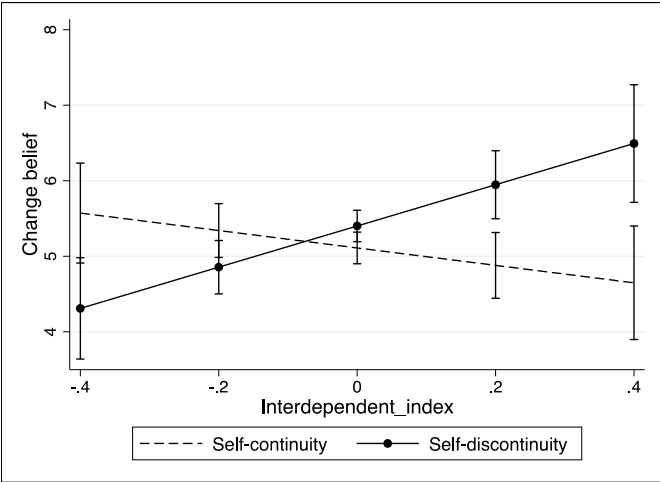
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Figure 1: The Effect of Self-Discontinuity and Self-Construal on Donation Decision

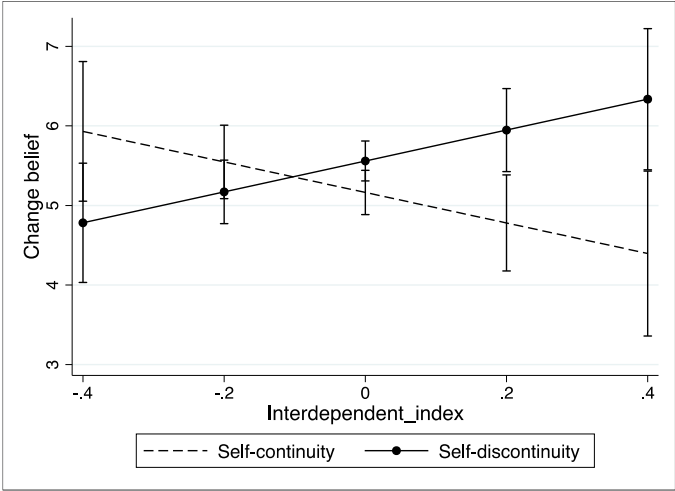


Figure 2: The Effect of Self-Discontinuity and Self-Construal on Change Belief

A. Full sample (model 1)



B. Positive change sub-sample (model 3)



C. Negative change sub-sample (model 4)

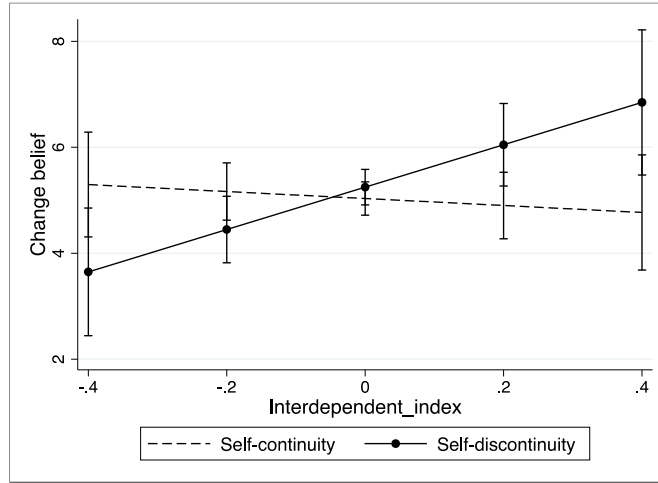


Figure 3: The Effect of Self-Discontinuity, Change Type, and Self-Construal on Donation Likelihood

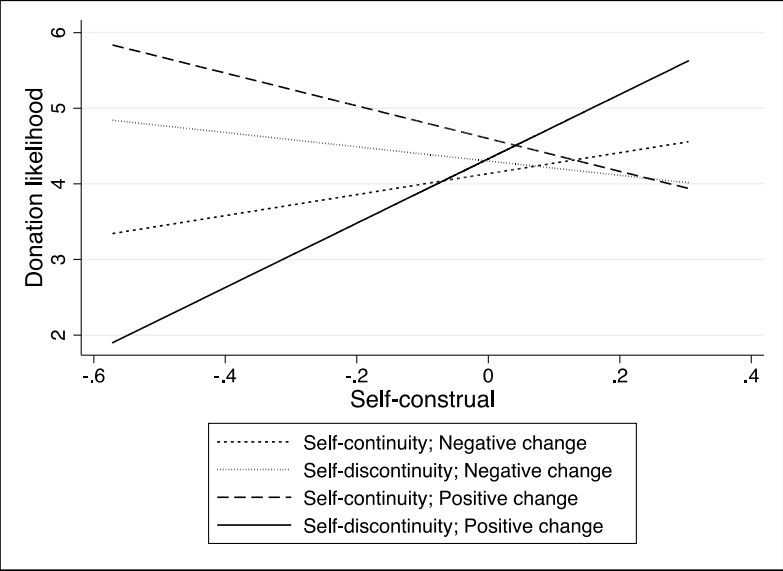


Table 1: Regression Results for Study 3

	Dependent Variable: Change belief (mediator)							
	Model 1 (Full sample)		Model 2 (Full sample)		Model 3 (Positive change sample)		Model 4 (Negative change sample)	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Constant	4.97 ***	0.13	5.03 ***	0.14	5.16 ***	0.14	5.03 ***	0.16
Self-discontinuity	0.30 *	0.15	0.21	0.21	0.40 **	0.19	0.21	0.23
Self-construal	-1.15	0.86	-0.66	1.13	-1.92	1.16	-0.66	1.25
Self-discontinuity X Self-construal	3.88 ***	1.23	4.66 **	1.81	3.86 **	1.52	4.66 **	2.01
Change type	0.27 *	0.15	0.13	0.22				
Self-discontinuity X Change type			0.18	0.30				
Change type X Self-construal			-1.26	1.75				
Self-discontinuity X Change type X Self-construal			-0.80	2.52				
R^2	0.07		0.08		0.07		0.06	
	Dependent Variable: Donation likelihood							
	Model 5 (Full sample)		Model 6 (Full sample)		Model 7 (Positive change sample)		Model 8 (Negative change sample)	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Constant	0.39	0.49	0.18	0.50	0.52	0.75	0.26	0.64
Self-discontinuity	-0.05	0.21	0.17	0.29	-0.28	0.29	0.17	0.31
Self-construal	-0.20	1.21	1.39	1.56	-2.12	1.76	1.38	1.64
Self-discontinuity X Self-construal	2.52	1.76	-2.33	2.53	6.33 ***	2.34	-2.26	2.70
Change type	0.21	0.21	0.46	0.30				
Self-discontinuity X Change type			-0.43	0.42				
Change type X Self-construal			-3.55	2.41				
Self-discontinuity X Change type X Self-construal			8.75 **	3.48				
Change belief (mediator)	0.74 ***	0.09	0.76 ***	0.09	0.78 ***	0.14	0.74 ***	0.12
R^2	0.26		0.29		0.31		0.25	

Note.

Self-discontinuity = 0 if self-discontinuity is low; Self-discontinuity = 1 if self-discontinuity is high.

Change type = 0 if the change is negative; Change type = 1 if the change is positive.

Similar results were obtained when self-discontinuity = -1 if self-discontinuity is low and change type = -1 if the change is negative

*. Correlation is significant at the 0.1 level.

