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Gratitude, finance, and financial gratitude reminders in charitable giving: A repeated experiment over time

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Abstract

An initial reminder of three good things (TGT) increases charitable giving intentions, while reminders of three good financial things (TGFT) or three financial things (TFT) reduce them. Repeating these reminders daily during the following seven days results in even higher donation intentions for TGT, but shows no consistent additional effects for TGFT or TFT. Donation intentions measured one or thirty days after stopping these reminders fall significantly faster for TGT. No such effects arise for TGFT or TFT. Gratitude reminders without financial references increase donation intentions, especially when repeated over time. However, this gratitude effect fades after the reminders stop.

JEL classifications: D64; D91

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1. Introduction

According to Giving U.S.A.'s annual report on philanthropy, in 2021, Americans contributed about $471.44 billion to charitable organizations. Total charitable giving grew by 5.1% in 2021, and approximately 70% of charitable donations came from individuals in 2021 (Giving USA, 2021).

Philanthropic motivations for individual charitable giving have received considerable attention in recent years (Krishna, 2011; Zlatev & Miller, 2016). Bekkers and Wiepking (2011) review the literature and propose that eight mechanisms determine charitable giving:

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awareness of need, solicitation, costs and benefits, altruism, reputation, psychological benefits, values, and efficacy. Research on charitable giving has often focused on a socioeconomic perspective (Bekkers & De Graaf, 2006; Brown & Ferris, 2007; James, 2011; James & Sharpe, 2007; James & Wiepking, 2008; Mesch et al., 2011, 2006).

However, there are other lenses from which to analyze the influences of charitable giving. For example, the influence of positive psychology interventions on charitable giving may be fruitful but has received limited attention in the literature (Asebedo & Seay, 2015). This study fills the gap in the literature and uses a randomized control-group pretest–posttest experimental longitudinal survey to determine if positive psychology interventions, including gratitude and financial/money reminders, effectively influence charitable giving intentions.

2. Literature review

Gratitude is defined as the acknowledgment and understanding that one has benefited from the kindness or altruism of another (McCullough & Emmons, 2003; McCullough et al., 2002, 2001). It is an interpersonal emotion and personal virtue similar to appreciation, which keeps it from being focused on itself. As a positive emotion that has emerged from positive psychology, gratitude increases positive affect, subjective happiness, and life satisfaction (Cunha et al., 2019; McCullough & Emmons, 2003; McCullough et al., 2002) and is also associated with a great range of social and psychological benefits (Watkins, 2014).

3. Gratitude and generosity

There is a growing body of research showing a significant positive relationship between gratitude and generosity—feeling grateful promotes altruism. Gratitude acts as a moral incentive that motivates people to participate in prosocial conduct, either toward the benefactor, toward others, or both (McCullough et al., 2001). Specifically, gratitude promotes giving to others, generosity, and social responsibility, while a lack of experiencing gratitude may lead to low donations (Isen, 1987). People who demonstrate gratitude feel more inner wealth, which makes them capable of sharing gifts with others (Isen, 1987). Based on the moral motivation theory, grateful people tend to care about others and participate in various prosocial activities because they are inspired to support others (McCullough & Emmons, 2003; McCullough et al., 2001; Romani et al., 2013). Bock et al. (2018) asserted that the moral trait of gratitude influences charitable giving intentions. They found that gratitude is associated with charitable giving behavior and other positive behaviors like helping others, returning favors, and supporting nonprofits than are emotions like happiness or satisfaction (Bock et al., 2018).

A fair amount of past research has shown that gratitude is a strong and reliable spur to altruistic action (Bartlett & DeSteno, 2006; DeSteno et al., 2010; Karns et al., 2017; Komter, 2004; Walker et al., 2016). For example, Chaplin et al. (2019) conducted a national survey of adolescents and found that encouraging gratitude in teenagers had the advantage of increasing generosity towards others and reducing their materialism. Specifically, the study found that those who kept a gratitude journal, defined by the researchers as a notebook in

which participants jotted down things they were grateful for, donated 60% more of their earnings than those in the control group, who did not keep a gratitude journal. In addition to this study by Chaplin et al. (2019), other studies have demonstrated a similar correlation between gratitude and generosity. Walker et al. (2016) conducted six experiments, each showing that gratitude encourages people's altruistic behaviors. Specifically, participants felt more grateful through experiential purchases than material purchases. Participants in the experiential purchases group were more inclined to act altruistically and wrote down more money to be given to the recipients and less money to keep for themselves. Another study conducted by Liu and Hao (2017) on social status and charitable giving found that while reciprocity was important in promoting charitable giving in high-status individuals, feelings of gratitude were the most dominant motivator for low-status individuals.

