

How Situational Cognition, Communication Behaviour and Public Trust of NPOs Affect Individual Donation Intention: The Case of Anti-COVID-19 in China

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Abstract: By investigating the relationship between information dissemination behaviour, public trust in NPOs and individual donation, this study seeks to expand our knowledge of individuals' donation behaviour in NPOs' charitable crowdfunding. Through an online quantitative study nationwide from April to July in 2020, we find that the public's situational cognition has a great impact on their information dissemination behaviour, and the public's trust in NPOs plays a moderating role in the interaction between information dissemination and donation behaviour. For academia, this study helps to better understand the individuals' decision-making behind donation. Our model can help researchers understand individuals' philanthropic behavior by providing empirical explanations for the relationship between information dissemination behaviour, public trust in NPOs and individuals' donation behavior. For practitioners, the research suggests appropriate design, launch, and operation strategies to facilitate individuals' donation behavior in the future.

Keywords: COVID-19; Public Situation Theory; Individual Donation; Non-profit Organization; Communication Behaviour

I. Introduction of Question

The COVID-19 pandemic has swept across the world since December 2019. This fast-spreading public health emergency has posed unprecedented threats to the life safety of the people and the environment they live in. When the pandemic first broke out, the government and the market acted slow in resource allocation and security monitoring, whereas non-profit organizations (NPOs), as a third-party sector, stepped up and filled in and played a role that could not be ignored. When resources were in serious shortage because of the pandemic, NPOs in China organized several large-scale donations of money and anti-virus supplies in a bid to support the medical workers, grassroots volunteers, police officers and community workers fighting on the frontline. When explaining why charity donations are successful, previous studies focus on such factors as public trust in NPOs^①, credibility of NPOs^②, information dissemination behavior^③, and social network^④. But what's urgently needed now is to integrate different findings to develop a more comprehensive theoretical model to systematically measure the mechanism behind individual's donation behavior.

The relationship among individual donation, information dissemination behaviour and public trust in NPOs remains unclear as previous studies have come to different conclusions on this point. While some scholars reckoned that trust in NPOs plays an intermediary role in information dissemination behaviour and individual donation^⑤, a recent study found that cognitive trust functions as a moderator variable between public dialogue dissemination and charity donation^⑥. Cognitive trust means a person, based on his/her knowledge, voluntarily chooses to trust another^⑦. This recent study has given new inspirations for our

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^② Liu, Lili, Ayoung Suh, and Christian Wagner. (2018), "Empathy or Perceived Credibility? An Empirical Study on Individual Donation Behavior in Charitable Crowdfunding", 28(3), *Internet Research*, 623-651.

^③ Mano, R. S. (2014), "Social media, social causes, giving behavior and money contributions", 31, *Computers in Human Behavior*, 287-293.

^④ Agrawal, Ajay, Christian Catalini & Avi Goldfarb (2015), "Crowdfunding: Geography, social networks, and the timing of investment decisions", 24(2), *Journal of Economics & Management Strategy*, 253-274.

^⑤ Minghui Kang, Yiwen Gao, Tao Wang, Haichao Zheng (2016), "Understanding the determinants of funders' investment intentions on crowdfunding platforms: A trust-based perspective", 116 (8), *Industrial Management & Data Systems*, 1800-1819.

^⑥ Behl, A., Dutta, P., Sheorey, P. and Singh, R.K. (2020), "Examining the role of dialogic communication and trust in donation-based crowdfunding tasks using information quality perspective", 24(2), *The TQM Journal*, 36.

^⑦ McAllister, Daniel J. (1995) "Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations", 38 (1), *Academy of management journal*, 24-59.

analysis of the relationship among individual donation, information dissemination and public trust in NPOs. We first combed through the literature on individual donation behavior in NPOs' crowdfunding, and then, based on previous studies, developed a theoretical model that uses information dissemination behavior and trust in NPOs to explain why individuals are willing to donate. This study tries to answer the following question: what exactly is the relationship among public trust in NPOs, information dissemination behaviour and donation behavior?

During the pandemic when people were asked to avoid gatherings and stay home for quarantine, social media was an important way for them to access pandemic-related information and participate in public welfare activities. For its extensive public reach and popularity in specific circles, public media became the main platform to initiate and promote charity donation across the whole media network. How to use technological approaches to spread charity information, values and concepts through various media outlets and stimulate people to donate is a topic worth further studying. For instance, on gongyi.weibo.com, one of the largest charity donation platforms in China that's affiliated to social media Sina Weibo, nearly 28 million people donated more than USD 8.34 million under the category of medical donation to support the anti-pandemic fight^①. However, other NPOs had a major credibility crisis during the pandemic. The Red Cross Society of China Wuhan Branch, for example, was criticized for its slow distribution of the piled-up anti-virus supplies when medical workers were in serious shortage of protective gears^②, a crisis further fuelled by its unclear and untransparent accounts. This marks the notable characteristics of Chinese NPOs in online information dissemination and public trust. Considering this, we handed out questionnaires and conducted semi-structured interviews during the pandemic, with NPOs and donors as the objects of study.