** . Correlation is significant at the 0.05 level.

***. Correlation is significant at the 0.01 level.

CHAPTER 3

How Thinking About Donation Decreases Sellers' Subsequent Willingness-to-Accept Price

There are many disposition methods available for consumers who want to dispose of their possessions that they no longer need. For example, they can dispose of a possession by donating it to charity, by selling it on Ebay, or simply by throwing it into a trash can. In order to reach a decision, a consumer has to make a choice among one or a few disposition methods that are available. Donation and secondary market resale are two of the most common methods by which people dispose of their possessions. Contemporary research has largely examined the downstream consequences of each method in isolation. On one hand, studies about donation mainly focus on individual and socioeconomic determinants of donation behaviors (Bauman & Rose, 2011; Bussell & Forbes, 2002), as well as psychological factors that can affect people's donation behaviors (Desmet & Feinberg, 2003; Savary et al., 2015; M. Strahilevitz & Myers, 1998; Winterich et al., 2017). On the other hand, research on consumers' behavior in the secondary market mostly explores the dynamics between buyers and sellers (Kamins et al., 2004; Kim et al., 2009; Ku et al., 2006; Reynolds et al., 2009). Nonetheless, research has not examined how considering one disposition method could influence the final method selected. This research attempts to address this gap by exploring interplay between the two disposition methods. Specifically, this research studies how being asked to consider donating a possession could change an owner's selling price if they decide to sell the same possession. We break down how owners decide to dispose of their possessions into two decisions: 1) whether to dispose of this possession, and 2) how to dispose of this possession. Separating disposition decisions into two sub-decisions allow a more detailed approach to identify how donation consideration could

influence owners' selling price at different stage. We propose that donation consideration can ease the decision difficulty that could happen when owners try to decide whether to dispose of a possession, which eventually decrease the selling price owners ask for the same possession.

Since how owners choose to dispose their possessions is influenced by a set of distinctive factors (see Cruz-Cárdenas and Arévalo-Chávez 2018 for a review), this research solely studies owners who decide to sell their possessions. We decide to study the influence of donation consideration on sellers' WTA for both theoretical and practical benefits. Theoretically, while past research has spent a great effort to understand the factors that determine whether or not people choose to make a donation and how to increase donation (Chang 2008; Fisher, Vandenbosch, and Antia 2008), the consequences of how being asked to consider making a donation could influence subsequent behaviors have remained under-explored. Practically, it's relatively easy to encourage owners to first consider donating the items they are selling. For example, online marketplace website could remind owners that they could also donate the item before they post their item for sale. Existing findings about how owners determine their willingness-to-accept (WTA) price when selling possessions suggest that owners often demand a price that is much higher than the price that buyers are willing to pay (Carmon and Ariely 2000; Kahneman, Knetsch, and Thaler 1990, 1991), and this price gap between owner's WTA and buyer's WTP (willingness-to-pay) often prevent the buyers from buying the item, as well as sellers from selling the item. Our research shows that donation consideration could decrease the WTA price sellers ask, which can increase the chance of a successful transaction.

The rest of the manuscript is organized as follows. First, we introduce the two decisions owners face when they sell their possessions in more details and discuss how donation consideration provides justification for owners to not keep their possessions and eventually

decrease their WTA price. Then, empirical findings are presented to support our theoretical framework. Lastly, we discuss the theoretical and practical contributions, as well as the limitations and directions for future research.

Theoretical Background

The Two Disposition Decisions

Researchers have attempted to provide conceptual frameworks for consumers' disposition decision process. A group of researchers focused on the determinants of disposition decision. Burke, Conn, and Lutz (1978) first developed profiles of individuals who selected different disposition methods. They identified a taxonomy with two groups of disposition choices, discarding the product and all other disposition options, and suggested the main individual characteristics that determined the choice selection. Hanson (1980) extended their work and proposed a more detailed four-stage model, which incorporates personal factors, product factors, and situational factors, to guide the disposition decision process. Others tried to categorize different disposition choices. Jacoby, Berning, and Dietvorst (1977) first developed a taxonomy to account for consumers' major disposition behaviors. Three main disposition choices were summarized as 1) keep the product; 2) dispose of the product temporarily (including rent or loan the product to someone); and 3) dispose the product permanently (including abandon the product, give the product away, and sell or trade the product). Building upon their work, we break down how owners make decision about selling their possessions into sub-decisions. In order for an owner to sell a possession, he needs to make two decisions. First, he needs to consider whether he'd like to keep this possession. Once he decides that he no longer wants to

keep this item, he has to make a choice among all the disposition methods and eventually chooses to sell this item. Our framework is different than the taxonomy proposed by Jacoby et al. (1977) in a way that emphasizes the multiple decisions owners face. Instead of treating the decision of keeping or disposing as separate parallel decisions, our model allows the exploration of the interplay among the two decisions and the distinct influence of the donation consideration.

We propose that a consumer has to decide on whether to dispose his possession first. Various individual and situational factors can influence his decision at this stage. For example, he might be less likely to decide to get rid of the possession if the possession has special meaning to him. However, if the consumer is in the middle of packing and moving, he might be more inclined to not keep the possession for an easier move. Once the consumer decides that he will not keep the possession, his next decision focuses on how to dispose of the possession, where people can choose amongst different disposition methods such as donating, gifting, selling, or simply throwing away. Literature has identified a set of factors that can influence consumers' decision at this stage, such as culture, personal lifestyle, and product characteristics (Cruz-Cárdenas & Arévalo-Chávez, 2018). Depending on the method someone selects, each disposition method will require subsequent decisions to be made. If the consumer decides to donate the possession he needs to decide on which nonprofit organization to donate to. Alternatively, resale channel and selling price have to be determined if the consumer decides to sell the possession.

Getting Over Whether to Dispose A Possession with Donation Consideration

The endowment effect suggests that owners often demand a price that is much higher than the price that buyers are willing to pay (Carmon & Ariely, 2000; Kahneman et al., 1990, 1991) and this finding is supported by numerous studies. For example, a study conducted by

Genesove and Mayer (2001) showed that real estate owners who lived in their property asked for a higher selling price than owners who had the property for investment purposes. Subsequent research further demonstrated that non-owners could also become psychologically attached to objects by forming a sense of ownership rather than having actual ownership, which in turn increased their valuation of the object (Carmon et al., 2003). By employing the two disposition decisions, it could shed light on how owners end up with a higher WTA price. We propose that how owners decide to dispose of their possessions could influence their WTA price when they sell the same possessions. Specifically, if owners experience difficulties in deciding whether to dispose of this possession, they are more likely to ask for a higher WTA after they decide to sell this possession. Our mechanism has been supported by the feeling-as-information theory (Schwarz and Bohner, 1996; Schwarz, 1990; Schwarz and Clore, 1983). It states that people often make judgements about the valence of the current environment based on their affective states. This notion has also contributed to our understanding of how people make evaluations about objects. For example, Carmon, Wertenbroch and Zeelenberg (2003) argued that people experienced unpleasant emotions when making choices because “choosing feels like losing” the unchosen options. In turn, the unpleasant emotions increased the valuation of the unchosen items because people assumed that their discomfort arose because the unchosen items were better than they had initially thought.

Consequently, past studies that investigate why owners often demand a higher WTA price could be mapped into our proposed framework. Emotional attachment has been shown to play a role in the higher WTA price demanded by sellers (Ariely et al., 2005; M. A. Strahilevitz & Loewenstein, 1998). As people become emotionally attached to their possessions, they experience anticipated emotional distress caused by giving their items up when they decide

whether they should dispose of the possessions, and consequently demand a higher WTA selling price if they need to sell the possessions later. Building on such a notion, we expect that if we make sellers' experience of trying to decide whether to dispose of their possessions relatively easy, they will ask for a lower WTA price compared to those who experience difficulties of deciding whether to dispose of their possessions.

