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Unit Asking: A Method to Boost Donations and Beyond

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Abstract
The solicitation of charitable donations costs billions of dollars annually. Here, we introduce a virtually costless method for boosting charitable donations to a group of needy persons: merely asking donors to indicate a hypothetical amount for helping one of the needy persons before asking donors to decide how much to donate for all of the needy persons. We demonstrated, in both real fund-raisers and scenario-based research, that this simple *unit-asking* method greatly increases donations for the group of needy persons. Different from phenomena such as the foot-in-the-door and identifiable-victim effects, the unit-asking effect arises because donors are initially scope insensitive and subsequently scope consistent. The method applies to both traditional paper-based fund-raisers and increasingly popular Web-based fund-raisers and has implications for domains other than fund-raisers, such as auctions and budget proposals. Our research suggests that a subtle manipulation based on psychological science can generate a substantial effect in real life.

Keywords
decision making, judgment

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Raising charitable donations requires considerable time and effort. In the United States alone, for example, it costs more than $50 billion each year to raise roughly $300 billion in individual donations (Greenfield, 1999; National Philanthropic Trust, 2012). In the research reported here, we introduced a simple and virtually costless method for boosting donations. The method is applicable both to conventional paper- and telephone-based fund-raisers and to increasingly popular Web-based fund-raisers. We wish to make it clear up front that the primary purpose of this research was not to introduce new psychological theories but to introduce a method that is based on psychological theories and designed to help people in real life; nevertheless, we also discuss the theoretical foundation and implications of this method.

The Method and Hypotheses

Consider a Web-based fundraiser that solicits donations to help *N* needy persons. The Web site has two versions of solicitation: control (conventional) and unit asking (experimental). The control version asks potential donors to decide how much to donate for all of the *N* persons. The unit-asking version first asks potential donors a hypothetical question—"How much would you donate for one of the *N* persons?"—and then asks them to decide how much to donate for all of the *N* persons. Note that the unit-asking version merely adds a hypothetical question that carries no additional external information. Yet we propose that this hypothetical question will increase donations to the *N* persons. We refer to this effect as the *unit-asking effect*. The reason unit asking works is not that it misleads respondents, draws their attention to the number of persons in need, or renders the needy persons identifiable. Rather, unit asking works because people are initially scope insensitive and subsequently scope consistent.

Specifically, the method builds on two well-established psychological effects. One is scope insensitivity. When

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asked to decide on their willingness to donate (WTD) for a certain number of needy persons, respondents largely ignore the number because the number itself is often independently inevaluable (Hsee, 1996; Hsee & Zhang, 2010). Instead, respondents base their WTD decisions on easy-to-evaluate cues, such as their feelings toward the needy persons (Peters, Västfjäll, Gärling, & Slovic, 2006; Slovic, Finucane, Peters, & MacGregor, 2002, 2007). Such feelings depend largely on a prototype of the needy persons, regardless of their number (Dunn & Ashton-James, 2008; Hsee & Rottenstreich, 2004; Kahneman & Frederick, 2005). Thus, the unit WTD that respondents in the unit-asking condition offer for one needy person will likely be close to the total WTD that respondents in the control condition offer for all of the *N* needy persons. We should mention that WTD for one person can be even higher than that for *N* persons if both the one person and each of the *N* persons are identified (Kogut & Ritov, 2005a, 2005b). However, in our studies, we did not identify each of the *N* persons and, therefore, did not expect WTD to be higher for one person than for *N* persons.

The second psychological effect on which the unit-asking method builds is the desire for consistency (Ariely, Loewenstein, & Prelec, 2003; Freedman & Fraser, 1966). When the unit-asking respondents are asked to decide on their total WTD for all of the *N* needy persons after having indicated a unit WTD for one needy person, their desire for consistency will compel them to contribute more for *N* persons, thus generating the unit-asking effect.

It should be noted that although we expect unit asking to increase total WTD, we do not expect total WTD to be *N* times as large as unit WTD. Donors have budgetary constraints; if the maximum amount donors can afford to contribute is \$30 and if they have already expressed a unit WTD of \$20 for one person, then the maximum total WTD they will offer for *N* persons will be only \$30, not \$20 × *N*.