According to situational theory of publics, a classic theory of public relations, problem cognition, limitation cognition and participation decide people's information dissemination behavior^③. In the past two decades, this theory has been widely applied to public relations and business activities to predict people's information dissemination behavior^④, and has displayed great explanatory capability. Therefore, this study tries to use it to explain the intrinsic or psychological mechanism of people's information dissemination behavior during the pandemic and, on that basis, provide suggestions on how to promote such behavior.

The quantitative approach is used in this study. We launched a nationwide survey from April to July 2020 in the form of online questionnaires and in the method of snowball sampling. A total of 357 questionnaires were released and 345, or 96.6%, came back valid. We also conducted semi-structured interviews with five individuals who donated money or supplies during the pandemic, and the results further corroborated our findings. Theoretically, this study will help understand the psychological process of making the decision of donation. The theoretical model herein provides the empirical support to explain the relationship among information dissemination behavior, trust in NPOs and individual donation. Realistically, this study provides suggestions on how to design, execute and operate NPO-based charity donation. When an NPO is in a trust crisis, the spread of charity information on media platforms will be an important way to stimulate donation.

II. Review of Literature

(I) Trust in NPOs and individual donation behavior

The trust in NPO means that the doner trusts the NPO to act in a way he/she wishes and fulfil its obligations^⑤. As an invisible asset, the trust in NPO must be cultivated and enhanced consistently and systematically over a long time, while any event of negative effect or charity scandal may plunge it into a trough. This reflects a strong connection between the trust in NPOs and individuals' intention of donation.

^① Peng, N., Zhou, X., Niu, B., & Feng, Y. (2021), "Predicting Fundraising Performance in Medical Crowdfunding Campaigns Using Machine Learning", 10(2), *Electronics*, 143.

^② Zhang Li, Li Xiufeng (2020), "Red Cross' credit crisis amid COVID-19 pandemic and rebuilding of public trust – an analysis based on SCCT theory", 5, *The Journal of Yunnan Administration College*, pp. 126-133.

^③ Grunig, J. E. (1997), "A situational theory of publics: Conceptual history, recent challenges and new research", 3, *Public relations research: An international perspective*, 48.

^④ Aldoory, L., Kim, J. N., & Tindall, N. (2010), "The influence of perceived shared risk in crisis communication: Elaborating the situational theory of publics", 36(2), *Public Relations Review*, 134-140; Kruger-Ross, M. J., & Waters, R. D. (2013), "Predicting online learning success: Applying the situational theory of publics to the virtual classroom", 61, *Computers & Education*, 176-184.

^⑤ Sargeant, A., & Lee, S. (2004), "Trust and relationship commitment in the United Kingdom voluntary sector: Determinants of donor behavior", 21(8), *Psychology & Marketing*, 613-635.

Once an NPO does anything in bad faith, it will not only lose public trust, but may also cause people to no longer make any individual donation^①.

Trust is the foundation for NPO's development and a key factor that affects public participation in charity activities. Studies show that those that have more trust in NPOs are more likely to donate^②, and their trust will even affect how much potential donors are willing to donate at most^③. In the meantime, it is also because of trust that those that have donated before will be more willing to do so in the future^④. The logic behind may be that people have the inner need to fulfil their social obligations as citizens, and if they think they can trust the NPO to fulfil such moral obligations on their behalf, they would be inclined to keep this kind of interaction^⑤. Therefore, this study proposes the following hypothesis:

Hypothesis 1: The most people trust NPOs, the more willing they are to donate.

(II) Information dissemination behavior and individual intention of donation

Many studies have found positive correlation between news coverage of disasters and donation, including direct donation to NPOs and donation through third-party channels^⑥. A large-scale research program on news coverage and charity donation showed how reportage in the US has systematically increased Americans' donations to quake-stricken regions worldwide. It found that during the 22 earthquakes (without deaths) between 1972 and 1990, the quantity of news coverage had pronounced effects on public donation. At the same time, when variables such as geography, national subsidy and international aid were controlled, the more casualties, the longer the earthquakes were covered, the more people donated^⑦.