We further propose that asking owners to consider donating their possessions can help them ease the emotional distress incurred when deciding whether to dispose of those items, which then decreases sellers' WTA price. This is because donating their possessions to a charity to help people can work as a justification for disposing of the possessions, which makes the decision about not keeping the possession much easier to make. Justification has been examined to effectively influence how people make choices (Huber & Seiser, 2001; Kivetz & Simonson, 2002; Kivetz & Zheng, 2006). Research has shown that people are more likely to select an option with high ease of justification (Sela et al., 2009; Tversky & Shafir, 1992). For example, the studies conducted by Sela and colleagues revealed that people are more likely to select healthy food options, which are easier to justify, when they are facing choice difficulty with large assortments. In a similar vein, we expect that it will be easier for sellers to reach a decision to dispose of their possessions if we can provide viable justifications to the sellers or guide the sellers to find justifications. Donation, which is normally perceived as an act of altruism, is a good way to justify and legitimize behavior. Indeed, research has shown that the act of donating elicits positive feelings and moral satisfaction from the knowledge that one is helping others (Andreoni, 1989; Crumpler & Grossman, 2008; Kahneman & Knetsch, 1992). Imagine an owner who is trying to decide whether to keep an item that he has not used for quite a long time. If he particularly likes this item or the item has some special meaning to him, it would be very

difficult for him to come to a decision to get rid of it. However, he will be more likely to decide to not to keep this item if he knows that his possession will be used in a meaningful way. The findings of Brough and Isaac (2012) supported our arguments. They demonstrated that owners who were attached to their possessions preferred their possession to be used in a way that they deemed as appropriate.

Overview of Studies

We tested our predictions in five studies. Studies 1a and 1b established the main effect proposed by showing that considering a donation option first was effective at decreasing an owner's WTA price. In study 2, we tested how donation consideration could influence how owners decide whether to keep their possessions by manipulating whether owners had already come up with reasons regarding whether to keep or to dispose of their possessions. Study 3 tested the moderation role of possession attachment. Compared to owners who have high attachment with their possessions, owners who have low attachment with their possessions do not experience strong decision difficulty when they decide whether to keep their possessions. As a result, they also do not need the justification provided by donation consideration and their WTA might not be decreased the same way as highly-attached owners. This study also examined how donation consideration could reduce the decision difficulty by testing a specific emotion distress owners often experience when they try to dispose of their possessions. Study 4 ruled out anchoring as another potential explanation. We showed that the decrease of WTA was not due to a low anchor number implied by the donation option.

Studies 1A & 1B

The primary goal of studies 1a and 1b was to provide evidence that making owners considering donating their object first would decrease owner's WTA price if they decide to sell this object. In both studies, we asked participants to randomly recall an object that they currently possess and the participants wrote down their object without knowing that they would later determine a selling price for this item. This is to mimic a common situation where we encounter a possession we have in the house and thus enter the decision of whether to keep the possession.

Not all owners who are considering whether to sell their possessions will experience decision difficulty at the same level of intensity. Across their lifespan, owners often grow attached to their possessions, from the blankets they had as a child (Passman, 1977; Passman & Halonen, 1979; Weisberg & Russell, 1971) to the cherished objects they bring with them to the nursing home (Sherman & Newman, 1978). As previously noted, research on affect-based attachment suggests that people experience different levels of emotional distress when giving up their possessions depending on the extent to which they are emotionally attached to those possessions (Ariely et al., 2005). Bearing this in mind, we employed different attachment manipulations in the studies to ensure that the participants could experience decision difficulty when they decide whether to dispose of their items. In study 1a participants wrote down an object that reminded them of their families and in study 1b participants told us an object that brought them good memories.

Study 1a

In the past, researchers who characterized the types of material possession attachment found that owners' possession attachment had a past orientation (Kleine et al., 1995). Their findings revealed that people felt attached to their possessions when the possessions represented memories of others - including parents, other family members, or a person who was important to them - or simply represented an experience from the past. Thus, in our attachment manipulation we asked participants to recall an object that reminded them of their beloved family members. We expected that the WTA price would be lower for participants who were first asked to consider donation.

Method. One hundred and fifty-one participants took part in this study via MTurk. Seventeen participants were excluded because they failed to follow our instructions, leaving a final sample of 134 participants (47.01% male; $M_{\text{age}} = 34.76$ years, $SD = 11.48$). Participants were randomly assigned into one of two conditions (consider donation first vs. control). All participants were asked to recall an object they currently owned that was worth about \$100 when it was new, and that reminded them of their beloved parents or other family members. In the consider donation first condition, after participants recalled the object, we specified that they had the option to donate this object to a local charity and we asked them how likely they were to make such donation on a seven-point scale (1 = "extremely unlikely", and 7 = "extremely likely"). Participants were then asked for the minimum price they would demand (WTA price) if they were to sell said object. In the control condition, the order of presentation of the donation and WTA questions was changed. We first asked them the minimum price they would demand if they were to sell this object and then posed the question about their donation likelihood. A Shapiro-Wilk test was performed on WTA price and the result rejected the normality assumption ($p < .001$). Because the variable of WTA price was severely skewed (skewness = 11.57), a

logarithmic transformation was applied in this study and all subsequent studies ($x_{\text{transformed}} = \text{Log}_{10} [x+1]$).

We hypothesized that the thought of considering donating an object would decrease the seller's WTA for the same object. In our studies, participants were encouraged to consider donating their possessions first by answering the question of how likely they would be to make donations. Although, the donation likelihood question was intended to simply have participants ponder about donating their possessions, it is possible that how they answer this question has an effect on the WTA. To control for that possibility, donation likelihood was added as a covariate in our analysis. We aimed to show that considering donating the object prior to establishing their WTA, caused participants to establish lower selling prices regardless of whether they were inclined to donate or not. In other words, if the dummy variable for considering donation before WTA had an effect above and beyond the likelihood to donate, we would have evidence that the mere consideration of donation could lower sellers' WTA.

Results. An independent-samples t-test was run to determine if there were differences in the log-transformed WTA between the conditions of considering a donation option first and control. WTA price was significantly lower for the donation consideration group ($M_{\text{donation}} = 4.44$, $SD = 1.78$) than for the control group ($M_{\text{control}} = 5.42$, $SD = 2.47$; $t(132) = 2.64$, $p < .01$). We performed an ANCOVA with log-transformed WTA as the dependent variable and donation consideration (consider donation first vs. control) as the independent variable, and donation likelihood ($M = 3.28$, $SD = 2.18$) as a covariate. Whereas donation likelihood had a significant main effect on WTA ($F(1,131) = 11.67$, $p < .01$; $\eta^2 = .08$), the dummy for donation consideration remained significant ($F(1,131) = 5.79$, $p < .02$; $\eta^2 = .04$). That is, the WTA price was reduced for

the donation consideration group above and beyond any effects of the intention to donate (Marginal $M_{\text{donation}} = 4.50$; Marginal $M_{\text{control}} = 5.36$).

Study 1b

We used a different manipulation in study 1b. Owners' attachment was manipulated by having participants recall an object that reminded them of good memories. We predicted that donation consideration decreased owners' WTA price similarly as in the prior study.

Method. Two hundred and eighty-six participants were recruited from MTurk. Twelve participants were eliminated because they failed to follow the instructions. Thus, our analysis has 274 participants in total (40.88% male; $M_{\text{age}} = 36.39$ years, $SD = 11.92$). Participants were asked to tell us an object they currently own but no longer use that could be useful to someone else. The object should be something that they associated with good memories and experiences, and was worth about \$200 when it was new. Then participants were randomly assigned into either the donation consideration condition or the control condition. In the donation consideration condition, we measured their donation likelihood before WTA price and in the control condition, we measured the WTA price before donation likelihood. We performed a log transformation for participants' WTA price to reduce skewness (skewness = 3.04; normality test $p < .001$).