3.1. Financial reminders and generosity

Research shows that money-related concepts produce robust changes in people's thoughts, motivations, cognitive states, and behaviors toward others (Vohs, 2015; Vohs et al., 2006; Zhou et al., 2009). Financial/money reminders weaken sociomoral and prosocial responses (Gasiorowska et al., 2016; Mok & De Cremer, 2016; Savani et al., 2016), encourage people to act independently (Vohs et al., 2008), reduce people's tendency to help others (Gasiorowska et al., 2012; Tang et al., 2008; Vohs, 2015), and decrease altruistic behavior (DeVoe & Pfeffer, 2007; Pfeffer & DeVoe, 2009). After being reminded of money, people are less likely to be interested in volunteering their time to an organization (DeVoe & Pfeffer, 2007; Pfeffer & DeVoe, 2009) and less willing to engage in charitable giving behaviors (Roberts & Roberts, 2012; Vohs et al., 2006, 2008).

Financial/money reminders may strongly influence donation behaviors (Vohs et al., 2006, 2008). For example, Vohs et al. (2006) found that when participants were primed with money concepts, they became less prone to donating. The authors suggested that money creates a self-sufficient orientation in which people prefer to be free from dependency and dependents. Consequently, money reminders caused people to hold more tightly to their resources, which reduced requests for help and also reduced assistance to others. Further research by Vohs et al. (2008) found that money-reminded participants donated less money to a University Student Fund than those who were neutral participants in the control group. Specifically, participants in the money-reminded group contributed 39% of their endowment compared with those in the control group, who donated 67%. Thus, reminders of money were associated negatively with charitable giving.

Building upon the works of Vohs et al. (2006, 2008), Ekici and Shiri (2018) focused on the effect of "exposure" of money on charitable giving. The authors conducted an experiment in which participants were shown a donation box containing money, which was either wooden (opaque condition) or transparent. The authors found that participants in the transparent box treatment group were less likely to donate money and donate less money to charities than participants in the opaque box treatment group. This study highlighted the effect of the degree of money exposure on charitable giving.

Additionally, money reminders on charitable giving can be observed not only in adults but also in adolescents (Roberts & Roberts, 2012) and young children (Gasiorowska et al.,

2012, 2016). Roberts and Roberts (2012) conducted an experiment involving 114 adolescents aged 13 to 14 who were randomly assigned to either money-reminder or control groups. The authors found that adolescents in the money-reminder group gave less money to the food bank than those in the control group. Additionally, children who had been reminded about money showed a lower level of generosity as they preferred not to share their stickers with their partners than children in the control group (Gasiorowska et al., 2012). Therefore, these studies show a negative relationship between money reminders and the amount of money donated to charities.

This paper contributes to previous research in two ways. First, the paper connects research findings on gratitude reminders and financial reminders by simultaneously examining the relationship between gratitude reminders, financial reminders, and financial gratitude reminders with charitable giving intentions. Specifically, this study identifies how reminders impact charitable giving intentions for Three Good Things (TGT), Three Good Financial Things (TGFT), and Three Financial Things (TFT) interventions. Second, the paper contributes to the literature by exploring how the effects of each reminder on charitable giving intentions change over time, either when repeated or not.

3.2. Hypotheses

Research shows that financial reminders could affect one's behavior and attitudes (Roberts & Roberts, 2012; Vohs et al., 2006, 2008) as they reduce people's tendency to help others (Tang et al., 2008) and result in less charitable giving (Roberts & Roberts, 2012; Vohs et al., 2006, 2008). At the same time, feelings of gratitude foster charitable giving (McCullough & Emmons, 2003; McCullough et al., 2002). The effect of positive psychology and financial reminders on charitable giving decisions is investigated through three hypotheses:

Hypothesis 1: The "Three Good Things" intervention will result in an increased likelihood of charitable giving compared to the control group.

