

Virtue or Competence? The Effects of Donation Recognition on Donors' Repeat Donations and Information Sharing

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Abstract

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Full Text

Virtue or Competence?

The Effects of Donation Recognition on Donors' Repeat Donations and Information Sharing

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Abstract An increasing number of charitable organizations provide donors with donation recognition in order to promote their repeat donations and information sharing, thereby improving donor retention and expanding the influence of charitable organizations. Drawing on objective self-awareness theory, self-consistency theory, and impression management theory, this study examines the effects of different sources and types of recognition on repeat donation and information sharing, as well as their underlying mechanisms. Through one field experiment and three laboratory experiments, the study finds that when recognition comes from beneficiaries, warmth-based (vs. competence-based) recognition leads donors into a state of objective self-awareness, thereby activating their self-consistency motivation and promoting repeat donation; when recognition comes from charitable organizations, competence-based (vs. warmth-based) recognition strengthens donors' state of subjective self-awareness, thereby ac-

tivating their impression-management motivation and promoting information sharing. By revealing the differentiated influence mechanisms of the source and type of donation recognition on donors' repeat donation and information sharing, this study not only extends research on donation recognition but also provides useful guidance for charitable organizations in formulating donation-recognition strategies.

Keywords donation recognition; repeat donation; information sharing; self-awareness state; self-consistency motivation; impression-management motivation

Classification numbers B849; F713.55

1 Introduction

The sustainable development of charitable organizations depends to a great extent on donors' long-term support and the recruitment of new donors. However, many charitable organizations currently still face the problems of low donor retention and high costs for recruiting new donors. On the one hand, the retention rate of first-time donors in most charitable organizations is only 20%-25% (Dirisam et al., 2021). On the DonorsChoose platform, approximately 74% of donors make only one donation and never return (Althoff & Leskovec, 2015). Yet research shows that a 10% increase in donor retention can increase the amount of charitable donations received by an organization by about 200% (Sargeant, 2013). On the other hand, recruiting new donors often requires substantial costs. A research report released by WorldMetrics in 2026 shows that the average cost of recruiting a new donor is USD 49. When fundraising-cost budgets are limited, donors' information sharing provides charitable organizations with a low-cost fundraising approach. Many charitable organizations actively encourage donors to mobilize their personal social networks through information sharing (Boman & He, 2025), which can not only expand the social visibility of charitable organizations but also enhance

the scale of donations and public participation (Silver & Small, 2024). Therefore, how to encourage donors to give again so as to increase donor retention, and how to promote donors' information sharing so as to reduce charities' recruitment costs, have become key issues for charitable organizations in achieving sustainable development.

With the development of technologies such as the mobile Internet and blockchain, charitable organizations are increasingly providing donors with donation recognition. Donation recognition refers to charitable organizations' gratitude and affirmation of donors' contributions to charitable causes by providing certificates, badges, and similar forms of acknowledgment (Zhu Yue et al., 2024). As an important mode of interaction, donation recognition not only helps maintain the relationship between charitable organizations and donors and encourages donors' continued participation in giving (Winterich et al., 2013), thereby promoting donor retention (Dangubić et al., 2025),

but can also motivate donors to share, facilitating broader dissemination of philanthropic information (Faulkner et al., 2016; van Dongen, 2015) and thus attracting more potential donors. In practice, donation recognition can take different forms in terms of its source and content. Specifically, recognition sources mainly include beneficiaries and charitable organizations. In terms of recognition content, one type highlights donors' kindness, enthusiasm, and the like. For example, students in Xinjiang who received care and assistance (beneficiaries) wrote in their thank-you letter to donors: "I have felt your support, warmth, and love for us. ...You have rekindled my will and hope for life and study." [^1] Another type highlights donors' ability, efficiency, and so forth. For example, the China Siyuan Foundation for Poverty Alleviation (a charitable organization) wrote in its certificate to donors: "We sincerely thank you for your attention and support, which have provided higher-quality educational resources for schools in economically underdeveloped areas and helped students achieve all-round development." [^2] This paper refers to these respectively as warmth-oriented and competence-oriented recognition. As two dimensions of donation recognition, how do recognition source and recognition content interact to influence donors' subsequent behavioral responses? Is there a matching effect? What is the underlying mechanism? These are the questions this paper seeks to explore in depth.

Reviewing the existing literature, scholars have mostly focused on the source and content of donation recognition, exploring their mechanisms of influence on the single behavior of repeat donation or information sharing. Regarding the source of donation recognition, multiple studies have shown that recognition from beneficiaries (vs. charitable organizations) is more effective in promoting donors' repeat donations (Dai Bin, 2014; Dangubić et al., 2025; Feng et al., 2021; Liu Bo et al., 2016). Regarding the content of donation recognition, Wang Tao et al. (2016) found that behavioral-gratitude (vs. quality-appreciation) recognition is more effective in promoting donors' repeat donations; other research has found that donation recognition with high (vs. low) content openness is more effective in promoting information sharing (Chell et al., 2023). From the perspective of behavioral characteristics, repeat donation and information sharing represent two different subsequent support behaviors: the former is substantive support with high cost and low social visibility, whereas the latter is symbolic support with low cost and high social visibility (Kristofferson et al., 2014). Therefore, examining these two types of behavior simultaneously helps provide a more comprehensive understanding of how donation recognition affects donors'

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[^1]: <https://xhslink.com/o/ArLXrLErCri3>

[^2]: <https://weibo.com/7920826826/OgZhAnNMO>

on donors' subsequent supportive behaviors. Given that source and content are two core dimensions of donation recognition, while repeat donation and infor-

mation sharing represent two different forms of subsequent supportive behavior, there is still a lack of systematic research on how the source and content of recognition interact to influence repeat donation and information sharing.

In summary, this article jointly considers the two dimensions of the source and content of donation recognition. Taking objective self-awareness theory as the core theoretical framework, supplemented by self-consistency theory and impression management theory, it systematically explores the differentiated effects of the source and type of donation recognition on donors' repeat donation and information sharing, and reveals the underlying psychological mechanisms from the perspectives of self-awareness and motivation. The findings of this study will not only help expand and deepen research related to donation recognition, but also provide strategic guidance for charitable organizations in designing donation-recognition practices.

