TO IMAGINE IS TO FEEL: THE ROLE OF IMAGINATION IN DONATION BEHAVIOR

By

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Abstract

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This dissertation underscores the role of imagination in the effectiveness of charity appeals. It proposes that the effectiveness of charity appeals depends on multiple factors, including the perspective viewers take when simulating the sensations of the victims depicted in the charity appeal, the content of such imagination (i.e., sensations of deprivation or satiation), and the viewers' current state. Across five studies, this dissertation shows that when viewers engage in other-perspective imagination ("How are the victim's feelings?"), appeals portraying sensations of deprivation are more effective; whereas when viewers are engaging in self-perspective imagination ("How would I feel in that situation?"), appeals depicting sensations that match viewers' state will be most effective. The present findings challenge prior beliefs that deprivation appeals are necessarily more effective and discuss contributions for both theory and practice in charity advertisements.

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CHAPTER 1: INTRODUCTION

We are frequently presented with appeals from more than 950,000 charities and other nonprofit organizations operating in the United States alone encouraging us to spend toward another's' welfare. Whether or not we respond to these appeals depends greatly on our ability to imagine the circumstances of the causes' beneficiaries (Batson 2009; Coke, Batson, and McDavis 1978; Eisenberg 2000; Krebs 1975; Stotland 1969). This is because when we imagine another's pain or joy, we increase our concern for alleviating the pain or sustaining the joy, and are consequently motivated to help (Batson et al. 1991; Stotland 1969). Therefore, to encourage consumers to donate, nonprofit organizations often ask them to explicitly imagine the beneficiary's conditions and accompanying sensations (e.g., an appeal from World Vision asking consumers to "Imagine yourself in a dry, hot, dusty landscape, where water is scarce and parents don't know whether they have enough food for their children," Sarkozi 2011). Given the pervasive use of imagination appeals in charity advertisements and strong effect on helping behavior, it is important to understand how they interplay with other factors to affect donation behavior. Some prior work underscores the importance of imagination by suggesting that it has a positive effect on donation behavior when potential donors are viewing the problem from the viewpoint of the victim (i.e., "How the victim is feeling?") as opposed to that of the donor (i.e., "Should I help this victim?") (Hung and Wyer 2009). Yet, a deeper understanding of how and under what circumstances imagination of the victims' situation will influence donation behavior is still lacking.

Imagination is a process in which we simulate sensations associated with a specific situation by retrieving concrete representations of these sensations stored in our memories (Decety 2011; Jackson, Rainville, and Decety 2006; Preston and de Waal 2002). We access these representations by engaging in one of two activities: Imagining how the other person is feeling (i.e., other-perspective imagination), or imagining how we would feel in that situation (i.e., self-perspective imagination) (Bandura 2002; Batson 2009; Batson, Early, and Salvarani 1997; Jackson et al. 2006). Although these two activities are functionally similar (Bandura 2002), when we take a self-perspective (versus an other-perspective) we have a lower ability to block our current sensations when trying to imagine sensations being portrayed (Decety and Sommerville 2003). Therefore, if there is a mismatch between one's current state and the sensations being portrayed, those taking a self-perspective will have trouble engaging in imagination. To illustrate, if a person has just eaten a filling lunch, he will have difficulty retrieving feelings of hunger from his memory if taking a self-perspective, but will not face such difficulty if taking an other-perspective. Therefore, I suggest that the effectiveness of imagination appeals depends on both the perspective people take and congruency between their current state and the sensations portrayed.

Developing a charity appeal involves an important and tangible decision (Fisher, Vandenbosch, and Antia 2008; Small and Verrochi 2009): Should it depict scenarios of satiation, with victims fulfilling their bodily needs (e.g., appeals portraying the victims feeling positive sensations such as fullness, warmth, and comfort; American Cancer Society 2012; Children International 2012; Water for People 2012)? Or should it depict situations of deprivation, with victims lacking their basic needs (e.g., the aforementioned

appeal by World Vision portraying victims feeling negative sensations such as hunger and thirst)? I demonstrate that, because consumers taking a self-perspective can better imagine sensations that match their current state, their concern for a portrayed victim's welfare will hinge critically on the match between their own current state and the sensations portrayed in the charity appeal. In contrast, consumers engaging in other-perspective imagination will be able to ignore their current sensations and will readily imagine any portrayed sensation, regardless of whether or not it matches their current state. Thus, since negative sensations produce stronger affective reactions than their positive counterparts (Perry, Hendler, and Shamay-Tsoory 2012; Taylor 1991), people taking an other-perspective will be more concerned with the victims' welfare when exposed to deprivation (versus satiation) sensations.

The contribution of the current dissertation is three-fold. First, it provides a deeper, more nuanced understanding of the role of imagination on donation behavior. Specifically, it suggests that the effectiveness of imagination depends on the interactive effect of the content of the appeal, imagination perspective, and consumers' current sensory state. In doing so, it also provides guidance for optimizing donation appeals. Second, it sheds light on the underlying mechanism driving helping behavior. Previous research suggests that people are motivated to help a victim whenever they empathize with the victim's deprived state, or in other words, whenever they vicariously feel the same deprived sensations that the victim is feeling (Fisher et al. 2008; Small and Verrochi 2009). However, I propose that while feelings of empathy produced by others' sensations should indeed increase concern for the victims' welfare, this increased concern should manifest regardless of the type of sensations portrayed (i.e., satiation or

deprivation). In other words, helping behavior depends primarily on the ability of an individual to empathize with a sensation rather than on the valence of the sensation itself. While providing an explanation for previous findings (Bagozzi and Moore 1994; Fisher et al 2008; Small and Verrochi 2009), this perspective represents a departure from most extant literature in charity advertisements by demonstrating that, under specific circumstances, satiation appeals are more effective than their deprivation counterparts. Third, this is, to the best of my knowledge, the first paper to demonstrate that helping behavior depends heavily on individuals' current sensory state (i.e., sensory state before exposure to the charity appeal), particularly when they are engaging in self-perspective imagination. This contributes to our understanding of helping behavior by showing that factors that affect one's current sensory state can influence the effectiveness of charity appeals.

I provide support for the present framework in five experiments. Study 1A demonstrates that people exposed to self-perspective imagination appeals make a larger donation when the sensations portrayed match (versus do not match) their current state; people exposed to the other-perspective appeals make a larger donation when the portrayed sensations are of deprivation (versus satiation). Study 1B generalizes these findings by using a different donation context and an alternative manipulation of the constructs. Studies 2A and 2B offer initial evidence for the underlying process by demonstrating that the pattern of results observed in studies 1A and 1B are replicated among participants who are either chronically (2A) or situationally (2B) prone to imagine sensations. Finally, study 3 enhances our understanding of the underlying process by testing the role of individuals' current sensory state on the effectiveness of charity

appeals. Study 3 also provides support for the proposed process by ruling out alternative explanations and demonstrating the mediating effect of feelings of empathy and concern for the people in need.

In the next section, I draw on the imagination and helping behavior literature to describe how the perspective one takes when imagining another's sensations interacts with the type of sensations portrayed (i.e., deprivation or satiation) and one's current state to influence the effectiveness of charity appeals.

CHAPTER 2: THEORETICAL BACKGROUND

Imagination and helping behavior

In determining who, when, and how to help, we first try to comprehend what others might be feeling (Anderson and Keltner 2002; Preston and de Waal 2002). Once we understand another's feelings, we are able to evaluate that person's situation, which determines our concern for the person's welfare (Eisenberg 2000; Stotland 1969). Not disregarding the role of rational calculations on the comprehension and evaluation of the victims' needs (Loewenstein and Small 2007), a primary means whereby we evaluate another's situation is by feeling empathy, or in other words, by vicariously feeling the same sensations that another is feeling (Anderson and Keltner 2002; Bandura 2002; Eisenberg 2000; Preston and de Waal 2002). In support of this relationship, Fabes, Eisenberg, and Eisenbud (1993) observed that indicators of feelings of empathy with a confederate's state (i.e., mimicked facial expressions and increased heart rate) were directly related to a child participant's concern for the confederate's welfare and likelihood to help the confederate. Similarly, Krebs (1975) demonstrated that participants' increased skin conduction, vasoconstriction, and heart rate elicited by exposure to a confederate's pain had strong positive associations with participants' willingness to help the confederate. Together, these studies suggest that our ability to empathize with another's sensations plays a vital role in our willingness to help.