Our explanation for the unit-asking effect—initial scope insensitivity and subsequent scope consistency—resonates with existing research on evaluability (Hsee, 1996; Hsee & Zhang, 2010; Moore, 1999) and arbitrary coherence (Ariely et al., 2003). Research on evaluability has suggested that in the *single evaluation* mode (in which a single value is presented and evaluated), people are relatively insensitive to the magnitude of the value, whereas in the *joint evaluation* mode (in which multiple values are juxtaposed and evaluated comparatively), people are relatively sensitive to the magnitude of the values. The total WTD that control-condition respondents indicate is independent of the unit WTD that unit-asking respondents indicate; therefore, it is in the single-evaluation mode and, hence, scope insensitive. In contrast, the total WTD that unit-asking respondents indicate immediately follows the unit WTD that these respondents indicate; therefore, it is in the joint-evaluation mode and, hence, scope sensitive (Kogut & Ritov, 2005b; Moore, 1999).

Research on arbitrary coherence has offered a similar account. According to that research, the first response to an unfamiliar stimulus is arbitrary, and subsequent responses are consistent with the first response. On the one hand, both the total WTD that control-condition respondents indicate and the unit WTD that unit-asking respondents indicate are the first responses in the two respective conditions; therefore, these responses are arbitrary and scope insensitive. On the other hand, the total WTD that unit-asking respondents indicate is the second response in their condition; therefore, it is coherent and scope sensitive. In the current research, we applied these psychological phenomena to facilitate fund-raising.

We report results from three studies that tested the unit-asking method. In Study 1, a scenario-based study, we demonstrated the unit-asking effect and addressed potential alternative explanations. In Studies 2 and 3, both field experiments, we applied the unit-asking method and replicated the unit-asking effect in real fund-raisers.

Study 1

Method

Participants were 180 adults in the United States (41% female, 59% male; mean age = 34.7 years) recruited from a nationwide online survey service and paid a nominal amount. The study was conducted shortly before Christmas. In a questionnaire, respondents were asked to imagine that the principal of a neighborhood kindergarten had sent them an e-mail requesting that they make a donation to buy Christmas gifts for the children there. Respondents were then directed to a Web site and told that they could revise their answers at any time and that their answers would not be recorded until they had completed the entire survey and submitted it.

According to the Web site, the kindergarten's students included 20 children from low-income families whose parents had little money with which to buy Christmas gifts, and the kindergarten principal hoped that the respondents would make a donation for buying these 20 children Christmas gifts. The Web site included the portrait of a young girl and described her as one of the needy children.

Unbeknownst to the respondents, the Web site had four between-subjects versions (conditions). The two main versions were control and unit-asking versions. The control version asked, "Please think about all of these 20 children. How much are you willing to donate to help these 20 children? Please enter the amount of money you decide and agree to donate: \$_____." After entering an amount of money, respondents were then given the

option to revise the amount or submit it. The unit-asking version was identical to the control version with one exception: Before respondents were asked how much to donate for the 20 children, they first were asked about one child (with what was explicitly described as a hypothetical question): "Before you decide how much to donate to help these 20 children, please first think about one such child and answer a hypothetical question: How much would you donate to help this one child? Please indicate the amount here: $____." After respondents typed the amount, they were asked the same question about the 20 children that respondents in the control condition answered.

In addition to the control and unit-asking versions, we included two other versions to address potential questions: a thinking-only version and a number-recalling version. The thinking-only version was identical to the unit-asking version except that it asked respondents to think only about the hypothetical unit-asking question and did not ask them to actually write down their answer (their unit WTD for one child); we included this version to test whether merely thinking about the unit-asking question without providing an answer would also increase total donations. The number-recalling version was identical to the control version except that before respondents were asked to decide on their total WTD, they first were asked to recall and write down the number of children in the kindergarten they were supposed to help; we included this version to examine whether merely paying attention to the total number of needy persons without seeing the unit-asking question would also increase total donations.