It has also been shown by research that people that use social media and social websites more often donate more both online and offline^⑧. The charity information online helps people learn more about the NPOs and their donation programs. Just like in a physical space, people in the digital space can also join a specific group that conforms with their beliefs and wishes and consequently connect with a broader world. By obtaining and forwarding information about charity donation, potential donors can learn more about how to take part and interact with the NPO, which will further enhance their intention to donate. Based on this inference, this study makes the following hypothesis:

Hypothesis 2: The more frequently people disseminate donation information, the more inclined they are to donate.

However, many blanks wait to be filled in the study of the relationship between information dissemination behavior and individual donation intention. Very few empirical studies have noticed the role played by trust in this relationship. Xu Yanhui and others found that the acquisition of charity information further affects a person's donation behavior through his/her trust in NPO^⑨. An online survey of 242 fans of One Foundation showed that communication and interaction based on social media has exerted considerable positive effects on public trust, thus further affecting the intention to donate^⑩. Another study covering 1,300 donors found that trust is an intermediary between people's perception of donation and their donation behavior¹¹. However, previous studies only considered the acquisition of charity information – a rather simple and one-way dissemination behavior, but didn't take into account that in the age of social media, users can engage deeply in the process of information dissemination, such as forwarding and sharing of information on charity donation. The information dissemination behavior mentioned in this study consists of proactive dissemination behavior (publicity, forwarding or release of information related with charity

^① Hind, A. (2017), "New development: Fundraising in UK charities—stepping back from the abyss", 37(3), *Public Money & Management*, 205-210.

^② Shi Guoliang (2014), "Analysis of determinants on the credibility of charity organizations", 5, *Chinese Public Administration*, pp. 95-100; Chen Tianxiang, Yao Ming (2012), "A study of determinants on personal donation to NPOs – based on a questionnaire survey in Guangzhou", 4, *Journal of Zhejiang University (Humanities and Social Sciences)*, pp.114-131.

^③ Zhong Zhijin (2015), "Charity fundraising on social media: a study of fundraising capability and information transparency of micro charity", 8, *Journalism & Communication*, pp. 68-83.

^④ Skarmeas, Dionysis, and Haseeb A. Shabbir (2011), "Relationship quality and giving behaviour in the UK fundraising sector: Exploring the antecedent roles of religiosity and self-construal", 45(5), *European Journal of Marketing*, 720-738.

^⑤ Hosmer, L. T. (1995), "Trust: The connecting link between organizational theory and philosophical ethics", 20(2), *Academy of management Review*, 379-403.

^⑥ Waters, R. D., & Tindall, N. T. (2011), "Exploring the impact of American news coverage on crisis fundraising: Using media theory to explicate a new model of fundraising communication", 23(1), *Journal of Nonprofit & Public Sector Marketing*, 20-40.

^⑦ Simon, A. F. (1997), "Television news and international earthquake relief", 47(3), *Journal of Communication*, 82-93.

^⑧ Mano, R. S. (2014), "Social media, social causes, giving behavior and money contributions", 31, *Computers in Human Behavior*, 287-293.

^⑨ Xu Yanhui, Li Zhibin (2020), "Why is personal donation feasible – a study of the interaction between charity information and trust in NPOs", 1, *Social Security Studies*, pp. 77-85.

^⑩ Feng, Y, Du, L, Ling, Q. (2017), "How social media strategies of non-profit organizations affect consumer donation intention and word-of-mouth", 45, *Social Behaviour and Personality An International Journal*, 11.

¹¹ Sargeant, A., Ford, J. B., & West, D. C. (2006), "Perceptual determinants of nonprofit giving behavior", 59(2), *Journal of Business Research*, 155-165.

donation) and passive dissemination behavior (reading information related with charity donation), in hopes of filling the blank. Therefore, we make the following hypothesis:

Hypothesis 3: People's dissemination of information on charity donation will further affect their intention to donate through their trust in NPOs.

(III) Situational theory of publics: the mechanism behind information dissemination behavior

The situational theory of publics is reputed as the primary "in-depth theory" in the field of public relations for its special contributions to understanding how and why people conduct dissemination behavior in specific situations^①. The hypothesis for this theory is that individuals would seek and process information about an issue related with people's life or a public topic based on their problem cognition, limitation cognition and involvement cognition^②. By measuring how the public perceives the situation when in face of the topic, we can understand their dissemination behavior. This theory uses three independent variables to differentiate different groups and two dependent variables to explain their information dissemination behavior in the problem situation. The three independent variables are problem cognition, limitation cognition, and involvement cognition, and the two dependent variables are active and passive information dissemination behavior. Problem cognition refers to a state in which people realize that the lack of something has caused a problem but cannot solve it immediately. Limitation cognition means people realize the constraints in a problem situation and the constraints hinder them in solving the problem. Involvement cognition means people realize the degree of relevance between themselves and the problem situation^③. Individuals' differences in problem cognition, relevance to the problem situation, and perception of personal capability when confronted with the problem decide their different information dissemination behavior in the problem situation. Problem cognition and involvement cognition are positively correlated with information dissemination behavior, while limitation cognition is negatively correlated with information dissemination behavior^④.