Hypothesis 2: The "Three Financial Things" intervention will result in a decreased likelihood of charitable giving compared to the control group.

Hypothesis 3: These effects will increase over time if repeated, but diminish over time if not repeated.

Because the "Three Good Financial Things" intervention combines both positively associated (gratitude) and negatively associated (financial reminders) interventions, no prediction is made as to the effects on charitable giving intentions.

4. Sample and methodology

4.1. Sample

A total of 993 people participated in the experiments. Each participated in a randomized control-group pretest–posttest experimental survey administered on the Qualtrics platform. Given the use of human subjects, this study was reviewed and approved by the Human

Research Protection Program (IRB2018-582) of the second author's affiliated university. Participants were recruited using the Amazon Mechanical Turk (MTurk) recruitment service, an online web service that connects researchers to individuals willing to complete tasks for compensation. Survey responses from such participants produce results similar to those generated from traditional nonprobability samples (Hauser & Schwarz, 2016). Researchers in a variety of disciplines have found that this source of participants produces reasonable and consistent results similar to other methods of participant recruitment (Buhrmester et al., 2011; Goodman et al., 2013).

Participant characteristics are reported in Table 1. Random assignment to four groups (TGT, TFT, TGFT, and no intervention) resulted in similar sample sizes for the three intervention groups (n = 246, 243, and 241), with the control group having a slightly larger sample size (n = 263). Socio-demographic and economic characteristics were relatively similarly distributed across groups as reflected by Table 1.

4.2. Experimental methodology

On Day 1, all participants first responded to an initial baseline question regarding charitable giving intentions. They were asked, "If you were asked in the next 3 months, what is the likelihood you might GIVE money to each of the following organizations? Please rate the likelihood from 0% to 100%" about eight nonprofit organizations.

Each subject was randomly assigned to one of four groups: TGT, TGFT, TFT, and no intervention (control group). Those assigned to an intervention then read the following,

> "In this exercise, you will remember and list three [good/good financial/financial] things that have happened in your day and reflect on what caused them. These things can vary from relatively small to relatively large in importance to you; these things can be related to any area of your [life/financial life/financial life] such as [TGT: relationships, work, school, leisure, physical and mental health, spirituality, money, daily living, transportation, and so forth/TGFT or TFT: spending, saving, budgeting, planning, giving, investing, daily financial transactions, thoughts/feelings about money, conversations with others about money, earning money, and so forth] By completing this

Table 1 Descriptive statistics

	All	Three Good Things	Three Good Financial Things	Three Financial Things	No Intervention
n	993	246	243	241	263
Female	48.9%	46.8%	48.2%	49.0%	45.6%
Male	51.1%	53.3%	51.9%	51.0%	54.4%
Married	63.5%	66.7%	60.5%	63.9%	63.1%
Not married	36.5%	33.3%	39.5%	36.1%	36.9%
White	77.6%	76.4%	77.0%	80.5%	76.8%
Other	22.4%	23.6%	23.1%	19.5%	23.2%
High school or less	24.0%	25.6%	29.2%	21.2%	20.2%
College degree	76.0%	74.4%	70.8%	78.8%	79.9%
Income < $40K	34.8%	31.7%	36.6%	34.0%	36.9%
Income $40K–$80K	40.7%	39.4%	42.4%	43.6%	37.6%
Income > $80K	24.5%	28.9%	21.0%	22.4%	25.5%
Age (mean)	37.5	36.6	38.1	37.8	37.6

exercise, you will intentionally focus on the [good/good financial/financial] things in your life, allowing you to remember the [good/good financial/financial] things that might otherwise have been overlooked."
This was followed by three sets of open-text responses for the following:
"Think about event [#1/#2/#3] from your day. Please record the following:
Title of event
Please describe what happened
How did this event make you feel at the time?
How did this event make you feel later (including now, as you remember it)?
Explain what you think caused this event — why it came to pass"
All participants in all groups were then asked, "Taking all things together, how happy would you say you are?" and "How satisfied are you with your current financial situation?"

The same procedure (excluding the initial baseline question) using the same reminder tasks was performed on Days 2 (one day after the initial survey), 3, 4, 5, 6, and 7. However, on these subsequent days, the task was followed by questions measuring charitable giving intentions. Again, this used a 0% to 100% scale and asked, "If you were asked in the next 3 months, what is the likelihood you might GIVE money to each of the following organizations?" about the eight nonprofit organizations referenced initially.

