A Double-edged Sword:  
Using Public Recognition to  
Encourage Individual Charitable Giving.  
– Evidence from a Field Experiment in China

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Abstract

Previous research finds that individuals tend to donate more to charitable and non-profit organizations when their activities are publicly recognized. In this research, we find that public recognition may discourage individual giving in certain cases. We conducted a field experiment to investigate how public recognition influences individual charitable giving. We designed five schemes to recognize our donors and varied the timing when we offered the opportunity of public recognition. Results show that while public recognition encourages donors to give more, it crowds out small donations and thus lowers the participation rate. Compared to those cases where public recognition is not available until after donation, when subjects realize they will be recognized, some of them choose to donate more, but others choose to donate 0 rather than a small amount. Therefore, public recognition is a “double-edged sword” on individual charitable giving when this opportunity is offered before donation.

JEL classification: C93; L31; H41; D64

Keywords: Charitable giving, field experiment, public recognition, experiment design
1 Introduction

Charities and non-profit organizations (NPOs) play an important role in providing public goods and services in our society. In the year of 2012, all charitable and nonprofit organizations of the US received 316 billion dollars, which was about 2% of its GDP. Specifically, 71% of these total amount comes from individuals and households. Comparatively, the total amount received by all charitable and non-profit organizations in China was 13 billion dollars, which was only 0.16% of the nation’s GDP, and the majority comes from corporate donations. Researchers and organizers of charities and NPOs are seeking cost-benefit efficient ways to increase individual charitable giving. Various approaches have been adopted to attract more donors (increasing the extensive margin) and elicit more donations (increasing the intensive margin), such as recognizing donors through social medias.

Numerous studies focus on the motivations behind individual charitable giving. According to Ariely, Bracha and Meier (2009) and Soetevent (2011), people donate to charitable and non-profit organizations because of (1) the intrinsic motivation, such as pure altruism and inequality aversion, as people care for others’ well-being, (2) the extrinsic motivation, which refers to the material rewards people receive from giving, and (3) the image motivation, or reputation motivation, which implies that people care about their images perceived by others and themselves. Extensive works have been done on examining the image motivation. Becker (1974) claims that an individual may donate more desiring to improve his reputation. Glazer and Konrad (1996) state that an individual may use his donation as a signal of his generosity, wealth, or both. Therefore, people tend to donate more when their donations can be observed by the public. Harbaugh (1998) also claims that public recognition is an important reason for people to donate. Moreover, public recognition is the only channel for individuals to gain prestige through donating. Benabou and Tirole (2006) further extend the theory by analyzing the interactions of the three motivations of giving in the image signaling framework. They find that an individual’s concern on his image increases with the visibility of his action. These findings have been confirmed in various laboratory and field experiments. For example, Andreoni and Petrie (2004) find that when subjects’ identities and donations are revealed, their group contribution to public goods increases by 59%. In their fundraising experiment sessions, the authors find that most of their subjects choose to have their contributions recognized when they are offered the
chance. Other experimental studies also show that people behave more prosocially when their identities are released to the public. For example, people are more generous in giving their time or money (Soetevent (2005), Linardi and McConnell (2011), Reinstein and Riener (2012), and Karlan and McConnell (2012)). Likewise, when people behave prosocially, they prefer to be perceived as doing the good deed for the society rather than for other reasons, such as for material rewards and benefits (Ariely, Bracha and Meier (2009), Lacetera and Macis (2010)).

In previous laboratory experiment studies (such as Andreoni and Petrie (2004), Karlan and McConnell (2012), and Reinstein and Riener (2012)) and field experiment studies (such as Soetevent (2005) and Linardi and McConnell (2011)), increased public recognition is always observed with a higher level of individual giving. In these experiments, anonymity is hard to attain: either information disclosure on subjects’ identities or/and donations were required regardless of their donation decisions, or it was hard to remain anonymous in a small laboratory environment when everyone else chose to be recognized, or it was impossible for subjects to hide their identities or donations when their actions were observed by others in a field experiment. Therefore, in these current studies, the underlying assumption for public recognition resulting in higher individual donation is that subjects cannot opt out from public recognition. This is a crucial assumption because if public recognition is optional, we expect people behave differently. For example, those who prefer not to be recognized, or those whose image motivation outweighs their intrinsic motivation will give less, or they will choose not to give.