Results and discussion

Figure 1 summarizes the total-WTD results of the four conditions. A one-way analysis of variance (ANOVA) revealed a significant effect, $F(3, 168) = 11.15$, $p < .001$.[1] To test the unit-asking effect, we conducted a planned comparison between the two primary conditions, control and unit asking, and found a significant unit-asking effect on total WTD; respondents in the unit-asking condition contributed more than twice as much for the 20 children ($M = \$49.42$) as did respondents in the control condition ($M = \$18.03$), $F(1, 168) = 22.68$, $p < .0001$, $d = 0.88$. Figure 1 also presents the unit-WTD result in the unit-asking condition. Comparisons of the total-WTD results with the unit-WTD result revealed that the total WTD in the control condition was not significantly different from the unit WTD in the unit-asking condition, $t < 1$, n.s., but the total WTD in the unit-asking condition was significantly higher than the unit WTD in the unit-asking condition, $t(42) = 5.28$, $p < .001$. These results corroborated our proposition that respondents were initially scope insensitive and subsequently scope consistent (although not linearly so).

Two questions arose regarding our findings. First, would respondents donate more if they were asked to merely think about the unit-asking question without answering it? Second, did the unit-asking effect occur because unit asking drew respondents' attention to the number of needy children? In other words, would respondents donate more if they were merely prompted to attend to the number without the unit-asking manipulation? To address these questions, we examined the other

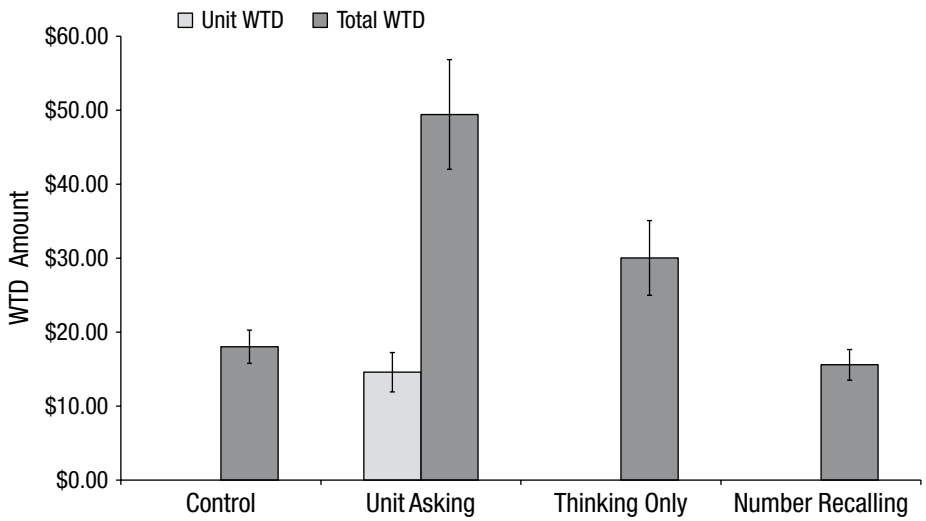

Fig. 1. Results from Study 1: mean amount of money participants were willing to donate (WTD) in different conditions. Error bars indicate standard errors.

two conditions of the study—the thinking-only condition (to address the first question) and the number-recalling condition (to address the second question). Specifically, we conducted post hoc Duncan tests to compare total WTD between the different conditions and found that total WTD in the unit-asking condition was significantly higher than that in the other three conditions but that total WTD in the thinking-only condition and in the number-recalling condition was not significantly different from that in the control condition. Thus, merely thinking about the unit-asking question or merely paying attention to the number of needy children without the unit-asking manipulation was not sufficient to boost donations. It seemed necessary for respondents to provide the unit-WTD amount. What was written down was concrete (the number was "out there"), and this concreteness accentuated the respondents' need to be consistent in making their subsequent total-WTD decisions. We should note, however, that this need was internal rather than external; as highlighted later, the unit-asking effect arises even in situations in which respondents make their decisions privately and anonymously and can revise their decisions without scrutiny from others.