Feelings of empathy may arise through an automatic process in which mere exposure to another's situation elicits an observers' own feelings and emotions (Preston

and de Waal 2002; Small and Verrochi 2009). Yet, research indicates that deliberate imaginative processes play a regulatory role in empathy, both channeling and intensifying our reactions to another's feelings and emotions (Bandura 2002; Batson 2009; Davis 1994; Loewenstein and Small 2007). Put another way, although people might react empathically to the mere exposure to another's' state, by focusing on mental images of the situation and accompanying sensations (i.e., imagining the situation) we are both directing and intensifying our empathic feelings (Bandura 2002). When we imagine another's sensory state, we retrieve the concrete representations of these sensations that are stored in our memory (Bandura 2002; Decety 2011; Niedenthal 2007). In retrieving these representations, we arouse the same areas of the brain as if we were directly experiencing the sensations ourselves, hence feeling empathy (Decety and Jackson 2004). For example, we feel warmer when imagining someone wrapped in a blanket and feel thirstier when imagining the struggle of African children living without water.

Importantly, such deliberate imagination can be motivated by one's internal disposition or, more importantly, by situational factors such as explicit instructions from charity appeals (Sarkozi 2011; Voices of Africa 2011). Thus, it is important to have a better understanding of how the way we imagine influences the effectiveness of charity appeals.

Two ways of imagining others' sensations

We imagine the sensations of another person in two ways – either by focusing on our self ("How would I feel if I were in the other person's position?") or by focusing on the other ("How does the other person feel?") (Bandura 2002; Batson 2009). When we take a self-perspective, we personalize the experience of another person by visualizing ourselves as the main actor of the mental picture we create of the situation and the accompanying sensations (Batson 2009; Batson et al. 1991). For instance, you might engage in self-perspective imagination of yourself feeling cold during the winter by picturing your cold skin as the breeze hits your shivering body while you look for shelter. Alternatively, you can imagine a similar situation but taking an other-perspective: Picturing a child exposed to the cold weather, the wind hitting the child's chilled body while the child looks for shelter.

The perspective people take can be influenced by both dispositional and situational factors. For example, some people are chronically focused on imagining either themselves or others when attending to a situation (Ickes et al. 1990). More interestingly, however, organizations often ask viewers to either imagine how the person in need is feeling, or how they would feel if facing a similar situation (Voices of Africa 2011). By explicitly instructing viewers to engage in either self- or other-perspective imagination, these organizations are, I argue, directly impacting the effectiveness of its appeals. Although both self- and other-perspective imagination arouse the areas of the brain responsible for the direct experience of sensations, they are differently influenced by

one's own current sensations (Ruby and Decety 2004, 2001). Past research suggests that when we engage in self-perspective imagination, we have a low ability to block our own sensations when trying to imagine those of others (Decety and Jackson 2004; Decety and Sommerville 2003). Since, in self-perspective imagination, we represent ourselves as the leading actor of our mental pictures, we will inadvertently project information about ourselves (i.e., the way we currently feel) onto others (Ruby and Decety 2004). In other words, when engaging in self-perspective imagination we will use our current sensory state as a starting point and the main source of information when trying to imagine the state of others.

In contrast, when we engage in other-perspective imagination we are able to block our current sensations while imagining those of others (Decety and Jackson 2004). By representing another person as the leading actor of our mental pictures, we are able to isolate and ignore our current sensations and instead retrieve from our memory the concrete representation of the sensation portrayed (Decety 2011; Decety and Jackson 2004). To illustrate, an observer who is feeling satiated before imagining the state of a hungry child will likely be able to empathize (i.e., also feel hungry) if engaging in other-perspective imagination, but not if engaging in self-perspective imagination. This suggests that the influence of imagination on donation behavior will depend not only on the perspective people take but also on the depicted sensation and its match with the potential donors' current state. In what follows, I detail how these three factors interact to influence the effectiveness of different charity appeals.

CHAPTER 3: THE CURRENT RESEARCH

The foundation of my theorizing is the idea that consumers' ability to imagine a target's sensory state is strongly dependent on the perspective they are taking. Consumers engaging in self-perspective imagination cannot block their own sensations when imagining those of others, and are thus better able to imagine and empathize with sensory states that match their current state (i.e., sensory state prior to exposure to the charity appeal). Therefore, because feelings of empathy increase our concern for another's welfare (Stotland 1969), consumers engaging in self-perspective imagination are expected be concerned for the welfare of victims portrayed in charity appeals that showcase sensations that match their current sensory state, and to donate after exposure to this matching appeal.

> H1: Consumers exposed to a self-perspective imagination appeal will have higher intentions to donate if the sensations portrayed match (versus do not match) their own current state.

On the other hand, consumers engaging in other-perspective imagination will successfully ignore their own sensations when imagining those of others. Thus, they are able to imagine sensations, regardless of their own current state. Yet, it is well documented that, *ceteris paribus*, sensations of deprivation produce stronger affective reactions than those of satiation (Taylor 1991; Perry et al. 2012; Small and Verrochi 2009). To illustrate, feeling a bodily need (e.g., experiencing a sensation of deprivation such as hunger) produces stronger arousal than feeling the satiation of that need (e.g., alleviating one's hunger). In support of this account, Perry and others (2012) used

functional magnetic resonance imaging to demonstrate that exposure to another person's misfortunes produced stronger activation in areas of the brain responsible for affect processing than did exposure to another person's fortunes. This implies that if sensations of both deprivation and satiation can be imagined, as is the case among people engaging in other-perspective imagination, sensations of deprivation will produce stronger feelings of concern for victims' welfare than sensations of satiation. Therefore, I formally propose that:

> H2: Consumers exposed to an other-perspective imagination appeal will have higher intentions to donate when the sensations portrayed are of deprivation (versus satiation).

Next**,** I test these basic predictions in five studies, and then discuss the implications of their findings to theory and practice in charitable donations.

STUDY 1

Study 1A

The goal of study 1A was to test hypotheses 1 and 2. The basic assumption behind this study (an assumption relaxed in study 4) is that individuals participating in this experiment would not be in the same states of extreme deprivation as those portrayed in the experimental manipulations (i.e., dying of hunger, dying of thirst, being homeless, being freezing cold while exposed to extreme weather). Yet, one could argue that participants might be in a transient state of extreme hunger and thirst before arriving at the lab. To rule out this alternative explanation, I ran a pre-test (N = 16). Upon arrival to the lab, participants where asked to indicate how they were currently feeling in regard to seven items (7-points: -3 = Not at all, 3 = A great deal), among which were "hungry" and "thirsty." A t-test confirmed my assumptions, such that participants reported being at a mean level of satiation (M_{hunger} = -.14, t(15) = -.35, p >.10; M_{thirst} = -.03, t(15) = -.08, p >.10). Since experimental subjects were not in states of deprivation, I expected deprivation appeals to be incongruent with participants' current state. Therefore, my specific predictions for this study are that participants presented to the self-perspective [other-perspective] imagination appeal will donate more when the sensations portrayed in the appeal are of satiation [deprivation].

Design and Manipulations

Hypotheses 1 and 2 were tested with a 2 (Imagination Perspective: Self vs. other) x 2 (Type of Sensations: Satiation vs. deprivation) between-subjects design. A video was used to manipulate both Imagination Perspective and Type of Sensations. The first frame of the video consisted of a white background with the name and logo of the organization (i.e., Children of the World), followed by a sentence that urged viewers to either, "Imagine how you would feel if you were a poor child, orphaned and in need" (self-perspective condition) or, "Imagine how a poor child would feel if he was orphaned and in need" (other-perspective condition). After the sentence faded, participants saw a sequence of scenes, each containing a picture of one child. In the deprivation appeal condition, each of these scenes presented a picture of a sad child, which originated in the bottom third of the monitor and floated from right to left, and a sentence that described the sensory state of the child (i.e., "Dying of hunger," "Dying of thirst," "Being homeless," "Being cold during the winter"), which was stationary at the top of the screen. In the satiation condition, participants saw floating pictures of children smiling and appropriately descriptive sentences (i.e., "Satiating your [their] hunger," "Satiating your [their] thirst," "Having a home," and "Getting warm during the winter"). Along with the picture and the description of the state, there was also a detailed explanation of the sensations at the very bottom of the screen. For instance, in the dying of hunger scene, participants assigned to the other-perspective imagination appeal read the sentence, "Imagine the hungry children, their stomachs ache and they feel weak", whereas those exposed to the self-perspective imagination appeal read, "Imagine that you are hungry, your stomach aches and you feel weak". The last frame of the video consisted of the logo and name of the charitable organization followed by an appeal, "Would you donate?

Please help!" The total duration of each video was 95 seconds (snapshots of the manipulations are available in Appendix A).

