

Moral Obligation, Fundraising Trust and Online Giving Sustainability: Evidence from China*

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Abstract: The new information technology brings a new proposition to the practice and theoretical research of online giving. However, there is still a lack of empirical research for the specific causes and mechanism of individuals' participation in online giving, especially how to transform "one-time giving" into "continuous giving". Using the first-hand survey data in the crisis of Covid-2019, the paper finds that the crisis inspired the first online charity donation of college students, but the willingness of the individuals who participated in the online giving for the first time was significantly lower than those who have multiple online giving experience. What's more, there are significant differences in the key factors influencing the two groups of donors to make a continuous online charitable donation in the future. For the individuals who participated in an online giving for the first time, both moral obligation and fundraising trust had significant promoting effects. However, for individuals with multiple online giving experiences, the impact of moral obligation is not significant, and the most important factor is fundraising trust. Therefore, in the practice, improving the social reputation of the organizations and creating a good charity fundraising environment can effectively promote individual continuous online donation, which is an important basic strategy for NPOs to cultivate stable funding sources. Furthermore, when soliciting donations from the public who have participated in charitable donations many times, NPOs could emphasize the actual social benefits of the giving behavior and disseminate the process information of fundraising. However, for the charitable donors who are less involved or potential donors, NPOs should highlight the moral norms and social basic emotions.

Key Words: Moral obligation, Fundraising trust, Nonprofit Organizations, Online giving sustainability, Internet

1. Research Questions

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With the development of mobile internet and new media technology, the donation channels have diversified enormously, and online donation has become an important fundraising method for nonprofit organizations (NPOs) in China. However, there is still insufficient research on the reasons for and the processes of online donation and particularly, how to increase continuous online donations. Moreover, the online fundraising efficiency of NPOs needs to be improved. According to the China Online Donor Behavior Research Report published by China Charity Alliance in 2019, “one-time donation” is a pronounced problem in online donations. In response, NPOs should better understand the donor’s pre-donation motivation and post-donation feelings and develop solicitation strategies accordingly to turn “one-time donation” into “continuous donations.” Young people represented by college students are the largest user group of new media. They are proficient at using the internet and active in online participation and expression. Existing studies find that people with higher levels of education are more involved in charitable giving¹. Since college students are the potential mainstay of future charity work, to raise their awareness of online donation is conducive to advancing the modern charitable cause, promoting cultural and ideological progress on campus and improving the civic morality of college students².

The COVID-19 pandemic offers a real-life context for studying the online donation behavior of young people. On one hand, people mainly donate online due to social distancing restrictions. On the other hand, the public health emergency has increased people’s enthusiasm and sense of engagement. Donations of various sizes have been launched throughout the country, in which a lot of people make their first-ever online donations. In case of emergencies, is it possible that people continue to donate because of emotional contagion or reputation in addition to the sense of fulfillment? Are there significant differences in motivation between people who donate online for the first time and those who do so multiple times? How can such differences be interpreted theoretically? And what are the reasons? In practice, how should NPOs develop strategies for online fundraising and implement them in a classified manner? These questions are the focus of this study. Based on a systematic empirical examination of college students’ online donation behavior in emergency situations, this study aims to shed light on the basic characteristics and rules of online donations among young people in real-life emergency situations, especially on the factors influencing the sustainability of online donations.

¹ Li, Z. (2020). Internet popularization, online government and the quality of information disclosure of “anti-epidemic” charity organizations: empirical evidences based on the information disclosure in the home isolation situation. *Journal of Central University of Finance & Economics*, 5, 117-128.

² Zhu, L.Y. (2015). Empirical research on post-disaster donation behavior of college students. *Chinese Youth Social Science*, 34(02), 16-20.

2. Literature Review

2.1 Online donations among young people

Charitable giving falls into two categories according to the context where they occur, that is, in everyday life or an emergency. Since the devastating Wenchuan earthquake in Sichuan in 2008, charity and volunteer activities of various types have developed rapidly in China. A growing number of people pitch in with disaster relief and reconstruction, indicating that disasters can significantly stimulate people's enthusiasm for charity³.

All people are social beings, and social information related to donation constitutes the social norms. Individuals in the social system abide by the social norms because they expect to act in a socially acceptable way⁴. If they don't conform to social norms, they would expect to be met with negative social evaluation. Individuals suffering from higher levels of social anxiety particularly fear negative evaluation, so they are more susceptible to donation-related social information. Furthermore, in the emergency context, donation decision making is more vulnerable to the influence of the expected peer pressure as well as the public opinion and one's own psychological stress. In this case, those with higher levels of social anxiety are more likely to be touched by the donation information. Making a donation can to some extent mitigate social anxiety. With the emergency evolving, people's donation decision making will be affected by public sensation, which urges more people to make charitable contributions.

