

An Empirical Study on the Promotion of Donation Performance of Non-profit Organizations

-Emotional Influence on the Willingness to Donate

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Abstract—With the development of social economy and the high popularity of the Internet, the share of network donations in non-profit organizations is also increasing year by year. But how to increase people's willingness to donate and thus improve the performance of online fundraising has not been studied at home and abroad. Based on past research, this study uses a two-factor experimental design to explore the influence of induced emotions on donors' willingness to donate. The results show that both the emotions induced by fund-raising materials and the non-material-induced emotions have a significant impact on people's fund-raising intentions. Specifically, when fund-raising materials contain strong negative emotions (such as individual donations for a serious disease), people need to be induced by positive emotions. Increase the willingness to donate; when fundraising materials contain weak negative emotions (such as fundraising for out-of-school children), willingness to donate can be increased by exerting positive or negative non-material emotions. This result provides a practical approach to improve the donation performance of non-profit companies at the micro level.

Keywords—Non-profit companies; Internet fundraising; Fundraising materials to induce emotions; Non-material induced emotions

I. INTRODUCTION

With the rapid spreading of the Internet, the Internet public welfare have rose rapidly. By collating the literature from previous fundraising studies, it can be found that there are many researches on external factors and internal factors in the rational behavior of donation behaviors, such as the study of demographic variables and the study of perceived factors and intrinsic motivation. However, research on emotional factors that affect donation, such as emotions, is still in its infancy. Early research on emotions focused on the effect of emotions on judgments and decision making. For example, Tversky showed through empirical research that negative emotions are more likely to cause pessimistic events than positive emotions and neutral emotions, regardless of whether the emotions are related to the target event or not. The idea [1], and then some scholars have added the impact of the expected mood on the decision.

II. LITERATURE REVIEW

Previous studies have shown that decision-making behavior is considered as a purely cognitive process, and emotion is not important in this process, but is only accompanied by the by-products of cognition. Later, Loewenstein and other scholars showed that there is an instant emotion in the decision-making process. It is independent of the cognitive process and may even surpass the cognitive process, directly affecting the decision-making behavior [2]. Subsequently, Anderson proposed a rational emotional model to integrate multiple emotional decision-making theory, and believes that decision-making behavior is influenced by immediate emotions, desired emotions, and other rational factors [3]. According to emotional decision theory, individuals make donations because they expect positive emotions to be greater than negative emotions. The theory believes that people's sentimental differences before and after donation can predict the donation intention to some extent. When the initial emotion is negative, the donation behavior can increase the subjective pleasure, thereby enhancing the willingness to donate; but when the initial emotion is positive, subjective pleasure is not obvious, but it will affect the willingness to donate [4].

Among the many ways in which charity ideas are influenced, fundraising advertisements are one of the most common and effective ways to stimulate people's emotional reactions. Among them, the influence of emotions on fundraising advertising is regarded as the most important one. [5]. In the study of PSAs, it was found that PSAs influence people's wishes and behaviors through wide appeals [6]. The broad appeals refer to the form in which public interest information is promoted, and is usually divided into perceptual and rational advertising needs. Kara's research found that emotional appeals are more likely to touch people's hearts and be accepted [7].

In online fundraising, the donor's emotions will appear in two stages. One is that the donors have their own emotions before donating, and the other is the emotions that the donors cause after they read the donation information. This kind of emotions will be used for the intention of donation. To a certain extent. In recent years, researchers have also done some empirical research on the emotions in fundraising. For

example, Xie Tao and Zhou Jun believe that individuals' sad emotions before donation can increase their willingness to donate, while being happy can reduce their willingness to donate [8]. This result supports the empathy-helping assumption. However, Liang believes that when the fundraising information contains some positive emotional content, it can increase the individual's willingness to donate. When he discovers that the information contains positive emotional content with a strong sense of power, people's willingness to donate is enhanced, and when the donation information contains both the positive emotional content of the sense of power and the negative emotional content of sadness can more effectively persuade people to donate [9]. This result supports the inspiration-helping hypothesis. On the one hand, the current emotions have different conclusions on the impact of network fundraising. On the other hand, the research on the emotions contained in donation information is still very rare. Based on this, this study further compares the influence of donation materials containing strong negative emotional content and donation materials with weak negative emotional content on the willingness to donate.

H1: The stronger the negative emotions contained in fundraising materials, the greater the willingness of individuals to donate.

The donor's own emotions and fundraising materials cause the donor's emotions to be in two phases of the donation decision process, which will affect the willingness to donate. Although previous studies have discussed the impact of these two emotions on the willingness to donate, both the impact of superposition on the willingness to donate has not yet been involved, and this superposition effect has very important significance in the network donation, so it is necessary to carry out special research. Previous studies have shown that excess negative emotions can hinder decision-making [10]. And, when individuals have been induced strong negative emotions, presenting fundraising materials containing positive emotions can partially neutralize negative emotions, making the degree of negative emotions in a proper range; on the contrary, when individuals have been induced to strong When negative emotions are present, presenting fundraising materials containing negative emotions will make emotions more negative. Therefore, put forward the hypothesis of this study

H2: After inducing individuals to generate strong negative emotions, presenting fundraising materials containing positive emotions can increase individual's willingness to donate, and presenting fundraising materials containing negative emotions will reduce the willingness to donate.