1.1 Source of Donation Recognition

The source of donation recognition refers to the entity that issues the recognition, which is generally reflected in the signature or attribution of the recognition. Existing research on the source of donation recognition has mainly focused on two sources—beneficiaries and charitable organizations—and has examined their effects on donors' willingness to donate subsequently. Drawing on value theory, Liu Bo et al. (2016) found that, compared with charitable organizations, donation recognition conveyed by beneficiaries increases donors' perceived social value and willingness to donate again. Dai Bin (2014), based on motivation attribution theory and group entitativity theory, found that donors believe recognition from beneficiaries can reflect the value of their helping behavior, thereby making them more inclined to donate again; recognition from charitable organizations, however, is often regarded as a routine work process, making it difficult to satisfy donors' emotional needs and thus reducing their willingness to donate again. Feng et al. (2021) further found that donation recognition originating from beneficiaries (vs. charitable organizations) is more likely to elicit donors' positive emotions, thereby stimulating their willingness to donate again. Based on a real-world context of providing housing for refugees, Dangubic et al. (2025) found that donation recognition originating from beneficiaries (vs. charitable organizations) may better motivate individuals to continue participating in volunteer service.

Overall, existing studies generally find that donation recognition originating from beneficiaries (vs. charitable organizations) can have a more significant effect in promoting repeat donations. However, most current research explains the underlying mechanisms from perspectives such as perceived social value and emotional responses; there remains a lack of systematic investigation into how the source of recognition influences donors' state of self-awareness and, in turn, affects their subsequent behavior.

1.2 Types of Donation Recognition

Types of donation recognition refer to the classification of donation recognition according to the informational characteristics conveyed by the recognition content. At present, scholars in China and abroad mainly classify donation recognition into different types based on dimensions such as the publicness of the recognition content and its focus, and further examine the effects of different recognition types on donors' repeat donation or information sharing (Feng et al., 2022; Kristofferson et al., 2014; Wang Tao et al., 2016). Kristofferson et al. (2014) divided donation recognition into high social visibility (asking donors to wear a pin) and low social visibility (placing the pin in an envelope and giving it to donors). The former more readily satisfies donors' impression-management needs, thereby weakening their subsequent willingness to support; by contrast, donors who receive low-social-visibility donation recognition are more likely to maintain behavioral consistency through subsequent support. Feng et al. (2022), according to the focus of attention, classified donation recognition into other-focused and self-focused types.

self-focused type; research shows that self-focused (vs. other-focused) donation recognition leads donors to make egoistic evaluations of their own donation behavior, thereby inhibiting their willingness to donate subsequently. Similarly, according to whether the content highlights "the benefits of helping behavior for recipients" or "the donor's good qualities and exemplary role," Wang Tao et al. (2016) divided donation recognition into behavior-thanking and quality-appreciation types, and found that quality-appreciation (vs. behavior-thanking) recognition is more likely to lead donors to anticipate receiving positive external attention and social rewards, thereby suppressing individuals' self-perceived altruism and repeat-donation behavior. In addition, the publicness of donation-recognition content also affects donors' information sharing. Compared with private thank-you emails, recognition that is more public on social media platforms, such as digital badges, can better strengthen donors' positive identity evaluation and thereby promote their information sharing (Chell et al., 2023). Although existing research has classified donation recognition in diverse ways, these classifications have not yet revealed how recognition content is understood by donors along the evaluative dimensions of social cognition, nor how it further strengthens donors' self-cognition. Given that donation recognition is essentially a form of social evaluation, it is therefore necessary to classify donation recognition from the basic dimensions of social perception.

Based on the Stereotype Content Model (SCM), this study divides donation recognition into warmth-based and competence-based types. The stereotype content model indicates that people evaluate persons or things mainly in terms of warmth and competence (Fiske et al., 2007). The former reflects people's perceptions of attributes such as kindness, friendliness, enthusiasm, and sincerity, whereas the latter reflects people's perceptions of attributes such as efficiency, talent, responsibility, and skill (Aaker et al., 2012). The stereotype content model initially focused primarily on social-group perception (Fiske et

al., 2002), but in recent years it has gradually been extended to individual perception (Judd et al., 2005), organizational perception (Aaker et al., 2010), and brand perception (Kervyn et al., 2012), among others. The corresponding warmth-competence two-dimensional classification has been widely used to describe perceptual differences among individuals: Kervyn et al. (2012), based on consumer perceptions, classified brands into two types, warmth and competence; Chen Siyun et al. (2019) further classified fundraising entities into warmth-based and competence-based types; in addition, some scholars have classified advertising appeals into warmth-based appeals and competence-based appeals (Zhu Zhenzhong et al., 2020). In practice, the content of donation recognition also differs in terms of warmth and competence. Therefore, based on the stereotype content model, this paper classifies donation recognition into warmth-based and competence-based types: warmth-based recognition refers to donation-recognition content that prominently emphasizes donors' kindness, enthusiasm, and the like; competence-based recognition refers to donation-recognition content that prominently emphasizes donors' ability, efficiency, and the like.

1.3 The Interactive Effects and Internal Mechanisms of Recognition Source and Recognition Type on Donors' Behavioral Responses

Previous studies have shown that persuasion is more effective when the information source and content match (Osgood & Tannenbaum, 1955). For example, in the field of influencer marketing, when the content views expressed by social media opinion leaders are consistent with their own image, audiences are more easily persuaded (Han & Balabanis, 2024); in the medical field, when the information source (doctor vs. peer) matches the message appeal (emphasizing disease risk vs. emphasizing sociocultural taboos), adoption of cervical-cancer screening is better promoted (Ponnappan et al., 2026). In the research context of this paper, information source and content correspond respectively to recognition source and recognition type. This study focuses on how the matching effect between the two influences the persuasive effect of donation recognition, that is, its influence on donors' repeat donation and information sharing.

According to objective self-awareness theory, when individuals' attention is focused on the self, they examine their own behavior and compare it with their internal standards and values; at this point, the self is the target and object of consciousness, that is, the individual is in a state of objective self-awareness. Conversely, when individuals' attention is not directed toward the self, the self is no longer the target and object of consciousness, but rather the source and subject of perception and behavior, that is, the individual is in a state of subjective self-awareness (Duval & Wicklund, 1972). In general, individuals are in a state of subjective self-awareness; only when external stimuli induce them to attend to the self do they shift into a state of objective self-awareness (Moskalenko & Heine, 2003). External stimuli that induce individuals to enter a state of objective self-awareness can be divided into two broad categories (Morin, 2004): first,

the social environment, such as face-to-face interpersonal communication, public speaking, and social comparison; and second, the physical environment, such as mirrors, self-portraits, or videotapes. As objective self-awareness theory has developed, the external factors influencing individuals' self-awareness states have also continued to expand, especially social-environmental factors with broader meanings. Fei Xianzheng et al. (2024) found that social media focused on interpersonal interaction and communication (such as WeChat) induces individuals to enter a state of objective self-awareness, whereas social media not focused on interpersonal interaction and communication (such as Toutiao) does not induce individuals to enter a state of objective self-awareness; in other words, individuals remain in a state of subjective self-awareness. In summary, interpersonal communication contexts activate individuals' objective self-awareness.