Young people play an active role in online donations, and their contributions to the fight against the pandemic have drawn extensive attention in society. For young people, to learn about social norms and moral code, promote self-development and strengthen the sense of social responsibility is a process of socialization, which is the most important stage of socialization in one's entire life. Young people at this stage are transitioning into adulthood, and what they learn during this period will be crucial to how they adapt to society and realize their self-value. In recent years, with the advances in online banking and communication, online transactions have facilitated payment and currency conversion for donations, lowering the threshold of online donation. This makes online donation a cost-effective and plausible fundraising method⁵. Additionally, online communication provides a chance to acquire potential donors and retain existing ones⁶. Online donation knowledge

³ Luo, J. (2015). Donation motivation, influencing factors and incentive mechanism: a review of theory, experiments and brain science. *The Journal of World Economy*, 38(07), 165-192.

⁴ Bekkers, R., & Wiepking, P. (2011), "literature review of empirical studies of philanthropy: Eight mechanisms that drive charitable giving.", *Nonprofit and Voluntary Sector Quarterly*, 40 (5): pp. 924~973.

⁵ Ahn, J. C., Sura, S., & An, J. C. (2018), "Intention to donate via social network sites (SNSs): A comparison study between Malaysian and South Korean users.", *Information Technology & People*, 31(4): pp. 910~926.

⁶ Shier, M. L., & Handy, F. (2012), "Understanding online behavior: the role of donor characteristics, perceptions of internet, website and program and influence from social networks.", *International Journal of Nonprofit and*

and experiences have a bearing on future donation decision making. The more the knowledge about online donation, the stronger the intentions to donate online in the future⁷.

2.2 Donation sustainability

Previous studies mostly focus on people's motivation behind charitable giving from the perspectives of individuals and the social environment. People's charitable contributions are affected by both demographic factors such as gender and age and their social roles such as political status, religious beliefs and level of education. In addition, the behavior of charitable giving can be interpreted through the lens of psychology, including people's attitudes towards charitable giving, which mainly refer to their assessment of the behavioral results. Such assessment is manifested as the motivations for giving, including self-interested motivations such as a good reputation and altruistic motivations like social benefits⁸. It also involves perceived behavioral control, which refers to the individual's perception of the degree of difficulty in performing a specific behavior. In the dimension of charitable giving, perceived behavioral control is manifested as the objective factors influencing decision making. Subjective norms refer to the social norms developed under the social pressure perceived by the individual when deciding whether to perform a specific behavior. They reflect the influence of the significant others or group on the individual's decision-making process, including family members⁹, friends¹⁰ and celebrities¹¹. Especially, under the influence of traditional Chinese culture, family can effectively fuse together individuals' charitable behavior and resources, so that they are engaged in charity as a family¹². The social environmental factors that influence individuals' charitable behavior include external factors such as institutional and organizational factors. One of the institutional factors is tax incentive policy. Tax incentives are an important way to regulate the distribution of social resources and can increase the total utility of donations and encourage donations¹³. Charitable giving programs themselves can influence

Voluntary Sector Marketing, 17(3): pp. 219~230.

⁷ Tseng, C. Y. (2009), "Technological innovation and knowledge network in Asia: Evidence from comparison of information and communication technologies among six countries.", *Technological Forecasting and Social Change*, 76(5): pp. 654~663.

⁸ Luo, J. (2015). Donation motivation, influencing factors and incentive mechanism: a review of theory, experiments and brain science. *The Journal of World Economy*, 38(07), 165-192.

⁹ Hu, R. & Shen, S. (2013). Social capital and individual donation in rural China. *Journal of Public Administration*, 6(05), 60-75.

¹⁰ Meer, J. (2011), "Brother, Can You Spare a Dime? Peer Pressure in Charitable Solicitation." *Journal of Public Economics*, 95(7-8): pp. 926~941.

¹¹ Bi, X.Y. et al. (2010). The reach of danwei mobilization: an analysis on urban residents' charitable giving to Project Hope. *Sociological Studies*, 6, 149-177.

¹² Yang, Y.J. et al. (2019). Intergenerational effects on individual charitable donation: an innovative study on charitable donation in China. *Sociological Studies*, 34(01), 183-209.

¹³ Hochman, H. M., & Rodgers, J. D. (1977), "The optimal tax treatment of charitable contributions." *National Tax*

people's decision making on donations¹⁴. Organizational factors such as the institutionalization of NPOs and organizations' mobilization and donation appeal strategies also have a bearing on charitable giving¹⁵.

