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Descriptive social norms and charitable giving

The power of local norms

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Abstract

By conducting a field experiment, we examined whether conveying descriptive social norms (e.g., "this is what most people do") leads to more charitable giving compared to industry standard appeals. Moreover, we examined whether people are more likely to conform to the local norms of one's immediate environment than to more global norms extending beyond one's local environment. University students received a charity organization's information brochure and were asked for a monetary contribution. An experimental descriptive norm manipulation was embedded in the brochure. We found that providing people with descriptive norms increased charitable giving substantially compared with industry standard altruistic appeals (control condition). Moreover, conveying local norms were more effective in increasing charitable giving than conveying global norms. Practical implications for charity organizations and marketing are proposed.

Introduction

Imagine that a representative of a charity organization asks you for a small monetary donation, noting that your contribution will make a difference to people in need. Would you make a donation? Further, imagine that you learn that a majority of those who have been asked to donate to this particular charity have done so. Does this additional information make you more likely to donate? What if you learn that most others at your school had actually donated to the charity? There are good reasons for suspecting that you would be more likely to donate if you also learn that others have donated, as social norms have been found to influence a wide range of behaviors, such as exercising (Okun, Karoly, & Lutz (2002), drinking behavior (Walters & Neigbors, 2005), and environmental conservation (Goldstein & Cialdini, 2009). Surprisingly, to what extent social norms can be specifically used to increase charitable giving is a research question that has not received much attention in the literature.

Two classes of social norms may underlie people's donation decisions. *Injunctive social norms* may produce charitable giving as such norms tell people that this is what they ought to be doing. Injunctive norms tend to be effective because noncompliance often elicits social disapproval (Cialdini, Reno, & Kallgren, 1990). Indeed, research suggests that injunctive norms can have a positive effect on giving behavior. For example, when it is suggested to players in a Dictator Game that sharing money is what players should do, they share more money compared with when no such injunctive norm is signaled (Raihani & McAuliffe, 2014). People may also be influenced by *descriptive norms* which refer to how most individuals behave in a certain situation. If a potential donor learns that most other people engage in charitable giving, he or she may follow suit because he or she automatically assumes that this is likely to be an effective and appropriate course of action in that situation (Cialdini et al., 1990).

The available experimental research evidence on the effect of descriptive norms on giving behavior is mixed. Raihani and McAuliffe (2014) examined the impact of descriptive norms on sharing behavior in a Dictator Game. They signaled descriptive norms by informing the players that most other players had shared their money. Contrary to expectation, players who learned that most other players had shared money (either $.20, or $.50) did not give more generously compared to a control condition that did not signal an altruistic norm. In contrast, Shang and Croson (2009) found that descriptive norms could indeed be used to enhance charitable contributions to a radio channel during the station's on-air fund drive. In that study, donors who called the station received information from the experimenters about how much money a previous donor had contributed. Relative to a control condition where the callers did not learn about the amount that previous donors had contributed, letting the callers know that previous callers had donated money increased donations. However, descriptive norms only increased donations for those callers who were new (as opposed to renewing) donors and who had learned that the previous caller had donated a large sum of money (90^{th} percentile). Learning that previous callers had donated a sum that was in the 85^{th} or 50^{th} percentile (as determined by past contributions to the channel) was not sufficient to enhance contributions.

Rather than speculating about why the findings on the effectiveness of descriptive norms on giving behavior is inconsistent in the Raihani and McAuliffe (2014) and Shang and Croson (2009) studies, it may be more informative to look at what experimental research conducted in a different prosocial context, namely environmental behavior, has to say about the effectiveness of descriptive norms. In a pioneering field experiment, Goldstein et al. (2008) examined the impact of normative appeals on hotel guests' towel reuse behavior. By systematically altering the type of information provided in a towel reuse sign, the authors demonstrated that signs signaling descriptive norms ("e.g., 75% of hotel guests have reused

their towels") produced significantly higher towel reuse rates compared to signs that contained a (industry) standard environmental appeal ("HELP SAVE THE ENVIRONMENT"). Furthermore, Goldstein et al. showed that signaling what they labeled as provincial norms (norms of one's local settings and circumstances) were more effective than more global norms (norms that apply more generally, beyond one's local settings and circumstances). For example, hotel guests who learned that 75% of the previous guests who had stayed in *the same room* had reused their towel more than once (provincial norms) were more likely to reuse their towels compared to hotel guests who learned, more generally, that 75% of the previous hotel guests had reused their towel more than once (global norms). Interestingly, provincial norms prevailed even though an independent sample of participants reported that the category of hotel guest in a particular room was less important to people's identities than the broader category of hotel guests. These intriguing findings suggest that sometimes people conform to the norms of reference groups that are relatively unimportant to their identities, as long as these reference groups are perceived to have situational similarities.