Applied to the research context of this paper, when donation recognition comes from beneficiaries, because beneficiaries are specific, named individuals, the relationship between donors and beneficiaries approximates interpersonal communication and interaction. At this point, individuals' attention is focused on the self, and their internal attitudes and beliefs become more salient (Gibbons, 1990). Warmth traits—such as kindness, sincerity, considerateness, and morality—are typically regarded as manifestations of individuals' internal qualities and core moral identity (Aaker et al., 2010). Warmth-based recognition, by emphasizing donors' goodwill and the emotional care they bring to beneficiaries, is more likely to direct individuals' attention toward their internal values. The interpersonal attributes embodied by beneficiaries and warmth-based recognition are highly congruent in emphasizing moral care and interpersonal goodwill, jointly strengthening individuals' entry into a state of objective self-awareness. By contrast, when beneficiaries provide competence-based recognition, this does not match the interpersonal attribute that beneficiaries are in a relatively disadvantaged position in terms of resources or ability, which can easily weaken individuals' internalized understanding of such recognition and thus make it difficult to significantly strengthen individuals' processing of self-awareness.

Conversely, when donation recognition comes from a charitable organization, because charitable organizations are more often regarded as intermediary vehicles through which individuals make charitable donations and help others, donation and being recognized are more akin to interactions between individuals and organizations than to interpersonal communication and interaction. At this point, individuals regard themselves as the source of perception and action. Competence traits—such as intelligence, efficiency, skillfulness, and talent—are more closely centered on individuals' efficacy as actors (Fiske et al., 2007). When individuals are recognized for their competence traits, they are more likely to attend to or value the efficacy of their own actions. The authoritative attributes of charitable organizations and competence-based recognition are highly congruent in emphasizing competence and efficiency in the donation process, jointly strengthening individuals' subjective self-awareness. By contrast, when charitable organizations provide warmth-based recognition, the emphasis is on donors' sincerity and considerateness; this does not match the attributes of

charitable organizations as vehicles for resource allocation and donation, which can easily weaken individuals' internalized understanding of such recognition and thus make it difficult to significantly strengthen individuals' processing of self-awareness.

Different self-awareness states among individuals further influence how they process self-related information (Fei Xianzheng et al., 2024), thereby generating different motivations and exerting differentiated effects on individuals' subsequent behavior. More specifically, individuals in a state of object self-awareness will evaluate their own behavior according to their beliefs and standards (Carver & Scheier, 2012). When they perceive a discrepancy between their behavior and those standards, they experience discomfort and attempt to adjust themselves so that subsequent behavior becomes consistent with their own beliefs, standards, or prior behavior (Heider, 1960), that is, self-consistency motivation. Applied to the research context of this paper, when recipients express gratitude and affirmation for donors' warmth and enthusiasm in donation recognition, donors enter a state of object self-awareness. At this point, donors will pay greater attention to the consistency between their current or subsequent behavior and their self-values or past behavior, thereby strengthening their self-consistency motivation (Aronson, 1968). Because donors have already engaged in donation behavior, driven by self-consistency motivation they will further develop a willingness to donate again. By contrast, information sharing is symbolic support characterized by low cost and high social visibility (Kristofferson et al., 2014); therefore, self-consistency motivation will not promote donors' strong willingness to share information.

Conversely, individuals in a state of subject self-awareness regard themselves as the agents of perception and action. They pay more attention to the traits manifested in their own actions (Duval & Wicklund, 1972; Morin, 2004) and tend to achieve self-enhancement by displaying these traits to external groups (Alicke et al., 2009), thereby constructing and conveying a positive self-image to others through impression building and satisfying impression-management motivation (Leary & Kowalski, 1990). Applied to the research context of this paper, when charitable organizations express gratitude and affirmation for donors' ability and efficiency in donation recognition, donors are in a state of subject self-awareness. At this point, donors pay more attention to their social image in the eyes of others, thereby strengthening their impression-management motivation. Donors can actively display their positive image through symbolic support observable to the public (such as information sharing), thereby satisfying impression-management motivation (Mehdizadeh, 2010). By contrast, repeat donation is substantive support characterized by high cost and low social visibility (Kristofferson et al., 2014); therefore, impression-management motivation will not promote donors' strong willingness to donate again.

Based on the above reasoning, this paper proposes the following hypotheses:

H1: The source and type of recognition will interactively influence donors' repeat donation and information sharing.

H1a: When the recognition comes from recipients, compared with competence-based recognition, warmth-based recognition will make donors more willing to donate again, whereas there will be no significant difference in information sharing.

H1b: When the recognition comes from charitable organizations, compared with warmth-based recognition, competence-based recognition will make donors more willing to share information, whereas there will be no significant difference in repeat donation.

H2: Donors' self-awareness state and motivation sequentially mediate the effects of recognition source and recognition type on repeat donation and information sharing.

H2a: When the recognition comes from recipients, warmth-based (vs. competence-based) recognition will lead donors to enter a state of object self-awareness, thereby activating their self-consistency motivation and promoting their repeat donation, whereas there will be no significant difference in information sharing.

H2b: When the recognition comes from a charitable organization, competence-based (vs. warmth-based) recognition strengthens donors' subjective self-awareness state, thereby activating their impression-management motivation and promoting their information sharing, whereas there is no significant difference in subsequent donation.

Based on the above hypotheses, we constructed the research model for this paper (see Figure 1).

[Figure schematic]

- Donation recognition
 - Source: recipient vs. charitable organization
 - Type: warmth-based vs. competence-based
- Path 1: object self-awareness state → self-consistency motivation → subsequent donation
- Path 2: subject self-awareness state → impression-management motivation → information sharing

Figure 1. Research Model

2 Field Experiment 1: The Interaction Effect of Donation Recognition Source and Recognition Type

The purpose of Experiment 1 was to conduct a preliminary test, through a field experiment, of the differentiated effects of the source and type of donation recognition on subsequent donation and information sharing; that is, to test Hypotheses H1, H1a, and H1b. The experiment adopted a 2 (recognition

source: recipient vs. charitable organization) $\times$ 2 (recognition type: warmth-based vs. competence-based) between-subjects design. This experiment was carried out in cooperation with a “sorority”¹ at a university in the central United States. The organization arranges for students to go to a local church every Thursday to help transport and distribute free food. Taking this opportunity, we sent donation-recognition certificates to students participating in the volunteer activities, and tracked and recorded their subsequent attendance at volunteer activities and their sharing of the donation certificates on social media, using these as data on actual subsequent donation and information sharing, respectively, in order to enhance the ecological validity of the research conclusions.