Although charitable giving is not a longstanding habit for a majority of online donors in China, donations are not a one-off, unconnected behavior. In contrast, many donors abroad make regular donations to support the development of their trusted NPOs. In foreign countries, NPOs are at the center of fundraising. They regard donors as customers, maintain long-term relationships with them and accumulate donor behavior data. Over time, people will internalize donation behavior and turn it into a long-term habit. Therefore, in addition to charitable giving motivations, attention should also be paid to its sustainability. Some scholars in China have analyzed the factors that influence the sustainability of donations made by families from the perspective of structural theory. These scholars see donors as individuals in the family¹⁶, whose behavior is subject to the influence and constraints of the behavioral rules in the social system. Family engagement in charitable giving is influenced by various structural factors such as social reputation, children's education and social responsibility. Nowadays, the public is becoming more rational in terms of charitable giving, expecting their donations to be a wise and effective action. In the event of an emergency situation, there are always a group of new donors who contribute online. It is necessary to adopt effective strategies to retain the donors and acquire potential donors and marginal donors. Cultivating and maintaining an active donor base is key to promoting the development of philanthropy¹⁷, which is conducive to the construction of non-profit organizations and improving the sustainability of resources.

2.3 Moral obligations and online donations

“Benevolence” and “kindness” are virtues advocated in traditional Chinese culture, which therefore has influence on people's charitable giving behavior. As charitable giving is a voluntary action, it is considered an externalized moral behavior. Compared with the West, collectivism is

Journal, 30(1): pp. 1~18.

¹⁴ Jamal, A., Yacob, A., Bartikowski, B., & Slater, S. (2019), “Motivations to donate: Exploring the role of religiousness in charitable donations.”, *Journal of Business Research*, (103): pp. 319~327.

¹⁵ Zhang, C. & Zhang, X. (2020). Organizational capability, the cooperative network and the institutional environment: the effectiveness of nonprofit community-based organizations in social governance. *Comparative Economic and Social Systems*, 2, 90-99.

¹⁶ Yang, Y.J. & Zhang, D. (2017). Research on the continuity of donations by Chinese households. *Academic Research*, 10, 51-59.

¹⁷ Luo, J. & Wang, T. (2012). A study on the sustainability of volunteering behavior: empirical data analysis based on college students' teaching volunteer program. *Sociological Studies*, 27(05), 94-118.

more highly valued in China, and individual behavior is more susceptible to the effects of collective morality, which has more significant influence on individual behavior than their own value judgments. Personal decision making on moral behavior is supposed to align with social models, rules or regulations for the sake of maximum social benefits. However, some studies believe that charitable donations have nothing to do with moral inclinations, since donations highly congruous with social consensus can reduce the ambiguity of individuals' judgments about what is right or what is wrong¹⁸.

In the public health emergency due to the COVID-19 pandemic, the public may resort to the ethical mechanism to resolve the moral dilemmas and risks associated with the major public emergency. Individual behavior of charitable giving may be influenced by moral obligations or collectivism, which will weaken egoism and altruism. Hence, moral obligations are factored in to examine its influence on the sustainability of donations.

Based on the above analysis, Hypothesis 1 is proposed:

Hypothesis 1: Moral obligations have significant positive effects on people's intention to make another online donation in the future.

Hypothesis 1a: Moral obligations have significant positive effects on people's intention to make their first-ever online donation in the future.

Hypothesis 1b: Moral obligations have significant positive effects on the intention of first-time online donors to make another online donation in the future.

2.4 Fundraising trust and online donation

Since the devastating earthquake in Wenchuan in 2008, China's fundraising landscape has changed dramatically. Before 2008, a vast majority of disaster relief operations were organized and implemented by the government, and this was not the case in the wake of the earthquake in Wenchuan. Shortly after the earthquake, hundreds of thousands of volunteers rushed to the disaster-stricken area. They promptly dispatched materials, helped and resettled people affected by the earthquake and energetically engaged in post-disaster reconstruction. They were independent of government-led disaster relief operations while collaborating closely with local government agencies. After ten years of development, NPOs have become an important force in social governance and played an important role in disaster response.

As online fundraising transcends the geographical and social distance of offline fundraising,

¹⁸ Reynolds, S. J., & Ceranic, T. L. (2007), "The effects of moral judgment and moral identity on moral behavior: an empirical examination of the moral individual.", *Journal of applied psychology*, 92(6): pp. 1610~1624.

there is a growing number of individual fundraisers. The donors and beneficiaries may have strong, weak or even no ties. When the two are not familiar with each other or even do not know each other, the donors tend to pay more attention to the donation-related information itself and are more willing to donate when seeing authentic and credible fundraising links. Furthermore, they tend to donate more money to individuals with whom they have closer ties. Governmental charitable organizations, non-governmental charitable organizations and individuals constitute the mainstay of online fundraisers in China. The organizational capabilities and reputation of charitable organizations also have an impact on donations¹⁹. The improvement in information disclosure can prompt people to decide on charitable giving²⁰. Into the information society, philanthropy and the internet have become closely integrated. Online donation reflects the power of acknowledgment, that is, online donors are concerned with the ideas of charity. In addition to disseminating the ideas of charity, online fundraising is intended to encourage the participants to give away real money rather than simply express opinions as in other online activities. Therefore, trust is of paramount importance in online fundraising. Some studies point out that college students' involvement in charitable giving is greatly influenced by organizational mobilization and closely related to their trust in charitable organizations. Moreover, altruistic values have a greater effect on their donation behavior than egoism²¹.