Results and Discussion. We used an independent-samples t-test to test the differences of log-transformed WTA between the donation consideration and the control groups. The WTA price was significantly lower for the donation consideration group ($M_{\text{donation}} = 4.21$, $SD = .93$ vs. $M_{\text{control}} = 4.42$, $SD = .80$; $t(272) = 2.03$, $p < .05$). Donation consideration (consider donation first vs. control) remained significant (Marginal $M_{\text{donation}} = 4.22$; Marginal $M_{\text{control}} = 4.42$; $F(1,271) =$

4.08, $p < .05$) in an ANCOVA with donation likelihood ($M = 4.15$, $SD = 1.89$) as a covariate ($F(1,271) = 26.96$, $p < .01$; $\eta^2 = .02$).

Taken together, study 1a and 1b provide initial support by showing that owners— who were somewhat attached to their possessions — demanded a lower WTA price when they were asked to consider donating their possessions to charity before deciding whether to dispose this item. The effect remained significant after we added donation likelihood as a covariate, which suggests that considering donation has an effect above and beyond the intention to donate.

Study 2

In study 2, we attempted to test how donation consideration influenced owners' decision about whether to keep or to dispose of a possession. We hypothesized that donation consideration works as a justification for owners to come to an agreement to dispose their possessions. If this is true, we can expect that donation consideration might not be as effective at decreasing owners' WTA price if the owners no longer need to use donation consideration to justify disposing of their possessions. To support this expectation, we manipulated whether owners had come up with reasons that why they should (or should not) keep their possessions before donation consideration. We expect that donation consideration will no longer be as effective at decreasing owner's WTA if they have come up with reasons about why they should not keep their possessions. Among owners who think about why they should keep their possessions first, donation consideration would provide them with viable reasons to not keep the items and thus decrease owners' WTA price.

Design and Procedure

We collected 250 participants via MTurk in study 3 (37.60% male; $M_{\text{age}} = 41.33$ years, $SD = 13.30$). We employed a 2 (provide reasons why you should keep this possession vs. provide reasons why you should not keep this possession) by 2 (consider donation first vs. control) between-participants factorial design and participants were randomly assigned to one of the four conditions. Similar to prior studies, all participants were asked to recall a possession that they had high attachment with (“Please tell us an object you currently own. You associate this object with good memories and experiences, and it was worth about \$200 when it was new”). Then, depending on the conditions, they were asked to list 3 reasons why they think they should keep or not keep this possession. In the consider donation first condition, once participants finished writing their reasonings, we asked them to consider donating this possession to charity by having them indicate how likely they were to make such donation on a seven-point scale (1 = “extremely unlikely”, and 7 = “extremely likely”). Then we asked them the minimum price they would demand if they were to sell this object. In the control donation, participants reported their minimum WTA immediately after they wrote their reasons. This study was pre-registered on Open Science Framework ([link](#)).

Results and Discussion

An ANOVA with log-transformed WTA (skewness = 7.45; normality test $p < .001$) as the dependent variable revealed a significant two-way interaction ($F(1, 246) = 4.76, p = .03; \eta^2 = .02$; figure 1). We also found a main effect of donation consideration on WTA ($M_{\text{donation}} = 4.60, SD = 1.24; M_{\text{control}} = 4.89, SD = 1.12; F(1, 246) = 3.97, p < .05; \eta^2 = .02$) and a main effect of

whether participants provided reasons why they should keep / not keep the possession on WTA ($M_{\text{notkeep}} = 4.53$, $SD = 1.12$; $M_{\text{keep}} = 4.96$, $SD = 1.14$; $F(1, 246) = 8.78$, $p < .01$; $\eta^2 = .03$). Planned contrasts revealed a significant difference between donation consideration condition and control condition when participants first wrote down reasons why they think they should keep this possession ($M_{\text{donation_keep}} = 4.66$, $M_{\text{control_keep}} = 5.27$; $p < .01$), and a non-significant difference when participants listed why they think they should not keep this possession ($M_{\text{donation_notkeep}} = 4.55$, $M_{\text{control_notkeep}} = 4.52$; $p = .89$).

Study 2 tested how donation consideration could change owners' WTA price in a more direct way. By asking owners to come up with their own reasons about why they should not keep their possessions, we made it easier for owners to reach the decisions about not to keep their items. In those situations, the justification provided from donation consideration was no longer needed and the WTA was low in both the control and the donation consideration conditions. For owners who had come up with reasons about keeping their possessions, it would be much more difficult for them to eventually dispose of their items. Consequently, they asked for higher WTA in the control condition. For the donation condition, as expected, donation consideration provided a viable justification for owners to dispose of their possessions, which successfully decreased their WTA price.

Insert Figure 1 about here

Study 3

In study 3, we sought to examine whether the effect of considering donating the possession before deciding to dispose it on sellers' WTA is moderated by possession attachment. We hypothesize that donation consideration could ease the decision difficulty owners experience when they decide whether to dispose their possessions. Compared to owners who has formed high attachment with their possessions, owners who do not have any attachment (or have low attachment) to their possessions would experience less decision difficulty during this stage, consequently, donation consideration might not influence their WTA the same way as the highly attached owners. In this study, participants were asked to recall an object (either with high attachment or low attachment), after which half were randomly assigned to consider donating the object first and the other half were assigned to the control condition. Possession attachment was manipulated by asking participants to recall an object that represented their self-identity. Given that people often regard their possessions as an extension of themselves, a possession is most likely to be linked to the self when it can help the owner restore and/or strengthen their self-identity, and symbolizes a core aspect of the self (Belk, 1988; Ferraro et al., 2011; James, 1890). Thus, to the extent that people form a stronger possession-self link with an object, they should have a correspondingly stronger attachment to this object. As owners usually experience more difficulties when deciding whether to donate the possessions they form a high attachment with, our expectation was that considering donation would decrease the WTA price of sellers who exhibited high attachment to the objects they were thinking about selling to a greater extent compared to the sellers with low possession attachment.

Another goal of study 3 was to examine how donation consideration could ease the decision difficulty of whether or not to dispose the item by examining a specific emotion distress that could incur during such stage. Owners could experience a feeling of guilt when deciding

whether to dispose the possessions, especially when they have high attachment with the possessions. Multiple sources can lead to such emotion. Owners' guilt can result from a violation of social norm, expectation or an identity. For example, owners who try to dispose of their possessions question whether they are "too hasty to get rid of their objects" or "not being sentimental enough" (Phillips & Sego, 2011). They might also feel guilty if disposing certain possessions does not meet the expectation of an ideal social identity. In a qualitative study of mothers who disposed of their children's possessions, Phillips and Sego found that mothers expressed significant feelings of guilt because a "good mother" identity implies a close connection with their children and the possessions that their children use, and discarding those possessions does not comply with such an identity. Moreover, owners may also feel guilty when they consider selling an object that they only used for a few times only because it might be seen as being wasteful (Morgan & Birtwistle, 2009). In our conceptual framework, we propose that donation consideration could relief owners' emotional distress when considering whether to dispose their possessions. Consequently, those who have considered donation first would demonstrate less feeling of guilt about disposing their possessions. We tested this expectation by measuring the feeling of guilt owners experience when selling their possessions.