Although seemingly related, the unit-asking effect is distinct from the identifiable-victim effect—the finding that people are more inclined to help identifiable victims than unidentifiable victims (Jenni & Loewenstein, 1997; Kogut & Ritov, 2005a, 2007; Small & Loewenstein, 2003, 2005; Small, Loewenstein, & Slovic, 2007; Small & Verrochi, 2009). According to the existing literature (e.g., Small et al., 2007), an effective way to render the needy persons identifiable is to include a picture of a single needy person. As described earlier, we included a picture of a single child in all of the conditions; therefore, the identifiability of the children was already high. The fact that we still observed a robust unit-asking effect rendered identifiability an unviable explanation. To further rule out identifiability as an explanation, we conducted a follow-up study ($N = 131$) using a 2 (method: control vs. unit asking) × 2 (victim identifiability: high vs. low) factorial design. A 2 × 2 ANOVA yielded a main effect of method, $F(1, 124) = 4.00$, $p < .05$, which replicated the unit-asking effect, and a main effect of victim identifiability, $F(1, 124) = 4.20$, $p < .05$, which replicated the identifiable-victim effect; the analysis showed no interaction between the two factors, $F < 1$, suggesting that the unit-asking and the identifiable-victim effects were orthogonal.

The unit-asking effect also differed from the foot-in-the-door (FITD) effect, the phenomenon that people are more likely to comply with a large request if they previously have complied with a small request (Freedman & Fraser, 1966; Guéguen & Jacob, 2001). Although both effects capitalize on respondents' need for consistency, the FITD effect capitalizes on respondents' desire to be attitudinally consistent (e.g., consistent about whether to donate money for the poor given that they have publicly expressed their sympathy for the poor), whereas the unit-asking effect capitalizes on respondents' desire to be analytically consistent (e.g., consistent about how much to donate for 20 children given that they would donate $10 for one child). Furthermore, FITD typically works in situations in which, at the time respondents agree to the small request, they do not know that the requester will make a large request later, and in situations in which respondents make their decisions in front of the requester and, thus, are under social pressure to be consistent. Conversely, unit asking works even in situations in which respondents know in advance that the unit-asking question is only a hypothetical precursor, and in situations in which respondents make their decisions in private, without external pressure for consistency.

Study 2

Method

Study 2 was a field experiment in which we applied the unit-asking method and replicated the unit-asking effect in a fundraiser of a midsized company (with approximately 800 employees) in China. The company conducted annual fund-raisers among its employees that were designed to assist needy individuals. The employees made their donations on a company-designated Web site, and the company sent the donations to the target organization. We administered our study in conjunction with one of these fund-raisers. This particular fundraiser aimed to help 40 students from low-income families at an elementary school in rural Sichuan, a school the company had sponsored following the region's 2008 earthquakes.

The procedure of the study was similar to that followed in Study 1 except that the process involved a real fundraiser and only the two main conditions, control and unit asking. The company sent a mass e-mail to all of its employees announcing the fundraiser and encouraging each employee to help the 40 students by making a donation on the designated Web site within 1 week of the announcement. Within 1 week of the announcement, 320 employees (36% female, 64% male; mean age = 32.1 years) visited the Web site. Unbeknownst to the visitors, some of them were directed to a control version and some to a unit-asking version of the solicitation.

Results and discussion

Unit asking made a significant difference in total WTD; mean total WTD was approximately 65% higher in the unit-asking condition ($M = 326.69$ yuan) than in the control condition ($M = 197.37$ yuan), $t(315) = 2.70$, $p < .01$,

d = 0.31 (at the time of the study, 1.00 yuan was worth approximately $0.16). Because this study involved real donations and because some employees visited the Web site without making donations, we also analyzed the data after removing such nondonors and still found a robust unit-asking effect: Mean total WTD was approximately 90% higher in the unit-asking condition (M = 601.30 yuan) than in the control condition (M = 315.13 yuan), $t(186) = 4.12$, $p < .0001$, $d = 0.63$. Unit asking did not influence the percentage of Web-site visitors who made donations (62.6% vs. 54.3%), $\chi^2(1, N = 317) = 2.17$, n.s. We should note that the employees may have felt obligated to make donations because the solicitation came from their company. However, the fact that the solicitation came from their company would have influenced only the participation rate or the amount of donations, not the unit-asking effect, namely, the difference between the unit-asking and the control conditions.