Pre-test

Because the manipulations check should affect and be affected by the measures of the dependent variable (Batson et al. 1997), I verified the effectiveness of manipulations by running a pretest with 48 participants (58% male, average age = 29.8) who were recruited from a national online job market. Consistent with previous research (Davis et al. 1996; Decety and Sommerville 2003), the fundamental distinction between self- and other-perspective imagination is the extent to which individuals are able to identify and ignore their own sensations when simulating those of others. Consistent with previous operationalizations of the construct (Batson et al. 1997; Davis et al. 1996), participants engaging in other-perspective imagination are expected to ignore their own sensations and, consequently, imagine the sensations of the children more than their own sensations. In contrast, individuals engaging in self-perspective imagination are expected to be unable to ignore their current state when imagining others' sensations and, therefore, to report similar levels of imagination of their own and others' sensations (Batson et al. 1997; Davis et al. 1996; Ruby and Decety 2004). Accordingly, I checked the manipulation of Imagination Perspective using four items adapted from Davis and colleagues (1996) (seven-point scales: 1 = not at all, 7 = great deal; "To what extent did you concentrate on the feelings of the children?", "To what extent did you see the problem from the perspective of the children?", "To what extent did you concentrate on your own feelings?", and "To what extent did you see the problem from your own

perspective?"). The first two items were averaged to create a Focus on Others' Feelings index ($r = .61$, $p < .01$) and the last two items comprised the Focus on Own Feelings index ($r = .84$, $p < .01$). In addition, I measured participants' assessment of the valence of the appeal using two 7-point items (1 = not at all, 7 = great deal; "To what extent did the video employ negative appeals?" and, "To what extent did the video employ positive appeals?"). The second item was reversed and averaged with the first to create a Negativity index ($r = .46$, $p < .01$).

I checked the effectiveness of the Imagination Perspective manipulation using a mixed model ANOVA with two between-subjects factors (Imagination Perspective and Type of Sensations) and one within-subjects factor (Focus: Focus on Own Feelings vs. Focus on Others' Feelings). The main effect of Focus, its two-way interaction with Imagination Perspective and its three-way interaction with Imagination Perspective and Type of Sensations were all found to be significant ($ps < .05$). A simple main effect analysis corroborated the basic predictions: Participants presented with the other-perspective imagination appeal reported focusing more on the feelings of the children instead of their own feelings ($M_{other} = 5.87$; $M_{own} = 5.03$, F (1, 46) = 11.92, $p < .01$); participants exposed to the self-perspective condition presented similar levels of Focus on Own Feelings and Focus on Others' Feelings ($M_{other} = 5.44$; $M_{own} = 5.40$, F (1, 37) = .04, $p > .10$). I also ran a 2 (Imagination Perspective) X 2 (Type of Sensations) between-subjects ANOVA on the Negativity index. Results were as expected: Main effect for Type of Sensations was found significant such that participants exposed to the deprivation (versus satiation) appeal rated higher in the Negativity index ($M_{satiation} = 3.00$;

$M_{deprivation}$= 4.30, F (1, 44) = 5.50, p< .05); Imagination Perspective had no main or moderating effect on participants' evaluation of the Negativity index (ps> .10).

Procedure

In the main study, a total of 128 university students and staff members (48% male, average age = 24.5) participated in exchange for a $5 show-up fee. Participants assigned to one of the four experimental conditions were informed that the nonprofit organization Children of the World was running a short, ten-minute survey. Then, participants were instructed to watch a video that was reportedly going to be advertised on the organization's website in the near future. Upon completion of the video, consistent with the cover story, participants answered two open-ended questions about their impressions of the video. Finally, as compensations for their participation, each participant was given five $1 bills (U.S.) inside an envelope and was informed that any portion of this money could be donated to the NGO Children of the World. Participants were instructed to put their donation in the envelope and close it, then deposit the envelope inside a sealed box. To reduce experimental effects due to the social pressure of the task, participants were asked to deposit the envelope even if it was empty. All envelopes were assigned a number, which was used as a non-identifying key that associated the envelope with the experimental condition participants were allotted to. The total amount donated by each participant was used as the dependent variable (i.e., Donation). All donated money was given to the organization Children of the World once the experiment was complete.

Results and Discussion

Thirty-two participants were excluded from the final sample: Two participants reported limitations in understanding the English language, seven participants demonstrated suspicious or distrust about the legitimacy of the nonprofit organization, and twenty-three participants did not follow basic instructions (e.g., did not return the donation envelop at the end of the experiment). A 2 (Imagination Perspective: Self vs. other) x 2 (Type of Sensations: Satiation vs. deprivation) ANOVA on Donation tested hypotheses 1 and 2. As expected, the two-way interaction was significant (F (1, 92) = 7.79, $p < .01$). Participants exposed to the self-perspective imagination appeal donated more money to the organization Children of the World when exposed to satiation sensations than when exposed to the deprivation sensations ($M_{satiation}$= \$2.43 ; $M_{deprivation}$= \$1.29, F (1, 93) = 3.25, $p = .07$), and those who were presented with the other-perspective imagination appeal donated higher amounts after exposure to the deprivation sensations ($M_{satiation}$= \$1.28, $M_{deprivation}$= \$2.21, F (1, 93) = 4.68, $p < .05$).

This first study corroborates hypotheses 1 and 2 by demonstrating that the perspective people take when imagining a certain situation affects their reaction toward satiation and deprivation charity appeals. The next study aims to replicate these findings using different manipulations for imagination perspective and content of appeal as well as a different donation context. In addition, study 1B portrays a fictitious organization, so that participants' prior attitudes toward the organization can be controlled.

Study 1B

We replicate the findings of study 1A by using African children with AIDS as the beneficiaries of the donation appeal. As it was the case in study 1A, the basic assumption is that individuals participating in this study were not in states of extreme pain or debilitation. Therefore, deprivation appeals should be incongruent with participants' own current state, leading to similar predictions as those of study 1A.

Design and Manipulations

A 2 (Imagination Perspective: Self vs. other) x 2 (Type of Sensations: Satiation vs. deprivation) between-subjects design was used to test hypotheses 1 and 2. The Imagination Perspective and Type of Sensations manipulations consisted of an article entitled "Donate to save children from AIDS!" that was reportedly posted at a fictitious organization's website (Donate for Africa). The Imagination Perspective and Type of Sensations manipulations were presented below the headline, within the subheading, and body of the text. Participants exposed to the other-perspective imagination of deprivation [satiation] sensations read the subheading, "Imagine the suffering [relief] of an African child." Participants in the self-perspective, deprivation [satiation] sensations condition read, "Imagine your suffering [relief] if you were in their shoes." The body of the text asked participants to imagine either themselves or the children in a debilitating or relieving state, depending on the experimental condition. Two pictures accompanied manipulations, each of them depicting either a child smiling (satiation condition) or sad (deprivation condition) (manipulations available in Appendix B).

Pre-test

The effectiveness of the manipulations was confirmed with a pretest of 43 participants (62% male, average age = 28.2) recruited from a national online job market. The constructs Focus on Others' Feelings (r = .57, $p < .01$), Focus on Own Feelings (r = .59, $p < .01$), and Negativity index (r = .78, $p < .01$) were measured as in the pre-test for study 1A. As in study 1A, the predictions were tested using a mixed model ANOVA with one within-subjects factor (Focus: Focus on Own Feelings vs. Focus on Others' Feelings) and two between-subjects factors (Imagination Perspective and Type of Sensations). The ANOVA revealed a significant main effect for Focus, as well as significant two-way interaction with Imagination Perspective. No other effects were significant. A contrast analysis of Focus within specific levels of Imagination Perspective corroborated the expectations: Participants who were exposed to the other-perspective imagination indicated focusing more on the feelings of others than on their own feelings (M_{other} = 5.71; M_{own}= 5.08, F (1, 41) = 12.55, $p< .01$). Also, similar to findings reported on the pre-test for study 1A and elsewhere (Batson et al. 1997; Davis et al. 1996), participants exposed to the self-perspective imagination did not differentiate in focus on their and others' feelings (M_{other} = 5.55; M_{own}= 5.80, F (1, 41) = 1.72, $p> .10$). Finally, a between-subjects 2 (Imagination Perspective) X 2 (Type of Sensations) ANOVA on the Negativity index was used to assess the effectiveness of the Type of Sensations manipulation. As predicted, only main effect of Type of Sensations was significant ($M_{satiation}$= 2.75; $M_{deprivation}$= 3.75, F (1, 39) = 4.22, $p< .05$).

Procedure

A total of 82 participants (63% male, average age = 28.8) drawn from the same population as in the pre-test participated in the actual study. As a cover story, participants randomly assigned to one of the four experimental conditions learned that a fictitious organization (Donate for Africa) was collecting information to develop a business plan. Participants were then presented with the Imagination Perspective and Type of Sensations manipulations, which were disguised as an article reportedly published on the organization's website. Next, participants assessed their Donation Intentions by indicating how much, in dollars, they would be willing to donate to the institution if they had US$100 in their pocket (Hung and Wyer 2009). Finally, participants indicated demographic characteristics and were debriefed.