However, recent replication studies have failed to reproduce the original findings obtained by Goldstein et al. (2008). In a German study, Bohner and Schlüter (2014) found no evidence of a provincial norm superiority effect. Perhaps even more disappointingly, they found that descriptive norms per se did not result in higher towel reuse rates compared to a standard message appealing to environmental concerns. Similarly, an Austrian replication study failed to reproduce the descriptive norms effect (Reese, Loew, & Steffgen, 2014). In an attempt to make sense of these discrepant findings, the authors of these replication studies note that because environmental attitudes tend to be stronger and towel reuse base rates higher in Europe, it is possible that a descriptive norm of 75% may constitute a less potent norm manipulation for European than for American hotel guests.

The current research

Based on the previous research on environmental conservation and charitable giving reviewed above, the practical utility of signaling descriptive norms for prosocial purposes appears inconclusive at this point, warranting further study. Thus, we conducted a field experiment with the overall goal of examining whether descriptive norms can be reliably used to increase charitable giving. Furthermore, inspired by Goldstein et al.'s (2008) pioneering work on provincial norms, we more specifically examined whether descriptive norms that are tied to a more specific, spatially proximal reference group would be more effective in producing charitable giving compared to descriptive norms that are tied to a more global reference group that also includes people of one's more distal environment. We are not aware of any previous research that has specifically examined the effectiveness of local versus global norm for charitable giving. We believe that the impact of descriptive norms on charitable giving may have been underappreciated in previous research due to its focus on the size of the other people' contributions rather than on the norm reference group itself (e.g., its spatial proximity).

Method

Participants. University students (N = 196; 62% females) of a large university situated in the southern part of Sweden, were the research participants of the current field experiment. The data were collected during a fundraising campaign on March 27, 2015. The students were not aware that they were participating in a study. Prior to running the study we wanted to have enough participants to have 80 % power to detect a .25 change in the proportion who decided to donate (e.g., an improvement from .5 to .75). We thus aimed for 192 participants (calculated in G*power).

Materials, *design, and procedure*. The current study was conducted in collaboration with Golomolo, which is a Swedish nonprofit charity organization that was founded in 2008. The overall goal of Golomolo is to improve children's living conditions in Uganda (http://www.golomolo.se/). The field experiment was conducted in one of the university main buildings. All the study materials consisted of information from Golomolo, except for the descriptive norms manipulation (see below). The materials consisted of a poster, which was placed on the wall behind the temporary station from which the volunteers of the charity, including the experimenters, worked, and of a brochure which was handed to students who were walking in the corridor where the station was located.

The poster and the brochure (see Electronic Supplementary Material 1) contained the kind of information that is typically provided by charity organizations ("industry standard"). More specifically they contained pictures of Ugandan children living in poverty, facts about the living conditions in Uganda, information about the charity's various projects that provide vulnerable and orphaned children in Golomolo with food, care, basic education, and a good upbringing. They also included altruistic appeals (e.g., "Your gift makes a difference", "By contributing you will improve living conditions for the children of Gossace School and orphanage").

Additionally, the participants received a small paper on which a message constituting the descriptive norm manipulation was printed. This paper was attached to the information brochure with a paper clip. Participants were randomly assigned to receive one of three messages. In the standard condition, the message simply contained a donation request. In the global norm condition, the message also communicated a descriptive norm informing participants that most university students (in Sweden) who had been asked to donate did so. In the local norm condition, the message communicated a descriptive norm informing participants that most students at the same university who had been asked to donate did so.