Design and Procedure

Two hundred and thirty-four participants were recruited from MTurk. Six participants were excluded because they failed to follow the instructions. We also eliminated four participants who indicated that they would never sell their objects, leaving a final sample of 224 participants (33.93% male; $M_{age} = 38.55$ years, $SD = 13.02$). This study employed a 2 (consider

donation first vs. control) x 2 (possession attachment: high vs. low) between-participants factorial design.

Participants were asked to “describe an object you currently own that was worth about \$100 when it was new.” Participants in the high attachment condition were asked to choose an object that was important to them and helped to define who they were. In the low attachment condition, participants were told that the object should be something that had no special meaning to them. Next, participants were randomly assigned into either the donation consideration condition or the control condition. In the donation consideration condition, we asked participants to consider donating this object to a local charity, the same way as in previous studies, before measuring their WTA price. Participants also rated to what extent they felt guilty about selling this item on a seven-point scale (1 = “none at all”, and 7 = “to a very great extent”). In the control condition, we asked their WTA price directly, then measured the feelings of guilt from selling the possessions and their donation likelihood.

Results and Discussion

An ANOVA was conducted with donation consideration and possession attachment as the independent variables, and feelings of guilt as the dependent variable. Results indicated no main effect of donation consideration ($M_{donation} = 2.01$, $SD = 1.23$; $M_{control} = 2.26$, $SD = 1.44$; $F(1, 220) = 2.08$, $p = .15$, $\eta^2 = .01$). However, a significant main effect of possession attachment was found ($M_{high-attachment} = 2.59$, $SD = 1.47$; $M_{low-attachment} = 1.71$, $SD = 1.05$; $F(1, 220) = 25.59$, $p < .001$, $\eta^2 = .10$). Of more importance, a significant two-way interaction also emerged ($F(1, 220) = 6.21$, $p = .01$; $\eta^2 = .03$; figure 2). Specifically, as predicted, participants in the high-attachment condition reported lower feelings of guilt when they were first asked to consider the donation

option as compared to the control condition ($M_{donation} = 2.24$, $SD = 1.37$; $M_{control} = 2.90$, $SD = 1.51$; $F(1, 220) = 7.52$, $p = .007$). However, no difference was found in the low-attachment condition ($M_{donation} = 1.80$, $SD = 1.05$; $M_{control} = 1.63$, $SD = 1.05$; $F(1, 220) = 0.57$, $p = .45$). Next, an ANOVA was conducted using the same independent variables and log-transformed WTA (skewness = 4.63; normality test $p < .001$) as the dependent variable. The results indicated a significant main effect of donation consideration on WTA ($M_{donation} = 3.82$, $SD = .85$; $M_{control} = 4.26$, $SD = .92$; $F(1, 220) = 15.98$, $p < .001$; $\eta^2 = .07$) and a significant main effect of possession attachment on WTA ($M_{high-attachment} = 4.32$, $SD = .97$; $M_{low-attachment} = 3.77$, $SD = .75$; $F(1, 220) = 25.12$, $p < .001$; $\eta^2 = .10$). More importantly, the two-way interaction was significant ($F(1, 220) = 5.94$, $p < .02$; $\eta^2 = .03$; figure 2). Confirming expectations, in the high-attachment condition, participants' WTA was significantly lower when they considered donating the object first ($M_{donation} = 3.97$, $SD = .99$; $M_{control} = 4.68$, $SD = .83$; $F(1, 220) = 20.13$, $p < .001$). However, in the low-attachment condition, considering donation did not affect participants' WTA ($M_{donation} = 3.68$, $SD = .68$; $M_{control} = 3.85$, $SD = .81$; $F(1, 220) = 1.25$, $p = .26$).

An ANCOVA with donation likelihood ($M = 3.63$, $SD = 2.18$) as a covariate revealed a similar result. There was a main effect of possession attachment on feelings of guilt ($F(1, 219) = 25.59$, $p < .001$; $\eta^2 = .08$), a non-significant main effect of donation consideration on feelings of guilt ($F(1, 219) = 1.18$, $p = .28$; $\eta^2 = .01$), and a significant interaction effect ($F(1, 219) = 6.72$, $p = .01$; $\eta^2 = .03$) when we added the feelings of guilt as the dependent variable. When we used WTA as the dependent variable, we found a significant main effect of possession attachment on WTA ($F(1, 219) = 14.85$, $p < .001$; $\eta^2 = .06$), a significant main effect of donation consideration on WTA ($F(1, 219) = 10.30$, $p < .01$; $\eta^2 = .05$), and a significant interaction effect ($F(1, 219) = 8.03$, $p < .001$; $\eta^2 = .04$).

Insert Figure 2 about here

The mediated moderation was analyzed by using PROCESS macro model 8 (Hayes, 2013) with 5,000 bootstrapped iterations. The indirect effect of the two-way interaction on WTA through feelings of guilt was significant (indirect effect = $-.07$, $SE = .05$; 95% CI [$-.2141$, $-.0034$]), which supported the mediated moderation. For high-attachment participants the conditional indirect effect of considering donation on WTA was significant (indirect effect = $-.06$, $SE = .04$; 95% CI [$-.1758$, $-.0013$]), whereas for low-attachment participants the same conditional indirect effect was not significant (indirect effect = $.02$, $SE = .02$; 95% CI [$-.0117$, $.0798$]).

The results of study 3 supported the moderation role of possession attachment. Among owners who had high attachment with their possessions, donation consideration reduced the feeling of guilt they had when they tried to decide whether to dispose of their possessions, which then reduced the WTA price they asked. Donation consideration did not decrease the WTA price of owners who had low attachment with their possessions. This is as expected since low-attachment owners did not experience the same choice difficulty when they were trying to decide whether to keep the possessions or not.

Study 4

The objective of study 4 was to rule out the anchoring effect. Past research has shown that people's numerical estimates were influenced by irrelevant numbers, such as a randomly drawn number or the last digits of one's social security number (Furnham and Boo 2011; Loewenstein, Ariely, and Prelec 2003; Tversky and Kahneman 1974). In our studies, asking participants to think about whether to donate the object first might have provided an anchor of \$0 because they would not receive any monetary return if they chose to make the donation. As a result, these participants may have used \$0 as a reference point and then later adjusted their WTA price from \$0. However, for participants who were asked to disclose their WTA price first, their reference point might be the object's initial cost or the value they believed the object to be worth, which was normally higher than \$0. In this study, we aimed to formally rule out the anchoring explanation by adding a "consider selling for one dollar" manipulation. If asking consumers whether they would donate the object provided an anchor of \$0, then asking them if they would sell the object for \$1 would also provide an anchor that should affect WTA. If the effects obtained with the donation manipulation were due to anchoring, we should expect to find that the one-dollar condition would produce similar effects to the donation consideration condition.

Design and Procedure

One hundred and eighty-one participants were recruited via MTurk. Thirteen participants were removed because they did not recall an object as per our instructions, leaving a final sample of 168 participants (44.58% male; $M_{\text{age}} = 37.57$ years, $SD = 12.40$). Participants were randomly assigned into one of the three conditions (consider donation first vs. consider selling for \$1 first vs. control).