Similarly, when an individual is induced a weak negative emotion, presenting a donation material containing negative emotion increases the negative emotion to a medium degree, and presenting a donation material containing a positive emotion reduces the negative degree of emotion. Based on this, put forward the hypothesis of this study

H3: After inducing individuals to produce slight negative emotions, presenting fundraising materials containing positive emotions can reduce individual's willingness to donate, and presenting fundraising materials containing negative emotions increases willingness to donate.

In this study, two experiments were used to explore the influence of emotional content in emotion-inducing and donation materials on the willingness of individuals to donate. Experiment 1 explored the influence of emotional content in fundraising materials on willingness to donate. On the basis of experiment 1, experiment 2 first conducted emotional induction for the subjects, and then explored the influence of emotions and sentiment in the fundraising materials on the net donation intention.

III. STUDY 1

A. Pretest

Prior to the formal experiment, the degree of emotions caused by the donation materials was tested in advance, and 103 subjects were randomly selected. The subjects were randomly assigned to induce weak negative emotions or induce strong negative emotions. After the subjects read the materials, fill in the Positive and Negative Affect Scale (PANAS) to measure the degree of negative emotions. The results showed that there were significant differences in the negative emotional scores of the two donation materials.

B. Experimental design

A single factor completely randomized design was used to examine the effect of different negative emotional intensity on individual willingness to donate. Emotional intensity is divided into strong negative and weak negative. Randomly selected 103 subjects were randomly assigned to two scenarios. One scenario's fundraising materials were described with strong negative emotions, and the other scenario's fundraising materials were described with weak negative emotions. The fundraising materials were generated and made from materials for a small boy who needs donations. In the weak negative emotion group, the presented material simply describes the boy as having a skin disease and the pathogenesis of the disease; in the strong negative emotion group, the presented material details the series of symptoms of the boy after the illness, and explains Boy's difficult family situation. After the participants finished watching the donation materials, they completed the donation willingness questionnaire.

C. Experimental materials

Including the Positive and Negative Affect Scale (PANAS), the donation willingness questionnaire, the self-funded donation materials, and the basic information questionnaire for the subjects. In this study, the negative emotional scale of the PANAS scale was used, and 10 negative emotions were included. The degree of negative emotions felt by the subjects after reading the materials was evaluated. The Negative Emotion Scale uses a five-point scale, with one point representing almost no feelings and five points representing very large feelings, gradually deepening from one to five degrees. The donation willingness questionnaire uses seven grades, with 1 representing no willingness to donate, and 7 representing a very strong willingness to donate, gradually increasing from 1 to 7 degrees.

D. Result

The descriptive statistics of the negative emotions of the participants in the two groups are shown Table 1, and the

descriptive statistics of the willingness to donate are shown in Table 2.

TABLE I. NEGATIVE EMOTION SCORES

Donation material	<i>N</i>	<i>SD</i>	<i>M</i>
Strong negative emotion	50	0.936	4.108
Wake negative emotion	53	0.877	2.771

A t-test was performed on the negative emotion scores of the two groups of subjects, $t(99) = 2.447$, $p = 0.016$. The results showed that the difference in scores of negative emotions between the two groups was significant, indicating that the

donation materials could cause different levels of negative emotions, and further that the fundraising materials used in this experiment were effective.

TABLE II. DONATION WILLINGNESS SCORES

Donation material	<i>N</i>	<i>SD</i>	<i>M</i>
Strong negative emotion	50	1.434	5.50
Wake negative emotion	53	0.995	5.02

A t-test was performed on the willingness of the two groups to donate, $t(102) = 1.987$, $p = 0.036$. It shows that there is a significant difference in the willingness to donate between the two groups. Therefore, Experiment 1 verified that when the fundraising materials contain strong negative emotional content, the willingness to donate is higher than that caused by slight negative emotional content.

other hand, it studies the effects of non-material-induced emotions and donation materials on the willingness to donate.

IV. STUDY 2

Study 1 verified that when the online fundraising materials contained weaker negative emotions than negative ones, the individual's willingness to donate was greater. In the past, researchers have demonstrated that when donations include emotions of power, they also increase their willingness to donate, but there is no study of the influence of positive or negative sentiment of the donor on willingness to donate before online donations. On the basis of experiment 1, experiment 2 increases the variable of non-material-induced emotions. On the one hand, it studies the influence of non-material-induced emotions on the willingness to donate; on the

A. Experimental design

Take a completely random design of 2 (strong negative sentiment fundraising material VS weak negative sentiment fundraising material) \times 3 (non-material induced positive sentiment VS non-material induced negative sentiment VS no induced sentiment). 310 subjects were selected and randomly assigned to 6 scenarios. For example, the subjects with strong negative emotions in the fundraising materials and the non-material induced positive emotion group first looked at two pictures of negative emotions. Each picture was observed for ten seconds and asked the participants to make a simple evaluation in order to induce the participants to be positive. The mood was then asked to read the fundraising materials that contained strong negative emotions, and finally to use a questionnaire to measure the willingness of the participants to donate. The tasks under the other scenarios were similar.

