Charitable Giving:

How Framing Amount Raised Influences Donations

Andrea Liberman

Vanderbilt University

Abstract

When attempting to solicit donations, fundraisers must consider how their campaign is portrayed. The goal gradient effect suggests that people tend to accelerate towards a goal the closer they get to achieving that goal. Additionally, people often care about not only the absolute distance from a goal, but also the percentage of the goal that is completed. This study analyzes the interaction between the size of the campaign goal, the nearness to completion of the goal, and whether the amount already raised is represented as a percent or in absolute dollars. This paper includes two separate surveys: the first survey asked 68 college students to distribute $1,000 between four fundraisers, which included 2 each of small/large goal sizes, each of which was characterized as either near or far from the goal. The description of the amount raised (either as a percent or in absolute dollars) was varied between-subjects. An analysis of variance showed the only significant result to be a main effect of size, with smaller campaigns receiving more donations. The second survey was similar, but used a forced choice method, with 62 college students being required to pick only 1 fundraiser to which they would donate $250. Again, only the main effect of size was significant. However, responses to an open-ended question in survey 2 indicate that future research in this area is necessary to better understand the interaction between the goal gradient effect and fundraising.

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People donate to charitable causes in part due to self-interest and the positive emotions associated with giving. In fact, when choosing to donate to a cause, the same reward systems in the brain are activated as those that are activated when people receive monetary rewards themselves (Moll et al. 2006). Thus, when considering how to motivate charitable giving, fundraisers should determine how to increase these positive feelings associated with donating. One method to increase positive emotions involves heightening the perceived impact the donor feels they have on the fundraiser. A donor's perceived impact has been shown to increase when the goal appears closer to completion, a phenomenon known as the goal gradient effect.

Goal Gradient Effect

The goal gradient effect describes how an individual accelerates towards an established goal as they near the completion of that goal (Hull 1932; Heath et al. 1999; Kivetz et al. 2006). This phenomenon suggests that a runner may speed up during a race when the finish line is in sight, or a student may finish the last question of a test more quickly upon recognizing that the end of the test is near. Hull (1932) first demonstrated this phenomenon using rats in a maze, finding that rats who had learned a maze and the location of the end (the goal) moved progressively faster through the maze as they neared the goal.

Kahneman and Tversky's prospect theory explains the theoretical side as to how the goal gradient effect works in relation to making judgments and working towards a goal. Prospect theory demonstrates that people's mental representations of values differ from reality (Kahneman & Tversky 1979). Values are centered around a reference point, and are viewed as convex before that reference point, but as concave after the reference point. In other words, before the a given point (potentially a goal), values are seen to accelerate in size, being perceived

as increasingly larger as they near the reference point. If this reference point is a goal, this means a one unit jump near the goal seems more significant than the same one unit jump farther from the goal (Heath et al. 1999). Thus, people are more willing to exert effort on a task once they are closer to the goal because the perceived impact of their effort feels higher (Heath et al. 1999).

Studies have demonstrated this goal gradient effect in people who are working towards achieving some goal. For example, users of coffee shop rewards cards buy from the coffee shop more frequently than usual when they know they are closer to their goal (Kivetz et al. 2006). The same effect was demonstrated in fundraising: fundraisers that are closer to completion receive a higher level of support (Bonezzi et al. 2011; Cryder et al. 2013a; Cryder et al. 2013b; Kuppuswamy & Bayus 2017; Fan-Osuala et al. 2018).

Goal gradient effect also occurs when goal visualizations are used. People are influenced to work harder for a goal when they see simple visualizations of progress, such as progress bars that demonstrate how far a participant is from reaching the end of a task (Cheema & Bagchi 2011). Furthermore, Cheema and Bagchi (2011) found that in a physical task, participants exerted the most effort when they not only had a visualization, but were also near the goal; the influence of the visualizations increased when individuals were closer to the goal. Visualizations of goals are heavily used in the fundraising world, often in the form of a thermometer demonstrating how much money the fundraiser has raised thus far. While research is needed on the effectiveness of these thermometers, these visualizations should theoretically simulate the same accelerating response, causing people to be more inclined to donate when they see a thermometer nearing completion.

The goal gradient effect works in fundraising in part because people feel a higher sense of impact when the goal is closer to completion (Cryder et al. 2013a; Cryder et al. 2013b;

Kuppuswamy & Bayus 2017). Perceived impact has been found to affect whether or not people

wish to donate. Guéguen and Lamy (2016) found that participants were more likely to donate

when a specific amount of money (i.e. $1.17 rather than $1.00) is requested because participants

believed the person was exactly that amount away from a monetary goal, such as buying a metro

ticket.

Similarly, the "Just One More" technique, which involves telling people that only one

more person is needed to complete a task, was more effective in getting participants to complete

a survey and was even more effective when the participant was told they would be the one-

hundredth and final rather than the fifth and final survey participant (Carpenter 2014). In both of

these instances, participants valued the knowledge that their efforts would complete the goal.

These results logically follow the general finding that people tend to attribute achieving a goal

more to the last contribution to the goal than to earlier contributions (Miller & Gunasegaram

1990). For example, the last person who scored to win a game of basketball is the one most

celebrated, even though each previous basket counted just as much. Research has shown that

even if they are not necessarily the last person to contribute to the fundraiser, people do feel they

have a greater impact when the fundraiser is closer to completion, and thus are more likely to

donate (Cryder et al. 2013a; Cryder et al. 2013b; Kuppuswamy & Bayus 2017).

Overall, people prefer to donate when they feel their impact on achieving the goal is

greater. However, previous research fails to analyze how people mentally calculate their impact

when they donate to fundraisers. Particularly, there is a dearth of studies exploring whether

potential donors care more about the percentage of the fundraising goal left to complete or about

the absolute number of dollars left to raise. To facilitate comparisons, studies have analyzed the

completion of a project based on the percent complete rather than the amount of money left to

raise (Kuppuswamy & Bayus 2017). In reality, most fundraisers display their goal and the amount raised in terms of the absolute number of dollars raised thus far. For example, the online fundraising website Kickstart displays fundraisers in absolute terms. However, research on decision making suggest that in certain circumstances, showing the percentage rather than the absolute value could more successfully produce the desired response in a participant, a customer, or in this case, a donor. (Chen et al. 1998; Hardesty & Bearden 2003; Krishna et al. 2002).