2.1 Experimental Procedure

First, together with church staff, we invited recipients² to write messages of thanks and affirmation for the volunteers. Two researchers then selected the two texts that best matched the characteristics of warmth-based and competence-based recognition as the content of the donation recognition. Combining these texts with the recipients’ names and the name of the charitable organization (the church), we produced four types of donation-recognition certificates (see Appendix 1). The formal experiment was conducted from September to October 2023 and lasted 8 weeks. Given that the volunteer activities took place every Thursday, we chose the Monday following each activity—that is, the fourth day after each volunteer activity ended—to send donation-recognition certificates by email, based on the volunteer list provided by the “sorority,” to volunteers participating in the activity for the first time ($N = 133$). Each volunteer randomly received one of the four types of donation-recognition certificates (the sample sizes of the four experimental groups were 33, 33, 33, and 34, respectively), and they were encouraged to share the certificate on social media. Next, during the following volunteer activity, we checked the volunteer roster to record the attendance of the volunteers who had received the donation-recognition certificates. Since volunteer service is one of the important forms of charitable resource investment, this study treats subsequent volunteer-activity attendance

...as data on repeat-donation behavior. Regarding information sharing, given that directly tracking volunteers’ social-media accounts could raise issues of violating personal privacy, we chose to send a unified email inquiry after the observation of the volunteer activity ended, asking the volunteers: “Did you forward the certificate you received to social media?” In addition, in this inquiry we also conducted a manipulation check on the type of recognition. Following Aaker et al. (2010), we used a seven-point Likert scale to measure the two dimensions of perceived competence and perceived warmth. The former included three items such as “I feel that my competence was affirmed” ($\alpha = 0.78$), and

¹A sorority is a student organization on U.S. university campuses that is primarily composed of female members and named with Greek letters. Among them, service sororities mainly engage in community service and charitable activities.

²Recipients register information such as their name and email address before receiving food.

the latter included three items such as “I feel that my kindness was affirmed” ($\alpha = 0.83$). Ultimately, we received a total of 96 replies.

2.2 Experimental Results

Manipulation check. The results of a one-way analysis of variance showed that participants in the competence-recognition group perceived their own competence as being recognized to a significantly greater extent than did those in the warmth-recognition group ($M_{\text{competence}} = 4.94, SD = 0.78, M_{\text{warmth}} = 3.64, SD = 0.72; F(1, 94) = 71.77, p < 0.001$); whereas participants in the warmth-recognition group perceived their own warmth as being recognized to a significantly greater extent than did those in the competence-recognition group ($M_{\text{warmth}} = 3.99, SD = 0.90, M_{\text{competence}} = 3.43, SD = 0.95; F(1, 94) = 8.79, p = 0.004$), indicating that the manipulation of the type of donation recognition was successful.

Attendance at subsequent volunteer activities. Following Rifkin et al. (2020), we conducted a binary logistic regression with attendance at subsequent volunteer activities as the dependent variable (0 = did not attend again, 1 = attended again). The results revealed a significant interaction effect between the source of donation recognition and the type of recognition on attendance at subsequent volunteer activities ($\beta = 1.799, \text{Wald} = 7.955, p = 0.005$). Further simple-effects analyses showed that when the recognition came from beneficiaries, warmth recognition (87.88%) was more effective than competence recognition (66.67%) in promoting volunteers' attendance at subsequent volunteer activities ($\chi^2(1) = 4.227, p = 0.040$); whereas when the recognition came from a charitable organization, there was no significant difference between warmth recognition (54.55%) and competence recognition (64.71%) in their effect on volunteers' attendance at subsequent volunteer activities ($\chi^2(1) = 0.484, p = 0.486$). Therefore, Hypothesis H1a was supported.

Information sharing. We conducted a binary logistic regression with information sharing as the dependent variable (0 = not shared, 1 = shared). The results revealed a significant interaction effect between the source of donation recognition and the type of recognition on information sharing ($\beta = 2.979, \text{Wald} = 9.250, p = 0.002$). Further simple-effects analyses showed that when the recognition came from beneficiaries, there was no significant difference between warmth recognition (33.33%) and competence recognition (29.17%) in their effect on information sharing ($\chi^2(1) = 0.097, p = 0.755$); whereas when the recognition came from a charitable organization, competence recognition (75.00%) was more effective than warmth recognition (15.63%) in promoting volunteers' information sharing ($\chi^2(1) = 16.44, p < 0.001$). Therefore, Hypothesis H1b was supported. Overall, Hypothesis H1 was also supported.

2.3 Discussion

The results of Experiment 1 show that the source of donation recognition and the type of recognition interactively affect donors' repeat donation and information-sharing behaviors. Specifically, when the recognition comes from beneficiaries, warmth recognition is more effective than competence recognition in prompting donors to attend subsequent volunteer activities; when the recognition comes from a charitable organization, competence recognition is more effective than warmth recognition in prompting donors to share information. However, the field experiment only provided evidence regarding the differentiated impact of the source of donation recognition and the type of recognition on repeat donation and information sharing.

provided preliminary correlational evidence for the effect, but it was still insufficient to establish a causal relationship. In addition, although the field experiment had relatively high external validity, it also involved uncontrollable factors, such as volunteers being unable to attend because of conflicts with class schedules and information-sharing behavior being difficult to track objectively. Therefore, Experiment 2 further tests the above conclusions through a scenario-simulation experiment.

3 Experiment 2: Retesting the Interaction Effect Between the Source of Donation Recognition and the Type of Recognition

Experiment 2 adopted a scenario-simulation experiment to retest the differential effects of the source of donation recognition and the type of recognition on subsequent donation and information sharing (H1, H1a, H1b), thereby enhancing the robustness of the research conclusions. The experiment used a 2 (source of recognition: beneficiary vs. charitable organization) $\times$ 2 (type of recognition: warmth vs. competence) between-subjects experimental design. The donation scenario was "donating old books to support the construction of libraries in impoverished mountain villages." Both the charitable organization and the public-welfare project were fictitious, namely "Qingshan Public Welfare" and "Dream Library," respectively. The experiment was conducted in classrooms at a university in northern China. A total of 224 university students participated and completed the questionnaire. After excluding questionnaires from participants who failed the memory check or whose response time was too short, 199 valid responses were ultimately obtained, including 102 women, accounting for 51.3%; the mean age was 23.6 ($SD = 1.71$).