Thus, the manipulation of local versus global norms concerned whether the norms were based on the donation behavior of individuals in one's local environment versus the donation behavior of people more generally, beyond one's local environment. The exact messages that were used were:

- "You can support Golomolo by donating 20 (Swedish) crowns." (Standard/control condition)
- "You can support Golomolo by donating 20 (Swedish) crowns. 73% of university students in Sweden who were asked for a contribution have donated 20 (Swedish) crowns to Golomolo." (Global norm condition)
- "You can support Golomolo by donating 20 (Swedish) crowns. 73% of Linnaeus University students who were asked for a contribution have donated 20 (Swedish) crowns to Golomolo." (Local norm condition)

We used 20 Swedish crowns (= $2.40; €2.16) as a donation reference value in our request because we believed that this would be a reasonable request given that our participant pool consists of university students. Of course, participants were free to donate any amount they wished. Since a pilot study conducted on an independent sample of university students (N = 60) suggested that as many as 46% did not have any cash on them, we also allowed "Swish" (mobile phone) payments. The same pilot study suggested that the proportion of eligible students who actually would be able to contribute if they wished increases to 90% when the "Swish" mode of payment is also available.

The data collection was performed by four experimenters who were blind to experimental condition. The experimenters handed out the information brochures to those students who agreed to spare a few minutes to read through Golomolo's information brochure. Data were

only collected from those students who were willing to receive the information brochure (which included the manipulation). When the participants had decided how much money to donate, the experimenter told them that they had participated in a study on how various methods influence charitable giving. They also learned that the study had been conducted in collaboration with Golomolo. During the debriefing it became clear that no participant suspected that they had been part of a study. They were asked not to spread this information to other students. Afterwards the experimenter opened the participant's information brochure and wrote down which condition the participant had been assigned to. The gender of the participant was also recorded.

The current study had two dependent variables: one nominal (donation: yes or no) and the other continuous (amount donated). We have not omitted any data points, measures or conditions, or other experiments on this topic.

Results

Donation rates

We first performed a chi-square test to examine if our experimental manipulation had an effect on overall donation rates This analysis was statistically significant, X^2 (2, N = 196) = 18.43, $p < .001$, $r = .31$ (Figure 1). A planned comparison showed that participants in two descriptive norm conditions combined (69.6%) were significantly more likely to donate compared to participants in the standard/control condition (42.6%), X^2 (1, N = 196) = 12.90, $p < .001$, $r = .26$. This analysis shows that those participants who learned that most other people had donated were more likely to donate than those who were only exposed to standard altruistic appeals. That is, conveying descriptive norms proved to be an effective means of increasing donation rates.

An additional planned comparison showed that participants were significantly more likely to donate in the local norm condition (79.4%) than in the global norm condition (59.7%), X^2 (1, N = 135) = 6.20, p = .01, r =.21. In other words, people are more likely donate if they learn that others in their immediate environment have donated money compared to if they learn that a broader group of people have donated – people who transcend their local environment. Results also reveal that the participants in the local norm condition were almost twice as likely to donate compared to those in the standard condition, X^2 (1, N = 129) = 18.48, p < .001, r =.38. Furthermore, the global norm condition produced more charitable giving than the standard condition, X^2 (1, N = 128) = 3.73, p = .05, r =.17, respectively.

Amount donated

Table 1 – 3 plot the data of the amount donated in the form of stem and leaf plots. From these plots, it is apparent that some amounts are far more common than others. Unsurprisingly, this corresponds to the available currency coins and bills in Sweden: 1, 5, 10, 20, 50, and 100. The requested amount was 20 SEK and it is thus not surprising that this amount is the most common amount donated, apart from zero. What is particularly striking is that the effect of descriptive norms appears to be driven almost entirely by an increase in giving 20 SEK.

As can be seen in the stem and leaf-plots, the participants' donations were not normally distributed. We thus choose to analyze this variable using non-parametric tests. However, we also report the mean values of donation, as this value is of intrinsic applied value in terms of the economic return of the manipulation. A Kruskal-Wallis test showed that donations were significantly affected by our experimental manipulation, X^2 (2, N = 196) = 19.19, p < .001. A planned comparison, revealed that participants in two descriptive norm conditions combined (M = 17.68) donated significantly more money compared to participants in the

standard/control condition (M = 9.11), U (N_1 = 135, N_2 = 61) = 2854.00, $p < .001$, r = .27. Thus, donations were larger when descriptive norms were signaled compared to when only standard altruistic appeals were made. Moreover, a second planned comparison showed that the participants in the local norm condition (M = 20.78) gave more generously than those in the global norm condition (M = 14.70), U (N_1 = 68, N_2 = 67) = 1804.50, p = .02, r = .19, supporting a local norm superiority effect. Further attesting to the effectiveness of local norms, participants in the local norm condition donated twice as much money as participants in the standard condition, U (N_1 = 68, N_2 = 61) = 1215.00, $p < .001$, r = .39. Finally, global norms produced larger donations than standard information, U (N_1 = 67, N_2 = 61) = 1639.00, p = .04, r = .19, respectively.