Decisions using proportions versus absolute values

In general, people are better at making relative than absolute decisions; it is easier for people to make a judgment by comparing a value to a reference (Bartels 2006). Often, people will use any reference that is available, whether or not such behavior is normative. For example, someone may not simply know the cost of a valuable bottle of wine, but if they know the price of a less valuable wine and know it is less valuable, they can use that comparison to estimate the price of the more valuable wine (Ariely et al. 2003).

This need for a comparison is also shown through the theory of psychophysical numbing, a sensation where people are less sensitive to changes when the magnitude is larger (Fetherstonhaugh et al. 1997). Participants favored a treatment that would save 9 out of 10 sick people rather than a treatment that would save 100 out of 10,000 sick people. Normatively, saving 100 people should be preferable to saving 9 people. If people put an equal weight on saving each person's life, it should not matter how large the total number of sick people is, only how many lives are being saved. However, when the number of sick people is available to use as a reference, people incorporate the information into their analysis and percentage becomes the decisive factor.

A similar phenomenon, the identifiable victim effect, also shows an instance where participants prefer to help when the reference group is smaller. The identifiable victim effect describes a phenomenon where people prefer to help a cause when they see a singular person in need rather than a large group. Often in fundraisers, a singular victim is well-described and thus emotion plays a role in the desire to donate. However, studies have demonstrated that the size of the reference group itself plays a large role in causing the identifiable victim effect (Jenni & Loewenstein 1997; Small & Loewenstein 2003). When participants were given identical surveys, differing only in the usage of either one or multiple victims, participants were more willing to help the singular victim, despite the absence of additional or emotional detail. With a singular victim, 100% of the reference group was being aided rather than a smaller percentage (Jenni & Loewenstein 1997). Essentially, helping one person—100% of the people in need—feels better than helping five people out of a large group of people in need, even though a smaller number of people (one versus five) are being aided.

People clearly incorporate the ratio of people helped rather than only the absolute values when comparing treatments. However, are these biases necessarily wrong? Baron (1997) believed that people were simply confused about which numbers were relevant in these sorts of evaluations. Bartels (2006) conducted a study where participants had to make a tradeoff between saving more lives or a higher proportion of the population. Bartels found that participants who had considered the percentages rather than the absolute values, upon reflection, stated that the absolute number of people saved was actually the more important value: they believed they had actually been wrong in considering the ratios. However, people may place importance on the ratio not simply out of confusion, but instead because they are concerned with the impact and efficient use of resources. If participants are determining whether or not to pay for a treatment,

they may consider that their money could go elsewhere, even if it is not stated in the task, and thus they only wish to donate to a cause that seems worth their money. A study on Psychophysical Numbing by Friedrich and colleagues (1999) explored the differences in reasoning for participants who demonstrated Psychophysical Numbing and cared about the ratios (about 62% of participants) versus participants who only cared about the absolute number of lives saved (about 34% of respondents). Participants who cared about the ratio expressed more thought about the cost-benefit analysis, while participants who only cared about the absolute number of lives saved focused on the value of each human life. Relatedly, Bartels and Burnett (2011) found that people were more likely to consider the proportion of people saved when they were manipulated to think of people as a group rather than as individuals. These studies indicate that people are not merely confused about whether or not to use ratios or absolute values, but instead change the way they view the problem when they are considering either the effectiveness of the program or the value of individual lives.

Depending on the situation, percentages and efficiency might matter to people in addition to the absolute value. Consequently, how should fundraisers display the amount of money raised thus far? Should they show the absolute amount of money raised (i.e. $900 out of $1,000) or the percentage (i.e. 90%)? This question has been explored in a marketing context where retailers wish to display a discount to consumers. Krishna and colleagues (2002) found that perceived savings are in general higher when using percentages, while other studies have found that it is more effective to show the discount as a percentage when the price is lower or at a moderate level, but as absolute dollars when the price of the product is higher (Chen et al. 1998; Hardesty & Bearden 2003). Displaying a price reduction in percentage or absolute value appears to affect customers' willingness to buy a product, which could suggest that this phenomenon could be

translated into other domains, including fundraising. This study investigates the effects of using percentage versus absolute value in displaying fundraisers, particularly in relation to the goal gradient effect.

Current Study

This paper has two main objectives that will aid in understanding donor behavior. First, this study looks to support the results of past studies that suggest that the goal gradient effect holds true for fundraisers. Thus, we hypothesize that the total amount donated will be higher for fundraisers closer to their goal because of the goal gradient effect, regardless of the size of the campaign.

Second, we want to see how framing the amount raised as a percentage or in absolute dollars affects the amount donated. We expect that this factor will interact with both the size of the campaign and the nearness to completion of the goal. Focusing specifically on the goal gradient effect, we hypothesize that when the fundraiser is near its goal, fundraisers with large goals will benefit from using the absolute value, while fundraisers with smaller goals will benefit from using the percentage. We believe this because when the fundraiser is larger, showing how much they have raised in absolute value seems like a large amount, but when the fundraiser is smaller, the amount raised seems smaller, and thus the percentage would make the amount raised seem larger. The answers to the aforementioned questions will help further research in understanding how potential donors make decisions about donating, as well as provide suggestions to fundraisers about how to display their campaigns.

Study 1

Methods

  Participants.

  68 participants participated in this study. Participants were Vanderbilt University

undergraduate students who were recruited on SONA and received course credit for

participation. Participants were required to be at least 18 years old and English speakers. Five

participants did not complete the survey and thus were removed from analysis, leaving 63

participants used in analysis. Of these 63 participants, the average age of participants was 19.

Forty-two of the participants were female, 19 of the participants were male, and two preferred

not to say. Twenty-six participants were in their first year at Vanderbilt, fifteen were in their

second year, fifteen were in their third year, six were in their fourth year, and one selected other.

Forty-five stated that they donate less than $100 a year, fifteen donate $100-$499 a year, two

donate $500-$999, and one donates $1,500-$1,999.

  Materials.