When using the situational theory of publics to explain American college students and civilians' participation in charity donation activities, foreign researchers found that problem cognition, involvement cognition and limitation cognition could help them effectively forecast individuals' behavior of seeking and processing information about charity donation^⑤. Studies in China also showed that people's problem cognition, limitation cognition and involvement cognition about a problem situation can help forecast their acquisition of charity donation information^⑥. In this connection, this study proposes the following hypotheses:

Hypothesis 4: The stronger problem cognition people have of COVID-19, the more frequently they disseminate information about charity donation.

Hypothesis 5: The stronger limitation cognition people have of COVID-19, the less frequently they disseminate information about charity donation.

Hypothesis 6: The stronger involvement cognition people have of COVID-19, the more frequently they disseminate information about charity donation.

III. Research Methods

The quantitative approach is used in this study. We launched a nationwide survey from April to July 2020 in the form of online questionnaire and in the method of snowball sampling (<https://wj.qq.com>). A total of 357 questionnaires were released and 345, or 96.6%, came back valid. We also conducted semi-structured interviews with five individuals who donated money or supplies during the pandemic, and the results further corroborated our findings. The interviewees were recruited in a snowballing approach. As they lived in different places, the semi-structured interviews were conducted via video link or over the phone with those

^① Aldoory, L., Sha, B. L. (2007), *The Future Of Excellence In Public Relations And Communication Management*, NJ: Lawrence Erlbaum.

^② Grunig, J. E. (1997), "A situational theory of publics: Conceptual history, recent challenges and new research", 3, *Public relations research: An international perspective*, 48.

^③ Lai Zedong (2014), "Situational theory of problem solving: new progress on situational theory of publics", 2, *Chinese Journal of Journalism & Communication*, 164-176.

^④ Grunig, J.E. (2006), "Furnishing the edifice: ongoing research on public relations as a strategic management function", 18(2), *Journal of Public Relations Research*, 151-176.

^⑤ McKeever, B. W. "From awareness to advocacy: Understanding non-profit communication, participation, and support", 25(4), *Journal of Public Relations Research*, 307-328.

^⑥ Cao Xing, Zhou Yixin, Xu Linjia (2017), "Charity donation in China in the context of situational theory of publics and theory of reasoned action: a comparative study of three models", 6, *Chinese Journal of Journalism & Communication*, pp.138-153.

living far away. Each interview lasted about an hour, the recordings were transcribed into text through a voice-to-text software (<http://rec.sogou.com/voice>) and the text was analysed.

Based on the hypotheses, this study conducts an in-depth analysis on six dimensions – problem cognition, limitation cognition, involvement cognition, information dissemination behavior, trust in NPO, and individual intention to donate. Except the last dimension, questions set on the other five dimensions all draw on established metrics studied and verified by many researchers. These metrics are then modified according to the realities in China to form the metrics used in this study. Demographics and other related questions are placed at the end of the questionnaire, including the interviewees' gender, level of education, current income and expected future income.

The metrics used by Grunig, founder of the situational theory of publics, in health studies were used in the analysis of situational cognition. We set three testing items for problem cognition, limitation cognition and involvement cognition each – nine in total. The questionnaire adopted the 4-Point Likert Scale, whereby the interviewees measured their approval of the statements on four levels, 1 meaning “strong disapproval” and 4 “strong approval”. The value of Cronbach's Alpha in the metrics for problem cognition, limitation cognition and involvement cognition was 0.742, 0.801 and 0.832 respectively.

In the hypothesis of the situational theory of publics, different people react differently to problem situations, as reflected in the two dependent variables – active and passive information dissemination behavior. In this study, active information dissemination behavior includes publicity, forwarding or release of charity donation information, while passive information dissemination behavior includes reading relevant information. The questionnaire lists the following items: “I read charity donation information during the pandemic” and “I disseminated, forwarded or released charity donation information during the pandemic”, and the interviewees could reply according to the 4-Point Likert Scale – 1 meaning “never”, 2 “occasionally”, 3 “often” and 4 “always”. The value of Cronbach's Alpha in the metrics was 0.795.

Individual intention to donate was measured with the interviewee's degree of approval of the statement “I'm willing to donate during the pandemic”. A question in the opposite direction was also set. Both questions adopted the 4-Point Likert Scale – 1 meaning “strong disapproval” and 4 “strong approval”.