Study 2 replicated the unit-asking effect in a real fundraiser. As in Study 1, respondents in the unit-asking condition knew in advance that their donation was for all of the students and that the unit-asking question was hypothetical. Moreover, respondents made their decisions in private and could revise their responses before submission. Thus, it was unlikely that the unit-asking effect was a result of confusion or social pressure.

Study 3

Method

To further replicate the unit-asking effect and to rule out external social pressure as a potential cause, we ran another field experiment. Unlike Study 2, Study 3 involved a paper-based fundraiser carried out in anonymity. We conducted the study in conjunction with the doctoral-studies office of a large business school in China. The office solicited donations from a group of 101 wealthy executive-business-administration students (15% female, 85% male; mean age = 40.8 years) to support the research of 70 doctoral students. Potential donors (the executive-business-administration students) received a printed form and an envelope and were told that those wishing to donate should fill out the form anonymously, place it in the envelope along with their (cash) donation, and drop it at a designated location within a week. We designed the form so that it had a control and a unit-asking version, as in Studies 1 and 2. Unbeknownst to the respondents, some respondents received one version and the rest received the other version. The respondents were reminded that they had to fill out the form if they wished to donate, that the amount they said they would donate on the form had to match the amount placed in the envelope, and that they should not put their names on the form.

Results and discussion

Again, unit asking greatly increased donations. Mean total WTD in the unit-asking condition (M = 746.94 yuan) was more than 4 times as high as that in the control condition (M = 168.20 yuan), $t(97) = 2.39$, $p < .05$, $d = 0.48$. When we excluded those who did not make donations, we still found a strong effect: Mean total WTD was more than 5 times as high in the unit-asking condition (M = 2588.89 yuan) as in the control condition (M = 442.63 yuan), $t(35) = 3.20$, $p < .01$, $d = 1.08$. As in Study 2, unit asking did not affect the percentage of respondents who made donations (38.0% vs. 34.7%), $\chi^2(1, N = 99) < 1$, n.s. Because this study was conducted anonymously, the results further ruled out demand or social pressure as an explanation for the unit-asking effect.

It is notable that this study exhibited a greater unit-asking effect than did the other two studies. One possible reason for this result is that the number of needy persons in this study (i.e., 70) was greater than that in Study 2 (i.e., 40) and that in Study 1 (i.e., 20; see further discussion in the General Discussion section). Another possible reason for the greater unit-asking effect is that participants in this study were more affluent and had fewer budgetary constraints than did participants in the other studies. We surmise that the size of the unit-asking effect depends, at least in part, on the elasticity of the amount donors can contribute, which in turn depends on their level of wealth. The unit-asking effect should enjoy a greater upward potential among affluent donors than among financially restricted donors.

General Discussion

The present work joins an increasing body of psychological research that has applied psychological science to the creation of strategies and policies to improve the welfare of people in real life (e.g., Arkes & Gaissmaier, 2012; Cialdini, 2003; Gneezy, Gneezy, Nelson, & Brown, 2010; Herzog & Hertwig, 2009; Johnson & Goldstein, 2003; Liu & Aaker, 2008; Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007; Smith, Faro, & Burson, 2013; Thaler & Sunstein, 2009). Specifically, the current work applies existing psychological research on scope insensitivity and need for consistency to the creation of a simple and costless fundraising method and demonstrates the effectiveness of the method in both scenario-based and field experiments. The remainder of the article discusses the implications of our research.

Increasing scope sensitivity

Besides increasing total donations, unit asking carries another potential benefit—increasing scope sensitivity. A common challenge in fund-raising is that donors are

insensitive to the number of people in need of help; they tend to donate similar amounts regardless of whether the number in need is 10 or 100 (Baron & Greene, 1996; Cameron & Payne, 2011; Desvousges et al., 1993). On the basis of the notion that people are initially scope insensitive and subsequently scope consistent, we hypothesized that unit asking could alleviate the scope-insensitivity problem. When respondents in the unit-asking condition are asked to indicate their unit WTD for one needy person, they will likely offer the same amount, regardless of whether the total number of needy persons is 10 or 100. Then, when asked to decide on their total WTD for all of the needy persons, they will likely donate more if the total number is 100 than if the total number is 10. In other words, the unit-asking question sets a common unit-level baseline by which to decide how much to donate for N persons, hence heightening respondents' sensitivity to the size of N.