The popularization of mobile internet plays a significant role in improving the quality of information disclosure by charitable organizations. In an emergency context, the internet penetration rate has a significant positive correlation with the quality of information disclosure. To put it another way, the quality of information disclosure can improve because of special events²². Individuals participate in online donations out of trust in the fundraiser. Whether such **temporarily** improved trust will influence people's intention to make another donation is the second issue this study addresses.

Hence, Hypothesis 2 is proposed:

Hypothesis 2: The degree of trust in fundraisers has significant positive effects on people's

¹⁹ Zhang, C. & Zhang, X. (2020). Organizational capability, the cooperative network and the institutional environment: the effectiveness of nonprofit community-based organizations in social governance. *Comparative Economic and Social Systems*, 2, 90-99.

²⁰ Sang, Z. et al. (2019). Donative network and foundation information disclosure: empirical study based on social network analysis. *China Nonprofit Review*, 24(02), 138-161.

²¹ Zhu, L.Y. (2015). Empirical research on post-disaster donation behavior of college students. *Chinese Youth Social Science*, 34(02), 16-20.

²² Internet popularization, online government and the quality of information disclosure of "anti-epidemic" charity organizations: empirical evidences based on the information disclosure in the home isolation situation. *Journal of Central University of Finance & Economics*, 5, 117-128.

intention to make another online donation in the future.

Hypothesis 2a: The degree of trust in fundraisers has significant positive effects on the intention of people's intention to make another online donation in the future.

Hypothesis 2b: The degree of trust in fundraisers has significant positive effects on the intention of first-time online donors to make another online donation in the future.

3. Research Design and Methods

3.1 Data source

This study uses first-hand data obtained from a survey on online donations among college students. The questionnaire was distributed in April 2020. After the removal of missing values and outliers, a total of 2,429 valid questionnaires were collected. The survey covered college students in 34 provincial-level regions across China.

3.2 Measurement of variables

The variables in this study are based on mature scales and adjusted in light of the emergency situations. The 7-point Likert scale is used for the items.

1. Dependent variable

The dependent variable is college students' intention to make online donations in the future. The three items are "I am going to learn more about online donations," "I may make an online donation" and "I have already planned to make an online donation," and the 7-point Likert scale is used to measure the degree of agreement²³. People's intention to donate is an important predictor of their donation behavior. When objective conditions such as financial strength, availability of donation information and behavior opportunities are adequate, donation intention directly determines donation behavior.

2. Independent variable

In an emergency context, the involvement in online donation is influenced by moral obligations and the degree of trust in the fundraiser. Moral obligations reflect the belief in benevolence at the time of charitable giving and are measured by whether they agree that individuals have a moral obligation to donate. The measurement of the degree of trust in fundraisers involves three levels, namely, governmental charitable organizations, non-governmental charitable organizations and

²³ Zhang, J.M. et al. (2011). Analysis of influencing factors of civic charitable donation based on theory of planned behavior – data from Liaoning Province. *Soft Science*, 25(08), 71-77.

help-seeking individuals. In other words, the impact of the fundraising environment on individual charitable giving is examined.

3. Control variable

On the part of donors, other individual characteristics and organizational characteristics also have influence on their intention to make another donation in the future. At the organizational level, donation appeal strategies have an impact on individuals' donation decision making. Affective strategies, which include both positive and negative emotions, can help stimulate charitable giving²⁴.

This study mainly examines the individual characteristics of donors from two perspectives, namely, social psychology and individual roles. From the perspective of social psychology, behavioral intentions are subject to the impact of behavioral attitudes, perceived behavioral control and subjective norms.

Behavioral attitudes are mainly manifested as what individuals expect of the action. Therefore, the more positive the attitude, the more likely it is to stimulate charitable giving. On top of that, individual behavior is also influenced by objective conditions, that is, people's donation behavior also depends on their personal ability and the degree of difficulty in participating in donations²⁵. As a social person, an individual is also subject to the code of conduct in the social system. Under the guidance and pressure from groups, individuals are liable to take collective and other standards as a reference frame, and the formed subjective norms will also prompt individuals to conduct a specific behavior.

Many studies prove that demographic factors such as gender, age, level of education and income have significant effects on people's donation behavior. Given that the study subjects are college students who are similar in age and generally do not have a stable income, this study uses gender as a control variable.