The degree of trust in NPOs was measured with the interviewee's degree of trust in nine types of organizations – foundation, charity federation, civil affairs organs of all levels, other Party and government organs than those in charge of civil affairs, non-profit public institutions (e.g. welfare home), Red Cross Society, people's group (e.g. Labor Union, Youth League, Women's Federation), private group, and religious organization. Still the 4-Point Likert Scale was used – 1 meaning “strong distrust” and 4 “strong trust”, and the value of Cronbach's Alpha in the metrics was 0.856.

IV. Research Findings

(I) Descriptive statistics

This study conducted the survey in the form of online questionnaire with the snowball sampling approach. Altogether 357 questionnaires were handed out in April-July 2020 and 345, or 96.6%, came back valid. Of the interviewees, 131 were male (38%) and 214 were female (62%). Regarding educational background, two of them graduated from middle school or below (0.6%), seven from high school/technical secondary school/vocational school (2%), 29 from junior college (8.4%), 248 had a bachelor's degree (71.9%) and 59 had a master's degree (17.1%). The samples demonstrated a generally high level of education with a large proportion of bachelor's and master's degree holders. Regarding monthly income, 93 made less than 2,000 (27%), 95 made 2,001-5,000 (27.6%), 59 made 5,001-8,000 (17.1%), 32 made 8,001-10,000 (9.3%), 44 made 10,001-20,000 (12.8%), and 22 made more than 20,000 (6.4%). Altogether 158 (45.8%) interviewees expected to “do better” in the coming year, 139 (40.3%) expected their income to “stay the same”, and 48 (13.9%) expected to “do worse”. Generally speaking, the samples were quite optimistic about their future income.

The samples had a high problem cognition (average=3.73, standard deviation=0.562) and involvement cognition (average=3.35, standard deviation=0.707), which might have something to do with the fact that data were collected at the height of the pandemic. The samples also had a limitation cognition slightly higher than medium (average=2.01, standard deviation=0.752). They had a rather high frequency of information dissemination behavior (average=3.07, standard deviation=0.815), actively spreading charity donation information online during the pandemic. Unexpectedly, the samples had a higher-than-medium level of trust (average=2.45, standard deviation=0.591) in NPOs despite the scandal of Red Cross Society of China Wuhan

Branch, and they had a fairly strong intention to donate (average=3.17, standard deviation=0.81). Descriptive statistics of main variables are in Table 1.

Table 1 Descriptive statistics of main variables

Variable	Number of samples	Min.	Max.	Avg.	Standard deviation
Gender	345	1.00	2.00	1.6203	.48602
Education	345	1.00	5.00	4.0290	.62345
Income	345	1.00	8.00	4.2406	2.07773
Expected income	345	1.00	3.00	1.6812	.70490
Problem cognition	345	1.00	4.00	3.7295	.56226
Limitation cognition	345	1.00	4.00	2.0116	.75174
Involvement cognition	345	1.00	4.00	3.3507	.70735
Information dissemination	345	1.00	4.00	3.0710	.81503
Trust in NPO	345	1.00	4.00	2.4461	.59096
Intention to donate	345	1.00	4.00	3.1739	.80976

(II) Correlation analysis of variables

Matrix analysis is applied to discern the relationship of gender, education, income, expected income, problem cognition, limitation cognition, involvement cognition, information dissemination behavior, trust in NPOs with the intention to donate. Correlation coefficients of the variables are shown in Table 2.

Correlation analysis shows that people’s problem cognition ($r=0.298, p<.001$) and involvement cognition ($r=0.262, p<.001$) are in significant positive correlation with information dissemination behavior, but limitation cognition is in significant negative correlation ($r=-0.449, p<.001$). This conforms with the hypothesis of situational theory of publics. People’s problem cognition ($r=0.278, p<.001$) and involvement cognition ($r=0.343, p<.001$) are in significant positive correlation with their intention to donate, but limitation cognition is in significant negative correlation ($r=-0.492, p<.001$). Limitation cognition means that people realize the constraints in a problem situation and these constraints hinder them in solving the problem, so the negative correlation between limitation cognition and intention to donate conforms with the hypothesis of the situational theory of publics. People’s information dissemination behavior ($r=0.745, p<.001$) and trust in NPOs ($r=0.302, p<.001$) are in significant positive correlation with their intention to donate, thus supporting hypotheses 1 and 2. Besides, education is in significant positive correlation with problem cognition ($r=0.180, p<.001$), which means that better-educated people are more keenly aware of the severity of the ongoing COVID-19. Their expected income is also in significant positive correlation with their intention to donate ($r=0.218, p<.001$), which means those more optimistic about their income in the following year are more willing to donate.