B. Result

TABLE III. DONATION WILLINGNESS SCORES

materials emotion	Induced emotions	<i>N</i>	<i>M</i>	<i>SD</i>
Strong negative	positive	52	5.85	1.422
	negative	62	5.25	1.185
	neutral	50	5.50	0.995
Wake negative	positive	63	5.48	1.202
	negative	53	5.57	1.323
	neutral	53	5.02	1.434

The main effects of induced emotion on donation willingness were significant (M positive = 5.39, M negative = 5.72, M neutral = 5.25; $F = 3.973$, $p = 0.02$). The willingness to donate for negative emotion induction was significantly higher than that without emotion induction and positive emotion induction. The willingness to donate.

Comparing the data in Table 3 with the results of the t-test, it can be seen that when the donation material contains strong emotions, there is no difference in willingness to donate as opposed to no inducement (M negative = 5.25, M). No induction = 5.50; $t(110) = 1.69$, $p = 0.144$). There was no significant difference in willingness to donate compared to no induction when positive emotions were induced (M positive =

5.31, $M_{\text{neutral}} = 5.50$; $t, p = 0.429$) However, the positive induction was significantly higher than the willingness to negatively induce donation ($M_{\text{positive}} = 5.85$, $M_{\text{neutral}} = 5.25$; $t(110) = 2.03$, $p = 0.029$); when the fundraising materials contained weak negative emotions, the participants were given negative induction. Compared with no induction, the willingness to donate was significantly increased ($M_{\text{negative}} = 5.57$, $M_{\text{no}} = 5.02$; $t, p = 0.044$), and there was a significant increase in volunteers' willingness to donate when they increased positive induction ($M_{\text{positive}} = 5.48$, $M_{\text{no}} = 5.02$; $t, p = 0.049$), and there was no difference in the willingness to donate between applying positive induction and negative induction.

V. DISCUSSION

Firstly, with regard to the influence of online fund-raising-induced emotions on the willingness to donate, the above experimental results show that in the actual fundraising situation, when the donor himself has negative emotions or is induced negative emotions, his/her willingness to donate will be more positive than normal emotions or positive. The mood is high, which is consistent with the results of previous studies. Compared to traditional offline fundraising, online fundraising makes it easier to control and influence the emotions of donors prior to donation. Then, the fundraiser can use the donor to listen to a sad music or watch a short video to induce the donor's negative emotions. Then he can read the fundraising materials to improve the donor's willingness to donate. This is of practical significance.

Secondly, with regard to the influence of fundraising materials sentiment on donors' willingness to donate, Experiment 1 verified that when fundraising materials contain strong negative emotions, they have higher willingness to donate than weak negative emotions. This is similar to previous studies. From the point of view of the originator of online fundraising, when the object to be donated is described as more miserable, the fund-raising effect is good. It is noteworthy that the negative emotions mentioned here are only a generalization concept, and the negative emotions contain a lot of specific emotion types. Not every negative emotion can increase the willingness to donate, and future research can further refine the category of negative emotions to study. As mentioned above, a mixture of power and negative emotions in positive emotions will significantly increase the willingness to donate. Similarly, some emotions in negative emotions may also reduce the willingness to donate, if they can improve their willingness to donate separately and reduce The sentiment of donation will have very important guiding significance for the fund-raising sponsor and further improve the efficiency of fund-raising. From the perspective of generalized decision-making research, different negative emotions have different influences on decision-making. Therefore, how to influence the decision makers' emotions and make them play a positive role in decision-making is very complicated and worthy of further study. In Experiment 2, only the main effect of emotional induction was obtained, and the main effect of fundraising materials was not significant. Although the interaction effect between the two is not significant, such changes indicate that

the induced emotion has an impact on the sentiment of the donation materials, and it shields the influence of some donation materials on the willingness to donate. It may be due to diminishing marginal effects. When the emotions are controlled at the beginning and the emotions of the donor materials are applied, the latter's influence on the willingness to donate will be reduced.

Thirdly, the effect of online fundraising materials sentiment and induced emotions on the willingness to donate. When the donation material contained strong negative emotions, there was no difference in the willingness to give the participant a negative induction compared to the non-induction. There was no significant difference in the increase in positive emotion induction versus the non-induction willingness to donate, but the positive induced emotion was imposed. The participants were more willing to donate than the negatively induced participants. This is somewhat different from previous studies. If emotions can be superimposed, then when negative emotions increase to a certain degree, they will no longer have an impact on the willingness to donate, and may also have a reverse effect. This is also worthy of in-depth research.

VI. CONCLUSION

According to the experimental data of this study, the following conclusions are drawn: When the fundraising materials contain strong negative emotions (such as serious disease individual donations), it is necessary to increase the willingness to donate by actively describing the fundraising targets; when the fundraising materials contain weak negative emotions (such as Out-of-school children's donations can be increased by inducing positive or negative non-material emotions.

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