In addition to demographic characteristics, individuals' donation behavior may also be influenced by their social roles. Some studies find that people's donation behavior is related to their political status. The membership of the Communist Party of China (CPC) or a democratic party involves responsibility and higher moral requirements from others²⁶, which prompts the party members to donate. Religious beliefs also have a positive effect on charitable giving. Religious beliefs impel people to internalize the concept of benevolence and therefore engage in charitable

²⁴ Chen, J.M. et al. (2017). Emotion and donating appeal influence giving decision-making: an experimental study. *Studies of Psychology and Behavior*, 15(04), 470-477.

²⁵ Zhang, J.M. et al. (2011). Analysis of influencing factors of civic charitable donation based on theory of planned behavior – data from Liaoning Province. *Soft Science*, 25(08), 71-77.

²⁶ Gao, Y.Q. et al. (2011). Business owners' social status, economic achievement and corporate philanthropy. *Economic Research Journal*, 46(12), 111-123.

giving²⁷.

Table 1. Measurement of Variables

Type	Variable	Item	Measurement	Source
Dependent variable	Intention to make an online donation in the future	· I am going to learn more about online donations in the coming year	Continuous variable after the sum of the scores of each item is averaged	Developed by the authors
		· I may make an online donation in the coming year		
Independent variable	Moral obligations	· I have already planned to make an online donation in the coming year	7-point scale with values assigned based on the degree of agreement in descending order	Developed by the authors
		· Do you agree with the following statements? I have no moral obligation to make an online donation		
	Degree of trust in the fundraiser	· I trust governmental charitable organizations (such as the China Youth Development Foundation and the Red Cross)	Continuous variable after the sum of the scores of each	Developed by the authors

²⁷ Zhou, Y. & Hu, A.N. (2014). Capital with faith: a study on the charitable giving behavior of Zhengzhou private entrepreneurs. *Sociological Studies*, 29(01), 57-81.

		<ul style="list-style-type: none"> · I trust non-governmental charitable organizations (such as the One Foundation and the Friends of Nature) · I trust help-seeking individuals <p>7-point scale with values assigned based on the degree of agreement in descending order</p>	<p>item is averaged</p>	
Control variable	Subjective norms	<ul style="list-style-type: none"> · My family often makes online donations · My friends often make online donations · The celebrities I like often make online donations <hr/> <ul style="list-style-type: none"> · My family often shares information about their participation in online donations · My friends often share information about their participation in online donations · The celebrities I like often share information about their participation in online donations 	<p>Continuous variable after the sum of the scores of each item is averaged</p>	White et al. ²⁸ (2009)

²⁸ White, K. M., Smith, J. R., Terry, D. J., Greenslade, J. H., & McKimmie, B. M. (2009), "Social influence in the theory of planned behaviour: The role of descriptive, injunctive, and in-group norms.", *British Journal of Social Psychology*, 48(1): pp. 135~158.

		<ul style="list-style-type: none"> · My family thinks I should make online donations · My friends think I should make online donations · The celebrities I like think I should make online donations <p>7-point scale with values assigned based on the degree of agreement in descending order</p>		
	Behavioral attitudes	<ul style="list-style-type: none"> · How much do you agree that online donations are beneficial to society? · How much do you agree that online donations can bring you personal benefits (such as: greater reputation and potential donations to myself in the future)? · How much do you agree that online donations can make you happy? <p>7-point scale with values assigned based on the degree of agreement in descending order</p>	Continuous variable after the sum of the scores of each item is averaged	Smith & McSweeney (2007)

	Perceived behavioral control	· Do you agree that the following factors will influence your decision to donate online? Convenience of donation channels and methods My own financial conditions Authenticity of information 7-point scale with values assigned based on the degree of agreement in descending order	Continuous variable after the sum of the scores of each item is averaged	Duan, W.T. et al. (2008) ²⁹
	Gender	· Your gender is	0 = Male 1 = Female	
	Political status	· Your current political status is	0 = Non-party member 1 = Party member (including probationary CPC member and member of a democratic party)	Hu, R. et al. (2013) ³⁰
	Religious	· Do you have any religious	0 = Yes	

²⁹ Duan, W.T. et al. (2008). A review of the theory of planned behavior. *Advances in Psychological Science*, 2, 315-320.

³⁰ Hu, R. & Shen, S. (2013). Social capital and individual donation in rural China. *Journal of Public Administration*, 6(05), 60-75.

	beliefs	beliefs?	1= No	
	Donation appeal strategy	<p>When a charitable organization solicits funds online, which of the following strategies will encourage you to donate (A: affective strategy; B/C: rational strategy)</p> <p>A. The strategy focuses on describing the sufferings and touching stories of the recipients</p> <p>B. The strategy highlights the importance and social value of the project itself</p> <p>C. The strategy presents authentic statistics showing how existing donors help make a difference</p> <p>Multiple choice</p>	<p>0 = Affective strategy</p> <p>1 = Rational strategy</p>	Chen, J.M. et al. (2017) ³¹

Table 2. Descriptive Statistics of Variables (N = 2,429)

Variable	Average/Percentage	Standard Deviation
Intention to make an online donation in the future	5.028	1.037
Moral obligations	4.140	1.658
Degree of trust in the fundraiser	4.574	0.984
Behavioral attitudes	5.706	0.863

³¹ Chen, J.M. et al. (2017). Emotion and donating appeal influence giving decision-making: an experimental study. *Studies of Psychology and Behavior*, 15(04), 470-477.