This paper intends to study the full scope of the effects of public recognition and information disclosure on individual charitable giving. Particularly, we are interested in the research question of what kind of institution fosters individual giving in China. According to a comparative study on nonprofit sectors across nations conducted by the John Hopkins Center for Civil Society Studies Center (2004), higher tax rates and better social benefit programs are negatively related to the rate of individual giving in developed countries. In European countries with better social benefit programs, although their individual donations were lower compared to that of the United States, people were more interested in other forms of giving such as volunteering. China, as a developing country that has been experiencing major social transformations in recent decades, encouraging charitable giving and promoting individual donation become more and more important
nowadays. Also, this paper aims to add to a small number of literature studying individual donation on east Asian countries. The unique oriental culture may shape individuals’ attitudes towards donating and public recognition, which leads to distinct results obtained with subjects in the western world. To best answer our research question, we conducted a field experiment at Zhejiang University in China. Subjects were randomly recruited and assigned into one of the five treatments with distinct information disclosure schemes. We find that public recognition affects individual giving in two opposite ways. On the one hand, subjects donate significantly more when they realize that they will be publicly recognized. On the other hand, public recognition lowers participation rate when subjects can avoid it by not donating. Approximately 1/3 of our subjects in those treatments with optional public recognition chose not to give and not being recognized. In another treatment where subjects were offered the chance to be publicly recognized after they donated, only 18% of them accepted this offer. 82% of the subjects chose not to be recognized, especially those whose donations were relatively small. In sum, public recognition is a “double-edged sword” towards individual charitable giving. This result provides practical values and policy implications for charities and NPOs.

The rest of this paper proceeds as follows. Section 2 describes the experimental design. Section 3 provides the results. Section 4 concludes.

## 2 Experiment Design

We conducted a field experiment at Zhejiang University of China in November 2013 and March 2014. This experiment was part of a fundraising event associated with the China Foundation for Poverty Alleviation (CFPA), aiming to support elementary and middles schools in rural areas of China. All our appliances used for this experiment, such as posters, donation boxes, subject information cards, etc. carried the official logo of CFPA.

We choose to conduct this study as a field experiment in China for several reasons. First, since this research aims to help promoting individual donations and provide practical insights for charitable organizations in China, obtaining subjects’ data from the field is a better way of learning and understanding individual behaviors in real lives. Second, comparing to a laboratory experiment setting, a field experiment provides

1China Foundation for Poverty Alleviation, founded in March 1989, is the largest and most influential non-profit organization specializing in poverty alleviation in China. For more details, please visit its official website: http://www.fupin.org.cn.
a larger environment where subject anonymity is possible. Moreover, China provides a unique background for conducting this field experiment, since mandatory public recognition is widely used for fundraising in schools, government and public sectors.

In this field experiment, we constructed an endowment earning stage and a donation eliciting stage. In the endowment earning stage, subjects were randomly recruited to complete a survey on their career plans. We also asked for personal information in this survey, such as subject’s age, gender, major, family income, number of siblings, etc., but we did not ask any question relating to charity giving. It took a typical subject about 5 minutes to finish this survey, and each subject was paid 30 yuan \(^2\) in cash upon completion. In the donation eliciting stage, subjects were introduced to the CFPA fundraising program and were offered an opportunity to contribute. We separated the survey site and the fundraising site far away from each other. Subjects did not know these two stages were related, and neither did they know that they were participating in an experiment. Subjects were able to donate in private in a divided donation area. We also provided envelopes and used non-transparent donation boxes, in order to protect subject privacy if they preferred to be anonymous donors.

We enrolled 12 experimenters and trained them before the experiment. We divided them into 3 teams, and each team had a recruiter, a surveyor, a cashier, and a fund solicitor. Their duties were clearly divided: the recruiter was responsible for randomly recruiting subjects. The surveyor was responsible for answering any question a subject might have during the survey period. The cashier was responsible for handling subject payments. The fund solicitor was responsible for introducing the fundraising program to subjects. To best eliminate the experimenter’s effect on subjects (List and Price (2009)), we selected experimenters with similar age and sex for the same role. Each team recruited a balanced number of subjects for each treatment. We assigned 5 subjects successively into one treatment before switching to another.