3.1 Experimental Procedure

First, participants were asked to imagine that they had participated in a public-welfare activity organized by "Qingshan Public Welfare" to build a "Dream Library" for students in impoverished mountain villages, and that the books

collected had already been mailed to a rural primary school. Next, participants were told that they had recently received a donation-recognition certificate (randomly presenting one of the four recognition conditions). Specifically, we designed four types of donation recognition. The source of recognition was manipulated through different signatures: in the beneficiary-recognition and charitable-organization-recognition conditions, the signatures were “Xiaohong” and “Qingshan Public Welfare,” respectively. The type of recognition was manipulated through textual information and graphic background. The competence-type recognition was expressed as “Thank you for the books you donated to us/the children in the village; your donation has brought knowledge to us/the children,” and was accompanied by a fist icon and a blue background to strengthen participants’ perception of competence (Labrecque & Milne, 2012). The warmth-type recognition was expressed as “Thank you for the warmth you have brought to us/the children in the village; your donation has brought hope to us/the children,” and was accompanied by a handshake icon and a pink background to strengthen participants’ perception of warmth (Labrecque & Milne, 2012) (see Appendix 1). Participants then completed measures of willingness to donate again ($\alpha = 0.91$) and willingness to share information ($\alpha = 0.91$) in sequence. Willingness to donate again included two items: (1) “How willing are you to continue supporting this public-welfare project in the future?” and (2) “How willing are you to continue participating in this public-welfare project?” (Merchant et al., 2010) (1 = very unwilling, 7 = very willing). Willingness to share information was adapted from the scale by Kim et al. (2015) and included three items: (1) “How likely are you to post this certificate on your personal social media?” (2) “How likely are you to update this certificate on your personal social media?” and (3) “How likely are you to repost this certificate on your personal social media?” (1 = very unlikely, 7 = very likely). Subsequently, participants completed manipulation checks for the source of recognition and the type of recognition as required. The manipulation check for the source of recognition examined whether participants accurately remembered the source of the donation recognition and also served as a method for attention checking; that is, participants were asked to recall the information on the donation-recognition certificate and answer the question, “Who did the donation recognition you received come from?” Those charitable organizations

Participants in the charitable-organization recognition group who answered “Xiaohong” and participants in the beneficiary-recognition group who answered “Qingshan Charity” were coded as failing the memory check. The manipulation check for recognition type was the same as in Experiment 1: Aaker et al.’s (2010) scale was used to measure two dimensions, participants’ perceived competence ($\alpha = 0.87$) and perceived warmth ($\alpha = 0.90$). Finally, participants completed demographic information.

3.2 Experimental Results

Manipulation check. The results of the one-way ANOVA showed that, for participants in the competence-type recognition group, the extent to which they perceived their own competence as being recognized was significantly higher than that in the warmth-type recognition group ($M_{\text{competence-type}} = 4.82, SD = 0.78, M_{\text{warmth-type}} = 3.59, SD = 1.30; F(1, 197) = 66.41, p < 0.001$). In contrast, for participants in the warmth-type recognition group, the extent to which they perceived their own warmth as being recognized was significantly higher than that in the competence-type recognition group ($M_{\text{warmth-type}} = 5.12, SD = 0.90, M_{\text{competence-type}} = 3.81, SD = 1.27; F(1, 197) = 70.62, p < 0.001$). This indicates that the manipulation of donation-recognition type was successful.

Willingness to donate again. The results of the two-way ANOVA showed that the interaction effect of recognition source and recognition type on willingness to donate again was significant ($F(1, 195) = 10.734, p < 0.001$). Further simple-effects analyses showed that when the recognition came from the recipient, warmth-type recognition, compared with competence-type recognition, led to higher willingness to donate again ($M_{\text{warmth-type}} = 5.32, SD = 1.24, M_{\text{competence-type}} = 3.92, SD = 1.31; F(1, 195) = 33.61, p < 0.001$). When the recognition came from the charitable organization, however, warmth-type and competence-type recognition did not differ significantly in their effect on willingness to donate again ($M_{\text{warmth-type}} = 4.22, SD = 1.27, M_{\text{competence-type}} = 4.03, SD = 1.46; F(1, 195) = 0.48, p = 0.49$), as shown in Figure 2 (left). Therefore, Hypothesis H1a was again supported.

Willingness to share information. The results of the two-way ANOVA showed that the interaction effect of recognition source and recognition type on willingness to share information was significant ($F(1, 195) = 5.50, p = 0.020$). Further simple-effects analyses showed that when the recognition came from the recipient, warmth-type and competence-type recognition did not differ significantly in their effect on willingness to share information ($M_{\text{warmth-type}} = 3.72, SD = 1.02, M_{\text{competence-type}} = 3.58, SD = 1.07; F(1, 195) = 0.95, p = 0.320$). When the recognition came from the charitable organization, competence-type recognition, compared with warmth-type recognition, led to higher willingness to share information ($M_{\text{competence-type}} = 5.27, SD = 0.80, M_{\text{warmth-type}} = 4.10, SD = 1.37; F(1, 195) = 25.98, p < 0.001$), as shown in Figure 2 (right). Therefore, Hypothesis H1b was again supported. Overall, Hypothesis H1 was again supported.

Figure content. Left panel: y-axis, “Willingness to donate again”; x-axis, “Recognition source”; groups, “Recipient” and “Charitable organization”; legend, “Warmth-type recognition” and “Competence-type recognition”; bar values, 5.32, 3.92, 4.22, and 4.03. Right panel: y-axis, “Willingness to share information”; x-axis, “Recognition source”; groups, “Recipient” and “Charitable organization”; legend, “Warmth-type recognition” and “Competence-type recognition”; bar values, 3.72, 3.58, 4.1, and 5.27.

Figure 2. Effects of recognition source and recognition type on willingness to donate again and willingness to share information (Experiment 2)

3.3 Discussion

Experiment 2 re-examined the results of Experiment 1 by using a scenario-simulation experiment. By changing the donation scenarios and measuring willingness to donate again and willingness to share information, the results showed that the source of donation recognition and the type of recognition exert differentiated effects on donors' subsequent donation and information sharing. H1, H1a, and H1b were again supported, thereby enhancing the robustness of the research findings.

4 Experiment 3: Testing the Sequential Mediating Role of Self-Awareness State and Motivation

The main purpose of Experiment 3 was to examine the sequential mediating role of self-awareness state and motivation in the above interaction effect, namely H2, H2a, and H2b. At the same time, using a donation scenario different from the preceding experiments—donating to a patient—as well as actual donation behavior, it repeatedly tested the differentiated effects of the source and type of donation recognition on willingness to donate again and willingness to share information. The experiment adopted a 2 (recognition source: beneficiary vs. charitable organization) $\times$ 2 (recognition type: warmth vs. competence) between-subjects design. A total of 188 enrolled students from a university in northern China participated in the actual donation and completed the follow-up experiment. After excluding 21 questionnaires that failed the memory check or had excessively short response times, 167 valid responses were ultimately obtained. Among them, 83 participants were female, accounting for 49.7%; the mean age was 23.8 ($SD = 1.64$).