Participants were asked to recall an object to which they were attached. The instructions were as follows: “Please tell us an object you currently own that was worth at least \$200 when it was new. It should be something that you have not used for a long time. Also, the object should be something that is important to you and helps to define who you are. If you were describing yourself, this object would likely be something that you would mention.” Then, they were randomly assigned into one of the three conditions: 1) being asked about whether to donate this object first; 2) being asked about whether to sell this object for \$1 first; and 3) the control condition. In all conditions, participants were asked to imagine that they were cleaning out their home and came across this item. In the donation condition, we specified that they could donate this item to a local charity and asked them how likely they would be to make such donation. Donation likelihood was measured on the same seven-point scale. After participants indicated their donation likelihood, we told them to imagine that they decided not to donate this object, but instead were now considering selling the object at a second-hand store. Participants wrote down the minimum price they would demand if they were to sell this object. Finally, we asked participants in the donation condition to rate how likely they were to sell this object for \$1 on the same seven-point scale (1 = “extremely unlikely”, and 7 = “extremely likely”). The consider selling for \$1 condition was identical to the donation condition, with the exception that participants were asked how likely they would be to sell this object for \$1 first. We then measured their minimum WTA and donation likelihood. In the control condition, we asked the participants to indicate their WTA price first. Participants in the control condition also stated how likely they were to donate the object or and sell it for \$1 after stating their WTA. In the end, participants from all conditions wrote down the cost of the object they recalled. As in previous

studies, WTA was log-transformed to reduce skewness (skewness = 2.51; normality test $p < .001$).

Results and Discussion

A one-way ANCOVA with WTA price as the dependent variable and consideration manipulation (consider donation first, consider selling for 1\$ first, vs. control) as the independent variable, and cost (log-transformed) as a covariate showed a significant main effect for consideration manipulation ($F(2, 164) = 3.39, p < .04; \eta^2 = .04$). Cost was also significant ($F(1, 164) = 63.53, p < .001; \eta^2 = .28$). Planned contrasts revealed that the WTA price of donation consideration condition was significantly lower than control condition ($M_{donation} = 4.49, M_{control} = 4.97; p < .02$; figure 3) and consider selling condition ($M_{donation} = 4.49, M_{sell} = 4.90; p < .04$; figure 3). No difference was observed between control condition and consider selling condition ($p = .71$; figure 3).

Insert Figure 3 about here

The results of study 4 ruled out anchoring as an alternative explanation. We observed that considering donation reduced WTA vis-à-vis the control group, but considering selling the object for \$1 did not. This suggests that it is not the low monetary return of donating that causes the reduction on WTA.

General Discussion

Theoretical and Practical Contributions

Connecting the literature of donation and secondary market resale, our research examined how these two product disposal channels can interact with each other. We argue that considering donation can decrease the decision difficulty owners face when they try to decide whether to dispose their possessions. Across five studies, we obtained evidence to support our predictions. We contribute to the marketing and psychology literatures in several ways. To the best of our knowledge, this is the first work that examines the interaction of two of the most common product disposal methods: selling and donating. We examined how considering whether to donate one's possessions could influence participants' selling behavior. In a non-intuitive manner, we found that charity encouraged subsequent disposal behavior in the form of selling rather than deterring. Second, and more broadly, we explored the effect of providing a donation option on subsequent economic behavior. While most researchers have investigated the factors that determine whether or not people choose to make a donation (Chang, 2008; Fisher et al., 2008), few efforts have been made to understand the economic consequences of considering the option to donate one's possessions. Lastly, while asking for a higher WTA price for possessions to which one is more attached has been well documented and widely accepted (Ariely et al., 2005; Kahneman et al., 1991), we proposed a situation where highly attached seller's WTA could be decreased to a greater extent.

This research also has practical implications for owners of second-hand stores and managers of nonprofit organizations, who usually have been seen as competitors in the area of consumer disposal. Both nonprofits and companies who are engaged in the secondary market

business rely on consumers to give up their possessions to increase their inventory, and both are facing the obstacle that consumers can become attached to their possessions and thus are reluctant to give them up. It is quite common to observe the use of charity as purchase incentives (Strahilevitz and Myers, 1998). Examples include Yoplait's long-running "Save lids to save lives" campaign where Yoplait donates 10 cents to breast cancer fundraising event for each lid consumers mail in. However, our paper proposes that charity can also incentivize selling. Instead of competing with each other on goods/donations, we argue that nonprofits and secondary market sellers can mutually benefit from working together. Nonprofits can benefit from marketing their name and cause, and for second-hand stores, our donation strategy effectively decreases sellers' WTA price. Our research also contributes to consumer welfare by encouraging product disposal and reducing hoarding behavior. While nowadays most resale activities are online, internet platforms, such as Ebay, that are in the business of secondary market can employ our methods to decrease consumers' selling price, which increases the probability of a successful resale transaction.

The Influence of Donation Consideration After Owners Decide to Sell Their Possessions

This research examined how donation consideration could influence owners before they decide to dispose of their possessions, but could donation consideration change an owner's WTA after he has decided that he will dispose his possession? We expect the answer to be positive. Once an owner decides that he wants to get rid of his possession, he still needs to choose amongst various disposition methods. At this stage, having owners consider donating the items first changes the sequence of the disposition choice set and moves donating to the first option to be evaluated. The moral licensing effect (Khan & Dhar, 2006) predicts a situation where

committing to donating could activate positive self signals. In their studies, Khan and Dhar found that consumers were more likely to choose a luxury item if they had made a commitment to donate to a charity. Although purchasing luxury items usually produces negative self-attributions (Dahl et al., 2003), they argued that merely committing to a virtuous act (e.g., making a donation) could activate consumers' positive self-concept, thus mitigating the negative attributions people make to themselves. However, while making a donation is often considered as an altruistic act, turning down a donation can be perceived as being greedy or selfish and bring negative self-attributions (Savary, Goldsmith, and Dhar 2015). Consequently, we expect that those who evaluated the donation option first and then moved to evaluate sale option would later ask a lower WTA to avoid the negative self-attribution incurred from not donating the object. Empirical evidence has provided support for such behavioral pattern. People tend to engage in subsequent reparation action if they experience a threat of personal attributes from their action or choice. For example, a study conducted by Amodio, Devine, and Harmon-Jones (2007) found that those whose task responses were evaluated as anti-Black tended to demonstrate greater interest in participating in the prejudice-reducing action when they were presented with such an opportunity. Ward and Broniarczyk (2011) provided another case where consumers engaged in actions to restore their identities after experiencing identity threat.

To explore this possibility, we conducted another study which employed an experimental setting that is commonly used to test the endowment effect (Kahneman et al., 1990, 1991) to examine how donation consideration can reduce sellers' WTA in a more subtle way. In this study, the endowed owners, while knowing that the item they have will be sold, were asked to consider donating the item by evaluating the donation likelihood. The study was also conducted in a real transaction context with the Becker, DeGroot, Marschak ("BDM") mechanism (Becker

et al., 1964) to increase external validity. The BDM mechanism has been widely used in the studies of WTP-WTA gap to elicit participants' true valuation of objects (see Plott & Zeiler 2005, table 1 for a review). In the BDM mechanism, a seller is matched with a random bidding price. If the seller's WTA price is higher than the random bid, he must sell the good and receive an amount of money that is equal to the random bid; if the seller's WTA price is lower than the random bid, he must retain the object. Under such design, the seller's dominant strategy is to truthfully indicate his WTA price in the transaction as he cannot influence the randomly generated bidding price (Davis & Holt 1993, p.461).