Discussion

Extant research has shown that charitable giving is influenced by a host of things, such as donor characteristics (e.g., personal values; Bennett, 2003), charity organization characteristics (e.g., trustworthiness; Bekkers, 2003), the characteristics of the final recipients of the charitable contribution (e.g., victim identifiability; Slovic, 2007), as well as the cognitions (e.g., perceived entitativity; Smith, Faro, & Burson, 2013) and the emotional reactions (e.g., empathy; Small & Verrochi, 2009) that these intended recipients elicit. The current field experiment adds to this literature by demonstrating that descriptive norms matter for charitable giving. Our results show that if people learn that a majority of other people have donated to charity they are more likely to donate themselves, compared to when no such information is provided. Moreover, we find evidence of a local norm superiority effect. That is, descriptive norms that are tied to a more specific, spatially proximal reference group (students at the same university) appear to be more effective in producing charitable giving

compared to descriptive norms that are tied to a more global reference group that also includes people of one's more distal environment (university students more generally).

The current research adds to the specific literature on descriptive norm and charitable giving by demonstrating the previously untested advantage of conveying local norms as opposed to global norms. It also adds to a broader literature on descriptive norms and prosocial behavior (e.g., towel reuse) that has produced mixed findings regarding the effectiveness of signaling descriptive social norms per se, and local norms more specifically, by showing that they can be reliably used to increase charitable giving in real-world settings.

The current findings are of practical importance. The news for charity organizations is that the "industry standard" approach consisting of altruistic appeals along with statistics and photos of identifiable victims will only take them so far. By adding information about descriptive norms, charitable giving should increase to substantially higher levels. In fact, our point estimates indicate that by providing local norms, the number of donors and size of the donations can be doubled. Such an effect makes a huge difference considering that a single donation of $10 translates into 30 high-calorie meals for malnourished children, 164 fluid replacements, or 360 malaria tablets. If one further considers that there are over one million charities in the US alone (National Center for Charitable Statistics, 2015), the accumulative effects that could emerge even if only a small proportion (e.g., 1%) of these charities were to take advantage of descriptive norms, would be practically and societally important (see Messick, 1995).

In order to avoid deceiving potential donors and thus putting the organization's reputation at stake, we stress the importance of providing real numbers when conveying descriptive norms. To achieve this, charities may want to contact possible donors in a more targeted fashion. For example, a charity that wants to take advantage of the local norms effect could go through its donor register and contact possible donors who live on a street where a

respectable proportion of one's neighbors have given to the charity. How large the proportion of donors in the reference group needs to be in order to be effective is not known, however, and is therefore an important topic for future research. Based on the local norm superiority effect, we expect that a lower proportion is needed for spatially (and socially) proximal reference groups.

The practical implications of this research apply to other domains where altruistic behavior is called for. For example, letting school children know that most children (at their own school) intervene on behalf of the bullying victim may be a more effective approach to combat bullying compared to adopting a value-based approach that primarily communicates altruistic values to children. Conveying local norms may be effective in marketing more generally. A salesperson selling burglar alarm systems may increase his/her sales by informing potential customers that most of their neighbors use their alarm systems. How well descriptive norms actually fare in these contexts awaits empirical scrutiny.