4.1 Experimental Procedure

First, participants completed a brief questionnaire unrelated to this study and received a 2-yuan experimental payment. Next, participants were invited to take part in a charitable donation activity—to help “Xiaoyang,” a college student suffering from a serious illness—and were informed that they could donate the 2-yuan experimental payment they had received to Xiaoyang’s family, who were unable to afford his medical expenses. After the fundraising was completed and the donation was made to Tencent Charity, we sent participants an electronic certificate as recognition, with one of four types of recognition randomly assigned. Specifically, in the beneficiary-recognition and charitable-organization-recognition conditions, the signatories were respectively “Xiaoyang’s family” and “Tencent Charity”; the competence-type recognition was phrased as “Thank you for your donation to us/Xiaoyang, which solved the difficulty of paying for our/his treatment in the ICU”; the warmth-type recognition was

phrased as “Thank you for your warm-hearted help to us/Xiaoyang; your donation allowed us/Xiaoyang to feel warmth in the cold ICU” (see Appendix 1). Then, participants sequentially completed the same scales as in Experiment 2 measuring willingness to donate again ($\alpha = 0.89$) and willingness to share information ($\alpha = 0.87$). Subsequently, participants completed measures of the mediating variables, namely self-awareness state and motivation. Specifically, the measurement of self-awareness state followed the approach of Fei Xianzheng et al. (2024), asking participants about their focus of attention and content of thought after receiving and reading the donation recognition (1 = focused on oneself/thoughts related to the self; 7 = focused outside oneself/thinking about things other than oneself) ($\alpha = 0.82$). The closer the score was to 1, the more participants’ attention was concentrated on themselves, indicating a state of objective self-awareness; conversely, the closer the score was to 7, the more participants’ attention was mainly focused on the surrounding environment, indicating a state of subjective self-awareness. The measurement of self-consistency motivation used the scale by Cialdini et al. (1995), including five items such as “I prefer to do things in the same way” ($\alpha = 0.81$). The measurement of impression-management motivation used the scale by White and Peloza (2009), including “I want to do what other people think is the right thing in this situation”

and nine items ($\alpha = 0.92$) (see Appendix 2). Both motivations were measured using a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). Subsequently, participants were asked to complete manipulation checks for the recognition source and recognition type that were the same as those in the preceding experiment. Finally, participants filled in demographic information.

4.2 Experimental Results

Manipulation check. The results of one-way ANOVA showed that participants in the competence-type recognition group perceived the extent to which their own competence was recognized as significantly higher than did those in the warmth-type recognition group ($M_{\text{competence-type}} = 4.92$, $SD = 0.65$, $M_{\text{warmth-type}} = 3.25$, $SD = 0.59$; $F(1, 165) = 302.59$, $p < 0.001$); whereas participants in the warmth-type recognition group perceived the extent to which their warmth was recognized as significantly higher than did those in the competence-type recognition group ($M_{\text{warmth-type}} = 5.22$, $SD = 0.73$, $M_{\text{competence-type}} = 3.25$, $SD = 0.82$; $F(1, 165) = 268.36$, $p < 0.001$), indicating that the manipulation of donation recognition type was successful.

Self-awareness state. The results of two-way ANOVA showed that the interaction effect of donation recognition source and recognition type on self-awareness state was significant ($F(1, 163) = 12.51$, $p < 0.001$). Further simple-effects analyses showed that, when the recognition came from recipients, warmth-type (vs. competence-type) recognition made participants more inclined to be in an objective self-awareness state ($M_{\text{warmth-type}} = 2.75$, $SD = 0.95$, $M_{\text{competence-type}} = 4.83$, $SD = 0.85$; $F(1, 163) = 295.27$, $p < 0.001$); when the recognition came from the charitable organization, competence-

type (vs. warmth-type) recognition made participants more inclined to be in a subjective self-awareness state ($M_{\text{warmth-type}} = 4.54$, $SD = 0.81$, $M_{\text{competence-type}} = 5.21$, $SD = 0.88$; $F(1, 163) = 62.10$, $p < 0.001$).

Willingness to donate again. The results of two-way ANOVA showed that the interaction effect of donation recognition source and recognition type on willingness to donate again was significant ($F(1, 163) = 167.48$, $p < 0.001$). Further simple-effects analyses showed that, when the recognition came from recipients, warmth-type (vs. competence-type) recognition led to higher willingness to donate again ($M_{\text{warmth-type}} = 5.48$, $SD = 0.51$, $M_{\text{competence-type}} = 2.85$, $SD = 0.74$; $F(1, 163) = 592.58$, $p < 0.001$); whereas when the recognition came from the charitable organization, there was no significant difference in the effect of warmth-type versus competence-type donation recognition on willingness to donate again ($M_{\text{warmth-type}} = 3.61$, $SD = 1.06$, $M_{\text{competence-type}} = 3.97$, $SD = 0.77$; $F(1, 163) = 2.99$, $p = 0.087$), see Figure 3 (left).

Self-consistency motivation. The results of two-way ANOVA showed that the interaction effect of donation recognition source and recognition type on self-consistency motivation was significant ($F(1, 163) = 342.95$, $p < 0.001$). Further simple-effects analyses showed that, when the recognition came from recipients, warmth-type (vs. competence-type) recognition promoted stronger self-consistency motivation among participants ($M_{\text{warmth-type}} = 5.27$, $SD = 0.83$, $M_{\text{competence-type}} = 3.08$, $SD = 0.93$; $F(1, 163) = 671.05$, $p < 0.001$); whereas when the recognition came from the charitable organization, warmth-type and competence-type recognition did not differ significantly in their effects on self-consistency motivation ($M_{\text{warmth-type}} = 3.49$, $SD = 0.86$, $M_{\text{competence-type}} = 3.40$, $SD = 0.83$; $F(1, 163) = 1.58$, $p = 0.21$), see Figure 3 (right).

Figure 3 charts: legend, warmth-based acknowledgment; competence-based acknowledgment. Left chart: y-axis, willingness to donate again; x-axis, source of acknowledgment; categories, beneficiary and charitable organization; values, beneficiary 5.48 and 2.85, charitable organization 3.61 and 3.97. Right chart: y-axis, self-consistency motivation; x-axis, source of acknowledgment; categories, beneficiary and charitable organization; values, beneficiary 5.27 and 3.08, charitable organization 3.49 and 3.4.