Results and Discussion

Although this experiment was conducted online, the timing of the responses and/or the pattern of responses (i.e., same alternative in multiple choices throughout the experiment) indicated that six participants did not follow experimental instructions. Additionally, one participant demonstrated being suspicious about study hypotheses. These seven participants were excluded from the final sample of 75. Because participants in this nationwide sample pool varied greatly in age, which is shown to be an important antecedent of helping behavior (Schieman and Van Gundy 2000), age was included as a covariate in the analysis. A 2 (Imagination Perspective: Self vs. other) x 2 (Type of Sensations: Satiation vs. deprivation) ANCOVA on Donation Intentions tested hypotheses 1 and 2. Corroborating findings of study 1A, the two-way interaction was

significant (F (1, 71) = 6.93, $p < .05$). No main effects (including the covariate "age") were significant. Participants exposed to the self-perspective imagination appeal were willing to donate higher amounts when presented with satiation (versus deprivation) states ($M_{satiation}$= 45.00; $M_{deprivation}$= 24.05, F (1, 71) = 3.43, p = .06); those who viewed the other-perspective imagination appeal were willing to donate higher amounts after exposure to the deprivation appeal ($M_{deprivation}$= 45.94, $M_{satiation}$= 29.19, F (1, 71) = 3.43, p = .06). Study 1B corroborated findings from study 1A using different manipulations, donation context, and advertising medium (i.e., a written message as opposed to a video). The next study aims to provide preliminary evidence for the process underlying these effects.

STUDY 2

When we are able to empathize with another's state of satiation or deprivation, we increase our concern for their welfare and behave in ways to maintain their state of satiation or alleviate their state of deprivation (Batson et al. 1991; Stotland 1969). Consumers' ability to empathize with another's feelings depends on, or is at least intensified by, their ability to imagine the sensations of the target (Bandura 2002; Batson 2009; Eisenberg 2000; Stotland 1969). Thus, imagination influences donation behavior because it produces feelings of empathy with the victims' state (Bandura 2002). Accordingly, people in high imagination decide whether or not to help by evaluating their feelings of empathy toward the victims (Batson et al 1997; Bandura 2002), whereas people engaging in low levels of imagination decide by making more rational and unemotional calculations of the degree of the victims' needs (Batson et al 1997; Davis 1983; Loewenstein and Small 2007). If this is indeed so, then anything that leads to differences in level of imagination of sensations should provide evidence for the underlying role of empathy.

Literature suggests that both individual and situational factors can lead to differences in consumers' level of imagination of sensations. For instance, Davis (1983) observed that some people have a higher tendency to use their imagination and spontaneously take the psychological and sensory perspective of others. Further, people might be explicitly instructed to engage in high or low imagination of the sensory content of an appeal (Batson et al. 1997; MacInnis and Price 1987; Petrova and Cialdini 2005), as evidenced in aforementioned charity requests (Sarkozi 2011; Voices of Africa 2011).

Consistent with the proposed process explanation, such dispositional and situational factors should moderate the interactive effect of imagination perspective and type of sensations on donation intentions. Specifically, consumers with high levels of imagination will have intentions to donate higher amounts when exposed to self-perspective appeals that portray sensations that match (versus do not match) their own current state, or when exposed to other-perspective appeals that portray sensations of deprivation (versus satiation). Consumers with low levels of imagination will present no differences in intentions to donate, regardless of imagination perspective and valence of the appeal. The predictions regarding the role of level of imagination on donation behavior were tested in studies 2A (dispositional factors) and 2B (situational factors).

Study 2A

Individual differences in tendency to engage in imagination can be assessed by the Interpersonal Reactivity Index, an instrument developed to measure the multiple dimensions associated with one's proneness to react to others' affective states (Davis 1983). The scale is composed of four dimensions: Empathy, personal distress, fantasizing, and perspective taking. In line with Davis's conceptualization (1983), the first two dimensions assess patterns of reactions one has when exposed to another's situation; importantly, however, the last two dimensions are associated with tendency to recognize and imagine another's situation, which, in line with the present conceptualization, are associated with the individual's ability and tendency to imagine another's sensory state (Bandura 2002; Eisenberg 2000; Stotland 1969). Thus, the

fourteen items composing the fantasy and perspective taking dimensions (instrument available in Appendix E) were averaged to form the Imagination Level index ($\alpha = .74$).

For this study, the prediction was that individuals who rank high in the Imagination Level index will be, *ceteris paribus*, more likely to empathize with sensations portrayed in the advertisement and, therefore, be affected by the Imagination Perspective and Type of Sensations manipulations; but participants who rank low in the index should not be able to empathize and their donations intentions will be relatively insensitive to changes in Imagination Perspective and Type of Sensations. Using the same manipulations as in study 1A, states of deprivation are expected to form a mismatch with participants' current state and results observed in study 1A and 1B should be replicated for participants high in Imagination Level, but not for those ranking below average in the index.

Design, Manipulations, and Procedure

The predictions were tested using a 2 (Imagination Level: continuous) x 2 (Imagination Perspective: Self vs. other) x 2 (Type of Sensations: Satiation vs. deprivation) between-subjects design. Imagination Perspective and Type of Sensations were manipulated as in study 1A. Imagination Level was measured as above described. One hundred and twenty-seven (51% male, average age = 20.8) marketing students participated in exchange for course credit. Participants were first exposed to the videos and then indicated their Donation Intentions as in study 1B. Next, participants were given a 10-minute filler task and then completed the Davis' (1983) Interpersonal Reactivity Index, which was used to assess their Level of Imagination.

Results and Discussion

Three participants did not follow the instructions (e.g., were handling their phones while watching the charity appeal) and were excluded from final analysis. In addition, outlier analysis (Tukey 1977; Van den Bergh, Dewitte, and Warlop 2008) indicated the exclusion of seven subjects that scored outside the cell inter-quartile range (i.e., Q1-1.5×IQR; Q3+1.5×IQR, where IQR = Q3-Q1) of Donations Intentions. The final sample consisted of 117 participants. A multiple regression was used to test the basic predictions with Imagination Level, Imagination Perspective, Type of Sensations, and all four interactions as the independent variables, and Donation Intentions as the dependent variable. Consistent with the proposed theorizing, the three-way interaction was significant (β = -30.87, t (109) = -2.16, p< .05). The two-way interactions Imagination Level by Imagination Perspective and Imagination Level by Type of Sensations were also significant (ps< .05).

Following Aiken and West (1991), simple interaction and simple slope tests were used to explore the nature of the three-way interaction. The simple interaction between Imagination Perspective and Type of Sensations was significant for participants who scored high in the Imagination Level index (i.e., +1SD) (β = -52.13, t (109) = -3.37, p < .01), but not for those who scored low (-1SD) (β = -3.85, t (109) = -.25, p> .10). Simple slope analysis clarified the nature of the interactions. As predicted, participants who scored high in the Imagination Level index were willing to donate more money when exposed to the other-perspective imagination of depriving sensations appeal ($M_{\text{deprivation}}$ = 42.66, $M_{\text{satiation}}$ = 15.24, t (109) = 2.1, p< .05) and when viewing the self-perspective

imagination of satiating sensations appeal ($M_{deprivation}$= 20.72, $M_{satiation}$ = 45.43, t (109) = -2.73, p< .01). There were no significant differences for participants who ranked low in the Imagination Level index (-1 SD) ($M_{satiation\text{-}other}$= 26.14, $M_{deprivation\text{-}other}$= 28.57,$M_{satiation\text{-}self}$= 16.17, $M_{deprivation\text{-}self}$= 22.46, ps> .10).

Study 2A replicated findings of studies 1A and 1B, and provided initial evidence for the underlying mechanism. Specifically, it demonstrates that imagination perspective matters only when people are likely to empathize with another's sensations (i.e., those who scored high in the Imagination Level index). Participants who are not likely to understand or imagine another's sensations showed no differences in donations intentions, regardless of imagination perspective or type of sensations portrayed. In the next study, I attempt to replicate this finding by manipulating (instead of measuring) individual tendency to imagine another's state.

Study 2B

This study provides additional support for the key role of empathy by directly manipulating respondents' level of imagination of sensations. Manipulation of Level of Imagination was adapted from previous works (Batson et al. 1997; Petrova and Cialdini 2005) and consisted of explicit instructions for participants to be objective (i.e., low imagination) or imaginative (i.e., high imagination) while examining how another person feels and how they themselves would feel. Study 2B also provides further external validity for the reported findings by employing a different manipulation for imagination perspective.

Design and Manipulations

This study had a 2 (Imagination Level: High vs. low) x 2 (Imagination Perspective: Self vs. other) x 2 (Type of Sensations: Satiation vs. deprivation) between-subjects design. Manipulations of Imagination Level and Imagination Perspective were embedded in the instructions of the activity by asking participants either to analyze the video objectively or to use their imagination while watching the advertisement from their own or the children's perspective (manipulations available in Appendix C). The videos used to manipulate the Type of Sensations were similar to those of study 1A. The only difference was that instructions to imagine were not included in the videos because they were already provided in the guidelines for the activity. The total duration of each video was 69 seconds.