Eighty-four (80.95% male; Mage = 19.30 years, SD = 1.04) undergraduate students from a central Chinese university participated in this study. In the instruction, the students were asked to participate in a pricing game and set a selling price for a reusable water bottle as if they were the owner of the object. We explained that we would randomly draw 5 students and gift each student a bottle. They were also told that we would randomly draw a buying price at which they could sell the bottle if they won one. Following the BDM design, if the student's selling price was lower than the randomly drawn buyer's price, she/he would sell the bottle and receive cash in the amount of the randomly drawn price. If the student's selling price was higher than the randomly drawn price, the transaction would fail and she/he would keep the bottle. In order to help them better decide their WTA price, we provided them with a picture and some main characteristics (e.g., capacity, size, and material) about the reusable water bottle. In order to make our experimental design close to the real life setting where owners are often informed about the current market value of the object they are selling by searching the similar object online, the students were also informed that the water bottle was currently selling at a price that ranges from 55RMB to 108 RMB (roughly \$8 to \$15). After reading the information about the

buying/selling procedure and about the water bottle, all students were asked to elaborate on the following two questions: 1) Please tell us what you like about this water bottle, and 2) Please imagine being the owner of this water bottle and write down a scenario about when, where, and how you can use it. Drawing on prior research that people are more likely to believe an event is true if they have imagined such event in their mind first (Anderson, 1983; Kahneman & Tversky, 1982; Schwarz, 2004), the second question aimed to increase students' attachment as if they were actually the owners of the water bottle. Then, all students were randomly assigned into donation consideration or control group. In the donation consideration group students read the following: "Before you decide your WTA price, we would like to collect your opinions about making physical donations for a nonprofit. Your answer will not affect the result of this game. Nowadays, nonprofits receive not only cash donations, but also donations in the form of physical goods. As a donor, you do not have to worry about whether your physical donation is useful for the beneficiary. If your physical donation is needed by the beneficiary, the nonprofit will distribute your donation to them directly. If your physical donation is not needed by the beneficiary, the nonprofit can sell your donation via online channels and the cash received from the sale will be used to help the beneficiary". Then, the students were asked to indicate how likely they were to donate this water bottle if they were asked by a nonprofit on a seven-point scale and elaborated why they made such choice. Once students provided their answers to the donation consideration questions, they were asked to provide their WTA price for the water bottle and rated to what extent they felt guilty about selling this water bottle on a seven-point scale (1 = "none at all", and 7 = "to a very great extent"). For the students in the control condition, we measured their WTA and feelings of guilt about selling the water bottle before having them consider about donating it to the nonprofit. Because the WTA variable was skewed

(skewness = 1.50) and failed the normality assumption ($p < .001$), it was log transformed the same way as studies 1a and 1b.

An ANCOVA with WTA as the dependent variable, donation consideration as the independent variable, and donation likelihood ($M = 5.21$, $SD = 1.77$) as the covariate showed a significant main effect of considering donation first on WTA for the water bottle ($M_{\text{donation}} = 4.04$; $M_{\text{control}} = 4.27$; $F(1,81) = 4.29$, $p < .05$; $\eta^2 = .05$). Donation likelihood did not significantly affect WTA price ($p = .98$). This study employed a design that is similar to the real-life situation where owners sell their possessions with limited market information. Students' true valuation of the object was elicited by using the BDM procedure, which is incentive compatible. The results supported our hypotheses that considering donating an object can decrease the owners' WTA price for the same object when they know that the object will be sold later.

Could donation consideration influence sellers' WTA price after they have decided to sell their possession? We believe the answer is still positive. Owners can reach a decision to sell their possessions through various decision routes. For example, they might have considered every disposition method and decided that selling their object is the most optimal option. Alternatively, they might have formed a disposition habit and always sell possessions that they no longer need. In this case, they probably will not evaluate other disposition methods. Nonetheless, we expect that by making a donation option salient, sellers would still ask for a lower WTA price to avoid the negative self attributes caused by forgoing the donation option.

Limitations and Future Research

Although we conducted a preliminary study to show that donation consideration could decrease owners' WTA price after they have decided to dispose of their possessions and

proposed that owners could ask for a lower WTA to avoid the negative self-attribution incurred from not donating the item, we did not specifically test this hypothesis. In the next step, researchers could examine this process formally, as well as explore the boundary conditions. Additionally, researchers can examine whether individual differences will change our results. For example, the donation strategy might be less efficient for hoarders than for average consumers.

Because we are interested in sellers' psychological processes when deciding about their WTA price, most of our studies are based on controlled hypothetical situations or lab experiment. Future research can examine our hypotheses with secondary data. Furthermore, the scope of our studies is limited to objects that people may consider selling, and our findings might not apply to situations where people are extremely attached to their possessions, thus unwilling to sell them. For example, in one of our studies, one participant recalled her wedding ring when she was asked to tell us an object that represented her self-identity. Unsurprisingly, in the debriefing she said that she would never sell this object. Moreover, product disposal methods are not limited to sale and donation. Consumers can also give their possessions to others as gifts or simply throw them away. In a similar vein, researchers can further examine the interaction of other disposal methods. Finally, while it is widely accepted that contributing to charity can bring positive feelings to donors, the consequences of turning down a charitable contribution offer remained unexplored. While our research studies the positive consequences of forgoing a charity offer, we acknowledge there might be negative consequences as well. We will leave these questions to future work.

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Figure 1: Donation Consideration and Reasons on WTA (Study 2)

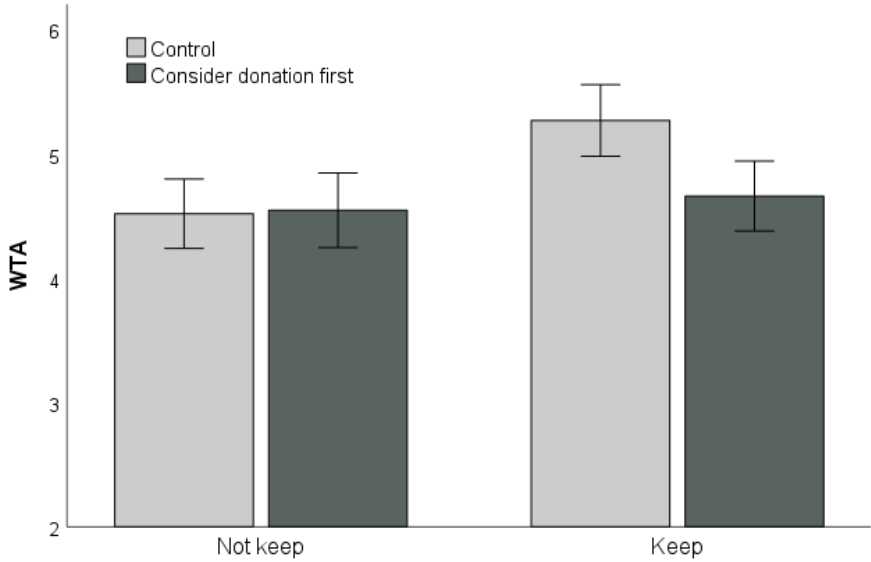


Figure 2: Donation Consideration and Possession Attachment on Feelings of Guilt and WTA (Study 4)