Figure 3. Effects of acknowledgment source and acknowledgment type on re-donation and self-consistency motivation (Experiment 3)

Willingness to share information. The results of the two-way ANOVA showed that the interaction effect of donation acknowledgment source and acknowledgment type on willingness to share information was significant ($F(1, 163) = 266.97$, $p < 0.001$). Further simple-effects analyses indicated that, when the acknowledgment came from the beneficiary, there was no significant difference between the effects of warmth-based and competence-based donation acknowledgment on willingness to share information ($M_{\text{warmth-based}} = 3.28$, $SD = 0.95$; $M_{\text{competence-based}} = 3.09$, $SD = 0.66$; $F(1, 163) = 1.83$, $p = 0.180$). By contrast, when the acknowledgment came from a charitable

organization, competence-based (vs. warmth-based) donation acknowledgment led participants to report greater willingness to share information ($M_{\text{competence-based}} = 5.32$, $SD = 1.05$; $M_{\text{warmth-based}} = 2.54$, $SD = 0.89$; $F(1, 163) = 547.33$, $p < 0.001$), as shown in Figure 4 (left).

Impression-management motivation. The results of the two-way ANOVA showed that the interaction effect of donation acknowledgment source and acknowledgment type on impression-management motivation was significant ($F(1, 163) = 266.22$, $p < 0.001$). Further simple-effects analyses indicated that, when the acknowledgment came from the beneficiary, there was no significant difference between the effects of warmth-based and competence-based donation acknowledgment on impression-management motivation ($M_{\text{warmth-based}} = 3.25$, $SD = 0.89$; $M_{\text{competence-based}} = 3.36$, $SD = 0.85$; $F(1, 163) = 1.54$, $p = 0.22$). By contrast, when the acknowledgment came from a charitable organization, competence-based (vs. warmth-based) acknowledgment promoted stronger impression-management motivation among participants ($M_{\text{competence-based}} = 5.31$, $SD = 1.34$; $M_{\text{warmth-based}} = 3.12$, $SD = 0.85$; $F(1, 163) = 630.51$, $p < 0.001$), as shown in Figure 4 (right).

Figure 4 charts: legend, warmth-based acknowledgment; competence-based acknowledgment. Left chart: y-axis, willingness to share information; x-axis, source of acknowledgment; categories, beneficiary and charitable organization; values, beneficiary 3.28 and 3.09, charitable organization 2.54 and 5.32. Right chart: y-axis, impression-management motivation; x-axis, source of acknowledgment; categories, beneficiary and charitable organization; values, beneficiary 3.25 and 3.36, charitable organization 3.12 and 5.31.

Figure 4. Effects of donation acknowledgment source and acknowledgment type on willingness to share information and impression-management motivation (Experiment 3)

Mediation-effect test. To examine the sequential mediating effects of self-awareness state and motivation in the relationship through which acknowledgment source and acknowledgment type differentially influence re-donation and information sharing, this study grouped the sample according to the source of donation acknowledgment (beneficiary vs. charitable organization) and conducted Bootstrap analyses using PROCESS Model 6 for each group, with the number of bootstrap samples set to 5000. The results showed that, when the acknowledgment came from the beneficiary, the path donation acknowledgment type $\rightarrow$ self-awareness state $\rightarrow$ self-consistency motivation $\rightarrow$ re-donation

The indirect effect on willingness was significant (Effect = -0.2548 , 95% CI = $[-0.5807, -0.0732]$, excluding 0), whereas the indirect effect of donation-recognition type $\rightarrow$ self-awareness state $\rightarrow$ impression-management motive $\rightarrow$ willingness to donate again was not significant (Effect = -0.0039 , 95%CI = $[-0.0779, 0.0336]$, including 0), as shown in Figure 5 (upper panel). When the recognition came from the charitable organization, the indirect effect of donation-recognition type $\rightarrow$ self-awareness state $\rightarrow$ impression-

management motive $\rightarrow$ willingness to share information was significant (Effect = 0.3390, 95% CI = [0.0350, 0.7841], excluding 0), whereas the indirect effect of donation-recognition type $\rightarrow$ self-awareness state $\rightarrow$ self-consistency motive $\rightarrow$ willingness to share information was not significant (Effect = 0.0021, 95%CI = [-0.0714, 0.0629], including 0), as shown in Figure 5 (lower panel).

In the context where donation recognition came from the recipient:

- Recognition type (warmth vs. competence) $\rightarrow$ objective self-awareness state: $\beta = 2.08^{***}$, $SE = 0.12$
- Objective self-awareness state $\rightarrow$ self-consistency motive: $\beta = -0.26^{***}$, $SE = 0.07$
- Self-consistency motive $\rightarrow$ willingness to donate again: $\beta = 0.47^{***}$, $SE = 0.13$
- Objective self-awareness state $\rightarrow$ willingness to donate again: $\beta = -0.22^*$, $SE = 0.09$
- Recognition type (warmth vs. competence) $\rightarrow$ self-consistency motive: $\beta = -1.65^{***}$, $SE = 0.17$
- Direct effect: $\beta = -1.12^{***}$, $SE = 0.30$
- Key1: 95%CI = [-0.92, -0.03]
- Key2: 95%CI = [-1.38, -0.25]
- Key3: 95%CI = [-0.58, -0.07]

Note: Recognition type (0 = warmth, 1 = competence); self-awareness state (1 = objective self-awareness state, 7 = subjective self-awareness state).

*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$.

Key1: Ind1 Recognition type $\rightarrow$ self-awareness state $\rightarrow$ willingness to donate again

Key2: Ind2 Recognition type $\rightarrow$ self-consistency motive $\rightarrow$ willingness to donate again

Key3: Ind3 Recognition type $\rightarrow$ self-awareness state $\rightarrow$ self-consistency motive $\rightarrow$ willingness to donate again

In the context where donation recognition came from the charitable organization:

- Recognition type (warmth vs. competence) $\rightarrow$ subjective self-awareness state: $\beta = 2.67^{***}$, $SE = 0.12$
- Subjective self-awareness state $\rightarrow$ impression-management motive: $\beta = 0.34^{***}$, $SE = 0.07$
- Impression-management motive $\rightarrow$ willingness to share information: $\beta = 0.38^*$, $SE = 0.15$
- Recognition type (warmth vs. competence) $\rightarrow$ impression-management motive: $\beta = 1.27^{***}$, $SE = 0.21$
- Subjective self-awareness state $\rightarrow$ willingness to share information: $\beta = 0.27^*$, $SE = 0.11$
- Direct effect: $\beta = 1.22^{***}$, $SE = 0.34$
- Key1: 95%CI = [0.20, 1.30]

- Key2: 95%CI = [0.03, 1.03]
- Key3: 95%CI = [0.04, 0.78]

Note: Recognition type (0 = warmth, 1 = competence); self-awareness state (1 = objective self-awareness state, 7 = subjective self-awareness state).