Pre-test

A pretest with 52 participants (58% male, average age = 30.3) evaluated the effectiveness of the manipulations. Focus of imagination and type of sensations were measured with the same items as in the pre-tests for study 1A and 1B (Focus on Other Feelings index - $r = .34$, $p < .05$; Focus on Own Feelings index - $r = .76$, $p < .01$; Negativity index - $r = .86$, $p < .01$). One additional item borrowed from Batson and colleagues (1997) assessed participants' focus on being objective ("To what extent did you focus on being objective?" 7-points: 1 = Not at all, 7 = A great deal) . Predictions for the Imagination Perspective and Type of Sensations constructs are similar to those of the pre-tests for studies 1A and 1B. Also implicit to the current conceptualization, participants engaging in high levels of imagination of sensations should generally exhibit more concentration on feelings (both own and others' feelings) and less concentration on being objective than would the participants engaging in low levels of imagination.

The effectiveness of the Imagination Perspective manipulation was assessed using a mixed model ANOVA with three between-subjects factors (Level of Imagination, Imagination Perspective, and Type of Sensations) and one within-subjects factor (Focus: Focus on Own Feelings vs. Focus on Others' Feelings). The main effect of Focus, its two-way interactions with Imagination Perspective and Type of Sensations, and its three-way interactions with Imagination Perspective and Type of Sensations as well as Imagination Level and Type of Sensations were all significant ($ps < .05$). The analysis of simple main effects are consistent with predictions such that participants who engaged in other-perspective imagination did report focusing more on the feelings of the children instead of their own feelings ($M_{other} = 5.84$; $M_{own} = 5.01$, $F(1, 50) = 12.70$, $p < .01$), whereas participants exposed to the self-perspective condition presented similar levels of

concentration in their own feelings and the feelings of the children (M_{other} = 5.45; M_{own} = 5.50, F (1, 50) = .14, p> .10).

The effectiveness of the Imagination Level manipulation was examined by running a 2 (Imagination Level) X 2 (Imagination Perspective) X 2 (Type of Sensations) between-subjects ANOVA on Focus on Others' Feelings, Focus of Own Feelings, and Focus on Being Objective. Results were as predicted: Main effects of Level of Imagination on the three dependent variables were significant such that participants who engaged in high levels of imagination presented higher levels of focus on own and others' feelings (Own - M_{high} = 6.14; M_{low} = 5.20, F (1, 50) = 4.96, p < .05; Others - M_{high}= 5.62; M_{low}= 4.92, F (1, 50) = 7.80, p < .01), and lower levels of Focus on Being Objective (M_{high}= 3.70; M_{low}= 4.62, F (1, 50) = 8.30, p < .01). Moreover, main and moderation effects of Imagination Perspective and Type of Sensations did not significantly affect any of the three dependent variables (ps > .10). Finally, a 2 (Imagination Level) X 2 (Imagination Perspective) X 2 (Type of Sensations) between-subjects ANOVA on the Negativity index assessed the effectiveness of the Type of Sensations manipulation. As predicted, only the main effect for Type of Sensations was significant; participants exposed to the deprivation (versus satiation) appeal rated higher in the index ($M_{satiation}$= 3.00; $M_{deprivation}$= 4.25, F (1, 50) = 5.28, p< .05).

Procedure

In the actual study, a total of 196 university students (52% male, average age = 21.2) participated in exchange for course credit. Subjects were informed that a fictitious organization, Children Support Fund, was running a short ten-minute study to analyze

college students' donation behavior. Participants were asked to watch an advertisement and then answer a short survey. The instructions that preceded the video contained the Imagination Level and Imagination Perspective manipulations. After watching the Type of Sensations video, participants completed an open-ended question about their general impressions (to be consistent with the cover story) and then indicated their Donation Intentions as in studies 1B and 2A.

Results and Discussion

Thirteen participants did not follow basic instructions (e.g., were talking to each other or handling phones during the experiment) and were excluded from the final sample. A 2 (Level of Imagination: High vs. low) x 2 (Imagination Perspective: Self vs. other) x 2 (Type of Sensations: Satiation vs. deprivation) ANOVA with Donation Intentions as the dependent variable tested basic predictions. Unlike the results observed in study 2A, the three-way interaction in this study was not statistically significant (F (1, 175) = 1.89, p = .17). However, the two-way interaction between Imagination Perspective and Type of Sensations was significant (F (1, 175) = 5.25, p < .05). More importantly, additional analysis revealed the predicted contrasts: A significant simple interactive effect between Imagination Perspective and Type of Sensations in the high imagination condition (F (1, 180) = 8.14, p <.01) and a non-significant simple interaction in the low imagination condition (F (1, 180) = .45, p > .10). Participants engaging in high imagination with focus on others were willing to donate more money after exposure to the deprivation appeal ($M_{satiation}$= 20.66; $M_{deprivation}$= 36.23, F (1, 180) = 5.00, p < .05), whereas those engaging in self-perspective imagination indicated higher donations

intentions after exposure to the satiation appeal ($M_{satiation}$= 22.7, $M_{deprivation}$= 10.9, F (1, 180) = 3.12, p = .07).

In sum, this study demonstrates that participants' perspective (self versus other) while watching a charity appeal is relevant only when they are actively imagining sensations and, therefore, feeling empathy. Because people under low imagination are likely to evaluate their donation decisions based on more rational and uncaring calculations (Batson et al. 1997; Loewenstein and Small 2007), the findings reported here provide initial evidence that empathy is the mechanism driving the effect of imagination perspective on donation behavior. In the next study, I provide further evidence of this process by demonstrating that participants' self-reported feelings of empathy and concern for the victims' welfare sequentially mediate the effect of imagination on donation intentions. In addition, a basic assumption of the previous studies was that people exposed to the self-perspective imagination appeal were willing to donate less when exposed to deprivation (versus satiation) appeals because sensations of deprivation were more incongruent with their current state. To more explicitly test for the role of current sensations, in study 3 I hold the type of the appeal constant (i.e., deprivation appeal) and create the match (versus mismatch) conditions by manipulating the participants' current state.

STUDY 3

A key argument in my theorizing is that the differences between self- and other-perspectives arise because people engaging in self-perspective have a low ability to imagine sensations that are different from their current state; in contrast, people taking the other-perspective will imagine any sensations with ease, regardless of their current state. If this is the case, consumers' current state should moderate the effect of imagination perspective on empathy and subsequent donation intention. I specifically propose that when there is a mismatch between consumers' current state and the sensations portrayed, only people engaging in other-perspective will be able to imagine sensations portrayed and exposure to an other-perspective (versus self-perspective) imagination appeal will lead to higher donations. Since people engaging in both self- and other-perspective imagination are able to imagine sensations that match their current state, consumers' imagination perspective will not affect donation behavior when they are exposed to an appeal that portrays sensations that match their current state. I provide direct support for these predictions by manipulating participants' current sensory state to create either a match or a mismatch with the sensations portrayed in the charity appeal.

Moreover, this study also provides insight into the process via mediation analysis. My framework suggests that imagination affects donation behavior because it facilitates feelings of empathy, by increasing feelings of concern for the victims' welfare. Thus, I predict that self-reported feelings of empathy and concern for the victims' welfare will sequentially mediate the effects of imagination perspective and consumers' current state on donation intentions.

Finally, this last study also rules out an alternative explanation for findings reported thus far. In the previous studies, differences between self- and other-perspective imaginations were observed when the portrayed state of deprivation [satiation] was incongruent [congruent] with participants' current state. It could be argued that participants had lower intentions to donate to victims after exposed to self-perspective imagination appeals featuring deprivation content because they felt personally distressed. Personal distress is a reaction that may emerge from high levels of empathy with another's negative state and often leads to low levels of prosocial behavior (Batson 2009; Eisenberg 2000). Put another way, some people might feel too distressed when observing a hungry child and, therefore, prefer to move away from the source of distress instead of helping the victim. Thus, if self-perspective imagination generates personal distress, people should react more egoistically (Batson 2009) and be less likely to donate money, producing the pattern of results reported thus far. I rule out this alternative hypothesis in two different ways: First, I manipulate the match (versus mismatch) with participants' current state by holding the content of the appeal constant (i.e., deprivation) and manipulating instead participants' current state (i.e., deprivation versus neutral). Therefore, since personal distress is caused by imagination of sensations of deprivation (Batson et al. 1997; Eisenberg 2000), the alternative explanation would suggest that facilitating the imagination of sensations of deprivation (i.e., prime people with negative sensations prior to exposure to the appeal) would lead to even stronger feelings of personal distress and consequently lower intentions to donate. Instead, my original account predicts that making people feel sensations of deprivation, which are similar to those portrayed in the charity appeal, increases intentions to donate among those

engaging in self-perspective imagination. To completely rule out this alternative hypothesis, I also measure participants' reported feelings of distress.