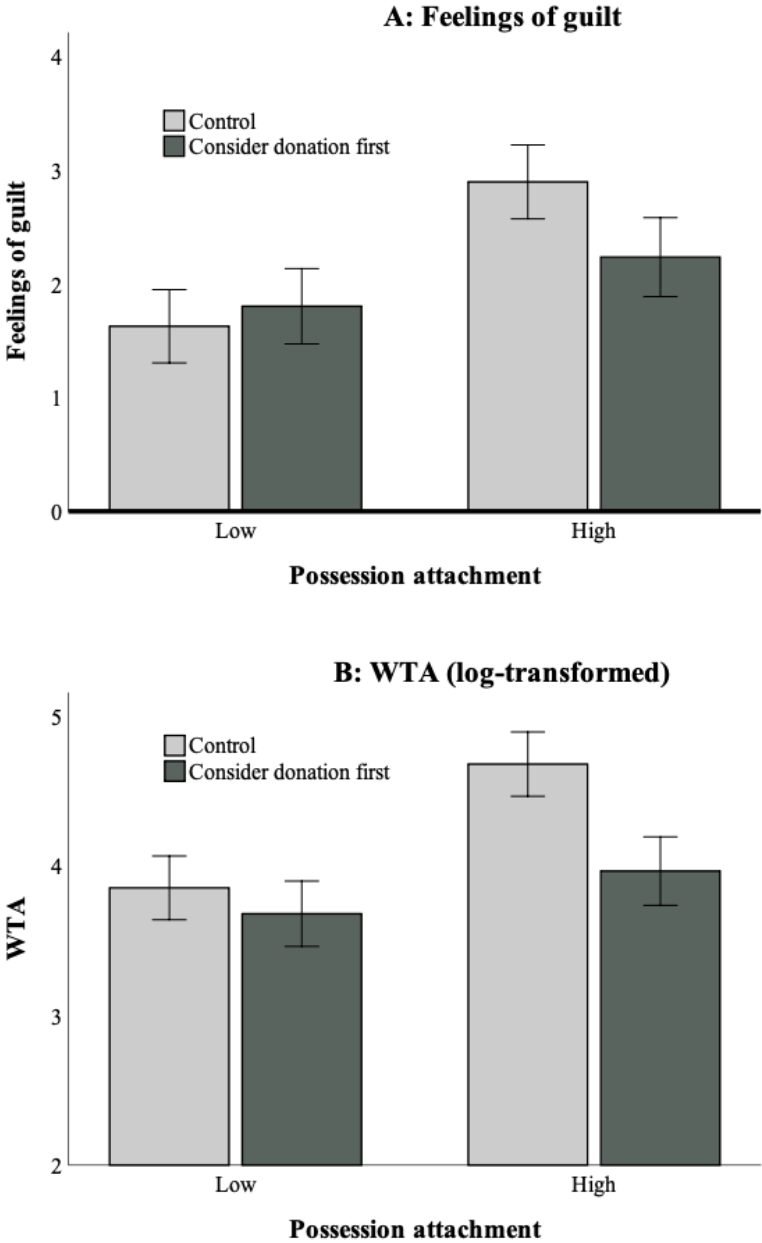
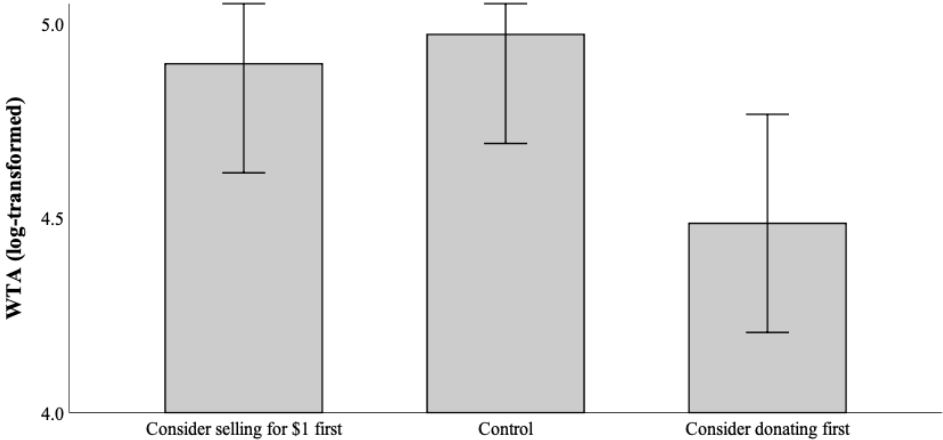


Figure 3: WTA Results (Study 5)



CONCLUSION

In this dissertation, I explore different problems non-profits are facing and try to provide theory-based solutions. The first two chapters examine areas that have been under-researched in the past. Specifically, chapter one aims to provide an explanation as to why donors prefer in-kind donations and suggests how non-profits could potentially benefit from targeting different donors with the right types of donations. However, besides the previously studied paternalism, overhead aversion, and the positive imagination explanation proposed in this essay, there is still more to understand about the distinctive influence of in-kind donation and how it differs from other donation forms, such as cash or time. Chapter two focuses on delinquent recipients. It tries to utilize the concept of self-continuity to explain what might prevent donors from helping delinquent recipients and proposes strategies for non-profits to encourage donation. I also point out that the recipients from non-profits' campaigns could be bifurcated into innocent and non-innocent recipients. As current empirical findings mostly focus on innocent recipients, they could be potentially moderated by taking the difference of recipients into account.

The third chapter studies the interplay between two possession disposal methods, selling and donating. By using donation consideration, I successfully lower owners' WTA price for possessions they no longer need, which decreases the price gap between owners/sellers and buyers. Since possession disposal is not limited to two methods, future research can examine how people make decisions when choosing amongst different methods and how each one could interact with another. Additionally, numerous articles have examined what encourages people to donate, however, not enough attention has been given to the downstream consequences when people are asked to make a donation. This could be another direction for researchers in the future.

Taken together, this dissertation contributes to the literature of consumer donation and consumer disposal behavior by examining areas that have been understudied, as well as provides practical implications to different parties (e.g., non-profits, policy makers, and C2C marketplace platforms).

CONCLUSIÓN

En esta tesis exploro distintos problemas afrontados por las organizaciones sin ánimo de lucro e intento ofrecer soluciones con una base teórica. Los primeros dos capítulos examinan áreas que habían sufrido un déficit de investigación hasta la fecha. Concretamente, el primer capítulo busca ofrecer una explicación al hecho de que los donantes prefieran las donaciones en especie, y se indica la forma en que las organizaciones sin ánimo de lucro pueden beneficiarse de abordar distintos tipos de donantes con las donaciones adecuadas. No obstante, aparte del paternalismo ya estudiado anteriormente, la aversión a los costes generales, y la explicación de la imaginación positiva que se ha explicado en el presente ensayo, aún falta por aprender acerca de la influencia propia de las donaciones en especie y la forma en que difiere de otros tipos de donación, tales como el dinero o el tiempo. El segundo capítulo se centra en los receptores con historial delictivo. Intenta utilizar el concepto de continuidad propia para explicar los motivos que pueden impedir a los donantes ayudar a receptores con historial delictivo, y propone estrategias para que las organizaciones sin ánimo de lucro fomenten las donaciones. También señalo que los destinatarios de las campañas de organizaciones sin ánimo de lucro podrían dividirse entre receptores inocentes y no inocentes. Dado que la mayoría de los resultados empíricos se centran en los receptores inocentes, cabe la posibilidad de moderarlos tomando en consideración la diferencia entre receptores.

El tercer capítulo estudia la interacción entre dos métodos de renuncia a las posesiones: la venta y la donación. Al emplear la consideración de la donación, logro rebajar el precio WTA de los propietarios con respecto a posesiones que ya no necesitan, lo que reduce la brecha de precio entre propietarios/vendedores y compradores. Dado que la renuncia a las posesiones no se limita a dos métodos, la investigación futura puede examinar la forma en que las personas adoptan

decisiones cuando eligen entre los distintos métodos y cómo puede interactuar cada uno de ellos entre sí. Además, si bien existen muchos artículos que han examinado lo que impulsa a hacer una donación, no se ha prestado suficiente atención a las consecuencias posteriores una vez que se ha solicitado a alguien hacer una donación. Esta podría ser otra área de interés para los investigadores del futuro.

Tomada en su conjunto, la presente tesis contribuye a la literatura académica de las donaciones de consumidores y la conducta de renuncia de los consumidores examinando áreas que sufrían un déficit de investigación, además de proporcionar implicaciones prácticas para las distintas partes (p. ej., organizaciones sin ánimos de lucro, diseñadores de políticas y plataformas de mercados C2C).