  Participants in this study completed a survey created through the online survey platform,

Qualtrics. In this survey, participants were told they had $1,000 to distribute amongst four

theoretical fundraisers. They were required to use all $1,000 and could distribute the money all

to one campaign or divide the money up among multiple campaigns. Participants were also told

that the campaigns were all planning to donate to a similar cause of helping children living in

poverty. One common cause for all four campaigns was chosen to avoid differences in donations

due to the cause itself rather than the variables being tested.

  Participants saw three pieces of information on all four campaigns at once: how much the

fundraiser hoped to raise (their goal), how much the campaign had already raised, and how much

the campaign had left to raise. There were two versions of the survey: in Version A, participants saw how much was raised/left to raise in percentages and in Version B, participants saw how much was raised/left to raise in absolute dollars. Participants were asked to distribute their $1,000 between the four campaigns.

Participants then responded to questions assessing how they viewed the size of the campaign and how close the campaign was to completion in order to verify that participants noticed a difference in those factors. Participants also answered questions on their age, gender, and the amount of money they typically donate to charitable causes annually in case those variables may have impacted responses.

Design.

The design of the experiment is a 2x2x2 design with one of the variables between subjects and two of the variables within subjects. The between-subjects variable is whether the survey uses percentages or absolute dollars when describing how much the fundraiser has raised thus far. Participants were randomly assigned to either the percentage condition (Version A) or absolute dollars condition (Version B). One of the within-subjects variables is the size of the campaign, which is characterized as either large or small. Participants saw two examples with large fundraisers and two examples with small fundraisers. The other within-subjects variable is how close the campaign is to completion, which is described as either near or far. Participants saw two examples with fundraisers near completion and two examples with fundraisers far from completion (See Table 1a). The dependent variable measured was how much money each participant donated to each campaign.

Procedure.

Participants were recruited through SONA and were able to take the survey online at home. This survey was estimated to take only approximately 15 minutes to complete, so participants should have been able to complete the survey quickly at home without high risk of distraction. A link in SONA took the participant to the online Qualtrics survey, where they first saw a consent form and clicked a button to consent to the form.

Next, participants saw a brief explanation of the study's purpose, followed by the following explanation:

"Imagine you have $1,000 to distribute amongst 4 different fundraisers. You must donate all $1,000. You may choose to give all of the money to one fundraiser, or divide the amount between the fundraisers. Each fundraiser supports a similar cause that is raising money to support children whose families are living in poverty."

On the following page, participants were asked how much money they must distribute between the fundraisers to verify that participants read and understood the scenario. On the next page, participants saw information on all four campaigns. For example:

"The fundraiser is aiming to raise $6,500. Currently, they have raised 84% of their goal and still need to raise 16% of their goal. How much, if any, would you like to donate to this campaign?"

We wrote the description in both a positive way (raised 84%) and a negative way (still need to raise 16%). We did this because of the effects of framing: people's decisions are affected by how a question is framed. For example, people rated qualitative aspects of meat more favorably when the meat was described as 75% lean rather than 25% fat (Levin & Gaeth 1988).

Thus, to avoid the effect of framing negatively or positively, we used both methods in our descriptions of the fundraisers.

Participants were then reminded to distribute their $1,000 amongst the campaigns. Refer to Table 1a for a complete list of the questions with the mix of percentages, large and small campaigns, and campaigns near and far from the goal.

Next, participants were reminded of the goal size of each campaign and how close to completion each campaign was. Participants were asked how they would describe the size of the campaign (on a five-point scale from a "Very small campaign goal" to a "Very large campaign goal"), as well as how far they believed the campaign was from completing its goal (on a five-point scale from "Very far from reaching its goal" to "Very close to reaching its goal"). Finally, participants answered demographic questions asking for their age, sex, year in college, and how much money they donate to charity annually.

Results

33 participants received Version A (percentages) of the survey, while 32 participants received Version B (absolute dollars). Figure 1a shows the average amount of money donated based on (1) the size of the campaign goal (small/large) (2) the nearness to completion of the campaign goal (near/far) and (3) whether the nearness to completion was presented as a percentage (Version A) or as absolute dollars (Version B). In Version A, the smaller campaign that was farther from its goal received the most money ($M = 315.8$, $SD = 229.0$), followed by the small campaign closer to its goal ($M = 274.0$, $SD = 245.7$), followed by the large campaign far from its goal ($M = 259.5$, $SD = 176.2$), with the large campaign near its goal receiving the least money ($M = 150.6$, $SD = 115.9$). In Version B, the smaller campaign that was farther from its goal again received the most money ($M = 293.3$, $SD = 198.0$), followed again by the small

campaign closer to its goal ($M = 278.6$, $SD = 234.2$), followed by the large campaign near to its goal ($M = 244.7$, $SD = 236.9$), with the large campaign far from its goal receiving the least money ($M = 183.4$, $SD = 133.1$).

In both versions, smaller campaigns received more money than larger campaigns, regardless of nearness to completion. In Version A, campaigns near to their goal were preferred for both large and small, while in Version B, campaigns far from their goal were preferred for both large and small. We hypothesized that campaigns closer to their goal would receive more money due to the goal gradient effect, but in fact the reverse seemed to occur for small campaigns. We also hypothesized that large campaigns near their goal would benefit from using the absolute dollars, which seemed to be the correct direction since the large-near campaign received more money in the absolute dollar version ($M = 244.7$, $SD = 236.9$) than in the percentage version ($M = 150.6$, $SD = 115.9$). However, these interaction results did not hold to be significant.

A 2x2x2 repeated measures ANOVA was used to investigate the significance of the interaction effects on the amount of money donated. We looked at the interaction of the between subjects variable (percentages/absolute dollars), the within subjects variable of size of the campaign goal (small/large) and the within subjects variable of nearness to completion of the goal (near/far). Table 1b shows the outcome of the repeated measures ANOVA. Using a significance level of p < .05, the only significant effect was Size (see Table 1b), with smaller campaigns receiving larger donations.

We noticed that 33% of the participants (11 in Version A and 10 in Version B) split their money evenly between the four campaigns. Only eight participants (13%) donated all of their

money to one fundraiser. These results encouraged us to require participants to choose only one

fundraiser they preferred to donate to in Study 2 by using a forced choice method.

