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Helping Others or Oneself: How Direction of Comparison Affects Prosocial Behavior

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Abstract

Despite the frequency with which individuals compare themselves to a benchmark, little research has examined the implications of such comparisons on willingness to help others. Such comparisons can vary in direction by suggesting that one is doing better than a benchmark (a

downward comparison) or worse than a benchmark (an upward comparison). We argue and find that by being relatively better off, people making downward comparisons are more likely to view giving as a means of expressing altruistic values (e.g., to give back and be a better person) compared to those making upward comparisons. Consequently, when the context highlights the instrumentality of giving for more altruistic reasons (to benefit others), they are more willing to give than are those making upward comparisons. Furthermore, this difference is mitigated when the context highlights the instrumentality of giving to benefit the self, and is reversed when the instrumentality of giving for benefitting others is challenged. We obtain support for this account across four studies, through both moderation and mediation, and across both monetary and nonmonetary comparison domains.

Article Type: Research Article

Keywords: direction of comparison, downward comparisons, upward comparisons, charitable appeals, helping behavior, social comparisons, other-benefit appeals

Imagine that Jane learns that she performed better than average on a creativity test, while Joe learns that he performed worse than average. Both then see an advertisement for the American Cancer Society's Relay for Life that states: "Making strides toward a world with more birthdays." Would Jane and Joe differ in their response to this appeal to help others? What if the ad copy stated instead: "Making strides toward giving you more birthdays"? Whereas the first is actual ad copy used by the American Cancer Society, the second has been modified in a key way: it highlights how helping to fight cancer benefits the self (giving you more birthdays) rather than others (giving the world more birthdays). Would this difference in type of appeal influence whether Jane or Joe is more likely to help? We argue that it does.

In the present research, we propose that direction of comparison is one important—yet largely ignored—predictor of people's willingness to give. Specifically, to make assessments about themselves, individuals often compare their current position to that of some benchmark. As in the opening example, the benchmark might be doing worse than oneself or better than oneself. A downward comparison is defined as a comparison of oneself with a benchmark "whose attributes, outcomes, or emotional states are worse than one's own; that is, the comparison target is more disadvantaged, more inadequate, or more distressed than oneself" (Taylor, Wayment & Carrillo 1996, p. 5). In other words, downward comparisons involve comparing oneself to a worse-off or inferior benchmark (Aspinwall & Taylor 1993; Becker 2012; Buunk et al. 1990; Buunk & Gibbons 2007; Markman & McMullen 2003; Summerville & Roese 2008; Wilson & Ross 2000; Yip & Kelly 2013). In contrast, an upward comparison is defined as a comparison with a benchmark who is "performing or doing better than the self" (Taylor et al. 1996, p. 5). Stated differently, upward comparisons involve comparing oneself to a benchmark who is better off or superior to oneself on attributes, outcomes, or emotional states

(Aspinwall & Taylor 1993; Becker 2012; Buunk et al.. 1990; Buunk & Gibbons 2007; Markman & McMullen 2003; Summerville & Roese 2008; Wilson & Ross 2000; Yip & Kelly 2013).

Whether a comparison is upward or downward (i.e., the direction of comparison) is important because it can influence individuals' focus and goals. For instance, existing research suggests that individuals focus less on self-improvement when comparisons are downward than upward (Taylor et al. 1996). We extend this research by proposing that direction of comparison can affect the extent to which individuals are receptive to helping for more altruistic reasons—that is, to give in order to benefit others' lives. By examining these issues, our research contributes to the literature on direction of comparison and charitable giving in at least three ways. First, past research has focused largely upon how direction of comparison affects the self rather than the collective (e.g., Mandel, Petrova & Cialdini 2006; McFerran et al. 2010; Shrum, Burroughs & Rindfleisch 2005; Taylor et al. 1996), with a few exceptions (Becker 2012; Croson & Shang 2008; Yip & Kelly 2013). Yet, the few exceptions investigated contexts in which the participant would personally benefit from giving. Thus, we contribute to this literature by examining direction-of-comparison effects when the context highlights how giving would directly benefit the self (the focus of past research) versus how giving would benefit others.

A second contribution is that we examine comparison situations where the benchmark is unrelated to the helping request. This contrasts with prior research where the benchmark was either other donors (Croson & Shang 2008) or beneficiaries (Becker 2012). Thus, we contribute to this research by showing that direction of comparison can meaningfully affect giving even when the benchmark is unrelated to the helping request. Third, we extend research on the effectiveness of two common types of charitable appeals (Bendapudi, Singh & Bendapudi 1996): altruistic messages that highlight the benefits to others of acting prosocially (other-benefit

appeals) and egoistic messages that highlight the benefits for the self of acting prosocially (self-benefit appeals). One factor that influences the effectiveness of each type of appeal is whether the response to help is private or public (White & Peloza 2009). When the response is private, individuals are less susceptible to socially desirable responding and behave less altruistically. We contribute to this literature by showing that even in private contexts, people's receptiveness to altruistic appeals depends on their direction of comparison. Next, we review the direction of comparison and helping literatures to theoretically develop our predictions.

Direction of Comparison and Helping Literatures

Comparison theory is an influential theory in the social sciences, with over six decades of research on the topic (Buunk & Gibbons 2007; Festinger 1954; Markman & McMullen 2003; Summerville & Roese 2008). According to this theory, individuals compare themselves to benchmarks to assess the self (Buunk & Gibbons 2007; Festinger 1954; Taylor et al. 1996)—that is, “to gain self-knowledge and discover reality about themselves” (Mettee and Smith 1977, p. 70) and answer questions about themselves such as “Am I attractive? Am I smart? Am I likable?” (Gilbert, Giesler & Morris 1995, p. 227). Indeed, comparative thought occupies a significant part of daily life with individuals comparing themselves to a variety of benchmarks (Summerville & Roese 2008), including identifiable and unidentifiable others (e.g., Jane comparing her score to Joe's score or the average score).

A central aspect of comparison theory is direction of comparison (Latane 1966; Buunk et al. 1990). Direction of comparison refers to the relative position of the self in comparison to a benchmark. Specifically, comparative thought can involve comparing the self with a benchmark whose personal qualities, attributes or outcomes are similar to one's own (a lateral comparison), superior to one's own (an upward comparison) or inferior to one's own (a downward

comparison; Taylor et al. 1996). Such comparisons can span a variety of domains (Buunk & Gibbons 2007). For example, one might compare oneself to others based on such personal qualities as personality, physical appearance, opinions, values and beliefs (Buunk & Gibbons 2007; Pinkus et al. 2008; Wilson & Ross 2000), such attributes as athletic or intellectual ability, social skills, and maturity (Cronson & Shang 2008; Pinkus et al. 2008; Wilson & Ross 2000; Yip & Kelly 2013), or such outcomes as academics, adjustment to college life, employment, job satisfaction, health or relationships (Aspinwall & Taylor 1993, Becker 2012; Buunk & Gibbons 2007; Pinkus et al. 2008; Wilson & Ross 2000). For example, direction of comparison has been manipulated in past research by providing participants with false feedback that they have performed better or worse than other students (Martinot et al. 2002; Yip & Kelly 2013), providing an article about others' superior or inferior employment or post-college experiences (Becker 2012; Mandel et al. 2006), or allowing participants to compare themselves to a known other on any dimension that they choose (Pinkus et al. 2008; Wilson & Ross 2000).

Across different types of benchmarks and comparison domains, direction of comparison is important because it influences whether individuals believe they are relatively better or worse off, thereby affecting different motivations and outcomes. Specifically, comparing oneself to a superior benchmark (an upward comparison) causes individuals to focus upon working toward self-improvement and achieving better outcomes for themselves (Brown & Zagefka 2006; Buunk et al. 1990; Taylor et al. 1996; Summerville & Roese 2008). In contrast, comparing oneself to an inferior benchmark (a downward comparison) causes individuals to be more satisfied with their current standing, thereby reducing self-improvement motives (Brown & Zagefka 2006; Taylor et al. 1996; Summerville & Roese 2008; Wilson & Ross 2000). We contribute to this research by proposing that because downward comparisons cause individuals to perceive themselves as

being in a relatively superior position, whereas upward comparisons cause individuals to perceive themselves as being in a relatively inferior position, those making downward and upward comparisons will differ in how willing they are to help in order to benefit others' lives.

Being charitable has its pros and cons. On the one hand, it undermines individuals' ability to spend their resources on themselves (Ariely & Norton 2009; Bendapudi et al. 1996). Indeed, being charitable is negatively related to acquiring wealth (Srivastava, Locke & Bartol 2001), and symbols of wealth (Belk 1985; Richins & Dawson 1992). On the other hand, it allows individuals to present and/or perceive themselves as helpful or unselfish. For example, in public contexts, giving can signal to others one's prosocial traits or status (Aquino & Reed 2002; Griskevicius et al. 2007; Griskevicius, Tybur & Van den Bergh 2010), or increase the chances of belonging to a group (Twenge et al. 2007). In private contexts, giving to others can provide the purchase of moral satisfaction (Kahneman & Knetsch 1992), viewing oneself as an altruistic individual (Ariely and Norton 2009) and expressing one's values (Arnett, German & Hunt 2003; Clary et al. 1998; Mowen & Sujan 2005), or provide more egoistic benefits such as developing career skills (Clary et al. 1998; Mowen & Sujan 2005). In other words, giving can be used as an instrument to achieve various outcomes, one of which in private contexts is to view oneself as an altruistic person by behaving in ways that express altruistic values. We propose that those making downward (vs. upward) comparisons are more likely to perceive giving in this way.