Design and Manipulations

The predictions were tested with a 2 (Imagination Perspective: Self vs. other) x 2 (Current State: Deprivation vs. control) between-subjects design. Imagination Perspective was manipulated with the same videos for other- and self-perspective imagination of deprivation appeals used in study 1A. The other factor, Current State, was operationalized by asking participants to evaluate the pictures of either four food and beverage products (facilitation condition) or four electronic products (control condition). I expected that, since elaboration of food and beverage products should increase desire for these products (Mischel, Ebbesen, and Zeiss 1972), participants would feel hungrier and thirstier after presented with the deprivation priming.

Pre-test

A pre-test of this manipulation tested the basic premise. Since the Current State manipulation involved the evaluation of meat products (i.e., hamburger) that presumably would elicit desire and hunger, only participants who reported eating meat were included in the pre-test and main study. A final sample of forty eight participants (70% male, average age = 28.0) recruited in a national online job market evaluated two food items (i.e., hamburger and pizza) and two beverages (i.e., a glass of water and a bottle of Gatorade) on five consummatory attributes (e.g., smell, juiciness, and flavor of a hamburger; freshness, pureness, and refreshing characteristic of a glass of water) or four

electronic products (e.g., high technology, luxury, design of a laptop; complete list of products and attributes in each condition is shown in Appendix D). After evaluating the products, participants were asked to indicate how they were feeling using the same items used in the pre-test of study 1A. As expected, compared to participants exposed to the control condition, those exposed to the deprivation condition reported being hungrier and thirstier ($M_{\text{hunger-deprivation}} = 1.21$, $M_{\text{hunger-control}} = 0.17$, $F\ (1, 46) = 4.84$, $p < .05$; $M_{\text{thirst-deprivation}} = 1.11$, $M_{\text{thirst-control}} = 0.13$, $F\ (1, 46) = 5.30$, $p < .05$).

Procedure

One hundred and three university students (49% male, average age = 21.5) participated in the actual study in exchange for course credit. Study participants were first asked to perform the Current State manipulation task. After a 3-minute filler task, participants received what was billed as a separate study. The procedure and cover story were identical to study 1A. The only exception was that, after indicating their Donation Intentions, participants assessed the extent to which they empathized with the depicted children's' feelings as well as their feelings of concern for the children. All measures were collected using 7-point (1 = Not at all, 7 = A great deal) items. Feeling of empathy was measured with a one-item in which participants indicated the extent to which they felt sensations similar to those of the children portrayed. Concern for the victims was measured using five items borrowed Batson and others (1997), namely, sympathetic, compassionate, tender, moved, and softhearted ($\alpha = .94$). Next, participants indicated the extent to which they felt distress in seven (7-point: 1 = not at all, 7 = great deal) items: Distressed, sad, troubled, tense, fearful, perturbed, and upset (Batson et al.1997; $\alpha = .94$).

Finally, they were presented with two items that assessed the time lapsed, in minutes, since participants last drank and ate. The pre-test indicated that participants in the deprivation condition reported higher feelings of hunger and thirst than those in the control condition. Yet, because this experiment was run at different points of the day, I included these two items to control for individual differences in feelings of hunger and thirst prior to arrival at the lab.

Results and Discussion

Twelve participants who indicated not eating meat were excluded from the analysis. Eight participants did not follow basic instructions and were eliminated from the final sample. Additional four participants were also excluded for being outliers as indicated by the same interquartile method used in the previous study. The basic predictions were tested using a 2 (Imagination Perspective: Self vs. other) x 2 (Current State: Deprivation vs. control) ANCOVA with Donation Intentions as the dependent variable and the variables aforementioned as covariates. As expected, only the two-way interaction was significant (F (1, 73) = 4.88, $p < .05$). Particularly, when participants' current state did not match that of the appeal (i.e., control condition), they intended to donate less when exposed to the self-perspective imagination appeal than when exposed to the other-perspective ($M_{other} = 29.00$, $M_{self} = 9.35$, F (1, 74) = 4.65, $p < .05$). More importantly, though, participants primed with deprivation states were willing to donate as much after exposure to the self-perspective imagination appeal as after exposure to the other-perspective appeal ($M_{other} = 26.25$, $M_{self} = 32.50$, F (1, 76) = .72, $p > .10$).

In addition, Study 4 demonstrates the proposed underlying process. Specifically, it was predicted that feelings of empathy and concern for victims would sequentially mediate the effect of the interaction between imagination perspective and participants' current state on intentions to donate. As expected, the effect of the manipulations on both mediators was similar to the pattern found for the main dependent variable. Participants primed with the control condition (i.e., mismatch state) and presented with the other-perspective imagination appeal reported higher feelings of empathy (M_{other} = 6.2, M_{self} = 4.94, F (1, 74) = 5.81, $p < .05$) and feelings of concern (M_{other} = 5.73, M_{self} = 4.71, F (1, 74) = 6.53, $p < .05$) than those exposed to the self-perspective appeal. There were no differences in feelings of empathy and concern among participants primed with the match condition (i.e., deprivation state; *ps* > .10). A nonparametric bootstrapping test for the indirect effect (Model 6 in Hayes 2013) provided stronger evidence of this process. The analysis was performed by including the interaction between Imagination Perspective and Current State as the predictor, and Donation Intentions as the dependent variable. Reported feelings of empathy and concern for victims were included in sequence as mediators. The main effects of Imagination Perspective and Current State as well as the variables capturing time elapsed since last meal and drink were also included in the equation. As predicted, the mediated moderation effect was significant with the 5,000 bootstraps 95% confidence interval for the indirect effect excluding zero (β = 2.30, CI = [.10 to 7.86]).

Finally, study 4 also rules out the possibility that personal distress was the process underlying the low intentions to donate among participants imagining sensations of deprivation with the focus on the self. Of course, this account is at least partially ruled out

by the fact that it fails to explain the results observed. Specifically, unlike predictions of the personal distress account (Batson et al. 1997; Eisenberg 2000), making people feel stronger sensations of deprivation prior to the imagination task increased intentions to donate among those exposed to self-perspective ($M_{control}$ = 9.35, $M_{deprivation}$ = 32.50, F (1, 74) = 7.39, $p < .01$). Yet, to completely rule out this account, I ran a 2 (Imagination Perspective) x 2 (Current State) ANCOVA with Personal Distress as the dependent variable, as well as time elapsed since last meal and last drink as covariates. The results revealed no significant main or interaction effects (*ps*> .10). Therefore, it is unlikely that personal distress affected participants' intentions to donate.

CHAPTER 4: GENERAL DISCUSSION

Despite the increased attention that charity advertising has received in the general media and its crucial importance to the success of nonprofit organizations (Pallotta 2010), marketing and psychology researchers have devoted little attention to identifying important factors that influence the effectiveness of charity appeals (Small and Veerochi 2009). To encourage consumers to spend on another's welfare, practitioners often ask them to imagine the sensations associated with either the satiation or deprivation of these victims' needs (American Cancer Society 2012; Children International 2012; Voices of Africa 2011; Water for People 2012; Sarkozi 2011). This paper provides guidance for these practitioners by examining the main determinants of the effectiveness of such appeals. Particularly, my results demonstrate that the effectiveness of charity appeals depends on the interactive effect of the valence of the appeal (i.e., deprivation versus satiation), imagination perspective (self versus other), and consumers' current sensory state. In five experiments, I demonstrate that self-perspective imagination appeals are more effective when they portray sensations that match (versus do not match) potential donors' current states, whereas other-perspective imagination appeals are more effective when they portray deprivation (versus satiation) sensations. Importantly, the present research also sheds light on the mechanism underlying such effects: That is, imagination affects donation behavior because it produces feelings of empathy and, as a result, increases potential donors' concern for the victims' welfare. Next, the theoretical contributions and practical implications of these findings are discussed.

Contributions

In its most common characterization, donation behavior is produced by spontaneous feelings of empathy produced by mere exposure to another's negative state (Bagozzi and Moore 1994; Hung and Wyer 2009; Small and Verrochi 2009). An alternative account suggests, however, that this perspective underestimates the power of human ability to channel and regulate the processing of others' sensations (Bandura 2002; Batson 2009; Decety 2011). Consistent with this account, deliberately imagining others' sensory states elicits affective reactions similar to those typical of the more spontaneous process (Ruby and Decety 2004; Loewenstein and Small 2007). I build on this perspective to offer a more specific understanding of how deliberate imagination of the sensations of people portrayed in charity advertisements affects viewers' reactions to charity appeals. Importantly, this research demonstrates that when it comes to the deliberate act of imagining, the perspective people take (self versus other) matters.