Table 2 Correlation coefficients of variables (N=345)

	1	2	3	4	5	6	7	8	9	10
1. Gender	—									
2. Education	0.123	—								
3. Income	0.094	0.264***	—							
4. Expected income	0.070	0.061	-0.053	—						
5. Problem cognition	0.056	0.180***	0.054	0.035	—					

6.Limitation cognition	-0.017	-0.052	-0.094	-0.102	-0.203***	—			
7.Involvement cognition	0.039	0.096	0.150**	0.026	0.527***	-0.402***	—		
8.Information dissemination	0.076	0.045	0.089	0.160***	0.298***	-0.449***	0.262***	—	
9.Trust in NPO	-0.017	-0.031	0.017	0.124	0.099	-0.383***	0.130**	0.321***	—
10.Intention to donate	0.146*	0.053	0.146**	0.218***	0.287***	-0.492***	0.343***	0.745***	0.302***

Note: N=345. p<.01, **, p<.001, ***, same below.

(III) Regression analysis of determinants of information dissemination behavior

The multiple regression model is used to find out how people’s problem cognition, limitation cognition and involvement cognition during the COVID-19 pandemic affect their information dissemination behavior. Demographic statistics (gender, education, monthly income) are included as control variables. Table 3 shows the results of multiple regression analysis. The model explains the 25.2% in the variation of dependent variable “information dissemination behavior”. On the 0.05 level, none of the three control variables (gender, education, monthly income) has any significant effect on information dissemination behavior. Of the three independent variables, problem cognition and limitation cognition have significant effects on information dissemination behavior but involvement cognition doesn’t.

Table 3 Results of multiple regression analysis of psychological determinants on people’s information dissemination behavior

	B	Standard error	β	Sig
Constant	2.789	.396		.000
Gender	.095	.080	.057	.223
Education	-.046	.065	-.035	.482
Monthly income	.018	.019	.047	.342
Problem cognition	.335	.081	.231	.000
Limitation cognition	-.445	.056	-.411	.000
Involvement cognition	-.036	.069	-.031	.602
R ²			0.252	
Adjusted R ²			0.239	
F			18.992***	
***p<0.001				

Problem cognition has significant effect and conforms with the hypothesis, which indicates that the more people think COVID-19 is a pressing issue, the more likely they will passively read or actively communicate information about charity donation, thus supporting hypothesis 4. Limitation cognition has significant effect and conforms with the hypothesis, which means the more people realize how difficult it is to respond to COVID-19, the less likely they will access and communicate donation information, thus supporting hypothesis 5.

Involvement cognition has no significant correlation with information dissemination behavior, which doesn’t support hypothesis 6. The reason for this is probably that the original theory premises the generation of “involvement cognition” on people’s perceived connection between themselves and the problem they are confronted with, so the metrics used under this definition categories COVID-19 as a “societal” situational problem, whereas the interviewees might have understood involvement cognition as the cognition of the risk of infection. For instance, when applying the situational theory of publics, a health communication study replaced involvement cognition with the cognition of risk of being infected with a specific disease. Moreover,

over half of the samples (229 people, accounting for 65.2%) were from Henan and Guangdong provinces, which were relatively less affected by the pandemic in April-July 2020, hence the insignificant correlation between their involvement cognition and information dissemination behavior. This also shows that while COVID-19 is a public health crisis, information dissemination behavior is only affected when people have a stronger personal involvement cognition due to the virus' high transmissibility.

(IV) Moderating effect of trust in NPOs

Hierarchical regression analysis is used to find out whether the trust in NPOs exerts a moderating effect between people's information dissemination behavior and intention to donate. The Hayes-developed SPSS Process is used, model 1 is selected based on the templates, 5,000 samples are selected through repeated sampling, and a 95% confidence interval is default. Table 4 shows the figures in Model 1 and 2.

Table 4 Moderating effect of trust in NPOs between information dissemination behavior and intention to donate

Model		B	Standard error	β	t	Sig.
1	Constant	3.174	.029		109.455	.000
	Information dissemination behavior	.718	.038	.723	19.090	.000
	Trust in NPO	.097	.052	.071	1.868	.063
2	Constant	3.198	.030		107.488	.000
	Information dissemination behavior	.688	.038	.693	17.888	.000
	Trust in NPO	.081	.052	.059	1.577	.116
	Product term	-.158	.052	-.113	-3.037	.003

Hierarchical regression analysis shows that when the product term of information dissemination behavior and trust in NPO is added, the interaction between those two items has significant effects (normalised slope -0.1581, $p < 0.01$) and enhanced explanation effects on the intention to donate.