We gave subjects envelopes to put their cash donations. These envelopes were numbered on the inside, allowing us to tie donations to subjects’ characteristics that we gathered from the surveys. We designed five treatments with distinct public recognition schemes and varied the timing when we offered chances of public recognition. Treatment 1 was the Donation-only Treatment (($) only). Before donating, subjects were told

\(^2\) The minimum hourly wage of the city was 12 yuan at that time. The purchasing power of this 30 yuan was approximately equal to three meals of a day at the university school cafeteria.
that only their donations would be released to the public. Their names would not be released. Treatment 2 was the Name-only Treatment (Name-only). Before donating, subjects were told that they would be publicly recognized if they donate. Only their names would appear but not their donations. Subjects were offered blank cards to write their names. If a subject did not wish to be recognized, he could donate zero and leave the card blank. Treatment 3 was the Public Recognition with Opt-in Treatment (PR-in). Subjects in this treatment first made their donations without knowing that they would be recognized. After donating, subjects were provided the chance of public recognition. If a subject would like to be recognized, he or she needed to write both name and donation amount on the card provided. Otherwise, the subject only needed to write down the donation amount. It is noteworthy that although subjects were provided the chance of public recognition after donation, they were not able to make any changes in their donation. Treatment 4 was the Public Recognition with Opt-out Treatment (PR-out). Subjects in this treatment were notified before making their donations that they would be publicly recognized if they donate. If they chose to donate, they needed to write their names on the cards provided. Otherwise, they could donate zero and leave the card blank. Subjects in the PR-out treatment expected public recognition if they donated. The only way to opt out from public recognition was not donating. Compare to that, subjects in the PR-in treatment were anonymous donors when they donated. They could opt in for public recognition after they donated. Treatment 5 was the Mandatory Public Recognition Treatment (Mandatory-PR). In this treatment, regardless of how much subjects donate (including zero), their names and donations would be released to the public. Table 1 summarizes these five treatments.

We can analyze treatment effects by comparing between treatments using the difference-in-difference approach. First, if we compare the PR-out Treatment and the Name-only Treatment, we can obtain the treatment effect on releasing subject donation amount to public. Likewise, if we compare the PR-out

### Table 1: Treatments

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Information Released</th>
<th>Public Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>$-only</td>
<td>Donation only</td>
<td>Not available</td>
</tr>
<tr>
<td>Name-only</td>
<td>Name only</td>
<td>Optional, offered before donation</td>
</tr>
<tr>
<td>PR-in</td>
<td>Both donation and name</td>
<td>Optional, offered after donation</td>
</tr>
<tr>
<td>PR-out</td>
<td>Both donation and name</td>
<td>Optional, offered before donation</td>
</tr>
<tr>
<td>Mandatory PR</td>
<td>Both donation and name</td>
<td>Mandatory, offered before donation</td>
</tr>
</tbody>
</table>
Treatment and the Donation-only (\$-only) Treatment, we can get the treatment effect on releasing subject names to public. Our assumption is that since subjects are driven by their reputation motivation, releasing subject names will increase donation, while only releasing subject donation amount will have no effect on donation. By comparing the Donation-only Treatment and PR-in Treatment, we are able to analyze the post-donation public recognition information such as who would opt-in for recognition and their donation amount. Also, we can examine the effect of public recognition on individual donation by comparing across treatments. In the Donation-only and PR-in Treatments, subject are anonymous donors at the moment of donation, while in the Name-only and PR-out Treatments, subjects know that they will be recognized at the moment of donation. By analyzing subject donation amount and participation rate, we are able to investigate the how public recognition influences individual donation behavior.

We used the Zhejiang University Bulletin Board System, the 98 Forum, as a platform to recognize our donors. The 98 Forum is the university official and the most popular campus-wide social network among students, faculty, and staff at the Zhejiang University\(^3\). All of our subjects knew about the 98 Forum, and most of them were registered members. In those treatments where public recognition was available, subjects were informed that their names, or donations, or both would be published on 98 Forum in the following month after donation.

3 Results

We obtained 262 observations from this field experiment. Table 2 provides some summary statistics. In this table, it shows that the Mandatory PR treatment has the highest average donation of 17.35 yuan. This number is significantly higher compared to those in other treatments\(^4\). The average donations in the rest of the treatments are not statistically different from each other\(^5\). Also, the Mandatory PR treatment has the highest participation rate of 93.02\%, and the highest average donation from contributed subjects of 18.65

\(^3\)As of May 12, 2014, this forum has 199,328 registered members.
\(^4\)The average donation of the Mandatory PR treatment is higher than the \$-only, Name-only, PR-in, and PR-out treatment with p-values of \(p < 0.0021, p < 0.0020, p < 0.0001,\) and \(p < 0.0008,\) respectively. All reported p-values in this section are based on the two-tailed Mann-Whitney-Wilcoxon test.
\(^5\)The average donation of the \$-only treatment is not statistically different compared to the Name-only, PR-in and PR-out treatment, with \(p < 0.8540, p < 0.9845,\) and \(p < 0.8445,\) respectively. The average donation of the Name-only treatment is not statistically different compared to the PR-in and PR-out treatments, with \(p < 0.8299\) and \(p < 0.9674,\) respectively. The average donation of the PR-in treatment is not statistically different compared to the PR-out treatment, with \(p < 0.8085.\)
These results indicate that people are highly influenced by their reputation concern when donating. This finding leads to our first result that public recognition leads to higher participation rate and larger donation. It is consistent with what was found in previous researches, where public recognition significantly increases individual donations when it is mandatory.