At the same time, the proposed framework complements a growing body of research on the effectiveness of charity appeals, which treat the process of imagining victims' sensations as a one-dimensional construct (Hung and Wyer 2009; Small and Verrochi 2009). Hung and Wyer (2009), for instance, observed that factors that facilitate imagination were more effective when people focused on the viewpoint of the victim (i.e., "How the victim is feeling?") as opposed to that of the donor (i.e., "Should I help this victim?"). The present research builds on this finding and shows that the perspective people take when imagining the situation of the victim (i.e., "How would I feel if I were in the victim's shoes?" versus "How is the victim feeling?") influences the effectiveness

of imagination appeals. Thus, this paper helps to build a more comprehensive and nuanced framework for the influence of imagination on the effectiveness of charity appeals.

The proposed theorizing also represents a departure from extant research in donation behavior (Bagozzi and Moore 1994; Fisher et al. 2008; Small and Verrochi 2009) by showing that the deprivation appeals can be less effective than satiation appeals. My account implies that when people are equally able to imagine another's state of satiation or deprivation, as it is the case when people take the other-perspective, deprivation appeals will be more effective because they produce stronger affective reactions (Perry et al. 2012; Taylor 1991). Accordingly, since the other-perspective is often the default when consumers are trying to imagine another's situation (Lord 1987, 1980), it is not surprising that previous research indicated that appeals portraying states of deprivation produce higher levels of concern and intentions to donate than those portraying states of satiation (Bagozzi and Moore 1994; Bendapudi, Singh, and Bendapudi 1996; Fisher et al. 2008; Small and Verrochi 2009). Importantly, however, both individual and situational factors might influence the perspective people take when imagining the state of others. For instance, by encouraging potential donors to "Imagine yourself in a dry, hot, dusty landscape, where water is scarce (…)" (Sarkozi 2011), World Vision is inducing the self-perspective imagination of sensations of deprivation. Findings reported in the current dissertation demonstrate that this strategy might not be optimal, since people who are engaging in self-perspective imagination often have limited ability to imagine the content of deprivation appeals. Hence, while accounting for previous findings in the literature, my research additionally demonstrates that, under specific

circumstances, satiation sensations will generate higher donation intentions. In doing so, the present dissertation provides a more thorough explanation of the effect of charity appeals on helping behavior.

Another key finding of this research – the role of potential donors' original state on their responses to charity appeals – complements a more general idea that individual's current state affects their predictions of how other people feel (Van Boven and Loewenstein 2003; Van Boven, Loewenstein, and Dunning 2005). Van Boven and Loewenstein (2003), for example, observed that participants who were dehydrated (versus properly hydrated) before predicting the sensory state of another person thought the other person would feel thirstier. The present research extends this paradigm in two ways. First, it demonstrates that an individual's current state affects not only his prediction of another's state, but, more importantly, his ability to feel empathy. Second, it shows that the influence of one's current state on helping behavior is restricted to circumstances in which people are engaging in self-perspective imagination (as opposed to other-perspective imagination).

The present dissertation also contributes to our understanding of other related phenomena. A long tradition on psychology and consumer research has studied the importance of affect on judgment and behavior. Affect is a superordinate category that includes transient feelings, moods, and emotions (Cohen, Pham, and Andrade 2007; Johar, Maheswaran, and Peracchio 2006; Petty et al. 1988; Zajonc 1980). The feelings and emotions that comprise our affective state may be produced either through direct perception of the environment and associated experiences, or through an indirect process of retrieval of sensory information from long-term memory (i.e., imagination; Finke

1980; Kolers 1983). Put another way, our affective state may be altered by either our perception of a given experience or our imagination of an experience (Finke 1980; MacInnis and Price 1987).

Previous researchers have extensively analyzed the role of affect on a multitude of consumption related phenomena such as product and advertisement evaluation (Pham 1998; Williams and Aaker 2002), variety seeking (Kahn and Isen 1993), and risk taking (Mellers, Schwartz, and Ritov 1999). These and other studies (Cohen et al. 2007; Petty et al. 1988) demonstrate that affect influences behavior because it serves as an informative source that may be used in two ways: As a main argument in an elaborated analysis of an object or situation, or as a cue that serves as a shortcut for judgment formation and decision making. Consistent with this paradigm, research in social psychology indicates that affect influences helping behavior by either influencing our elaborated analysis of one's situation, or automatically activating autonomic and somatic responses (e.g., helping the person in need; Loewenstein and Small 2007; Preston and de Waal 2002). This dissertation contributes to this research tradition by exploring not how affect influences donation behavior, but how affect is produced in the first place. In doing so, it provides a deeper understanding of the antecedents of consumers' affective state upon exposure to charity appeals.

Implications

This dissertation also has important implications for research and practice on charitable giving. A typical strategy used by organizations to increase potential donors

concern for the victims' welfare is the depiction of deprivation appeals (Red Cross 2012; Sarkozi 2011; Voices of Africa 2011). Although research on charitable advertisements (Fisher et al. 2008; Small and Verrochi 2009) and helping behavior (Eisenberg et al. 1989) support this notion, deprivation appeals may also have their shortcomings, such as elicitation of viewers' feelings of distress and guilt (Basil, Ridgway, and Basil 2008; Batson et al. 1997; Eisenberg et al. 1989). Since satiation appeals do not elicit similar aversive reactions, it is important to understand how their use can be optimized. My research shows that satiation appeals will maximize donations when consumers themselves are in similar state of satiation and are encouraged to imagine themselves in the situations portrayed.

These results are also informative of contextual factors that might influence the effectiveness of charity appeals. If satiation appeals are only maximized when consumers are in states of satiation, then marketing managers have to be cognizant of elements influencing viewers' current sensory states. For instance, when asking for donations for homeless people during the winter, the environment where the advertisement is displayed becomes of central relevance. If advertising in a closed, acclimatized environment, viewers will likely be feeling warm, making satiation appeals such as asking viewers to put themselves in the shoes of the people protected by a warm, cozy shelter more effective than a deprivation appeal. On the other hand, if the advertisement is displayed outdoors, where potential donors are exposed to cold temperatures, asking viewers to imagine how they themselves would feel if they had no home during the winter should be more effective. For the same reason, satiation appeals for a food drive should be more effective when exposed after a lunch break, whereas deprivation appeals for a similar

campaign should be more effective if presented right before potential donors have had their meals (and are thus presumably hungry).

Further, academic research and nationwide surveys indicate that low-income individuals are more likely to donate than high-income individuals (Independent Sector 2002; James and Sharpe 2007). Mayo and Tinsley (2009) explained this surprising finding by arguing that low-income donors can better relate to what people in need are feeling and, therefore, are more concerned with their welfare. A large opportunity of nonprofit organizations lies, therefore, in their ability to increase high-income donors' concern for the welfare of those in need. My research indicates that concern for a victim's welfare can be maximized if nonprofits design their charity appeals with consideration for the perspective elicited by the appeal, the valence of the emotions portrayed, and consumers' own sensory state.

Limitations

This research has certain limitations that present opportunities for future investigation. Across the five experiments, I used children in need as the beneficiaries of the donations. Even though there is no reason to expect that the effects observed are limited to donations toward children (Small and Verrochi 2009), future research could extend the findings reported to other donation contexts. Moreover, in the studies reported, participants' focus on themselves or others was manipulated with directions that were embedded either in the instructions of the exercise (study 2B) or in the advertisement presented to participants (studies 1A, 1B, 2A, and 3). Yet, people differ noticeably in

terms of their chronic disposition to focus on themselves or others when predicting someone's sensory or cognitive state (Ickes et al. 1990). Thus, researchers could investigate whether the pattern of results observed is also evidenced when people are chronically disposed and not only situationally led to take different perspectives while simulating another's state.

Another limitation of this dissertation (and related research in imagination) is that technical restrictions prevent us from having a better understanding of what participants were in fact thinking upon exposure to the experimental stimuli. I try to reduce the impact of this limitation in multiple ways: First, during the pre-tests I asked participants to report the extent to which they focused on the feelings of victims portrayed in the message. Since imagination is characterized by the simulation of feelings in the working memory (MacInnis and Price 1987), participants' self-reported focus on emotions should positively correlate with the extent to which they imagined the feelings portrayed. Second, I measured and manipulated participants' tendency and ability to imagine another's sensations in studies 2A and 2B, respectively. Accordingly, I proposed and demonstrated that only participants who are more likely to imagine another's' sensations were affected by experimental manipulations of imagination perspective and content of imagination, but not those who were less likely to engage in imagination. Yet, future research could more directly assess the extent to which people accurately imagine what others are feeling by adapting a methodology advanced by Ickes (Ickes et al. 1990). In such study, participants could first be exposed to a manipulation similar to that used in study 2B, in which instructions directed subjects to either be very imaginative (i.e., imagination condition) or detached (i.e., objective condition) while watching a video.