Figure 1 shows marked slope change on the three lines of low moderation, medium moderation and high moderation – they are getting closer. With their increasing moderating effect, it obstructs the effect of information dissemination behavior on the intention to donate. The relationship between information dissemination behavior and the intention to donate is affected by the trust in NPO that plays the role of negative moderation. In other words, the less people trust NPOs, the stronger the positive correlation between information dissemination behavior and intention to donate, thus supporting hypothesis 3. This means when people have a low level of trust in NPOs, the information dissemination behavior affects their intention to donate more effectively.

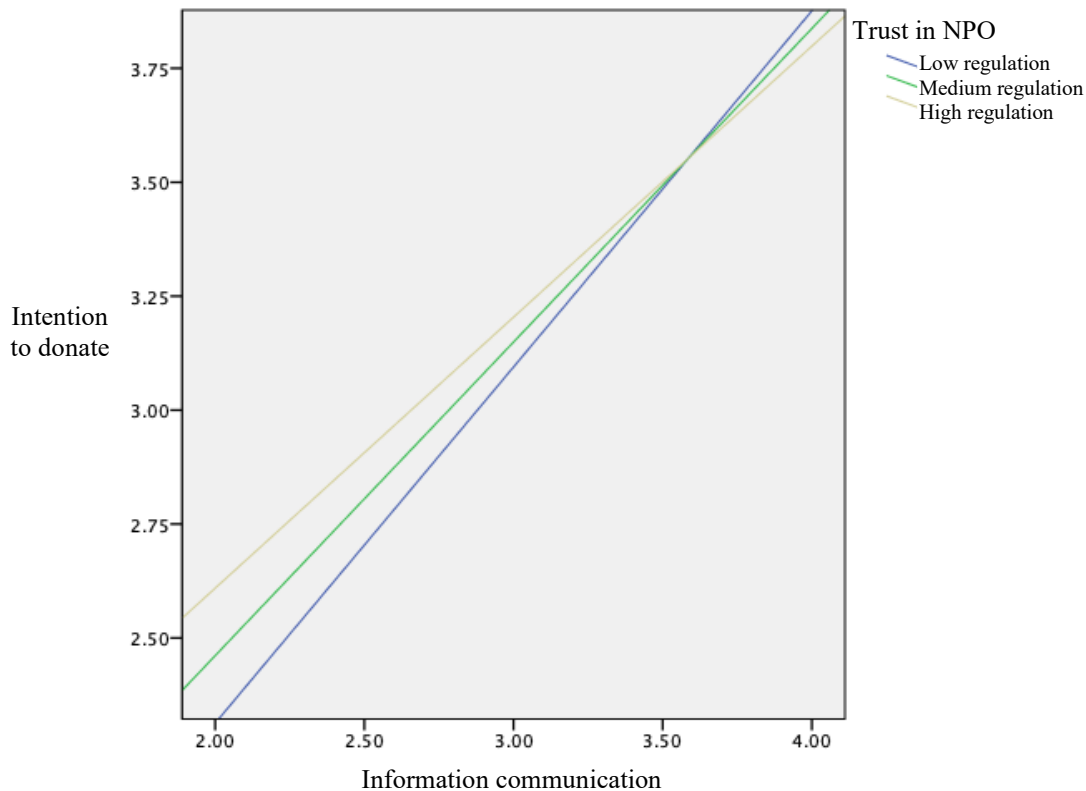


Figure 1 Moderating effect of trust in NPO in the relationship between information dissemination behavior and intention to donate

V. Conclusion

When a sudden public crisis hits the society, it is important for NPOs to effectively mobilize charity donation and enhance the intention to donate in all walks of life. Based on empirical investigations about COVID-19 in April-July 2020 and semi-structured interviews later, this study analyses in depth how personal intention to donate is formed on three dimensions – situational cognition, information dissemination behavior, and public trust in NPOs, and has come to the following three conclusions.

First, this study finds that limitation cognition is the strongest predictor variable on information dissemination behavior in the situational theory of publics, followed by problem cognition, while involvement cognition’s predictive effect on information dissemination behavior is insignificant. This varies from the original theory and the findings of other related studies, which indicates that with different cultural background and situational problems, the effects of problem cognition, limitation cognition and involvement cognition on individuals’ dissemination of charity information may vary. Interviewee A from Shenzhen said his/her intention to donate stemmed from the low limitation cognition of local NPOs. “If a Shenzhen-based NPO organizes a donation, I’d be more willing to forward the information and make donations. Since I’m a native, I think I can find out whether the donations are really put to good use and what follow-up steps are taken.” This shows that geographical proximity reduces the interviewee’s limitation cognition and makes them think that through local NPOs, their donations can be used more effectively to help those in need. This reminds us that there are ways to reduce the public’s limitation cognition about other donation themes such as earthquake and cancer, and consequently drive them to spread relevant charity information and enhance their intention to donate.