Additionally, we used Study 1 results to determine if we could maintain the same

fundraisers (size/nearness to completion) in our second survey. The results for participants'

opinions on the sizes of the campaign goals for each fundraiser are listed in Table 1c.

Participants generally agreed that the large campaigns were large. The small campaigns were

also generally seen as small, but responses varied more than they did for the large campaign.

This response suggested that making the "small" campaign a smaller size may have created more

clear results. However, we ultimately chose not to change the campaign sizes, as we did not want

the amount a participant had available to donate to become too large a proportion of the small

campaign goal. A campaign around $250 would cause more agreement amongst the participants

that the campaign was small, but then a $250 donation would complete the goal, which would

feel unrealistic.

Results for how near participants thought each fundraiser was to completion are listed in

Table 1d. All the campaigns were generally judged as expected, except for the larger campaign

near to completion, which had a bit more variance. Despite this discrepancy with the larger

campaign, we maintained the distances in the second campaign since they worked well in the

small campaign. However, it is important to note that there may have been more disagreement on

this fundraiser's nearness to completion because it had a large percentage raised, but still needed

to raise a large amount of money when measured in absolute dollars.

Study 2

Methods

Study 2 is intended to replicate the results of Survey 1 under a forced-choice survey method, which is intended to show more distinct preferences. The survey is essentially the same as in Study 1, except participants are forced to choose only one fundraiser to donate to rather than having the option to donate to multiple fundraisers. This should force participants to pick a favorite and avoid having participants simply donate the same amount to everyone.

Participants.

62 participants participated in this study. Participants were Vanderbilt University undergraduate students who were recruited on SONA and received course credit for participation. Participants were required to be at least 18 years old and English speakers, and also were not permitted to complete the survey if they had completed our prior survey. Of these 62 participants, the average age of participants was 19.5. Forty-seven of the participants were female, thirteen of the participants were male, and two preferred not to say. Twenty-three of the students were first years, twenty-two were second years, ten were third years, six were fourth years, and one was a fifth year. Forty-two participants donate less than $100 per year, fourteen donate $100-$499, two donate $500-$999, two donate $1,000-$1,4999, and two donate $5,000+.

Materials and Design.

The participants saw a similar survey to the survey in Study 1. However, instead of being told they had received $1,000 and could distribute that amongst the fundraisers, they were "given" $250 and could choose one fundraiser to donate the money to. The fundraisers that the participants saw were the same as in Study 1, as detailed in Table 1a.

Additionally, participants received an open-ended question asking them why they chose the fundraiser they did. This question is intended to analyze the reasons why a participant might choose one fundraiser over another.

Procedure.

As with Study 1, participants were recruited through SONA and were able to take the survey online at home. This survey was estimated to take only approximately 15 minutes to complete. A link in SONA took the participant to the online Qualtrics survey, where they first saw a consent form and clicked a button to consent to the form.

Next, participants saw a brief explanation of the study's purpose, followed by the following explanation:

"Imagine you have $250 to donate to one fundraiser. On the next page you will see a description of four different fundraisers. Each fundraiser supports a similar cause that is raising money to support children whose families are living in poverty. You must pick only ONE fundraiser to donate to."

On the following page, participants were asked how much money they had available to donate to a fundraiser to verify that participants read and understood the scenario. On the next page, participants saw information on all four campaigns. For example:

"The fundraiser is aiming to raise $6,500. Currently, they have raised 84% of their goal and still need to raise 16% of their goal."

The four campaigns are the same as the ones in Study 1 (see Table 1a). Participants then selected the fundraiser they preferred among the four options.

Next, participants saw an open-ended question asking them why they selected the fundraiser they chose. Afterwards, participants were reminded of the goal size of each campaign

and how close to completion each campaign was. Participants were asked how they would describe the size of the campaign (on a five-point scale from a "Very small campaign goal" to a "Very large campaign goal"), as well as how far they believed the campaign was from completing its goal (on a five-point scale from "Very far from reaching its goal" to "Very close to reaching its goal"). Finally, participants answered demographic questions asking for their age, sex, year in college, and how much money they donate to charity annually.

Results

33 participants received Version A (percentages) of the survey, while 29 participants received Version B (absolute dollars). Figure 1b shows the number of people who chose each campaign based on (1) the size of the campaign goal (small/large) (2) the nearness to completion of the campaign goal (near/far) and (3) whether the nearness to completion was presented as a percentage (Version A) or as absolute dollars (Version B).

A log linear regression was used to analyze the significance of the choices because this survey dealt with frequencies as the dependent variable rather than amounts (see Table 1e). The only significant result was that small fundraisers received more donors than large fundraisers *(β = -.295, p = .033, 95% CI [-.566, -.024]).* This result aligns with the results from our first survey, as size was the only significant variable there as well, once again with small fundraisers receiving more donations.

Additionally, responses to the open-ended question were analyzed. Responses were read and coded for three different potential categories of responses. The first type of response is labeled "Likely to achieve goal." Responses that fit into this category included responses such as, "The fundraiser was close to the goal and I felt the goal was achievable," or "They seemed most likely to reach their goal, and their goal was the highest." The second type of response is labeled

"Significance of contribution." This category includes responses that mention the significance participants felt their contribution had, such as "My money will make the most impact on getting the fundraiser to reach their goal," or "They are raising a smaller amount of money, which means that my donation will have a larger impact on their goal." The final category was labeled "Fundraiser needs help." This category includes responses where the participant expressed a need to "help" the fundraiser, such as, "They seemed to be asking for a modest amount, and were not very close to their goal so they seemed like the best to help," or "They have a long way to go and I want to help them reach their goal."

Responses were coded according to these three categories. The categories were not mutually exclusive, so some responses fit into multiple categories, while other responses did not fit into any of the categories. Responses that did not fit in any category may have showed a lack of interest from the participant (i.e. "b/c") or may have included a unique reason, such as assuming a fundraiser with a larger campaign goal was a more established and reliable fundraiser. A full list of responses and how they were coded is included in Table 2a in Appendix 2. Due to a computer error, the data for this question was not collected for Version B, and thus only data for Version A is shown.