Subjective norms	4.535	1.001
Perceived behavioral control	5.962	0.791
Gender	32.6% (male)	-
	67.4% (female)	
Political status	85.7% (non-party member)	-
	14.3% (party member)	
Religious beliefs	8.9% (with religious belief)	-
	91.1% (no religious belief)	
Donation appeal strategy	15.7% (affective strategy)	-
	84.3% (rational strategy)	

3.3 Statistical analysis methods

The dependent variable in this study is college students' intention to make online donations in the future, and it is a continuous variable. In view of this, this study uses multiple linear regression (MLR) and incorporates the independent variable and control variable into the regression model to analyze the effects of different dimensions on college students' intention to donate online in the future.

4. Analysis of Research Results

4.1 Correlation analysis

Meanwhile, behavioral attitudes, subjective norms and perceived behavioral control all have a significant positive correlation with the intention to donate online in the future (behavioral attitudes: $r = 0.357$, $p < 0.01$; subjective norms: $r = 0.544$, $p < 0.01$; perceived behavioral control: $r = 0.291$, $p < 0.01$). The data also indicates that compared with men ($r = 0.082$, $p < 0.01$), women are more willing to make another donation in the future, so are people who are a member of a political party ($r = 0.050$, $p < 0.05$). Absence of religious belief and rational strategy have no significant correlation with donation intention (absence of religious belief: $r = -0.007$, n. s; rational strategy: $r = -0.030$, n. s), which requires future regression analysis.

Finally, the correlation coefficient of the independent variables is calculated to identify the problem of multicollinearity. The results show that among all the independent variables, the two with the largest correlation coefficients are subjective norms and the degree of trust in fundraisers ($r = 0.409$, $p < 0.01$), which fall within an acceptable range.

Table 3. Correlation Analysis

Variable	1	2	3	4	5	6	7	8	9	10
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1	Intention to make an online donation in the future	1.000									
2	Moral obligations	0.107**	1.000								
3	Degree of trust in the fundraiser	0.307**	0.159**	1.000							
4	Behavioral attitudes	0.357**	0.140**	0.262**	1.000						
5	Subjective norms	0.544**	0.130**	0.409**	0.321**	1.000					
6	Perceived behavioral control	0.291**	-0.022	0.015	0.168**	0.145**	1.000				
7	Gender	0.082**	0.028	0.017	0.002	0.053**	0.094**	1.000			
8	Political status	-0.050*	-0.012	0.007	-0.011	0.012	0.033	-0.012	1.000		
9	Religious beliefs	-0.007	-0.066**	-0.100**	0.024	-0.052*	0.086**	-0.024	0.099**	1.000	
10	Donation appeal strategy	-0.030	-0.010	-0.094**	-0.029	-0.070**	0.050*	0.021	-0.005	0.063**	1.000

Note: N = 2,429; * and ** indicate significance at the 5% and 1% levels, respectively (two-tailed test).

4.2 Independent sample t-test

Existing studies find that the groups of people who donated in the past are more willing to donate again compared with those who have never made a donation³². Before we conduct a comprehensive analysis of the factors influencing individuals' intention to donate in the future, the samples are divided into two categories based on whether it is the first time they donate online. Then, the independent sample t-test is performed to analyze the specific differences in the intention of the two groups to donate again in the future.

³² Knowles, S. R., Hyde, M. K., & White, K. M. (2012). "Predictors of young people's charitable intentions to donate money: An extended theory of planned behavior perspective.", *Journal of Applied Social Psychology*, 42(9): pp. 2096~2110.

Table 4. Independent Sample t-Test

	First-time online donors	Non-first-time online donors	t	p value
Intention to make an online donation in the future	4.819±1.087	5.063±1.024	-4.088	< 0.0001

Table 3 shows that among college students who donated online following an emergency, those who already made an online donation before and those who had never done so vary significantly in their intention to donate again in the future ($t = -4.088$), $P < 0.0001$). Specifically, the former are much more willing to make another online donation in the future than the latter. This indicates that in an emergency context, the sustainability of online donations due to social impact is not quite high.