Across four studies, we test our prediction that those making downward (vs. upward) comparisons are more likely to perceive giving as a means of expressing altruistic values (e.g., to give back and be a better person) through moderation and mediation (see Figure 1). Specifically, one way to test a causal relationship is by manipulating a proposed psychological process (Spencer, Zanna & Fong 2005). Applied here, if downward (vs. upward) comparisons causes

individuals to be more likely to perceive giving as a means of expressing altruistic values, then they should be more willing to give when the context highlights altruism, such as when an ad or news article highlights how being charitable benefits others. According to the matching hypothesis of the functional theory of attitudes (Eagly & Chaiken 1993; Shavitt 1990), appeals are more persuasive when they are congruent with individuals' values and motives. For instance, messages emphasizing collective benefits are typically more persuasive among those valuing collective (vs. personal) welfare and responsibilities (Han & Shavitt 1994; see Shavitt, Lee & Torelli 2009 for a review). In terms of charitable appeals, other-benefit appeals are more persuasive among those with altruistic (vs. egoistic) motives (Brunel & Nelson 2000). This is consistent with the matching hypothesis because other-benefit appeals are altruistic by highlighting how giving benefits others (Bendapudi et al. 1996). As such, other-benefit appeals are value-expressive appeals (Brunel & Nelson 2000): giving in response to such appeals is a means of expressing valued human traits such as kindness, cooperation and compassion (Fisher et al. 2008). Applied to our research, if those making downward (vs. upward) comparisons are more likely to perceive giving as a means of expressing altruistic values, then contexts that highlight the instrumentality of giving for altruistic reasons (e.g., other-benefit appeals) should be more persuasive among those making downward (vs. upward) comparisons. Thus, we predict:

H1a: When the context highlights how giving will benefit others, individuals will be more likely to give after making a downward than upward comparison.

Insert Figure 1 about here

We expect this effect to be mitigated when the appeal highlights how giving would benefit the self. Self-benefit appeals highlight the egoistic benefits of giving (Bendapudi et al.

1996). As such, self-benefit appeals are more utilitarian than other-benefit appeals because they state how giving causes the donor to gain rewards and/or avoid punishments (e.g., volunteering in order to meet new people or to reduce one's own chances of getting a disease; Brunel & Nelson 2000). Although self-benefit appeals explicitly highlight egoistic reasons for giving, charitable appeals in general likely imply that others will be helped by one's charitable contribution. Thus, giving in response to self-benefit appeals will likely benefit the self as well as others. For instance, in our opening example, although donating to the American Cancer Society might give oneself more birthdays, such donations will likely give others more birthdays as well. Thus, self-benefit appeals will likely be persuasive to those making upward comparisons by highlighting how giving will benefit the self as well as be persuasive to those making downward comparisons because giving to a charity will benefit others as well. Thus, we expect the direction-of-comparison effect on giving to be mitigated when the context highlights the egoistic benefits of giving (e.g., when self-benefit appeals are used).

H1b: When the context highlights how giving will benefit the self, the effect of direction of comparison on giving will be attenuated.

We also test our process account through mediation. Specifically, we propose that the underlying mechanism driving the difference in giving between those making downward and upward comparisons is the instrumentality of giving as a means of expressing altruistic values (e.g., being a good person). As mentioned earlier, giving can be used as an instrument to achieve various outcomes, one of which is to express values related to altruism, such as a concern for others (Clary et al. 1998). We argue that by being in a relatively better (vs. worse) position than a benchmark, those making downward (vs. upward) comparisons are more likely to view giving as instrumental to expressing altruistic values. This should especially be the case when the context

highlights how giving benefits others, which are altruistic appeals to act unselfishly by benefitting the lives of others (Brunel & Nelson 2000; Fisher et al. 2008). Thus, we expect the interactive effect between direction of comparison and appeal on giving to be mediated by beliefs that giving is instrumental to expressing altruistic values.

H2: The instrumentality of giving as a means of expressing altruistic values will mediate the interactive effects of direction of comparison and appeal on giving.

Another way to test the instrumentality of giving as a means of expressing altruistic values is to challenge such instrumentality beliefs (Duclos, Wan & Jiang 2013). If downward (vs. upward) comparisons cause individuals to give more as a means of expressing altruistic values by benefitting others (e.g., “I am a good person because I help others”), then the effect should emerge when other-benefit beliefs are highlighted (H1a), but should reverse when other-benefit beliefs are challenged (H3), such as when suggesting that giving can harm others. Under such circumstances, giving would not be instrumental to expressing such altruistic values as being a good person, because giving would harm (not help) others. Thus, those making downward comparisons should be less willing to give than those making upward comparisons.

H3: When the context challenges beliefs about how giving benefits others, individuals will be less likely to give after making a downward than upward comparison.

Overview of Studies

We test our conceptual model (Figure 1) across four experimental studies using a variety of comparison benchmarks, comparison domains, nonprofit organizations, and measures of helping. In study 1, we test the effects of direction of comparison when the charities are described in terms of the benefits provided to others (H1a). In study 2, we vary whether the appeal explicitly highlights benefits to others or the self in order to test our process account via

the moderating role of the type of appeal (H1a and H1b). In study 3, we include a control condition as well as test for mediation (H2) by measuring the instrumentality of giving to express altruistic values. Study 4 further tests our process account through moderation by either highlighting or challenging beliefs that giving benefits others (H3).

Across studies, we also test the robustness of the effect across monetary and nonmonetary domains of comparison, as well as test two alternate process accounts. One alternate account is based on mood regulation. Specifically, individuals are motivated to maintain positive moods and alleviate negative moods (Larsen 2000). Because helping is one mood-regulating behavior (Cialdini & Kenrick 1976; Cialdini et al. 1987; Larsen 2000), those making downward (vs. upward) comparisons may be more inclined to help in order to maintain a positive mood or alleviate a negative mood. A second alternate account is the “warm glow” hypothesis—that is, when individuals feel more positively, they view others more positively, thereby increasing helping behavior (Isen 1970). Thus, perhaps those making downward (vs. upward) comparisons are more willing to help because they view the charitable organization more positively.

Study 1: Direction of Comparison Based on Performance Feedback

Method

Fifty-five undergraduate students participated in exchange for partial completion of an introductory business course requirement, and were randomly assigned to a downward or upward comparison condition. Using a comparison manipulation from prior research (Martinot et al. 2002), we gave participants a bogus “LCT” test, which we described as a word-generation test that assesses verbal-creative ability. Participants were further informed that the test is scored based on: the number of words generated; the length, uniqueness and difficulty of each word; and the speed with which words were listed. Participants were then given five 10-letter strings,

and told to form up to five words from each string as fast as they could. For instance, they were informed that for the first string (acdeinostu), they could make the word “cat.” Following this, all participants were told that their score was 32 and that higher scores reflected better performance. To manipulate comparison, those in the downward (upward) condition were told that the average score is 12.33 (51.67)—that is, on average, others performed worse (better) than they did. A pretest confirmed the effectiveness of this manipulation in affecting perceptions of doing better or worse than others (see methodological details appendix for LCT test and the pretest).

After this task, participants completed a purportedly unrelated study on consumer decision making, in which participants had the opportunity to win \$25 in a drawing to be held at the end of the academic quarter. Similar to past procedures to measure helping behavior (Cialdini & Kendrick 1976), participants were told that they had five raffle tickets and could use all, some, or none of to enter themselves (vs. a charity) in the raffle. They were given information about two charities: The American Red Cross and the Humane Society. The information was gathered from the charities’ respective websites, and contained other-benefit appeals (e.g., the American Red Cross provides “assistance to victims of disasters,” the Humane Society “respond to animals in peril from natural and human-caused crises,” and “Without your support, they would not be able to help those who need it most”). A pretest confirmed that these descriptions contained other-benefit more than self-benefit appeals (see methodological details appendix for the pretest). Participants then had the choice to donate all, some or none of their raffle tickets to either or both charities. Participants were reminded that the more raffle tickets that they used to enter themselves, the higher their likelihood of winning.

Drawing upon other research on prosocial behavior (Reed & Aquino 2003; Winterich, Mittal & Ross 2009), we gave participants a large envelope that contained five blank raffle

tickets and three smaller envelopes (one labeled for the American Red Cross, one for the Humane Society, and one for “You”). Participants wrote either their own name or the name of one of the charities on each ticket, put the five raffle tickets in the corresponding smaller envelopes, and then placed the smaller envelopes inside the large envelope. This task served as the key charitable giving variable, with tickets allocated to the charities (vs. oneself) treated as giving to others (vs. oneself). In addition, to confirm that their division of raffle tickets in the envelopes reflected their intentions, participants were asked in the questionnaire to report how many tickets they intended to give to each charity and to themselves.