Table 1f shows a summary of the types of responses based on the size and nearness to completion of the campaign the participant selected. Twenty of the responses included a reference to "Significance of contribution," making it the most popular response. "Likely to achieve goal" was referenced in 14 responses, and "Fundraiser needs help" was referenced in 9 responses. Eight of the 31 responses did not fit into any of these three categories. Every participant who mentioned a campaign being likely to achieve selected one of the campaigns that was near its goal. Conversely, every participant who mentioned a campaign needing help chose

one of the campaigns far from its goal. Feelings of significance were mixed, but were most common for small campaigns near their goal, and then equal for small and large campaigns far from their goal.

Discussion

Our research had two main objectives: 1) demonstrate the goal gradient effect with fundraisers and 2) analyze the interaction of the goal gradient effect between the goal size and whether percentages or absolute values are used. For the first objectives, we expected fundraisers closer to their goal would receive higher funding. For the second objective, we expected that fundraisers closer to their goal would receive higher donations by using the absolute value if they were large and percentage if they were small.

Both our first and second surveys showed only a significant main effect for the size of the fundraiser. The smaller fundraisers were significantly favored by participants and received more donations. This effect was not one we were particularly interested in, but is a finding that seems to potentially support previous research. Kuti and Madarasz (2014) suggested that people donating to crowdfunding campaigns seem to prefer the risk averse options of popular fundraisers with smaller goal sizes. Similarly, many studies found that a lower goal size on crowdfunding websites was correlated with higher success rates for completing the goal (Belleflamme et al. 2014; Cordova et al. 2015; Kuppuswamy & Bayus 2013; Mollick 2014). However, these results may be focused more on the fact that it is easier for fundraisers with smaller goals to reach their goal simply because that goal is smaller. These results say less about people's preference to donate to the fundraisers than about their ability to achieve the goal. Additionally, on crowdfunding websites, people typically receive something (i.e. a copy of the product being fundraised for), so people may have more of an incentive in these types of

campaigns to donate to smaller campaigns. Would they still prefer to donate to a smaller campaign if they are not personally affected by the campaign reaching its goal or not? However, Kuppuswamy and Bayus (2017) found that the goal gradient effect was more prominent for fundraisers with smaller goal sizes, which they suggested was due to people believing their (often small) contribution was more meaningful when the goal size was smaller. If that is in fact the case, our participants may have been thinking about their impact and thus it is reasonable that they preferred to donate to a smaller campaign. Overall, there has been minimal research done in this specific area, which suggests a potential for future research.

Surveys 1 and 2 both did not show any signs of goal gradience, as "nearness to completion" was not significant, nor was its interaction with any other variable significant. This is in opposition to studies where the goal gradient effect has been demonstrated specifically in fundraising (Bonezzi et al. 2011; Cryder et al. 2013a; Cryder et al. 2013b; Kuppuswamy & Bayus 2017; Fan-Osuala et al. 2018). One reason this may have been the case was because, unlike other studies that investigated the goal gradient effect, this survey had participants compare fundraisers to each other. Rather than simply determining how much money to give to one fundraiser, people had to choose amongst different fundraisers. This potentially elicited two opposite reactions in participants. Some people may have decided to donate to a fundraiser that is more likely to succeed, which would have demonstrated the goal gradient effect, but others might have wanted to donate to a fundraiser that needed more help, which would cause them to donate to the fundraisers farther from their goal. Other participants may not have had these thoughts at all, instead focusing on something like the size of the campaign.

The open-ended question in Survey 2 provides interesting insight as to the thought process participants may have had that drove them to choose different fundraisers. Past research

suggests several possible reasons explaining why people demonstrate goal gradience. The main reason we discussed is because people feel their contribution to a goal is larger when they are near the goal (Cryder et al. 2013a; Cryder et al. 2013b; Heath et al. 1999; Kuppuswamy & Bayus 2017). However, a variety of factors can affect how significant a person feels their contribution to a fundraiser will be. One of these factors was feeling like they are the ones pushing something over the edge to reach the goal, as seen in the "Just One More" technique (Carpenter 2014). The feeling of significance and feeling that a goal is close to being achieved are described by our first two methods of coding the open-ended response: "Likely to achieve goal" and "Significance of contribution." The other response category, "Fundraiser needs help," is not as characteristic of the goal gradient effect and is in fact almost suggesting the converse (the goal is not close to being achieved, so I should help).

The results suggest that people who chose campaigns that were near their goal, whether they were small or large, focused on how close the campaign was to achieving its goal and the significance of their own contribution. On the other hand, people who chose campaigns far from their goal were typically focused on helping the campaign. Thus, perhaps the goal gradient effect was demonstrated, but only when participants were focused on having their contribution be significant. So, future research could investigate this difference in opinions for fundraisers related to helping something in need versus feeling significant. It is reasonable that fundraising brings out a need to "help," while working towards other more selfish goals may not. Additionally, participants often mentioned significance when they chose a smaller campaign. This idea supports that of Kuppuswamy and Bayus (2017) mentioned above, that people may feel their contribution is more significant when the fundraiser is smaller rather than larger. Unfortunately, because of the glitch in the survey, we did not have data for Version B of the

survey and thus we were not able to analyze any differences in responses between the use of absolute value and percentages.

Surveys 1and 2 did not show any effects of having used the percentage or the absolute value. In part, this is due to the goal gradient effect not being shown; we expected how the amount raised was displayed to vary in relation to the goal gradient effect. Additionally, this interaction may have been affected because we used both the wording "Currently they have raised…" and "still need to raise…" in each question. We used both of these phrases because of the potential for framing effects to cause differences in donations. As explained in the methods section, participants could be affected by whether they saw how much was donated already (framed positively) or how much was left to raise (framed negatively). We thought phrasing the question in both ways would control for framing effects based on positivity/negativity, but perhaps percentage versus absolute value has an effect in one way for positive framing and in another way for negative framing. For example, when a large fundraiser near the goal is framed negatively ("they still need to raise…"), it may make more sense to use the percentage because the absolute value shows that there is still a large amount of money left to raise, even though the percentage is small. Conversely, if the large fundraiser was framed positively, absolute value could be preferable because such a large amount of money has already been raised. Therefore, using both methods of framing the question may have muddled our results.