4.3 Multiple linear regression analysis

Tables 4 and 5 demonstrate the specific effects of moral obligations and the degree of trust in fundraisers on college students' intention to make another online donation in the future. In order to facilitate analysis and explanation, the analyzed model is put in the position of Model 1 in each table, and the results of Model 1 in each table are used for explanation. Models 2 and 3 in each table show how moral obligations and the degree of trust in fundraisers impact the donors' intention to donate again in the future, while Model 4 only contains the control variable. The results of Table 4 and Table 5 are as follows.

Table 5. Non-First-Time Donors

	Model 1	Model 2	Model 3	Model 4
Moral obligations	0.006	0.012		
	(0.011)	(0.011)		
Degree of trust in the fundraiser	0.089***		0.090**	
	(0.021)		(0.021)	
Behavioral	0.207***	0.222***	0.208***	0.225***

attitudes	(0.023)	(0.023)	(0.023)	(0.023)
Subjective norms	0.418***	0.447***	0.418***	0.449***
	(0.021)	(0.020)	(0.021)	(0.020)
Perceived behavioral control	0.259***	0.254***	0.259***	0.252***
	(0.024)	(0.024)	(0.024)	(0.024)
Gender	0.128***	0.130***	0.128***	0.131***
	(0.039)	(0.039)	(0.039)	(0.039)
Political status	-0.197***	-0.195***	-0.197***	-0.195***
	(0.051)	(0.051)	(0.051)	(0.051)
Religious beliefs	0.048	0.029	0.045	0.024
	(0.065)	(0.065)	(0.065)	(0.065)
Donation appeal strategy	0.021	0.007	0.020	0.006
	(0.050)	(0.051)	(0.050)	(0.051)
Con_s	-0.131	0.092	-0.114	0.129
	(0.197)	(0.191)	(0.195)	(0.188)
N	2,080	2,080	2,080	2,080
Adjusted R ²	0.357	0.351	0.357	0.351

Note: ***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively; the number in parentheses is the standard error.

In the sample of non-first-time donors, there is a positive correlation between moral obligations and the intention to donate again in the future, but the correlation is not significant (Model 1, $\beta = 0.006$, n. s). There is a significant positive correlation between the degree of trust in fundraisers and the intention to make another donation (Model 1, $\beta = 0.089$, $p < 0.01$). The above results are consistent with the results of Model 2 and Model 3 which examines the impact from one of the two variables, respectively (moral obligations: Model 2, $\beta = 0.012$, n. s; degree of trust in the fundraiser: Model 3, $\beta = 0.090$, $p < 0.01$). Hence, Hypothesis 1a does not hold, that is, moral obligations have no significant positive effects on non-first-time donors' intention to make another online donation. This is perhaps because people who donated online before have a better understanding of online donations and are inclined to act more rationally. Donation decision making is subject to the influence of such factors as action results and personal abilities rather than consist in some moral

obligations alone. Hypothesis 2a is confirmed, that is, the degree of trust in fundraisers has significant positive effects on non-first-time donors' intention to donate again in the future.

Table 4 show a significant positive correlation between behavioral attitudes and individuals' intention to make another online donation (Model 1, $\beta = 0.207$, $p < 0.01$). Meanwhile, subjective norms also has a significant positive correlation with the donation intention (Model 1, $\beta = 0.418$, $p < 0.01$). Perceived behavioral control also has a positive impact Model 1, $\beta=0.259$, $p < 0.01$). In addition, women (Model 1, $\beta = 0.128$, $p < 0.01$) are more willing to donate again in the future compared to men.

Table 6. First-Time Donors

	Model 1	Model 2	Model 3	Model 4
Moral obligations	0.060**	0.060**		
	(0.026)	(0.027)		
Degree of trust in the fundraiser	0.103**		0.104**	
	(0.046)		(0.047)	
Behavioral attitudes	0.136***	0.151***	0.152***	0.167***
	(0.049)	(0.049)	(0.049)	(0.049)
Subjective norms	0.513***	0.554***	0.514***	0.556***
	(0.042)	(0.038)	(0.043)	(0.039)
Perceived behavioral control	0.238***	0.236***	0.233***	0.231***
	(0.048)	(0.048)	(0.048)	(0.048)
Gender	-0.163*	-0.169**	-0.146*	-0.152*
	(0.085)	(0.085)	(0.085)	(0.085)
Political status	-0.097	-0.075	-0.110	-0.088
	(0.129)	(0.129)	(0.129)	(0.130)
Religious beliefs	-0.008	-0.050	-0.019	0.061
	(0.139)	(0.138)	(0.139)	(0.139)
Donation appeal strategy	-0.133	-0.141	-0.094	-0.102
	(0.111)	(0.111)	(0.110)	(0.110)

Con_s	-0.066	0.203	0.077	0.349
	(0.415)	(0.399)	(0.413)	(0.396)
N	349	349	349	349
Adjusted R ²	0.494	0.488	0.487	0.482

Note: ***, ** and * indicate significance at the 1%, 5% and 10% levels, respectively; the number in parentheses is the standard error.