Second, trust is an important factor that affects people’s donation behavior. This study finds that people’s trust in NPO is in significant positive correlation with their intention to donate, meaning those that are more trustful of NPOs are more willing to donate. When an NPO is troubled by scandal or doubt, negative comments may make people question its credibility, become less trustful, and consequently less possible to donate. Interviewee B, who made several donations during the pandemic, said “there were many negative reports at the time, such as medical resources or donations not being delivered to those who needed them.

This made me feel that there were some grey zones and I didn't trust the Red Cross or similar organizations very much. My donations didn't go through them, but through a link provided by several hospitals on social media – they were asking for help. I believe this could make sure my donations would go to the hospitals directly". This shows that more often than not, there is no shortage of love or willingness to help in the society, but there is a shortage of trust in NPO. If we want to improve the general atmosphere of charity donation, the first thing we need to do is rebuilding the public trust and recognition of NPO. We must establish and improve the information disclosure mechanism in the charity sector to guarantee the people's right to be informed about how the NPOs operate. We must also bring into play the media to supervise NPOs and ensure transparent charity information, so as to increase the public trust in and connection with NPOs and steer the development of the charity cause onto a sound track.

Third, when NPOs are in a trust crisis, spreading charity information on media platforms is an important way to encourage donation. This study finds that the dissemination of charity donation information not only affects personal donation behavior directly, but their relationship is affected by the trust in NPOs, the moderator variable. This is to say that the more charity information a person accesses or participates in disseminating through information dissemination behavior, the more likely he/she is to donate. In particular, when exposed charity scandals hurt public trust in NPOs, stimulating people's information dissemination behavior can effectively promote personal donations.

Interviewee C, a consistent donator, said that most charity projects she had donated to posted information on social media, such as Sina Weibo, Bilibili (a video sharing platform), and WeChat public account. "I joined the program on Sina Weibo of donating tampons for girls in mountainous areas and I also donated to the 'health class' for children in those areas. Many streamers on Bilibili are donators. I saw a PE teacher in northeast China teaching more than 50 kids – like a charity school. There are also some WeChat public accounts collecting used clothes and donating them to people in need." When public trust in NPOs was low, C donated because of the charity information spread on social media. "I think the streamers are quite trustworthy because they'd give you feedback, like a video, which couldn't be faked, could it?" Interviewee B, who didn't trust the Red Cross Society of China, added that he/she might still donate if the Red Cross runs donation programs in the future. "But before I donate, I will search for more information. If there are media reports about hospitals being short of materials in the same period, I would think the donation program is more credible. Information from different sources can help confirm the authenticity and necessity of the program, and I'd donate if there are channels." Interviewee B's remarks further corroborated the relationship between the variables supported by data of this study.

The form and quality of charity information is an important factor too. Interviewee D said, "if project descriptions include images, videos or more details of the recipients, I'd be touched more easily because I'd feel I'm helping someone real. Therefore, I'm usually more willing to donate to programs with videos." She mentioned advertising films, short videos and photos for public welfare, which would be more convincing for her. Interviewee E mentioned that charity information that had "reasonable plans and clear flow of capital" increased his trust in a donation program. This shows that when NPOs are in a trust crisis, the dissemination of charity information on media platforms is an important way to stimulate donation, so NPOs should pay more attention to the form and quality of the charity information they release.

This study is of realistic significance for the development of the charity cause. Rebuilding public trust in NPOs requires a long time, during which NPOs should give full play to the role of media, especially social media, in spreading charity donation information. The media serves dual functions in the development of NPOs – a supervisor and a supporter. On the one hand, the media can report on NPOs' behavior and performance real-time, push them to establish an information feedback mechanism, and timely inform the public of how the funds are raised, used and managed to increase transparency. On the other hand, the media can help NPOs release and spread information on charity projects and process on fundraising to keep the public timely informed.

This study has its limitations. As a cross-sectional study, it cannot verify the sequence of information dissemination behavior, trust in NPO and individual intention to donate or their relation of causality. Therefore, a cross-lagged approach can be adopted in the future. This study uses convenient sampling, and the resulting sampling bias may have in a way restricted the promotion of its results to a broader audience. For instance, most samples have a bachelor's or master's degree, an educational level disproportionately higher than the general average. Therefore, further studies are needed to determine whether the conclusions drawn from this study are applicable for people with a lower-than-college education.

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