**Result 1.** Public recognition encourages individual donation, especially when information disclosure is mandatory.

We divide these five treatments into two categories according to subjects’ status when making donations. In the $-only and PR-in treatments, subjects were anonymous donors because public recognition either was unavailable, or was offered after subjects donated. In the other three treatments, subjects knew that they would be recognized before they donated. This difference in subject’s status leads to some interesting results. Figure 1 shows the average donation of contributed subjects and the participation rate for all the treatments as two categories. First, for those subjects who contributed, their average donations are higher in those treatments where public recognition is offered before donation.6 Second, Within each category, there is no statistical difference between the average donations of contributed subjects.7

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6 The average donation of those contributed subjects in the $-only treatment is statistically lower compared to those in the Name-only treatment ($p < 0.1985$), PR-out treatment ($p < 0.0600$), and Mandatory PR treatment ($p < 0.0082$). The average donation of those contributed subjects in the PR-in treatment is statistically lower compared to those in the Name-only treatment ($p < 0.0619$), PR-out treatment ($p < 0.0123$), and Mandatory PR treatment ($p < 0.0004$) as well.

7 The average donation of contributed subjects are not statistically different between the Name-only and PR-out treatments ($p < 0.4281$), the Name-only and Mandatory PR treatments ($p < 0.1220$), as well as the PR-out and PR treatments ($p < 0.5890$). The average donation of contributed subjects in the $-only treatment is not statistically different from that of the PR-in treatment ($p < 0.6708$).
Figure 1: Average donation of contributed subjects and participation rate in each treatment by category

Subjects as anonymous donors

<table>
<thead>
<tr>
<th></th>
<th>Ave. donation of contributed donors</th>
<th>Participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>$−only</td>
<td>$13.75</td>
<td>81.4%</td>
</tr>
<tr>
<td>PR−in</td>
<td>$12.86</td>
<td>84.62%</td>
</tr>
</tbody>
</table>
| Subjects as recognized donors

<table>
<thead>
<tr>
<th></th>
<th>Ave. donation of contributed donors</th>
<th>Participation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name−only</td>
<td>$16.18</td>
<td>69.36%</td>
</tr>
<tr>
<td>PR−out</td>
<td>$17.81</td>
<td>65.31%</td>
</tr>
<tr>
<td>PR</td>
<td>$18.65</td>
<td>93.02%</td>
</tr>
</tbody>
</table>

Legend: Blue = Ave. donation of contributed donors, Red = Participation rate
Table 3: Probit regression of donation dummy on explanatory variables

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Marginal effect</th>
<th>Coefficient</th>
<th>s.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$-only</td>
<td>0.0300</td>
<td>-0.1079</td>
<td>(0.2945)</td>
</tr>
<tr>
<td>Name-only</td>
<td>-0.1884***</td>
<td>-0.6766**</td>
<td>(0.2847)</td>
</tr>
<tr>
<td>PR-out</td>
<td>-0.1355***</td>
<td>-0.4867***</td>
<td>(0.2678)</td>
</tr>
<tr>
<td>Mandatory PR</td>
<td>0.1217</td>
<td>0.4369</td>
<td>(0.3263)</td>
</tr>
<tr>
<td>Session time</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject characteristics</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of observations</td>
<td></td>
<td></td>
<td>253</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.0852</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.0184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wald $\chi^2$</td>
<td>24.32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We use PR-in treatment as the baseline. We use weighted sample regression since there are more observations in the PR-in treatment. *** Significant at the 1% level. ** Significant at the 5% level. * Significant at the 10% level.

Figure 1 also show the subject participation rate in each treatment. It shows that only 69.36% and 65.31% of subjects contributed in the Name-only and PR-out treatments, respectively. These participation rates are relatively low compared to those in the other category. To further analyze the relationship between subject participation decision and the choice of public recognition, we run a probit regression with donation decision as the dependent variable on various explanatory variables. The results are described in Table 3.

We find that subjects are 18.84% less likely to donate in the Name-only treatment compared to the PR-in treatment, and this result is significant at 5% level. Also, subjects are 13.55% less likely to donate in the PR-out treatment compared to the PR-in treatment, and this result is significant at 1% level. This implies that subject participation is affected by their donation status. If subjects know that they will be recognized before donation, some of them would rather not donate in order to opt out from public recognition. In other words, subject participation rate is lower in those treatments where recognition is offered before donation and optional, since subjects who prefer to be anonymous opt out. Furthermore, result of the Fisher’s exact test shows that subject participation rate in the Name-only treatment is not statistically different from that in the PR-out treatment. This implies that subject participation is affected by information disclosure on identity rather than donation. These findings lead to our second result.