In the sample of first-time donors, there is a significant positive correlation between moral obligations and their intention to donate again in the future (Model 1, $\beta = 0.060$, $p < 0.05$). Similarly, the degree of trust in fundraisers also has significant positive effects (Model 1, $\beta = 0.103$, $p < 0.05$). The above results are consistent with the results of Model 2 and Model 3 which examines the impact from one of the two variables, respectively (moral obligations: Model 2, $\beta = 0.060$, $p < 0.05$; degree of trust in the fundraiser: Model 3, $\beta = 0.104$, $p < 0.05$). Hence, Hypothesis 1b and Hypothesis 2b are both verified, that is, moral obligations and the degree of trust in fundraisers both have significant positive effects on the intention of college students who made their first online donation to donate again in the future.

Additionally, the results indicate that behavioral attitudes (Model 1, $\beta = 0.136$, $p < 0.01$), subjective norms (Model 1, $\beta = 0.513$, $p < 0.01$) and perceived behavioral control (Model 1, $\beta = 0.238$, $p < 0.01$) have significant positive correlation with the students' intention to donate again. Different from the sample of non-first-time donors, however, women (Model 1, $\beta = -0.163$, $p < 0.01$) are less willing to make another donation compared with men. This may be because women's attitudes towards donation are less likely to be influenced. Religious beliefs and affective strategy both have positive effects on first-time donors' intention to donate again in the future, but such effects are not significant.

5. Conclusion and Discussion

Based on the data obtained from the questionnaire survey on online donations among college students in emergencies, the study constructs a model of individuals' online donation intention and conducts regression analysis of two types of samples, namely individuals who donated online for the first time and those who made multiple donations. The independent sample t-test finds that individuals who have already made multiple online donations are more willing to donate again in

the future compared with those who donated online for the first time. This implies that online donations made by young people in the wake of an emergency are mainly one-offs, which has limited impact on the sustainability of their online donation behavior. Individuals' online donation behavior is subject to the influence of online donation habits and experiences. People who have made multiple donations in emergencies are more inclined to donate again in the future. Individuals who have already made online donations before are more conscious of fundraising in case of public emergencies. Hence, they get better access to related information and are therefore more likely to make online donations. Gender has different effects on the intention of first-time donors and non-first-time donors. Among the latter, women demonstrate significantly higher intentions to donate again in the future, while among the former, men are more willing to donate again than women.

When factors such as gender, political status, religious beliefs and donation strategies are controlled, it is found that amongst first-time online donors, moral obligations and the degree of trust in fundraisers both have significant positive correlation with their intention to donate again in the future. By comparison, amongst people who have already donated online multiple times, the degree of trust in fundraisers has significant positive effects on their intention, while the effects of moral obligations are not significant. This indicates that an emergency can prompt people to make their first online donation, whose behavior is significantly influenced by moral obligations. In other words, moral obligations do not carry equal importance for the donation behavior of different groups; instead, their importance varies by people's experience in online donations. Different moral views have varying effects on individuals' online donation behavior, and utilitarianism-based ethics has negative effects on the sustainability of charitable giving. With the increasing social differentiation and stratification, individual values of different groups become prominent and collective moral fatigue effects have come to the fore. Consequently, moral preaching is no longer the most effective way to solicit online donations. In an emergency context, collective ethics still has much of an impact on individual behavior. Collective ethics such as "feeling guilt," "emotional resonance" and "compliance with social ethics" still has a bearing on people's intention to donate online. However, for people who have made multiple online donations, trust in fundraisers is a key factor that significantly affects their decision to make another online donation. This may be because they have better information literacy and a better knowledge of NPOs and charity.

This provides the following practical implications for the management of NPOs and the development of charity. First, to improve the creditability and reputation of fundraisers and create an enabling fundraising environment can prompt individuals to make continuous online donations in emergencies, where they donated for the first time or multiple times. This will pave the way for

NPOs to ensure a stable and sustainable funding stream. Second, Chinese people are more willing to take on social responsibility in emergencies. Due to the influence of social moods and the social environment, many people are impelled by moral obligations to donate online for the first time. Therefore, it is recommended that NPOs leverage new media technology and the mobile internet to strategically disseminate public information and actively interact with online communities to engage internet users in online donations. Third, targeted fundraising communications strategies can be adopted for the two different groups. Individuals who have donated online before are more willing to make another donation in the future. Therefore, when soliciting donations from people who have donated multiple times, NPOs should highlight the societal benefits the donations could bring, publish the information on the fundraising processes and progress in a proactive and timely manner, and make full use of the real-time interaction feature of social media platforms. By comparison, for those who are less involved in charitable giving or are potential donors, NPOs should highlight the moral norms and social basic emotions.

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