In summary, a major limitation for this survey may have been having too many features in one survey that could have affected results in ways we did not expect. We looked at size, nearness to completion, and percentage versus absolute value all in one study. Investigating the interaction of all three of these variables, especially with our sample sizes of only approximately 60, was difficult. Additionally, there were factors that likely affected our results that we did not

anticipate. One of these factors, as previously mentioned, was the framing of the question as both positive and negative. Another factor was the amount of money participants had available to donate ($1,000 to distribute between four campaigns in Study 1, $250 to give to one of four campaigns in Study 2). If the amount had been smaller or larger, participants may have been more inclined to donate to a smaller or larger campaign or one closer or farther from the goal. Finally, there was a limitation in investigating whether people preferred to donate more/less money, or whether they choose to donate at all. In Study 2, participants only had the option to say whether or not they wanted to donate, but in Study 1 they could decide to donate more/less or also to not donate at all. This difference is a difficulty faced in researching donor tendencies, as fundraisers can increase donations by either increasing the number of donors, increasing the average amount donated by each donor, or both. Thus, our study has limitations on drawing generalizations for organizations that are looking to particularly increase donors or average donations. Finally, this study has limitations in generalizability due to the fact that the participants are Vanderbilt students, who are younger and often without income and also are generally more highly educated and wealthy than the general population, and the participants were majority women. Thus, the sample may not be representative of all potential donors.

Generally, future studies should work to tease out some of the varying factors seen in our study. For example, future studies could instead focus on only large fundraisers near their goal. The study could determine whether they raise more money using the percentage or absolute value, and also if that depends on if the question is framed positively or negatively. A study such as this one would eliminate the factors of size and nearness to completion, instead focusing only on whether or not percentage or absolute value matters. Additionally, the significance of size in both of my studies suggests that further research should be done in looking at size, and especially

how the effect of size varies based on how much a person has available to donate. Finally, considering the responses to the open-ended question in Study 2, future studies should analyze the effects of encouraging people to focus on a specific mindset. For example, studies could use priming to encourage participants to think about the significance of their contribution or how their money is being used, and compare that data to data collected from a study where participants are instead primed to think about the fundraiser needing their help.

While our main hypotheses were ultimately not supported, these studies still present findings that will be important for future research and for implementation into the fundraising field. First, although we had not initially planned to investigate size, we did find that smaller campaigns received significantly more donations. This insight can guide future research, but also can suggest to organizations that they may benefit from having multiple smaller fundraisers throughout the year rather than one large fundraiser. Even though the other factors observed were not significant, the responses to the open-ended question suggest a need to do more research in understanding how people make decisions on donations and how that may affect what kind of fundraiser they prefer to donate to. While simply changing from displaying the amount of money raised as a percentage to absolute value may seem like an insignificant change, it could ultimately cause a large difference during the course of a fundraiser if there are in fact effects on potential donors' perceptions. After all, when it comes to fundraising, every cent counts.

Appendix 1

Table 1a

Survey Question by Version

Version	Goal Size	Nearness to Completion	Question
A	Small	Near	The fundraiser is aiming to raise $6,500. Currently, they have raised 84% of their goal and still need to raise 16% of their goal. How much, if any, would you like to donate to this campaign?
A	Small	Far	The fundraiser is aiming to raise $6,250. Currently, they have raised 17% of their goal and still need to raise 83% of their goal. How much, if any, would you like to donate to this campaign?
A	Large	Near	The fundraiser is aiming to raise $515,000. Currently, they have raised 85% of their goal and still need to raise 15% of their goal. How much, if any, would you like to donate to this campaign?
A	Large	Far	The fundraiser is aiming to raise $535,000. Currently, they have raised 18% of their goal and still need to raise 82% of their goal. How much, if any, would you like to donate to this campaign?
B	Small	Near	The fundraiser is aiming to raise $6,500. Currently, they have raised $5,460 and still need to raise $1,040. How much, if any, would you like to donate to this campaign?
B	Small	Far	The fundraiser is aiming to raise $6,250. Currently, they have raised $1,063 and still need to raise $5,187. How much, if any, would you like to donate to this campaign?
B	Large	Near	The fundraiser is aiming to raise $515,000. Currently, they have raised $437,750 and still need to raise $77,250. How much, if any, would you like to donate to this campaign?
B	Large	Far	The fundraiser is aiming to raise $535,000. Currently, they have raised $96,300 and still need to raise $438,700. How much, if any, would you like to donate to this campaign?

Note: Version A uses percentages, while Version B uses absolute dollars. Participants will only see one version.

Table 1b

Repeated Measures Analysis of Variance for Size, and Nearness to Goal, and Group

Source	Df	SS	MS	F	p	η^2
Between groups	1	5.088e-26	(5.088e-26)	-1.706e-14	1.00	
Error	61	-1.819e-10	(-2.982e12)			
Size	1	411779.6	(411779.6)	7.142	.01*	.11
Size*Group	1	5081.2	(5081.2)	.088	.77	.00
Error	61	3.517e6	(57657.6)			
Nearness	1	42750.8	(42750.8)	.698	.41	.01
Nearness*Group	1	153294.6	(153294.6)	2.503	.12	.04
Error	61	3.736e6	(61244.6)			
Size*Nearness	1	307.7	(307.7)	.007	.93	.00
Size*Nearness*Group	1	80536.2	(80536.2)	1.839	.18	.03
Error	1	2.671e6	(43786.1)			

*significant at p < .05

Table 1c

Participant responses on size of campaign goal for each fundraiser

	Very small	Small	Average	Large	Very large
Small-Near	2	20	9	1	0
Small-Far	2	19	10	1	0
Large-Near	0	0	1	16	15
Large-Full	0	0	1	16	15

Table 1d

Participant responses on nearness to completion of campaign goal for each fundraiser

	Very far	Far	Average	Close	Very close
Small-Near	0	0	1	26	5
Small-Far	8	21	3	0	0
Large-Near	1	1	5	22	3
Large-Full	17	14	1	0	0