No additional reminders occurred after Day 7. However, charitable giving intentions were collected once again one day later (on Day 8) and 30 days later (on Day 38).

4.3. Variables

The model used these control variables: charitable organization referenced, married status, age, gender, race, education, and income. The charitable organizations were the American Cancer Society, the Nature Conservancy, the American Humane Association, the American Red Cross, the Breast Cancer Research Foundation, Ducks Unlimited, a local animal shelter, and the Salvation Army. Education was a dichotomous variable equal to 1 if the respondent had a bachelor's degree or higher and 0 otherwise. Income was recorded as three categories: less than $40,000, $40,000 to $80,000, and greater than $80,000.

4.4. Model

This study estimates the following linear regression model via ordinary least squares:

$$CHG_i^* = \beta_0 + \beta_1 TGT + \beta_1 TGFT + \beta_1 TFT + \beta_i' CHO + \beta_j' DEM + \varepsilon$$

where CHG_i^* was a continuous dependent variable that represents the probability of charitable giving. *TGT* represented the indicator variable of Three Good Things; *TGFT* represents the indicator variable of Three Good Financial Things; *TFT* represented the indicator variable of Three Financial Things; *CHO* represented a matrix of eight organization groups; *DEM* was a matrix of demographic variables that comprise married status, age, gender, race, education, and income.

5. Results

The study used multivariate analysis, ordinary least squares linear regression, to investigate the impact of interventions on charitable giving intentions. Column 1 of Table 2 reports the immediate effect of the intervention on the probability of charitable giving intentions. In line with our hypothesis, the result provides evidence that these initial reminders result in increased giving intentions for TGT and decreased giving intentions for TGFT and TFT. The results also show that married, White, and male are associated negatively with giving intentions while age is associated positively with giving intentions.

Column 2 of Table 2 presents the results exploring whether repeating these interventions over time has any additional effects. The intervention variable coefficients (TGT, TGFT, and TFT) reflect the overall propensity for charitable intentions to be different from the control group, controlling for preintervention intentions, across each category. (This is the overall group effect.) The day variable coefficients (Day 3, Day 4, Day 5, Day 6, and Day 7) reflect the overall propensity for giving intentions to be higher or lower on any particular subsequent day across all groups, relative to the first postintervention measurement. These separately identify overall effects from time and experimental repetition.

The interaction variable coefficients are key. They reflect the difference in the effects of each repetition day on the overall propensity for charitable intentions for each intervention group relative to the control group. The TGT intervention results in significantly greater giving intentions on Days 4, 5, 6, and 7, relative to the initial postintervention intentions on Day 2. Although the TGFT and TFT interventions result in overall lower intentions, these relationships appear not to be consistently higher or lower with repeated interventions, relative to the initial postintervention intentions on Day 2.

Table 3 reports how giving intentions change over time after interventions stop. Again, the intervention variable coefficients (TGT, TGFT, and TFT) reflect the overall propensity for charitable intentions to be different from the control group, controlling for preintervention intentions, across each category. (This is the overall group effect.) The day variable coefficients (Day 8 in column 1, Day 38 in column 2) reflect the overall propensity for giving intentions to be higher or lower on any either subsequent day without continued interventions across all groups, relative to the first postintervention measurement. (This is the overall time effect.)

Again, the key results are the interaction variable coefficients. These reflect the difference in the effects of time passage without continued interventions on the overall propensity for charitable intentions for each intervention group relative to the control group. (This is how the effect of time passage varies across the groups.) These results indicate that charitable giving intentions decline significantly for the TGT group relative to the control group following one day without repeating the intervention, controlling for overall time effects. A similar result occurs for the TGT group, with roughly similar magnitude, following 30 days without repeating the intervention. No such significant differences arise for either the TFT or TGFT groups.