To assess the effect of comparison on nonmonetary behavior, we measured whether participants divulged their email address to receive information about local volunteering opportunities for the American Red Cross and Humane Society. In addition, participants were asked how likely, probable, and willing they were to volunteer their time to these organizations on seven-point scales anchored with “Not at all” and “Very” ($\alpha = .73$).

Next, we tested a mood regulation account by having participants report the extent to which they were experiencing various emotions on a scale ranging from 0 (not at all) to 6 (very). Specifically, we used measures from the helping (Cialdini et al. 1987) and the social comparison (Richins 1997; Smith et al. 2000) literatures. A final set of 20 items was analyzed with an exploratory factor analysis with varimax rotation. A four-factor solution emerged with eigenvalues greater than one, explaining 78% of the variance. Only those items that loaded on a single factor at .40 or greater were kept. The factors were positive emotion (content, encouraged, fulfilled, inspired, proud, satisfied; $\alpha = .94$), empathy (compassionate, moved, useful; $\alpha = .86$), distress (alarmed, upset, worried; $\alpha = .89$) and envy (envious, jealous, resentful; $\alpha = .90$).

Results and Discussion

Consistent with H1a, when the charity was described in terms of the benefits provided to others, participants donated more tickets to a charity when making downward than upward comparisons ($M_s = 4.25$ vs. 3.31 ; $F(1, 53) = 5.93$, $p < .05$). These behaviors reflected participants' intentions as well: those making downward (vs. upward) comparisons intended to give more tickets to charity ($M_s = 4.22$ vs. 3.39 ; $F(1, 53) = 4.54$, $p < .05$). Thus, even though donating their tickets countered their chances of winning the money for themselves, participants donated more raffle tickets when comparing downward than upward.

In terms of nonmonetary behavior and intentions, consistent with H1a and our monetary findings, a higher proportion of those in the downward than upward condition opted-in to the volunteering email list (35% vs. 7%; $\chi^2 = 6.58$, $p = .01$). Likewise, participants reported a higher willingness to volunteer their time when making downward than upward comparisons ($M_s = 4.17$ vs. 3.24 ; $F(1, 53) = 5.91$, $p < .05$).

We then tested a mood-regulation account, and found that none of the emotions were significantly affected by comparison (all $F_s(1, 53) < 2.47$, NS). In general, participants felt positive ($M = 3.48$), empathic ($M = 3.14$), and neither distressed ($M = 1.83$) nor envious ($M = 1.42$). We further tested these accounts as potential mediators by conducting bootstrap analyses with 5,000 bootstrap samples using the macro by Preacher and Hayes (2008). The results further ruled out these variables as mediators: 95% confidence intervals included zero for all emotions. Thus, we obtain initial evidence that affect does not account for the comparison effects on helping. We tested affect in studies 2-4 using these measures as well as others, and replicated these results (see methodological details appendix for the emotion findings across studies).

Taken together, the results of Study 1 provide evidence that when a charity is described in terms of the benefits it provides for others, those making downward (vs. upward) comparisons

are more likely to help (H1a). We found support for this hypothesis with both monetary and nonmonetary behaviors. We extend these results in study 2 by varying whether a charitable appeal highlights how helping benefits others or the self, thereby testing both H1a and H1b.

Study 2: Direction of Comparison and Type of Charitable Appeal

Method

Eighty-seven undergraduate students participated in exchange for partial completion of an introductory business course requirement. We employed a 2 (comparison: downward vs. upward) x 2 (appeal: self- vs. other-benefit) experimental design. Similar to direction of comparison manipulations used in recent research (Becker 2012), we manipulated comparison by having participants complete a purported reading comprehension task of an article about economic indicators for the state in which they attend school. All participants compared themselves to recent graduates and those living in other states. In the downward condition, the article highlighted how participants' job prospects are better than that of others: it began with the statement that it is easier for college graduates to get jobs now than for those who graduated in the past, followed by conclusions along with supporting statistics that the unemployment rate in their state is lower than in other states. In contrast, in the upward condition, the article highlighted how participants' job prospects are worse than that of others. Specifically, the article stated how it is harder for college graduates to get jobs now than it was for college graduates in the past, and that the unemployment rate in their state compared to other states is rising. A pretest confirmed that the comparison manipulation influenced only the intended variables (see methodological details appendix for the stimuli and pretest results).

Inserted to the right of the article was a rectangular banner ad for a campus volunteering organization that contained the appeal manipulation. Consistent with prior research (White &

Pelozo 2009), the ad with the other-benefit appeal mentioned two altruistic benefits (“help those less fortunate by giving to those who need it” and “help make the world a better place for everyone”), whereas the ad with the self-benefit appeal mentioned two egoistic benefits (“build your resume by gaining valuable job skills” and “build connections by networking with local business and community leaders”). Both ads ended with a call-to-action (“Volunteer”) and the phrase “Get Involved” followed by their university’s logo. A pretest supported the effectiveness of the appeal manipulation and our assumption that, by being charitable appeals, self-benefit appeals communicate how helping benefits the self as well as how it benefits others (see methodological details appendix for pretest results).

Participants then answered three questions to purportedly test their reading comprehension (e.g., “getting a job after graduation is getting harder”) on a five-point scale anchored with “Strongly disagree” and “Strongly agree.” Afterwards, participants were told that their university has multiple volunteering opportunities on and off campus, among which are volunteering for the American Red Cross and the Humane Society, and completed the intention items described in study 1. Participants were then asked if they would like to be emailed information about how to get involved in university-sponsored volunteering opportunities on and off campus. Those who opted into this list provided their email address.

Next, to test a “warm glow” account, we measured attitude toward the charities (positive, favorable, like; $\alpha_s > .96$) on a seven-point scale where higher numbers reflect more favorable attitudes. Inconsistent with a “warm glow” account, there were no significant differences in attitudes toward the charities in this study ($F_s(1, 83) < 2.25$, NS). This was replicated in the other studies as well (see methodological details appendix for the results in the other studies).

Results and Discussion

A binary logistic regression analysis revealed that whether participants opted-in to the email list depended on comparison ($\chi^2 = 6.67, p < .05$), and was moderated by appeal ($\chi^2 = 9.64, p < .05$, see Figure 2). Supporting H1a, when the ad used an other-benefit appeal, more participants in the downward than upward condition opted-into the email distribution list (35% vs. 4%, $\chi^2 = 7.19, p < .01$). Furthermore, supporting H1b, when the ad used a self-benefit appeal, this difference was nonsignificant (36% vs. 27%, $\chi^2 < 1$).

Insert Figure 2 about here

We also measured intentions to volunteer with a 2 x 2 ANOVA. As with opt-in behavior, a comparison x appeal interaction was significant ($F(1, 83) = 4.33, p < .05$, see Figure 2). Supporting H1a, when the ad highlighted the benefit of helping for others, volunteering intentions were higher in the downward than upward condition ($M_s = 4.85$ vs. $3.98, F(1, 83) = 5.76, p < .05$). Furthermore, supporting H1b, when the ad highlighted the benefit of helping for the self, volunteering intentions did not significantly differ between those in the downward and upward conditions ($M_s = 4.14$ vs. $4.31, F(1, 83) < 1$). Thus, as predicted, self-benefit appeals mitigated the comparison effect on opt-in behavior and willingness to volunteer.

In summary, the results of study 2 replicate and extend those of study 1 by varying the charitable appeal. Specifically, we find with a different comparison domain and charity than used in study 1 that those in the downward (vs. upward) condition were more willing to help when the ad used an other-benefit appeal (H1a), whereas this effect was attenuated when the ad used a self-benefit appeal (H1b). Study 3 further extends these findings in two ways. First, we test whether the direction-of-comparison effect on giving is mediated by the instrumentality of giving as a means of expressing altruistic values (H2). Second, consistent with prior research (Cronson

& Shang 2008), we included a control (lateral comparison) condition, in which comparisons with a benchmark suggest that one's current position is the same as that of a benchmark. Although the results across studies 1-2 consistently show that giving is higher among those making downward (vs. upward) comparisons when an other-benefit appeal is used, a remaining question is whether this is because downward comparisons increase giving and/or upward comparisons decrease giving. If being relatively better off increases giving, then downward comparisons should cause greater giving than the control group. Likewise, if being relatively worse off decreases giving, then upward comparisons should lead to less giving than the control group.

Study 3: The Instrumentality of Giving for Expressing Altruistic Values

Method

The sample was 147 participants (42% female; $M_{\text{age}} = 35$ years, range = 19 to 68) who were recruited from an online sample of North American participants registered on Amazon Mechanical Turk (Mturk) and paid \$0.90 for their participation. The design was a 3 (comparison: downward, upward vs. control) x 2 (appeal) experimental design. All participants were informed that they would be completing ostensibly different studies. First, participants completed the comparison manipulation. Specifically, those in the upward condition wrote down the initials of three people who are in a better position than themselves, those in the downward condition wrote down the initials of three people who are in a worse position than themselves, whereas those in the control condition wrote down the initials of three people who are in the same position as themselves. All participants then chose one of the individuals and wrote a vivid description of why they are currently in a better, worse or the same position compared to this person.