After watching this advertisement for a first time, participants would be instructed to watch the advertisement again, and to stop the video at each point where they recall having had a thought or feeling during their first viewing. For each of these points of recollection, the subject would be asked to describe their thoughts and/or feelings in detail. Researchers could then code thought protocols as "Feelings and Emotions related to the advertisement," "Rational Thoughts and Cognitions related to the advertisement," and "unrelated thoughts and feelings." Accordingly, if participants are indeed attending to the advertisement and imagining the sensations portrayed, they should report having more feelings and emotions [rational thoughts and cognitions] when exposed to the imagination [objective] condition.

More interestingly, perhaps, this study supports the notion that participants' differences in current feelings regarding a discrete state (e.g., hunger or fullness) moderate the effect of imagination perspective on donations intentions. However, because primary dimensions of one's affective state such as valence and arousal have strong impacts on consumption behavior (Gorn, Pham, and Sin 2001; Havlena and Holbrook 1986), one could argue that a more holistic, valence based matching of one's current state with that portrayed in the advertisement could be sufficient to trigger similar effects. Thus, an explicit test of this hypothesis would greatly contribute to our understanding of the phenomenon.

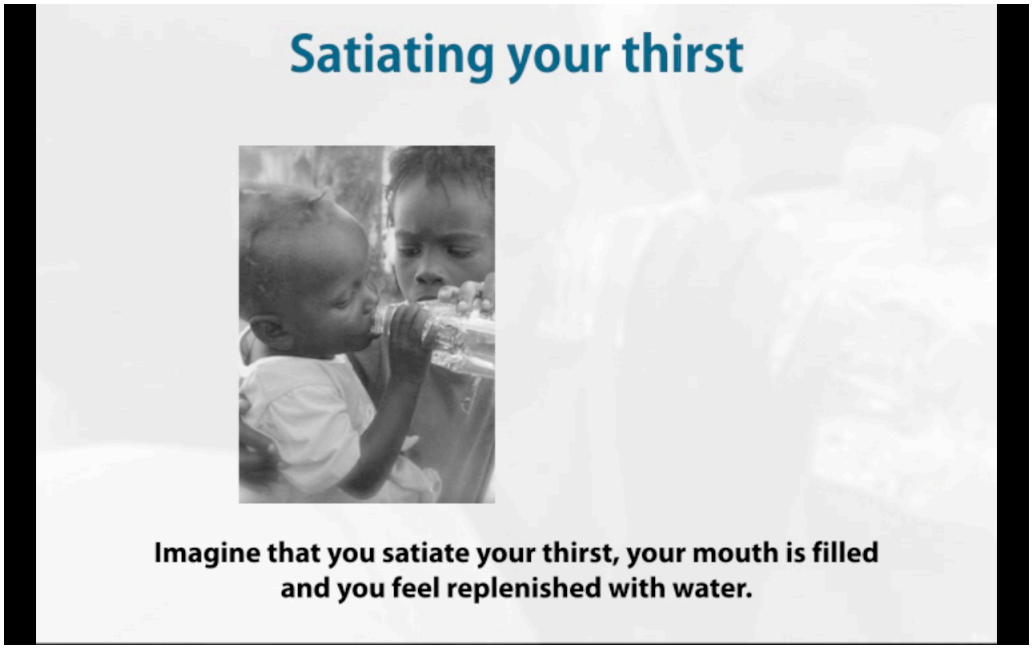
Finally, future research could also examine the potential moderating role of other important determinants of helping behavior. For example, researchers have shown that familiarity and level of identification with those in need play a central role on one's ability to feel empathy (Anderson, Keltner, and John 2003; Small and Simonsohn 2008;

Stürmer, Snyder, and Omoto 2005; Winterich, Mittal, and Ross 2009). As a result, it would be beneficial to examine whether differences in empathy among people engaging in self- versus other-perspective imagination are less prominent among those with high familiarity or identification with the victim. Even though this prediction has not been properly tested, there is some empirical evidence to support this contention. For example, Batson (2009; Batson et al. 1997) reported that when college students simulate the plight of a person with whom they have high familiarity (another student from the same university), self- and other-perspective imagination result in similar levels of empathy. It would be interesting to investigate more systematically whether these variables impact one's ability to imagine satiation and deprivation sensations and the resultant behavioral consequences.

APPENDIX A: MANIPULATION OF IMAGINATION PERSPECTIVE AND TYPE OF CONTENT FOR STUDIES 1A, 2A, AND 3

Other-perspective imagination / Negative content appeal

Self-perspective imagination / Positive content appeal



APPENDIX B: MANIPULATIONS OF IMAGINATION PERSPECTIVE AND TYPE OF CONTENT FOR STUDY 1B

Other-perspective imagination / Positive content appeal

Self-perspective imagination / Negative content appeal

APPENDIX C: MANIPULATIONS OF IMAGINATION PERSPECTIVE AND IMAGINATION LEVEL FOR STUDY 2B

High imagination / Other-perspective

While watching the advertisement, try to imagine how the children in the advertisement are feeling about what is happening to them and how it would affect their lives. We do request that you rely on your imagination to visualize as vividly and in as much detail as possible how the children are feeling.

Don't feel that you have to be coldly analytical in imagining the situation to which they are being exposed. Just give your thoughts and sensations free reign while you imagine how the children depicted would be feeling if experiencing the situation portrayed.

High imagination / Self-perspective

While watching the advertisement, try to imagine how you yourself would feel if you were experiencing what is happening to the portrayed children and how this experience would affect your own life. We do request that you rely on your imagination to visualize as vividly and in as much detail as possible how would you feel if experiencing what is happening with them.

Don't feel that you have to be coldly analytical in imagining the situation to which they are being exposed. Just give your thoughts and sensations free reign while you imagine would you feel if experiencing the situation portrayed.

Low imagination / Other-perspective

While watching the advertisement, try to be as objective as possible to analyze what is happening with the children being portrayed and how the state in which they are would affect their lives. We do request that you be careful and well-reasoned in analyzing the situation.

Do not let your imagination and emotions get the best of you. Focus your thoughts on the objective analysis of the situation of the children being portrayed, detailing what would be the state of the children in such situation. Just try to remain objective and detached.

Low imagination / Self-perspective

While watching the advertisement, try to be as objective as possible to analyze what would happen to you if you were in a similar situation as the children portrayed and how it would affect your life. We do request that you be careful and well-reasoned in analyzing the situation.

Do not let your imagination and emotions get the best of you. Focus your thoughts on the objective analysis of the situation if you were in the shoes of the child, detailing what would be your state. Just try to remain objective and detached.

APPENDIX D: MANIPULATION OF CURRENT STATE FOR STUDY 4

Deprivation condition

Product	Pizza	Product	Glass of water
Attributes	Juicy	Attributes	Pure
	Fresh		Fresh
	Flavorful		Refreshing
	Cheesy		Invigorating
	Overall good taste		Good quality
Product	**Hamburger**	**Product**	**Bottle of Gatorade**
Attributes	Juicy	Attributes	Flavorful
	Fresh		Fresh
	Flavorful		Refreshing
	Cheesy		Invigorating
	Overall good taste		Good quality

Control condition

Product	Watch	Product	Computer
Attributes	High technology	Attributes	High technology
	Luxury		Luxury
	Beautiful design		Beautiful design
	Attractive		Attractive
	Overall good quality		Overall good quality
Product	**Cell phone**	**Product**	**Keyboard**
Attributes	High technology	Attributes	High technology
	Luxury		Luxury
	Beautiful design		Beautiful design
	Attractive		Attractive
	Overall good quality		Overall good quality

APPENDIX E: SCALE OF DISPOSITIONAL IMAGINATION LEVEL USED IN STUDY 2A

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate letter on the scale at the top of the page: A, B, C, D, or E. When you have decided on your answer, fill in the letter on the answer sheet next to the item number. READ EACH ITEM CAREFULLY BEFORE RESPONDING. Answer as honestly as you can. Thank you.

ANSWER SCALE:

A	B	C	D	E
DOES NOT DESCRIBE ME WELL				DESCRIBES ME VERY WELL

1. I daydream and fantasize, with some regularity, about things that might happen to me.
2. I sometimes find it difficult to see things from the "other guy's" point of view.
3. I really get involved with the feelings of the characters in a novel.
4. I am usually objective when I watch a movie or play, and I don't often get completely caught up in it.
5. I sometimes try to understand my friends better by imagining how things look from their perspective.
6. Becoming extremely involved in a good book or movie is somewhat rare for me.
7. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.
8. After seeing a play or movie, I have felt as though I were one of the characters.
9. I believe that there are two sides to every question and try to look at them both.
10. When I watch a good movie, I can very easily put myself in the place of a leading character.
11. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.
12. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.
13. When I see someone who badly needs help in an emergency, I go to pieces.
14. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

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