Table 2 Likelihood of giving the following initial and repeated reminders (OLS)

	(1) Giving likelihood after initial reminder	(2) Giving likelihood change when repeating reminders
Pre-intervention giving likelihood	0.8250 (0.0080)***	0.8676 (0.0034)***
Three Good Things	1.2856 (0.6341)**	0.1944 (0.3951)
Three Good Financial Things	−1.4211 (0.6444)**	−0.7743 (0.3976)*
Three Financial Things	−1.2655 (0.6211)**	−0.7348 (0.3907)*
Day (reference: Day 2)		
Day 3		0.2518 (0.6551)
Day 4		−0.277 (0.4933)
Day 5		0.4025 (0.6597)
Day 6		−0.2872 (0.6449)
Day 7		1.4372 (0.6449)
Day3*Three Good Things		1.4372 (0.9938)
Day4*Three Good Things		2.0165 (0.7627)***
Day5*Three Good Things		2.2466 (1.0418)**
Day6*Three Good Things		2.3890 (0.8180)***
Day7*Three Good Things		2.2662 (1.0104)**
Day3*Three Good Financial Things		−0.156 (1.0071)
Day4*Three Good Financial Things		0.2561 (0.7683)
Day5*Three Good Financial Things		−0.1426 (1.0509)
Day6*Three Good Financial Things		2.1306 (0.8177)***
Day7*Three Good Financial Things		1.1254 (1.0532)
Day3*Three Financial Things		−0.8422 (0.9725)
Day4*Three Financial Things		−0.8904 (0.7554)
Day5*Three Financial Things		−0.437 (1.0208)
Day6*Three Financial Things		−0.1872 (0.8163)
Day7*Three Financial Things		0.1217 (0.9978)
Charitable organization (reference: American Cancer Society)		
The Nature Conservancy	0.0580 (0.9190)	0.0372 (0.3472)
The American Humane Association	1.3324 (0.9178)	1.8311 (0.3467)***
The American Red Cross	0.0074 (0.9177)	0.0131 (0.3466)
Breast Cancer Research Foundation	0.2274 (0.9181)	0.2469 (0.4093)
Ducks Unlimited	−0.5413 (0.9280)	0.1925 (0.4132)
A Local Animal Shelter	1.5303 (0.9186)	1.1602 (0.4095)**
The Salvation Army	0.9466 (0.9178)	0.9960 (0.4092)**
Married	−1.3847 (0.5031)***	−0.7408 (0.2124)***
Age	0.0754 (0.0220)***	0.0228 (0.0091)**
Male	−1.0259 (0.4735)**	−1.2185 (0.1982)***
White	−3.1780 (0.5928)***	−1.9368 (0.2491)***
College	0.7090 (0.4836)	0.7972 (0.2033)***
Income (reference: 40K)		
$40K–$80K	2.5625 (0.5430)***	1.3094 (0.2299)***
$>80K	2.5879 (0.6533)***	1.1147 (0.2762)***

Significance levels: *$p < .05$, **$p < .01$, ***$p < .001$.

6. Conclusion, discussion, and implications

Following results from previous single-intervention gratitude experiments, the current results confirm that an initial reminder of TGT increases charitable giving intentions. This matches the prediction of Hypothesis 1. Following results from previous single-intervention financial reminder experiments, the current results confirm that an initial financial reminder

Table 3 Likelihood of giving after reminders stop (OLS)

	Giving likelihood change when reminders stop for 1 day	Giving likelihood change when reminders stop for 30 days
Pre-intervention giving likelihood	0.7987 (0.0066)***	0.6339 (0.0079)***
Three Good Things	2.3623 (0.6919)***	2.0752 (0.6919)**
Three Good Financial Things	1.3103 (0.7032)***	1.3306 (0.7032)
Three Financial Things	−0.755 (0.6863)	−0.5109 (0.6863)
Day (reference Day 7)		
Day 8 (1 day after reminders stop)	0.9258 (0.6456)	
Day 8*Three Good Things	−3.5280 (1.0256)***	
Day 8*Three Good Financial Things	−1.7271 (1.0045)	
Day 8*Three Financial Things	−1.6588 (1.0091)	
Day 38 (30 days after reminders stop)		−0.3126 (0.6456)
Day 38*Three Good Things		−3.4133 (1.0256)***
Day 38*Three Good Financial Things		−0.1877 (1.0045)
Day 38*Three Financial Things		−0.6507 (1.0091)
Charitable organization (Reference: American Cancer Society)		
The Nature Conservancy	−0.0358 (0.6750)	−1.3301 (0.6750)
The American Humane Association	2.0601 (0.6739)***	1.206 (0.6739)
The American Red Cross	−0.4325 (0.6739)	−0.3501 (0.6739)
Breast Cancer Research Foundation	−0.4962 (0.7546)	−0.5615 (0.7546)
Ducks Unlimited	−0.0395 (0.7628)	−3.2147 (0.7628)***
A Local Animal Shelter	1.1487 (0.7550)	1.2199 (0.7550)
The Salvation Army	0.9442 (0.7544)	−0.6316 (0.7544)
Married	−0.2749 (0.4084)	−1.4006 (0.4084)***
Age	−0.0200 (0.0174)	0.0001 (0.0174)
Male	−1.8485 (0.3779)***	−1.1589 (0.3779)**
White	−1.5147 (0.4806)***	−1.6529 (0.4806)***
College	1.6071 (0.3898)***	0.5016 (0.3898)
Income (reference: 40K)		
$40K–$80K	1.6700 (0.4424)***	1.6730 (0.8443)**
$>80K	0.69312 (0.5303)	2.4702 (1.0273)**