Ad appeal was manipulated in a purportedly second study using stimuli from prior research for a fictitious organization, the National Cancer Society (Brunel & Nelson 2000).

Specifically, the self-benefit appeal described the personal benefits they would receive from donating (e.g., “Save your life: help researchers find cures for cancer and protect your future”), whereas the other-benefit appeal described the benefits that others would receive from their donations (e.g., “Save people’s lives: help researchers find cures for cancer and help others live”; see methodological details appendix for stimuli). After viewing the ad, participants reported how much of their \$0.90 payment they would donate to the National Cancer Society.

To test H2, we created two instrumentality measures based on similar measures used in prior research (Duclos et al. 2012). Specifically, participants reported the instrumentality of giving to express altruistic values (“to be a better person” and “to give back”) and more egoistic reasons (“to improve my current position” and “to improve my status”). These four items were subjected to an exploratory factor analysis with varimax rotation, which yielded a two-factor solution with eigenvalues greater than one and explaining 91.45% of the variance. Each item loaded only on its respective factor with coefficients $\geq .93$.

Manipulation checks were the same as those used in the pretests for studies 1-2 (Aspinwall & Taylor 1993; Pinkus et al. 2008) and supported the effectiveness of the manipulation (see methodological details appendix for details). In addition, toward the end of the study, participants reported the domain(s) of their comparison from a list used in prior research (Pinkus et al. 2008), which included a monetary domain (financial, or anything related to money or expenses) as well as nonmonetary domains (e.g., family, health, physical appearance, social skills). The most common comparison domain was money (59.9%). At the end, to examine whether our findings would emerge after controlling for socially desirable responding, we administered the short-form measure of the Social Desirability Scale (form A; Reynolds 1982). We included this measure because past research has indicated that it is an important variable in

affecting consumers' response to other-benefit and self-benefit appeals (Fisher et al. 2008; White & Peloza 2009). Thus, we wanted to examine whether our predictions would be supported above and beyond any effects of socially desirable responding.

Results and Discussion

Monetary donations. For the amount donated, a 3 x 2 ANCOVA was conducted that controlled for socially desirable responding. A marginally significant comparison effect ($F(2, 140) = 2.88, p = .06$) was qualified by a significant comparison x appeal interaction ($F(2, 140) = 4.21, p < .05$ with covariate; $F(2, 141) = 4.08, p < .05$ without covariate). When the other-benefit appeal was used, consistent with H1a, those in the downward (vs. upward) condition donated more money ($M = .33$ vs. $.07, F(1, 140) = 11.84, p = .001$; see Figure 3). Furthermore, compared to those in the control condition, those in the downward condition gave more ($M = .33$ vs. $.18, F(1, 140) = 3.35, p = .05$), whereas those in the upward condition gave marginally less ($M_s = .07$ vs. $.18, F(1, 140) = 2.84, p = .099$). When the self-benefit appeal was used, consistent with H1b, those in the upward condition gave as much as those in the downward condition ($M = .14$ vs. $.12; F(1, 140) < 1$), and gave as much as those in the control condition ($M = .12; F(1, 142) < 1$).

Insert Figure 3 about here

To test the robustness of the effect across monetary and nonmonetary comparison domains, we conducted a 3 (comparison) x 2 (appeal) x 2 (domain: monetary vs. nonmonetary) ANCOVA that controlled for socially desirable responding. All direct and indirect effects involving domain were nonsignificant ($F_s < 1$ with and without covariates). The only significant effects to emerge were a significant comparison main effect ($F(1, 134) = 3.19, p < .05$ with covariate; $F(1, 135) = 2.92, p = .057$ without covariate), and a significant comparison x appeal

interaction ($F(1, 134) = 3.64, p < .05$ with covariate; $F(1, 135) = 3.54, p < .05$ without covariate).

Thus, the interactive effect of direction of comparison and appeal on monetary donations emerged regardless of whether participants made monetary or nonmonetary comparisons.

Instrumentality of Giving. For instrumentality of giving for altruistic reasons, a comparison effect ($F(2, 137) = 4.72, p = .01$) and appeal effect ($F(1, 137) = 4.79, p < .05$) were both qualified by a significant comparison x appeal interaction ($F(1, 137) = 3.20, p < .05$ with covariate; $F(2, 138) = 2.42, p = .09$ without covariate). With the other-benefit appeal, those in the downward (vs. upward) condition agreed more that their decision was based on expressing altruistic values ($M = 3.17$ vs. $1.35, F(1, 137) = 8.40, p = .001$). Compared to those in the control condition, those in the downward condition had slightly but not significantly higher agreement that their decisions were based on expressing altruistic values ($M = 3.17$ vs. $2.65, F(1, 137) < 1$), whereas those in the upward condition agreed less ($M_s = 1.35$ vs. $2.65, F(1, 137) = 4.40, p < .05$). In contrast, for the self-benefit appeal, those in the upward condition agreed as much as those in the downward condition did ($M = 2.73$ vs. $2.72, F(1, 137) < 1$) but less than those in the control condition ($M = 3.98; F(1, 137) = 3.22, p = .08$). These findings were specific to giving for more altruistic reasons. In terms of giving for more egoistic reasons, no effects were significant (all $F_s(2, 137) < 1.34$, NS with covariate; $F_s(2, 138) < 1.01$, NS without covariate).

We tested both types of instrumentality as mediators of the comparison x appeal effect on giving by conducting bootstrap analyses with 5,000 bootstrap samples using model 8 of the macro by Preacher and Hayes (2008) programmed for testing mediated moderation. Consistent with H2, the instrumentality of giving to express altruistic values significantly mediated the interactive relationship between downward and upward comparisons and appeal (indirect effect of highest order interaction = $.11$; 95% LLCI = $.01$; 95% ULCI = $.22$), and between downward

and lateral comparisons and appeal (indirect effect of highest order interaction = .12; 95% LLCI = .02; 95% ULCI = .26). In fact, the conditional indirect effects of the instrumentality of giving for altruistic reasons of the relationship between comparison on giving was stronger for the other-benefit appeal (effect = .11; 95% LLCI = .03; 95% ULCI = .20) than the self-benefit appeal (effect = .00; 95% LLCI = -.07; 95% ULCI = .07). In terms of the instrumentality of giving for more egoistic reasons, none of the effects were significant (i.e., the 95% CI of the highest order interactions and conditional indirect effects all included zero).

Conclusions. Study 3 replicates and extends the results of the prior studies in several ways. First, replicating the results of the prior studies, we find that those making downward (vs. upward) comparisons were willing to give more, but only when the appeal highlighted how giving benefits others. Second, extending the results of our prior studies for other-benefit appeals, we find that compared to a control group, those making downward comparisons gave more, whereas those making upward comparisons gave marginally less. Third, we obtain evidence supporting H2. Specifically, the results suggest that the reason those making downward (vs. upward or lateral) comparisons give more when an other-benefit appeal is used is due to the instrumentality of giving to express more altruistic values (e.g., to be a better person).

In study 4, we further test the instrumentality of giving as a means of expressing more altruistic values versus more egoistic reasons by using an experimental design that tests psychological processes through moderation (Spencer et al. 2005). To do so, we adopted a paradigm from past research (Duclos et al. 2013), in which instrumentality as a mediator is tested through moderation by varying whether instrumentality beliefs are challenged. Applied to our research, if those making downward (vs. upward) comparisons give more as a means of expressing altruistic values by helping others, then they should give less when these beliefs are

challenged by suggesting that giving may harm rather than benefit others. Thus, we expect that when the context challenges such other-benefit beliefs by suggesting that giving can harm others, those making downward (vs. upward) comparisons should give less (H3). We compare this to a parallel context that highlights the instrumentality of giving as a means to benefit others. Such contexts, like the other-benefit appeals used in studies 1-3, should cause those making downward (vs. upward) comparisons to give more, consistent with H1a and the results of our prior studies.

To further test giving for egoistic reasons (e.g., to benefit the self) as an alternative process account, we include contexts that challenge or highlight the instrumentality of giving to benefit the self. Consistent with H1b and the results of our prior studies, we expect that the direction-of-comparison effect on giving will be mitigated when the context highlights the instrumentality of giving as a means to benefit the self. Furthermore, because the instrumentality of giving to benefit the self does not appear to be a significant mediator of our effect (study 3), we expect that challenging such beliefs will have little effect on giving.