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8Subject participation rate = number of contributed subjects / number of total subjects of the treatment.
9Fisher’s exact = 0.830.
Result 2. Public recognition discourages individual participation in charitable giving, especially when individuals can opt out from identity disclosure by not donating.

As opposed to previous researches where public recognition is found to increase donation unanimously, we reveal that public recognition crowds out potential donors who prefer to be anonymous. Compare to previous findings such as in Andreoni and Petrie (2004) where most subjects opt in for public recognition, we observed that the majority of donors preferred to stay anonymous. We recruited 78 subjects in the PR-in treatment in order to get more observations on recognized subjects in this treatment. However, only 12 out of 66 contributed subjects opt in for public recognition. About 82% of the subjects who made a donation in this treatment chose to remain anonymous.

We attempt to characterize those donors who stayed anonymous in the PR-in treatment and analyze the reasons behind that. One possible explanation is due to the unique oriental culture on attitudes towards public recognition. Oriental culture values modesty and believes that a good deed done anonymously deserves to be praised twice. Therefore, subjects prefers to stay anonymous in order to be perceived as caring about others and doing the good deed itself, which is superior, rather than as gaining personal reputation. More importantly, we find that the average donation was 11.43 yuan for the group of subjects who chose to remain anonymous, compared to that of 15.50 yuan of those who opt in for public recognition.\textsuperscript{10} Figure 2 provides additional information on subjects’ donation between anonymous donors and recognized donors in the PR-in treatment. We categorized them as Low, Medium, and High amount donors according to their donations. For those subjects who chose to remain anonymous, 70.69% donated less than 10 yuan (Low), 17.24% donate 11-20 yuan (Medium), and 12.07% donate more than 20 yuan (High). For those subjects who opt in for public recognition, these percentages were 50.00%, 16.67%, and 33.33%, respectively. One explanation of this observation is that subjects have their own believes on how much is a high or a low donation, and these home-grown believes vary by individuals. For example, five yuan may be considered as a high amount of donation for one individual while the same amount may be considered as a low donation by another. Therefore, we observe subjects whose giving were in the low category (below 10 yuan) and still chose to be recognized, as well as subjects whose giving were in the high category (above 20 yuan) and chose not to

\textsuperscript{10}The sample size did not allow further economics analysis.
be recognized. However, as the absolute amount of donation increases, more and more people are going to consider it as a high amount. Hence, we observed the tendency that subjects with relatively small donations were more likely to stay anonymous, while subjects with relatively higher donations were more likely to opt in for public recognition.

Since public recognition was offered after subjects donated, participants in the PR-in treatment were not motivated by their image or reputation concern when donating. However, image motivation affects subject decision on whether they choose to be publicly recognized or not. When donors are required to release their information, those who might have donated if they could remain anonymous opt out, especially for those who would have donated a small amount. One explanation of this is that people are more likely to remain anonymous if they believe their donation is not high enough to improve their reputation, if not to harm it.

In general, a larger amount of donation is more socially preferred and associated with generosity, wealth, altruism, etc. However, people have their own beliefs on what is the socially preferred level of donation. In our experiment, we did not discover a strong correlation between the amount of donation and the choice of public recognition. However, there was a tendency that people who donated a larger amount were more likely to opt in for public recognition. These findings lead to our third result.

**Result 3.** Public recognition crowds out small donations from potential donors who prefer staying anonymous.
4 Concluding Remarks

We conducted a field experiment in China to study the full scope of the impact of public recognition on individual charitable giving. We designed five treatments with distinct schemes of public recognition and information disclosure. We find that mandatory public recognition, in which case donor’s personal information is released to public regardless of donation decision, leads to the highest contributes from donors and participation rate, comparing to all other treatments. We also find that public recognition is a “double-edged sword” on individual donation. On one hand, public recognition encourages individual donation. On the other hand, public recognition crowds out small donations and lowers the participation rate when people are able to avoid it by not donating. Results of this paper reveals the rationale behind the commonly accepted form of donation with mandatory public recognition in schools, governments and other public sectors China. It also suggests that charitable organizations should adopt public recognition if the goal is to elicit larger contributes from a single donor, but should avoid public recognition if they plan to attract more donors. These results offer some insights for charitable and non-profit organization as well as for policy makers.
References