As a note of theoretical caution, when provincial versus global norms are manipulated, a change to the norm reference group's spatial proximity will likely also entail a change to its social proximity. This is because spatial and social distances are strongly interrelated (Trope & Liberman, 2010). For example, people who are far away geographically are often perceived as being socially removed from the self. Thus, when a norm reference group of university students in general is changed to include students at one's local university, it not only becomes both more spatially proximal, it may also become more socially proximal. Yet, both spatial and social proximity of the norm reference group should increase conformity to the norm in question. After all, it has been argued that it is typically beneficial to follow the norms that most closely match one's physical environment because it should be more diagnostic of effective and adaptive behavior (Goldstein et al., 2008). Likewise, social identity and self-categorization theories (Tajfel, 1982; Turner, 1985) suggest that reference

groups that are increasingly socially proximal to people's selves should generally be more behaviorally relevant and more influential compared to more socially distal reference groups. Indeed, research shows, for example, that people are more likely to follow the norms of socially close others whom they identify more strongly with (Terry & Hogg, 1996; Terry, Hogg, & White, 1999). Because, we see spatial and social proximity as intrinsically linked and because local norms tend to be based on what most socially proximal others, such as peers, do (but see Goldstein et al. for an exception), we did not attempt to separate the influences of these distances in the current research. Moreover, because our goal was to examine whether local/provincial norms can be effectively used to enhance giving in real-word charitable settings, we allowed for any joint spatial and social proximity effect to be exerted on participants' giving behavior. Nevertheless, more theoretically oriented future research may want to tease apart and study the independent effects of the reference group's spatial versus social proximity.

During the summer of 2014, largely thanks to a very spectacular campaign named the "ice bucket challenge", the Amyotrophic Lateral Sclerosis (ALS) Association received a stunning $98.2 million in donations, which is to be compared with the $2.7 million donated during the summer before (Townsend, 2014). What made the "ice bucket challenge" so successful? Although there are probably multiple reasons for its success, we would like to believe that one reason has to do with the public attention that the challengers' behavior received. After all, 2.4 million ice bucket-related videos have been posted on Facebook (Townsend, 2014). The current findings suggest that by seeing many other in their proximity participating in the challenge, people decided to follow suit.

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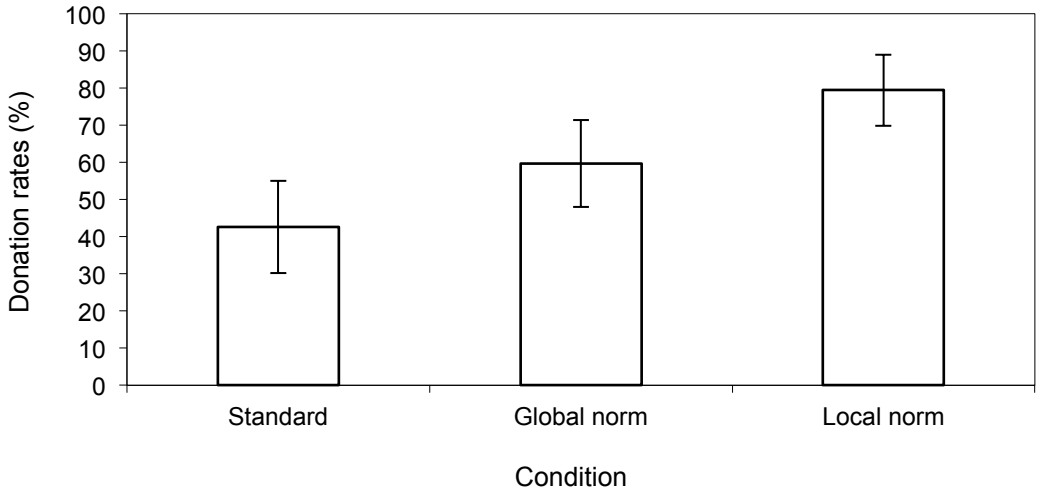
Figures

Figure 1. Donation rates as a function of experimental condition



Note. Error bars denote 95 % CI.

Table 1. Stem and leaf-plot for the donations (Swedish crowns) in the standard condition

Stem	Leaf
0	00000000000000000000000000000000001
1	5
2	000000000000000000000
5	00

Table 2. Stem and leaf-plot for the donations (Swedish crowns) in the global norm condition

Stem	Leaf
0	00000000000000000000000000001
0	59
1	00
2	000000000000000000000000
3	0
4	000
5	000000

Table 3. Stem and leaf-plot for the donations (Swedish crowns) in the local norm condition

Stem	Leaf
0	000000000000007
1	1
2	00000000000000000000000000000000000000000005
3	0
5	000000
10	00