Study 4: Challenging Beliefs of How Giving Benefits Others versus the Self

Method

The sample was 244 undergraduate students (57% female; $M_{\text{age}} = 21$ years, range = 18 to 50) who participated in exchange for partial course credit. The design was a 2 (comparison: downward vs. upward) x 2 (benefit: other vs. self) vs. 2 (instrumentality beliefs: highlighted vs. challenged) experimental design with two baseline conditions: those in the upward and downward conditions who read an article that was unrelated to giving. Specifically, everyone completed the social comparison manipulation, which was the same as that used in study 3. Afterwards, everyone read an article. In the baseline condition, the article was about the history of paper. In the other-benefit condition, the article either described how giving is beneficial to

others (i.e., the article highlighted how giving is instrumental to benefitting others) or costly to others (i.e., the article challenged beliefs that giving is instrumental to benefitting others). In the self-benefit condition, the article either described how giving is personally beneficial (i.e., the article highlighted how giving is instrumental to benefitting the self) or personally costly (i.e., the article challenged beliefs that giving is instrumental to benefitting the self). All articles contained three paragraphs and were 135-136 words long (see methodological details appendix for these articles as well as a pretest supporting the effectiveness of these manipulations). To increase the believability of this being a reading comprehension test, three true-false questions and one open-ended question about the article appeared next. These four questions served as an attention check for reading the articles. Participants who answered half or fewer of these questions correctly were deleted ($n = 24$), leaving a sample size of 220.

Next, using the same procedure for measuring giving behavior as used in study 1, participants received five raffle tickets that they could donate some, all or none to either charity (the American Red Cross and Humane Society). The only difference from study 1 was that instead of providing other-benefit descriptions of both charities, participants read only: “The American Red Cross and the Humane Society are just a few of the community organizations working together to respond to those affected by natural disasters.” That is, the paragraph used in study 1 to describe how these charities benefit others was omitted.

As in study 3, participants completed the social desirability scale as well as the same manipulation checks for direction of comparison as used in the pretests for studies 1-3, which supported the effectiveness of the comparison manipulation (see methodological details appendix for details). For domain of comparison, the majority of participants (76%) compared themselves to others in more than one domain ($M = 2.85$). Likely because of the sample population

(undergraduate students), the most common comparison domain was career-related (62%), followed by money (46%), knowledge/ability (45%), and interpersonal relationships (45%).

Results and Discussion

As expected, given the results of a pretest that giving to a charity is generally perceived to be more altruistic than egoistic (see methodological details appendix for pretest), participants in the baseline condition donated more tickets after making a downward (vs. upward) comparison ($M_s = 2.64$ vs. 1.70 , $F(1, 40) = 4.33$, $p < .05$ with covariate of socially desirable responding; $F(1, 41) = 4.79$, $p < .05$ without covariate).

To examine whether highlighting or challenging instrumentality beliefs regarding the benefits of giving for others or the self might moderate comparison effects, the number of tickets donated to a charity was analyzed with a $2 \times 2 \times 2$ ANCOVA controlling for socially desirable responding. The only significant effect was a 3-way interaction ($F(1, 167) = 8.81$, $p < .01$ with covariate; $F(1, 168) = 7.97$, $p < .01$ without covariate; see Figure 4). First, we examine the results when the benefits of giving for others or the self are highlighted in the article, which should replicate the findings observed in our prior studies when the ad appeals highlighted either how giving benefits others or the self. Consistent with H1a and the findings from studies 1-3, when the instrumentality of giving to benefit others was highlighted, donations were higher among those who made downward (vs. upward) comparisons ($M_s = 2.46$ vs. 1.69 , $F(1, 167) = 3.83$, $p = .05$). Furthermore, consistent with H1b and replicating the findings from our prior studies, when the instrumentality of giving to benefit the self were highlighted, the direction-of-comparison effect on giving was mitigated ($M_s = 1.89$ vs. 2.34 , $F(1, 167) < 1.25$, NS).

Insert Figure 4 about here

We next examine what happens when other-benefit and self-benefit beliefs of giving are challenged. Consistent with H3, when other-benefit beliefs were challenged, donations were significantly lower among those who made downward (vs. upward) comparisons ($M_s = 1.58$ vs. 2.54 , $F(1, 167) = 5.70$, $p < .05$). In contrast, when self-benefit beliefs were challenged, those making upward (vs. downward) comparisons were slightly less willing to give, although this effect was nonsignificant ($M_s = 2.03$ vs. 2.22 , $F(1, 167) < 1$). Consistent with the results of study 3, it appears that the instrumentality of giving as a means of expressing altruistic values (rather than as a means of gaining egoistic benefits) is the process underlying the effect of downward (vs. upward) comparisons on giving.

Another way to examine the results is by comparing giving across the four articles against giving in the baseline condition. Among those making downward comparisons, the only conditions in which participants gave less than those who read the baseline article ($M = 2.67$) were those who read the article that challenged other-benefit beliefs ($M = 1.58$, $F(1, 208) = 6.84$, $p = .01$) or the article that highlighted self-benefit beliefs ($M = 1.89$, $F(1, 208) = 3.39$, $p = .067$). In other words, consistent with our theorizing, giving was reduced in the downward condition when the instrumentality beliefs of giving as a means of benefitting others was either directly challenged by suggesting that giving harms others, or indirectly challenged by highlighting how giving provides egoistic benefits. Also consistent with our theorizing, among those making upward comparisons, the only conditions in which participants gave more than those who read the baseline article ($M = 1.67$) were those who read the article that highlighted self-benefit beliefs ($M = 2.34$, $F(1, 208) = 2.80$, $p = .096$) or the article that challenged other-benefit beliefs ($M = 2.54$, $F(1, 208) = 4.50$, $p < .05$). That is, giving increased in the upward condition when the benefits of giving for egoistic reasons was either explicitly stated in the article highlighting self-

benefits, or implied in the article challenging other-benefits by suggesting that beneficiaries may feel indebted and obligated to the donor. Perhaps for someone in a relatively inferior position, giving in order to build social capital to draw upon when needed is an egoistic incentive to give.

As in study 3, to test the robustness of the effect across monetary and nonmonetary comparisons, we conducted a 2 (comparison) x 2 (benefits) vs. 2 (instrumentality) x 2 (domain: monetary vs. nonmonetary) ANCOVA that controlled for socially desirable responding. The comparison x benefits x instrumentality interaction remained significant ($F(1, 159) = 7.41, p < .01$ with covariate; $F(1, 160) = 6.60, p = .01$ without covariate), and was not significantly qualified by domain of comparison ($F(1, 159) < 1$ with covariate; $F(1, 160) < 1$ without covariate). In other words, the comparison x benefits x instrumentality effect on monetary donations did not depend on whether participants made monetary or nonmonetary comparisons.

General Discussion

The objective of this research is to examine whether comparisons with an inferior or superior benchmark might influence individuals' subsequent propensity to give, and if so, when this effect might be strongest and why. Across four studies, we consistently find that downward (vs. upward) comparisons increase individuals' willingness to give when the context explicitly states or implies that giving will benefit others. These findings are robust, emerging across different populations (students and nonstudents), different requested resources (monetary and nonmonetary), and different domains of comparison (monetary and nonmonetary). Moreover, we find through mediation and moderation that this is due to differences in beliefs about the instrumentality of giving in order to express more altruistic values (to be a better person, give back). For instance, in addition to mediation evidence (study 3), we find that this effect occurs when the context highlights the benefits of giving for more altruistic reasons (i.e., how giving

benefits others; studies 1-4), is mitigated when the context highlights egoistic benefits (i.e., how giving benefits the self; studies 2-4), and is reversed when the context challenges beliefs that giving is instrumental to benefitting others (i.e., how giving can harm others; study 4).

Theoretical and Managerial Contributions

These findings contribute to the literatures on direction of comparison, prosocial behavior, and charitable appeals in at least three ways. First, we address a gap in the literature regarding whether direction of comparison can influence collective outcomes in spite of any direct benefit to the self (Taylor et al. 1996). We extend the limited prior research in this area on downward (vs. upward) comparison and helping (Becker 2012; Croson & Shang 2008; Yip & Kelly 2013) by proposing and consistently finding that the direction of comparison effect on charitable behavior depends on whether the context highlights how giving benefits the self or others. In fact, compared to a control group, those making downward comparisons gave more, whereas those making upward comparisons gave less when given an other-benefit appeal (study 3). This contrasts prior research that both those making downward and upward comparisons self-reported fewer prosocial behaviors than did a control group (Yip & Kelly 2013). However, in that study, both those in the upward and downward comparison (vs. the control) conditions believed the experimenter less and questioned the feedback. In other words, those in the comparison (vs. control) conditions may have reported less prosociality because of their distrust.

Second, we find that downward (vs. upward) comparisons influenced prosocial behavior even when the benchmark for comparison is unrelated to the charitable request (e.g., is neither recipients of help nor other donors). In fact, even though participants are likely in a better position than the recipients of help (e.g., cancer patients or disaster victims), those who recently made upward (vs. downward) comparisons in a different context (e.g., scored as less verbal-

creative than other students) were less willing to help unless the appeal highlighted how giving would be personally beneficial. In fact, challenging beliefs that giving will benefit others—that is, suggesting that beneficiaries feel obligated and indebted toward the donor—caused those making upward comparisons to give more than those in the upward/baseline condition did. It appears that whereas downward comparisons cause individuals to be more altruistic and cooperative, upward comparisons cause individuals to be more egoistic and competitive.