We tested this hypothesis in a recent study ($N = 319$; Hsee, Zhang, & Lu, 2013). The procedure was similar to that of Study 1 except that it adopted a 2 (method: control vs. unit asking) × 2 (scope: 10 vs. 100 children) design. Replicating the unit-asking effect, results from an ANOVA on total WTD revealed a main effect of method, $F(1, 310) = 15.25$, $p < .0001$, and no main effect for scope, $F(1, 310) = 1.89$, n.s. More important, the analysis yielded a Method × Scope interaction effect, $F(1, 310) = 4.15$, $p < .05$, revealing greater scope sensitivity in the unit-asking condition than in the control condition. It is intriguing to note that unit asking takes advantage of people's initial scope insensitivity to increase their eventual scope sensitivity.

We should also note, however, that the ability of unit asking to increase scope sensitivity is likely limited; if the target numbers are large—for example, 1,000 versus 10,000—respondents may encode either number as "a lot" and not differentiate the two. Moreover, large numbers may even reduce donations (e.g., Cameron & Payne, 2011; Fetherstonhaugh, Slovic, Johnson, & Friedrich, 1997; Slovic, 2007). For a discussion of possible shapes of the donation functions under the unit-asking and control conditions, see the Supplemental Material available online.

Other applications and implications

The unit-asking method may be applied to domains other than fund-raisers. For example, auctioneers may elicit a higher final bid for a set of 12 wine glasses if they first ask prospective bidders to consider how much they would pay for 1 of the glasses than if they ask only how much bidders would pay for the whole set. Likewise, psychology professors may obtain more funding from their department chair for running a set of eight experiments if they first ask the chair how much he or she would fund one such experiment than if they ask only how much the chair would fund the whole set of experiments.

We conjecture that the unit-asking method probably works better in some situations than in others and would like to see future research devoted to the following speculations. First, because unit-asking capitalizes on initial scope insensitivity, which in turn capitalizes on lack of evaluability, the method would perhaps work better if the need of the target persons (or the value of the target items) were hard to determine. For example, the method may exert a greater effect on fund-raising if the donors do not know exactly how much each needy person needs. Second, the method would probably work better if the number of target persons (or the number of target items) were specified and comprehensible (e.g., 30 children) than if it were unspecified (e.g., a group of children) or incomprehensibly large (e.g., 3,000 children). Third, although unit asking works even without social pressure for consistency, it would probably be more effective in the presence of social pressure. For example, the method may create a greater effect on donations if the requester is present (as in person-to-person fund-raisers) as opposed to not present (as in Web-based fund-raisers). Finally, the method would likely work better on donors who have not experienced the method or have forgotten it than on donors who just encountered the method because the latter donors may discount the unit-asking question.

Fund-raising solicits hundreds of billions of dollars annually, yet it is effortful and costly. As our studies demonstrate, unit asking can significantly raise donations without adding extra costs. Therefore, even if only a small fraction of fund-raisers adopts the method, it can increase total donations by a large amount. A subtle manipulation based on psychological science can make a substantial difference in real life.

Author Contributions

All the authors, especially C. K. Hsee, contributed to developing and designing the studies. J. Zhang and Z. Y. Lu did most of the work collecting and analyzing data. C. K. Hsee drafted the manuscript; J. Zhang, Z. Y. Lu, and F. Xu provided critical revisions. All authors approved the final version of the manuscript for submission.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Supplemental Material

Additional supporting information may be found at http://pss.sagepub.com/content/by/supplemental-data

Note

1. Because WTD had no upper bound, some responses were very high. To prevent the influence of outliers, we excluded responses that were more than 3 standard deviations from the mean from all of the studies before analyses. We also analyzed the results by Winsorizing the data at the 5%-to-95% level and found the same pattern of results in all of the studies.

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