Table 1e

Log-Linear Regression Coefficients for Size, Nearness to Goal, and Group

	β	SE	95% CI	Z	p
(Intercept)	1.966	.138	[1.695, 2.237]	14.213	<.001
Size	-.295	.138	[-.566, -.024]	-2.130	.033*
Nearness to completion	-.177	.138	[-.448, .094]	-1.281	.200
Group	.076	.138	[-.195, .347]	.548	.584
Size*Nearness to completion	.004	.138	[-.267, .275]	.028	.978
Size*Group	.098	.138	[-.174, .369]	.705	.481
Nearness to completion*Group	-.132	.138	[-.403, .140]	-.951	.342
Size*Nearness to completion*Group	-.153	.138	[-.424, .118]	-1.108	.268

*significant at p < .05

Table 1f

Number of times each category of response mentioned by fundraiser chosen

	Likely to achieve goal	Significance of contribution	Fundraiser needs help	None of the above
Small-Near	9	10	0	1
Small-Far	0	4	4	0
Large-Near	5	2	0	4
Large-Far	0	4	5	3

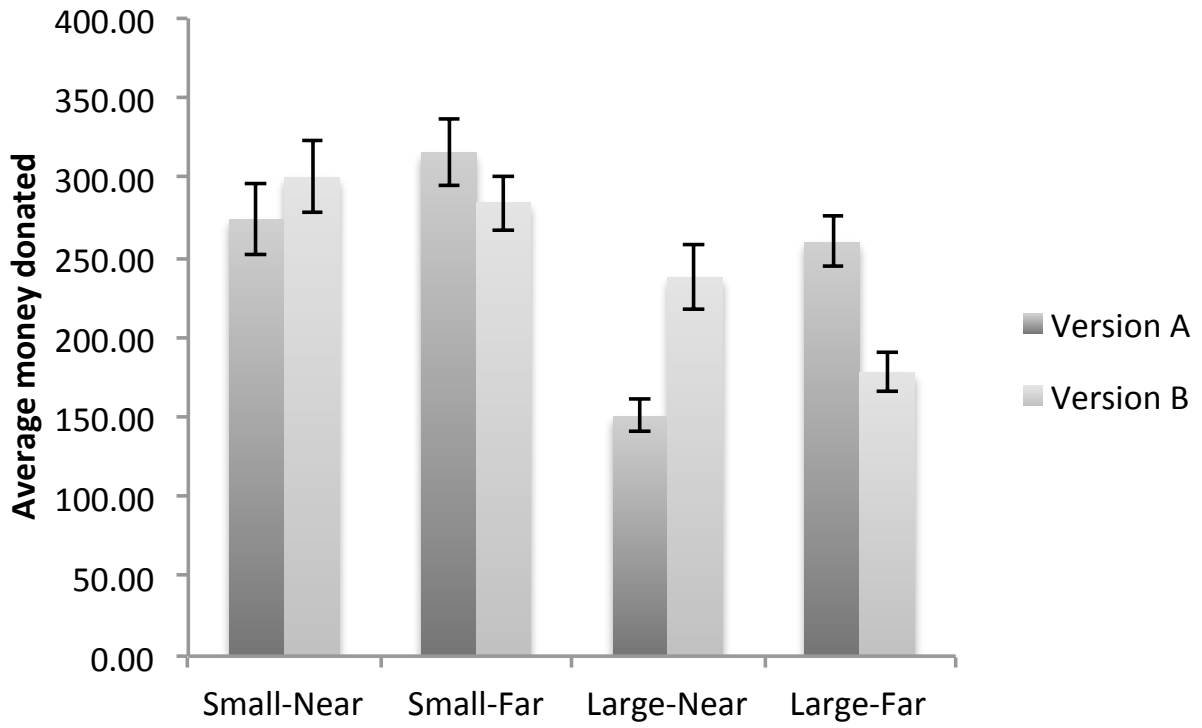Note: Responses were coded such that one response could fit into more than one category

Figure 1a. Average donation amount for Version A (percentages) and Version B (absolute dollars) by size of campaign goal(small/large) and nearness to completion of goal (near/far). Standard error bars shown.
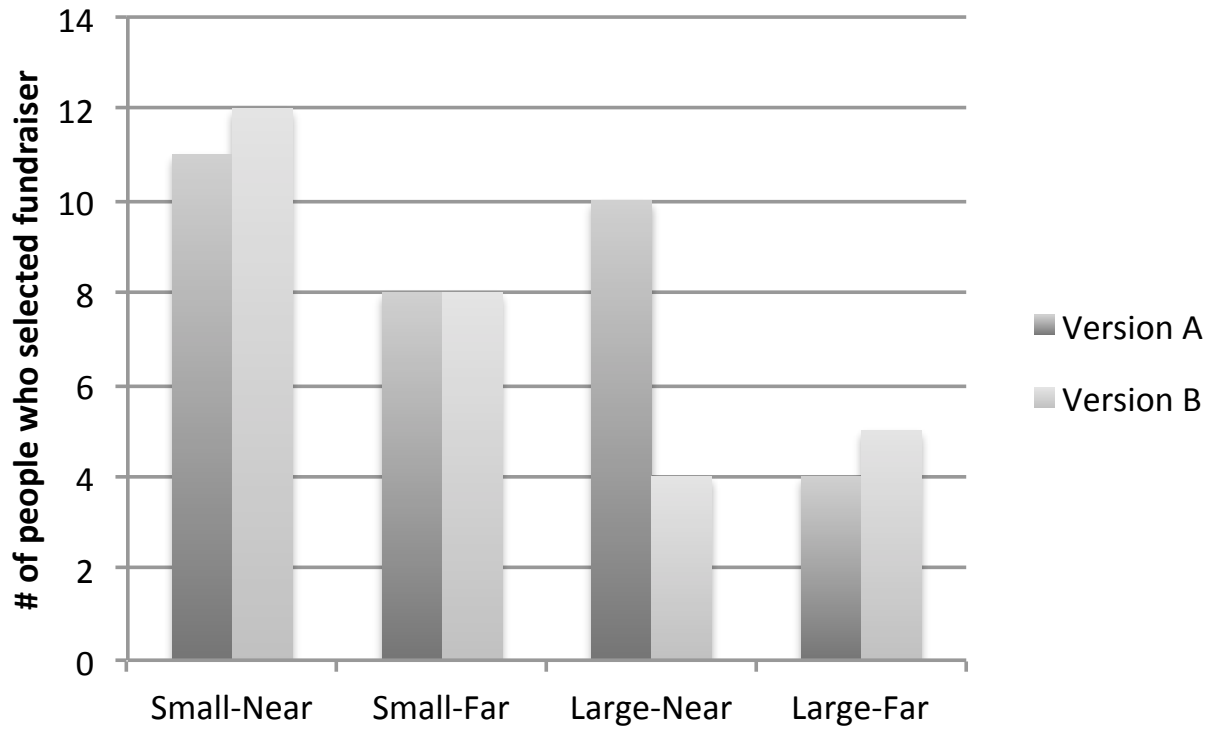
Figure 1b. Number of participants who chose each campaign for Version A (percentages) and Version B (absolute dollars) by size of campaign goal(small/large) and nearness to completion of goal (near/far).