Third, we extend research that has examined the effectiveness of other-benefit and self-benefit appeals (Bendapudi et al. 1996; Brunel & Nelson 2000; Fisher et al. 2008; Nelson et al. 2006; White & Peloza 2009). For instance, prior research suggests that in public, socially-desirable responding causes individuals to be more responsive to other-benefit appeals, but in private, they are more responsive to self-benefit appeals (Fisher et al. 2008; White & Peloza 2009). Yet, we find that even in private contexts, those making downward (vs. upward) comparisons were more willing to help when viewing an other-benefit appeal. Moreover, this effect held even when controlling for individual differences in socially desirable responding.

Our findings are also inconsistent with a number of alternate explanations for these effects. For instance, in addition to our results being inconsistent with a mood regulation hypothesis and a “warm glow” hypothesis, our results are inconsistent with an account that people who have more money simply give more money: the direction-of-comparison effect (1) emerges across monetary and nonmonetary comparisons (studies 3-4), (2) emerges even when the requested resource is nonmonetary (studies 1-2), and (3) is moderated by whether the context highlights self- or other-benefits (studies 2-4).

Our findings are also largely inconsistent with a compensatory consumption account, or that those making upward (vs. downward) comparisons compensate for their inferior position by

acting prosocially. Instead, those making upward (vs. downward) comparisons were less willing to help, especially when the context highlights how giving would benefit others. This is likely because when the altruistic benefits of giving are highlighted, acting prosocially may seem relatively ineffective in compensating for an inferior position. Indeed, past research suggests that prosocial compensations occur when individuals want to restore social connections (Lee & Shrum 2012; Mead et al. 2011), which was unlikely to be operating in our studies. In terms of contexts that highlight how giving benefits the self, it is possible that those making upward comparisons gave in order to compensate for their inferior position. Although we observed null effects between those making upward and downward comparisons across self-benefit conditions, this may be because the self-benefit contexts communicated both egoistic and altruistic benefits. As a result, those making downward comparisons may give because of the altruistic benefits, whereas those making upward comparisons may give because of the egoistic benefits.

Our results also have important managerial implications. For instance, depending on the target segment's beliefs of being generally better or worse off, managers should craft charitable appeals to emphasize benefits to others or oneself, respectively. In addition, attending to the context in which an ad is placed—and whether it makes upward or downward comparisons—is critical to the success of a charitable appeal. For instance, if it is expected that the popular press will report that individuals are worse off compared to those in another state or country, such as in adjoining news articles on the state of the economy, then a self-benefit appeal should be used.

Limitations and Future Directions

Although we find the direction-of-comparison effects persisted across a variety of social-comparison manipulations, there are other types of comparisons that are less fact-based and concrete: future temporal comparisons and counterfactual comparisons (Summerville & Roesse

2008). Given the unbounded nature of simulation- (vs. fact-) based comparisons, future temporal and counterfactual comparisons tend to be upward more than downward (Summerville & Roeser 2008). Thus, although we expect downward (vs. upward) comparisons to increase prosocial behavior across types of comparisons, prompting individuals to make counterfactual or future temporal comparisons without specifying direction might cause them to spontaneously compare upward more than downward, thereby reducing their willingness to help for altruistic reasons.

Another aspect of comparison that could be explored in future research is the magnitude of comparison. For example, prior research has shown that when the magnitude of comparison is extreme (e.g., comparing one's intelligence to that of Einstein's), individuals judge the benchmark to be irrelevant, thereby freeing them from comparison (LeBoeuf and Estes 2004). However, with less extreme comparisons (e.g., comparing one's intelligence to a professor or, as in our studies, peers), the benchmark is deemed relevant and a contrast effect occurs (e.g., "I'm less intelligent than a better performing peer"). Thus, we expect our results to be mitigated as the magnitude of comparison becomes more extreme.

In addition, we focused upon donation decisions that were expressed privately rather than publicly. Because prior research suggests that self-benefit appeals are more effective in private than public contexts (White & Peloza 2009), focusing on private decisions provided the most conservative test of our predictions that those making downward (vs. upward) comparisons will give more in response to other-benefit but not self-benefit appeals. An interesting future research direction would be to examine whether downward comparisons lead to a preference for donating anonymously, whereas upward comparisons lead to preference for donating to gain recognition, consistent with our framework. These and other research directions would be valuable in shedding additional light on the effects of direction of comparison on willingness to give.

References

- Aquino, K. F. & Reed II, A. (2002). The Self-Importance of Moral Identity. *Journal of Personality and Social Psychology*, 83, 1423-1440.
- Ariely, D. & Norton, M.I. (2009). Conceptual Consumption. *Annual Review of Psychology*, 60, 475-499.
- Arnett, D. B., German, S. D., & Hunt, S. D. (2003). The Identity Salience Model of Relationship Marketing Success: The Case of Nonprofit Marketing. *Journal of Marketing*, 67, 89-105.
- Aspinwall, L. G., & Taylor, S. E. (1993). Effects of Social Comparison Direction, Threat, and Self-Esteem on Affect, Self-Evaluation, and Expected Success. *Journal of Personality and Social Psychology*, 64, 708-722.
- Becker, J. C. (2012). The System-Stabilizing Role of Identity Management Strategies: Social Creativity Can Undermine Collective Action for Social Change. *Journal of Personality and Social Psychology*, 103, 647-662.
- Belk, R. W. (1985). Materialism: Trait Aspects of Living in the Material World. *Journal of Consumer Research*, 12, 265-280.
- Bendapudi, N., Singh, S. N., & Bendapudi, V. (1996). Enhancing Helping Behavior: An Integrative Framework for Promotion Planning. *Journal of Marketing*, 60, 33-49.
- Brown, R. J., & Zagefka, H. (2006). Choice of Comparisons in Intergroup Settings: The Role of Temporal Information and Comparison Motives. *European Journal of Social Psychology*, 36, 649-671.
- Brunel, F. F., & Nelson, M. R. (2000). Explaining Gendered Responses to 'Help-Self' and 'Help-Others' Charity Ad Appeals: The Mediating Role of World-Views. *Journal of Advertising*, 3, 15-28.

- Buunk, B. P., Collins, R.L., Taylor, S. E., VanYperen, N. W., & Dakof G. A. (1990). The Affective Consequences of Social Comparison: Either Direction has its Ups and Downs. *Journal of Personality and Social Psychology*, 59, 1238-1249.
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The End of a Theory and the Emergence of a Field. *Organizational Behavior and Human Decision Processes*, 102, 3-21.
- Cialdini, R. B., & Kenrick, D.T. (1976). Altruism as Hedonism: A Social Developmental Perspective on the Relationship of Negative Mood State and Helping. *Journal of Personality and Social Psychology*, 34, 907-914.
- Cialdini, R. B., Haller, M., Houlihan, D., Arps, K., Fultz, J. & Beaman, A. (1987). Empathy-Based Helping: is it Selflessly or Selfishly Motivated? *Journal of Personality and Social Psychology*, 52, 749-758.
- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and Assessing the Motivations of Volunteers: a Functional Approach. *Journal of personality and Social Psychology*, 74, 1516-1530.
- Croson, R., & Shang, J. (2008). The Impact of Downward Social Information on Contribution Decisions. *Experimental Economics*, 11, 221-233.
- Duclos, R., Wan, E. W., & Jiang, Y. (2013). Show Me the Honey! Effects of Social Exclusion on Financial Risk-Taking. *Journal of Consumer Research*, 40, 122-135.
- Eagly, A. H., & Chaiken, S. (1993). *The Psychology of Attitudes*. Harcourt Brace Jovanovich College Publishers.
- Festinger, L. (1954). A Theory of Social Comparison Processes. *Human Relations*, 7, 117-140.
- Fisher, R. J., Vandenbosch, M. & Antia, K. D. (2008). An Empathy-Helping Perspective on Consumers' Responses to Fund-Raising Appeals. *Journal of Consumer Research*, 35, 519-

31.

Gilbert, D. T., Giesler, R. B., & Morris, K. A. (1995). When Comparisons Arise. *Journal of Personality and Social Psychology*, 69, 227-236.

Griskevicius, V., Tybur, J.M., Sundie, J.M., Cialdini, R.B., Miller, G.F., & Kenrick D.T. (2007). Blatant Benevolence and Conspicuous Consumption: When Romantic Motives Elicit Strategic Costly Signals. *Journal of Personality and Social Psychology*, 93, 85-102.

Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going Green to be Seen: Status, Reputation, and Conspicuous Conservation. *Journal of Personality and Social Psychology*, 98, 392-404.

Han, S-P, & Shavitt, S. (1994). Persuasion and Culture: Advertising Appeals in Individualistic and Collectivistic Societies. *Journal of Experimental Social Psychology*, 30, 326-350.

Isen, A. M. (1970). Success, Failure, Attention, and Reaction to Others: The Warm Glow of Success. *Journal of Personality and Social Psychology*, 15, 294-301.