Significance levels: *$p < .05$, **$p < .01$, ***$p < .001$.

(TFT) reduces charitable giving intentions. This matches the prediction of Hypothesis 2. In a new result, a combination of gratitude and financial reminders (TGFT) is found to initially reduce charitable giving intentions.

Hypothesis 3 predicted that these effects will increase over time if repeated, but diminish over time if not repeated. This was confirmed for the gratitude reminder (TGT). Repeating these reminders daily during the following seven days results in even higher donation intentions for TGT, controlling for overall time effects. However, results from repeating the interventions over time were not consistent for the financial or financial gratitude reminders (TFT, TGFT). Donation intentions measured one or thirty days after stopping these reminders fell significantly faster for TGT. No such effects arose for TGFT or TFT. Thus, Hypothesis 3 is confirmed for gratitude reminders, but not for financial reminders or financial gratitude reminders.

Charitable decision-making is a topic of interest to social science researchers for a variety of reasons. However, it is also an important topic for practice among fundraisers and financial advisors. Financial counselors and financial planners are likely to work with charitably inclined clients. Fundraisers will work almost exclusively with those who are charitably inclined.

These results confirm the importance of gratitude, and gratitude reminders, as a motivator for charitable giving decisions. Additionally, they show that the impact of these reminders is stronger when they are repeated over time and fades when that repetition stops. This is important for fundraisers and financial advisors to understand. The power of gratitude references is not fully realized from a one-time reference. Instead, they can be more powerful if incorporated into regular, repeated references or conversations.

Additionally, these results confirm past research showing that money reminders tend to reduce interest in charitable giving. First focusing on the client's desired philanthropic impact, rather than financial spreadsheets, may lead to more interest in charitable giving. Also, these results suggest that whereas general gratitude reminders lead to increased charitable giving, financial gratitude reminders do not. References to gratitude for all things lead to increased charitable giving intentions, whereas references to gratitude strictly for financial things do not. Again, this matches with the idea of starting philanthropic conversations with broader, nonfinancial motivations, rather than financial references.

The present findings have practical for fundraising professionals and financial services professionals in understanding the behavioral intentions of donors. As a practical matter, it may be better for fundraising professionals not to begin by drawing attention to financial reminders, which increases the money salience for potential donors, but instead, emphasize areas of gratitude and focus on the "good things" or the impact the donations that could bring in. Thus, gratitude reminders should be acknowledged to promote fundraising. Financial advisors who wish to discuss philanthropic planning with clients may have better conversations when emphasizing broad concepts such as gratitude while reducing money reminders.

7. Limitations

Some limitations must be acknowledged when evaluating these findings. First, this study is focused on the measure of charitable giving intentions, not the estimations of actual giving. As a result, extending our findings to actual altruistic behaviors should be done with caution. Given the substantive importance of donation magnitude, more study is needed to see how the individuals' characteristics and motivations examined here affect the charitable giving intentions related to the absolute amount of charitable giving, rather than a simple yes/no choice. Second, participants were asked to write about financial behaviors during a stock market downturn in the United States (the S&P 500 Index fell 15% during the month of this study's data collection in December 2018), as well as during the peak Christmas shopping season. It may be insightful for future experimental research to determine how gratitude and financial interventions impact charitable giving intentions in different months and economic cycles.

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