Appendix 2

Table 2a

Responses to "Briefly explain why you chose the answer you selected."

Campaign Selected	Response	Coded
Small-Near	Because they are close to their goal, and it seems to be attainable and that the sum of my money will be a large contribution to the goal.	Likely to achieve goal, Significance of contribution
Small-Near	I would make the most impact in pushing that fundraiser to success.	Significance of contribution
Small-Near	$250 is a more significant contribution to a goal of roughly $6000 than it is to a goal of over $500,000. Plus, in this option, the fundraisers are so close to the goal	Likely to achieve goal, Significance of contribution
Small-Near	I choose this fundraiser because I like picking the "under dog." The two organizations with bigger fundraising goals seems like they might be doing just fine and have more available resources to create such a big goal. However, between the two organizations with smaller goals, I picked the one that was closer to their fundraising goal because they seemed like they may be a more organization, successful organization between the two "under dogs." However, I do not know how long these orgs have been fundraising, which would be helpful. Lastly, I wanted to point out that I accidentally typed $250 with a dollar sign and that is why I got it incorrect.	None of the above
Small-Near	Their goal is small enough that my contribution would be more meaningful and I could potentially help them reach the goal they are so close to. Also, the fact that their goal is smaller makes me think that maybe their are fewer people who are going to be exposed to this fundraising effort.	Likely to achieve goal, Significance of contribution
Small-Near	Because they have a lower goal and a higher percentage completed, my donation will bring them closer to their goal.	Likely to achieve goal, Significance of contribution
Small-Near	It seemed like my money was helping this cause reach the finish line	Likely to achieve goal,

Table 2a (Cont.)

Responses to "Briefly explain why you chose the answer you selected."

Campaign Selected	Response	Coded
Small-Near	The fundraiser was close to the goal and I felt the goal was achievable. I felt my contribution made a direct difference.	Likely to achieve goal, Significance of contribution
Small-Near	That fundraiser was closer to achieving their goal and my money would have the greatest impact on letting them reach their goal, perhaps spurring others to donate when they see that they are even closer to reaching their goal.	Likely to achieve goal, Significance of contribution
Small-Near	My money will make the most impact on getting the fundraiser to reach their goal	Likely to achieve goal, Significance of contribution
Small-Near	Because the goal is in a reasonable range and they are very close to reaching their goal. My donation will constitute a bigger percentage in this scenario comparing to other scenarios.	Likely to achieve goal, Significance of contribution
Small-Far	They need the most help.	Fundraiser needs help
Small-Far	I felt like my money would make a difference with the smaller goal amount, and they had less of their goal raised than the other fundraiser with a similar goal amount.	Significance of contribution
Small-Far	They are raising a smaller amount of money, which means that my donation will have a larger impact on their goal. Additionally, they have raised the smallest percentage of their goal.	Significance of contribution
Small-Far	They needed the money the most (far from goal). Since their goal was smaller, $250 would have more impact.	Significance of contribution, Fundraiser needs help
Small-Far	My money will have the most percentage impact.	Significance of contribution
Small-Far	I chose them because they asked for less money and were nowhere near their goal. As a result, I perceived them as needing the money more, whether it was true or not.	Fundraiser needs help

The note "Significance of contribution" appears at the top right of the page.

Table 2a (Cont.)

Responses to "Briefly explain why you chose the answer you selected."

Campaign Selected	Response	Coded
Small-Far	They seemed to be asking for a modest amount, and were not very close to their goal so they seemed like the best to help.	Fundraiser needs help
Large-Far	They have raised the least amount of money so far	None of the above
Large-Far	They had a much longer distance to go to reach their large goal.	None of the above
Large-Far	They have a long way to go and I want to help them reach their goal	Fundraiser needs help
Large-Far	b/c	None of the above
Large-Near	This fundraiser needed to raise one of the largest sums of money, as was furthest from their goal.	None of the above
Large-Near	In my quick analysis, it was the one that, at first glance, seemed closest to reaching its goal.	Likely to achieve goal
Large-Near	I assumed that a fundraiser that was trying to raise more money was a more well-known and therefore (probably) more reputable and well-established fundraiser. That way, my money would be going to the people who would make the best use of it (ideally).	None of the above
Large-Near	They were raising one of the most amounts of money, indicating that they were well-established. Also, they had already received a large chunk of money, therefore close to completing their goal.	Likely to achieve goal
Large-Near	They seemed most likely to reach their goal, and their goal was the highest.	Likely to achieve goal
Large-Near	This fundraiser had a high goal amount, so I thought that it would focus on a larger subject group. It was also one of the closest to completion, so it is more likely to reach its goal compared to the one with a high goal amount and high distance from meeting that goal.	Likely to achieve goal

Table 2a (Cont.)

Responses to "Briefly explain why you chose the answer you selected."

Campaign Selected	Response	Coded
Large-Near	I want to be part of a big movement backed by multiple donors, so I can help a campaign achieve more than half a million in funds.	Significance of contribution
Large-Near	It seems that my donation can help them to reach their goal faster since they have already reach 87 percent	Likely to achieve goal, Significance of contribution
Large-Near	large sum is mroe liekly a legit fundraiser and they have made a lot of money already - more likely to be a more worthy cause if the most people are supporting it - dont want my money going to a dinky fundraiser	None of the above
Large-Near	text	None of the above
Large-Near	Because the cause is greater and will affect a greater number of people.	None of the above

Note: Responses were coded such that one response could fit into more than one category

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