Kahneman, D., & Knetsch, J. L. (1992). Valuing Public Goods: the Purchase of Moral Satisfaction. *Journal of Environmental Economics and Management*, 22, 57-70.

Latané, B. (1966). Studies in Social Comparison—Introduction and Overview. *Journal of Experimental Social Psychology*, 1, 1-5.

Larsen, R. J. (2000). Toward a Science of Mood Regulation. *Psychological Inquiry*, 11, 129-141.

LeBoeuf, R. A., & Estes, Z. (2004). Fortunately, I'm no Einstein: Comparison Relevance as a Determinant of Behavioral Assimilation and Contrast. *Social Cognition*, 22, 607-636.

Lee, J., & Shrum, L. J. (2012). Conspicuous Consumption Versus Charitable Behavior in Response to Social Exclusion: A Differential Needs Explanation. *Journal of Consumer Research*, 39, 530-544.

- Mandel, N., Petrova, P.K., & Cialdini, R. B. (2006). Images of Success and the Preferences for Luxury Brands. *Journal of Consumer Psychology*, 16, 57-69.
- Markman, K. D., & McMullen, M. N. (2003). A Reflection and Evaluation Model of Comparative Thinking. *Personality and Social Psychology Review*, 7, 244-267.
- Martinot, D., Redersdorff, S., Guimond, S., & Stéphane Dif (2002). Ingroup Versus Outgroup Comparisons and Self-Esteem: The Role of Group Status and Ingroup Identification. *Personality and Social Psychology Bulletin*, 28, 1586-1600.
- McFerran, B., Dahl, D.W., Fitzsimons, G.J. & Morales, A.C. (2010). Might an Overweight Waitress Make You Eat More? How The Body Type of Others is Sufficient to Alter Our Food Consumption. *Journal of Consumer Psychology*, 20, 146- 151.
- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D., & Vohs, K. D. (2011). Social Exclusion Causes People to Spend and Consume Strategically in the Service of Affiliation. *Journal of Consumer Research*, 37, 902-919.
- Mettee, D. R., & Smith, G. (1977). Social Comparison and Interpersonal Attraction: The Case for Dissimilarity. In J. M. Suls & R. L. Miller (Eds.), *Social Comparison Processes: Theoretical and Empirical Perspectives* (pp. 69–101). Washington, DC: Hemisphere.
- Mowen, J. C., & Sujan, H. (2005). Volunteer Behavior: A Hierarchical Model Approach for Investigating its Trait and Functional Motive Antecedents. *Journal of Consumer Psychology*, 15, 170-182.
- Nelson, M. R., Brunel, F. F., Supphellen, M., & Manchanda, R. V. (2006). Effects of Culture, Gender, and Moral Obligations on Responses to Charity Advertising Across Masculine and Feminine Cultures. *Journal of Consumer Psychology*, 16, 45-56.
- Pinkus, R. T., Lockwood, P., Schimmack, U., & Fournier, M. A. (2008). For better and for

- worse: Everyday social comparisons between romantic partners. *Journal of Personality and Social Psychology*, 95(5), 1180-1201.
- Preacher, K. J. & Hayes, A. F. (2008). Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models. *Behavior Research Methods*, 40, 879–891.
- Reed II, A. & Aquino, K. F. (2003). Moral Identity and the Circle of Moral Regard Toward Out-Groups. *Journal of Personality and Social Psychology*, 84, 1270–1286.
- Reynolds, W. M. (1982). Development of Reliable and Valid Short Forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38, 119-125.
- Richins, M. (1997). Measuring Emotions in the Consumption Experience. *Journal of Consumer Research*, 24,127-146.
- Richins, M., & Dawson, S. (1992). A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation. *Journal of Consumer Research*, 19, 303-16.
- Shavitt, S. (1990). The Role of Attitude Objects in Attitude Functions. *Journal of Experiential Social Psychology*, 26, 124-148.
- Shavitt, S., Lee, A. Y., & Torelli, C. J. (2009). Cross-Cultural Issues in Consumer Behavior. In Wanke, M. (Ed.), *The Social Psychology of Consumer Behavior* (pp. 227-250). New York: Taylor and Francis.
- Shrum, L.J., Burroughs, J. E., & Aric Rindfleisch (2005). Television's Cultivation of Material Values. *Journal of Consumer Research*, 32, 473-479.
- Smith, R. H. (2000). Assimilative and Contrastive Emotional Reactions to Upward and Downward Social Comparisons. In J. Suls and L. Wheeler (Eds.), *Handbook of Social*

- Comparison: Theory and Research (pp. 173-200). New York: Kluwer Academic/Plenum.
- Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a Causal Chain: Why Experiments are Often More Effective than Mediational Analyses in Examining Psychological Processes. *Journal of Personality and Social Psychology*, 89, 845-851.
- Srivastava, A., Locke, E.A. & Bartol, K. M. (2001). Money and Subjective Well-Being: It's Not the Money, It's the Motives. *Journal of Personality and Social Psychology*, 80, 959-971.
- Summerville, A. & Roese, N. J. (2008). Dare to compare: Fact-based versus Simulation-Based Comparison in Daily Life. *Journal of Experimental Social Psychology*, 44, 664-671.
- Taylor, S. E., Wayment, H. A., & Carrillo, M. (1996). Social comparison, self-regulation, and motivation. In R.M. Sorrentino and E.T. Higgins (Eds.). *Handbook of Motivation and Cognition* (pp 3-27). New York: Guilford Press.
- Twenge, J. M., Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Bartels, J. M. (2007). Social Exclusion Decreases Prosocial Behavior. *Journal of Personality and Social Psychology*, 92, 56-66 .
- White, K., & Peloza, J. (2009). Self-Benefit Versus Other-Benefit Marketing Appeals: Their Effectiveness in Generating Charitable Support. *Journal of Marketing*, 73, 109-124.
- Wilson, A. E. & Ross, M. (2001). From Chump to Champ: People's Appraisals of Their Earlier and Present Selves. *Journal of Personality and Social Psychology*, 80, 572-584.
- Winterich, K. P., Mittal, V. & Ross Jr., W. T. (2009). Donation Behavior Toward In-Groups and Out-Groups: The Role of Gender and Moral Identity. *Journal of Consumer Research*, 36, 199-214.
- Yip, J. J., & Kelly, A. E. (2013). Upward and Downward Social Comparisons can Decrease Prosocial Behavior. *Journal of Applied Social Psychology*, 43, 591-602.

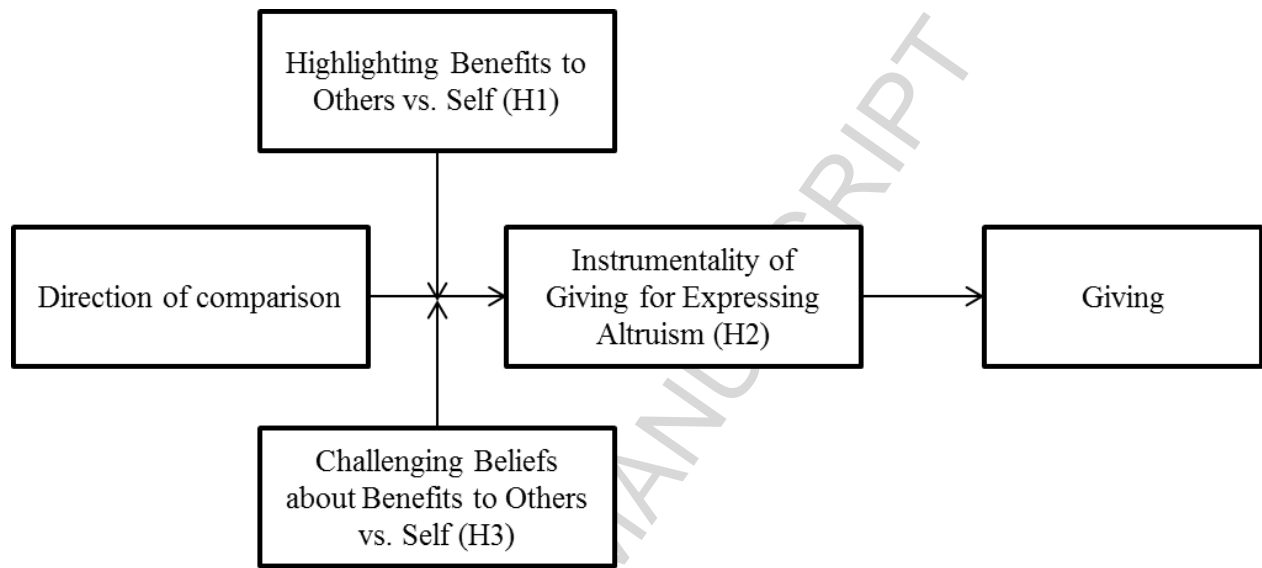
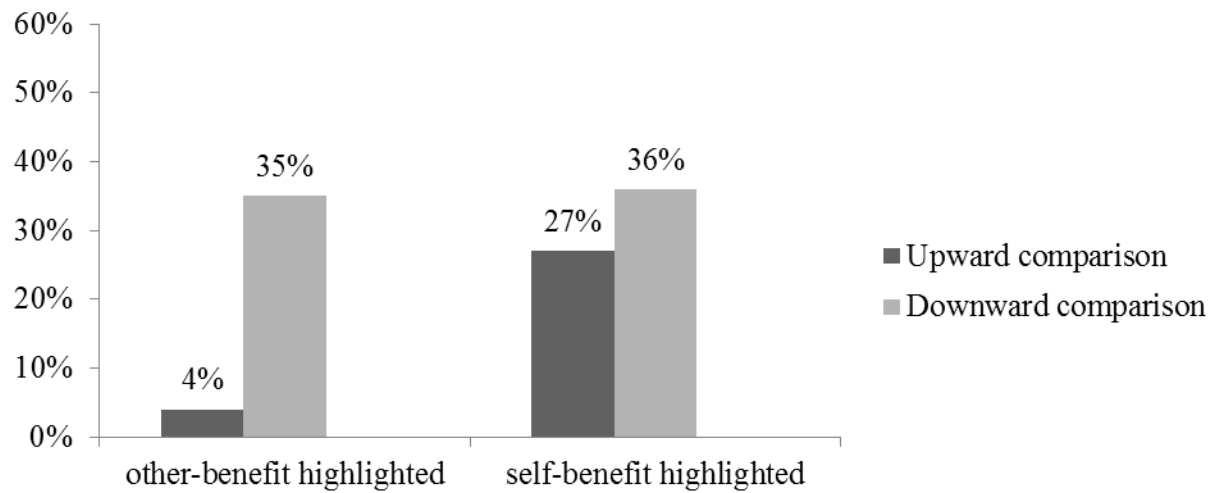


Figure 1. Conceptual model of how direction of comparison affects giving.

Email opt-in



Volunteering intentions

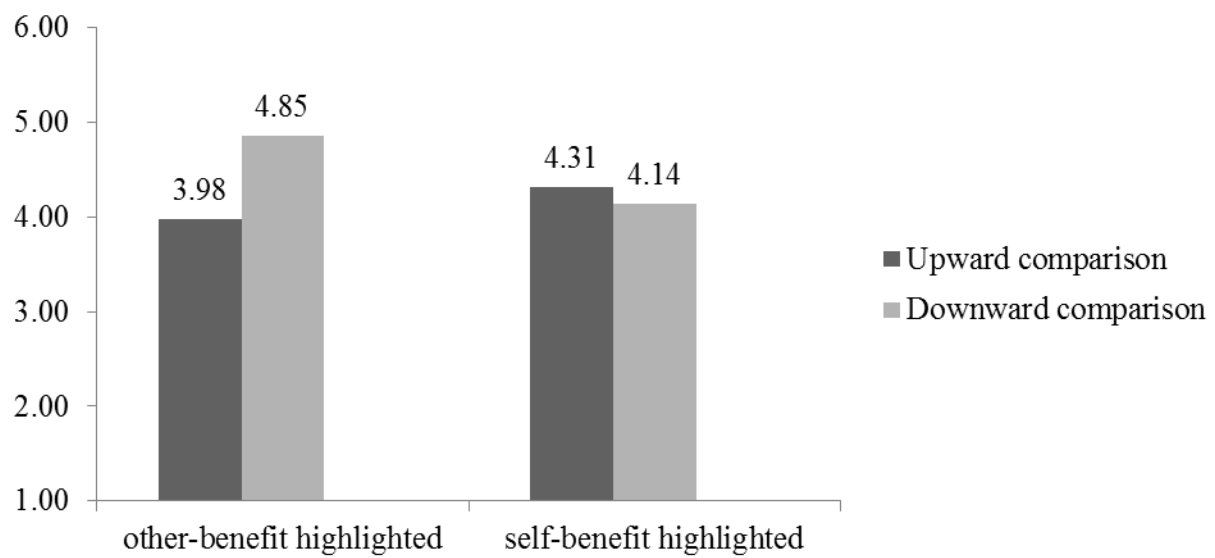


Figure 2. Study 2: Direction of comparison and ad appeals highlighting other- versus self-benefits on email opt-in and volunteering intentions.

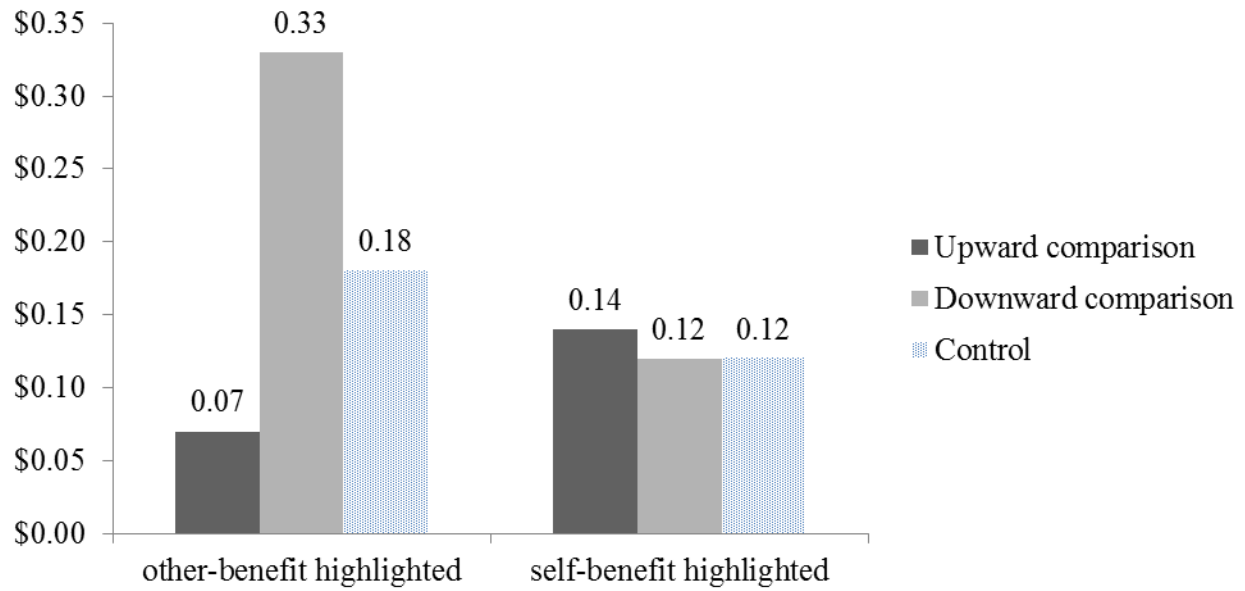


Figure 3. Study 3: Direction of comparison and ad appeals highlighting other- versus self-benefits on donation of Mturk payment of \$0.90.

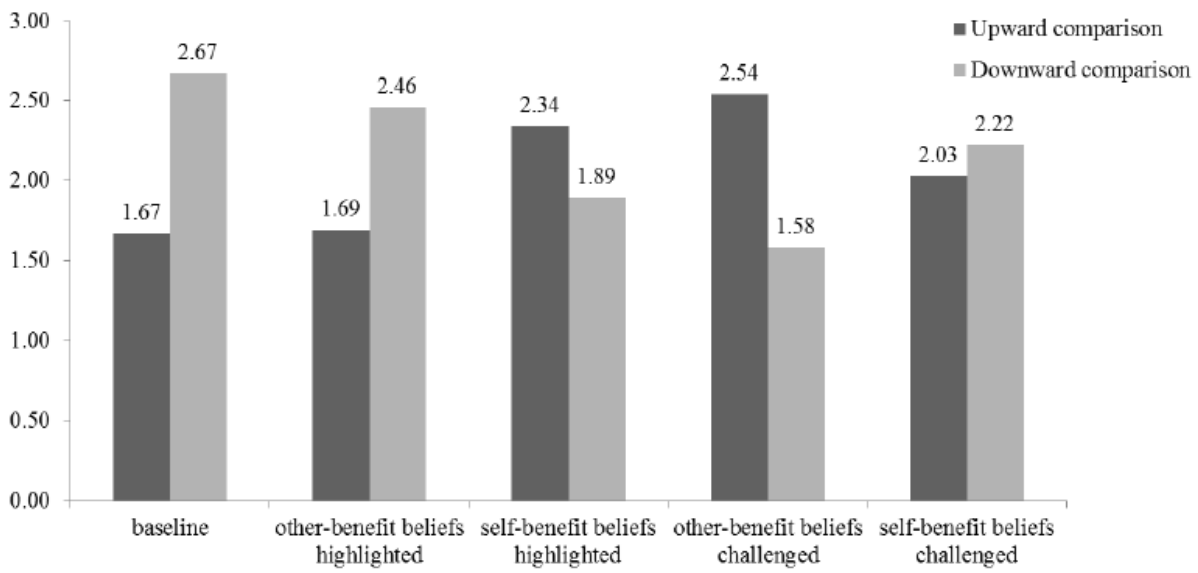


Figure 4. Study 4: Direction of comparison and enhancing versus challenging instrumentality beliefs on donation of raffle tickets (maximum of 5).