*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$.

Key1: Ind1 Recognition type → self-awareness state → willingness to share information

Key2: Ind2 Recognition type → impression-management motive → willingness to share information

Key3: Ind3 Recognition type → self-awareness state → impression-management motive → willingness to share information

Figure 5. Sequential mediating effect of self-awareness state and motive (Experiment 3)

4.3 Discussion

In summary, the results of Experiment 3 provide support for H2, H2a, and H2b. Specifically, when the recognition came from the recipient, warmth-based (vs. competence-based) recognition led donors to enter an objective self-awareness state, thereby activating their self-consistency motive and increasing their willingness to donate again. Therefore, in the context where the recipient provides warmth-based recognition, “objective self-awareness state →

The “self-consistency motive” constitutes the key serial mediating pathway affecting the intention to donate again. However, when recognition comes from a charitable organization, competence-based (vs. warmth-based) recognition strengthens donors’ subjective self-awareness state, thereby activating their impression-management motive and increasing their willingness to share information. Therefore, in the context in which a charitable organization provides competence-based recognition, “subjective self-awareness state → impression-management motive” constitutes the key serial mediating pathway affecting willingness to share information.

5 Experiment 4: Reexamining the Mediating Effect Using a Moderation-Test Approach

Experiment 4 further verifies the mediating role of different self-awareness states through a moderation-test approach. The experiment adopted a 2 (source of recognition: beneficiary vs. charitable organization) × 2 (type of recognition: warmth-based vs. competence-based) × 2 (self-awareness state: objective vs. subjective) between-subjects experimental design. The donation scenario was “participating in volunteer service to support the daily companionship and care of older adults in a nursing home.” Both the charitable organization and the public-welfare project were fictitious, namely the “Elderly Care Service Center” and “Chongyang Assistance for the Elderly,” respectively. A total of 486

students from a university in northern China participated in and completed the experiment. After excluding 35 questionnaires that failed the memory check or had excessively short response times, 451 valid responses were ultimately obtained; among them, 245 participants were female, accounting for 54.3%, and the mean age was 21.0 ($SD = 1.96$).

5.1 Experimental Procedure

This experiment used a video-monitoring method to manipulate individuals' self-awareness state (Pryor et al., 1977). The computers in the objective self-awareness group (odd-numbered computers) had their cameras turned on, and participants could see themselves on the computer screen; the computers in the subjective self-awareness group (even-numbered computers) were only powered on, and participants could see the computer desktop. To record the experimental group to which participants belonged, participants first filled in the number of the computer in front of them. Next, participants were asked to imagine a donation scenario, namely that they had participated in the "Chongyang Assistance for the Elderly" charitable public-welfare activity organized by the "Elderly Care Service Center." Participants were then informed that they had recently received a piece of donation recognition (one of four types of recognition was randomly displayed). Specifically, for beneficiary recognition and charitable-organization recognition, the signatories were "Grandma Zhang" and the "Elderly Care Service Center," respectively; competence-based recognition was phrased as "Thank you for your hard work. Your meticulousness and sense of responsibility have made the service more powerful," whereas warmth-based recognition was phrased as "Thank you for your warm companionship. Your patience and kindness have made Grandma Zhang/me feel less lonely" (see Appendix 1). Participants then completed the same scales for intention to donate again ($\alpha = 0.80$) and willingness to share information ($\alpha = 0.79$) as in Experiments 2 and 3. Subsequently, participants completed the measurement of the mediating variables; the measurement methods for self-consistency motive ($\alpha = 0.84$) and impression-management motive ($\alpha = 0.82$) were consistent with those in Experiment 3. Next, participants completed manipulation checks for the three core variables in sequence as required; among them, the manipulation checks for source of recognition and type of recognition were the same as in the preceding experiments, and the manipulation check for self-awareness state used the same measurement scale as in Experiment 3 ($\alpha = 0.73$). Finally, participants filled in demographic information.

5.2 Experimental Results

Manipulation checks. The results of one-way analysis of variance showed that participants in the competence-based recognition group perceived their competence as being recognized to a significantly greater extent than did those in the warmth-based recognition group ($M_{\text{competence-based}} = 5.45, SD = 0.76, M_{\text{warmth-based}} = 4.17, SD = 0.85; F(1, 449) = 283.45, p < 0.001$); whereas

participants in the warmth-based recognition group perceived their warmth as being recognized to a significantly greater extent than did those in the competence-based recognition group (M_{warmth}

$\text{type} = 5.45, SD = 0.82, M_{\text{competence type}} = 3.44, SD = 0.87; F(1, 449) = 637.39, p < 0.001$), indicating that the manipulation of donation-recognition type was successful. Participants in the objective self-awareness group (who completed the experiment under camera monitoring) were more likely to be in a state of objective self-awareness ($M = 3.59, SD = 1.01$), whereas participants in the subjective self-awareness group (who completed the experiment without camera monitoring) were more likely to be in a state of subjective self-awareness ($M = 4.43, SD = 0.99, F(1, 449) = 79.50, p < 0.001$), indicating that the manipulation of self-awareness state was also successful.

Willingness to donate again. A three-factor analysis of variance was conducted with willingness to donate again as the dependent variable. The results showed that the three-way interaction among donation-recognition source, recognition type, and self-awareness state was significant ($F(1, 443) = 4.50, p = 0.034$). Further simple-effects analyses showed that, when participants were in a state of objective self-awareness, the interaction between donation-recognition source and recognition type was not significant ($F(1, 443) = 0.46, p = 0.710$). When the recognition came from the beneficiary, there was no significant difference in the effects of warmth-type and competence-type donation recognition on willingness to donate again ($F(1, 443) = 0.51, p = 0.476$); when the recognition came from a charitable organization, there was likewise no significant difference in the effects of warmth-type and competence-type donation recognition on willingness to donate again ($F(1, 443) = 0.43, p = 0.514$). By contrast, when participants were in a state of subjective self-awareness, the interaction between donation-recognition source and recognition type was significant ($F(1, 443) = 12.69, p < 0.001$). When the recognition came from the beneficiary, warmth-type (vs. competence-type) recognition led to higher willingness to donate again among participants ($M_{\text{warmth type}} = 4.68, SD = 1.24, M_{\text{competence type}} = 3.63, SD = 0.70; F(1, 443) = 29.76, p < 0.001$); when the recognition came from a charitable organization, there was no significant difference in the effects of warmth-type and competence-type donation recognition on willingness to donate again ($F(1, 443) = 1.11, p = 0.294$).

Self-consistency motivation. A three-factor analysis of variance was conducted with self-consistency motivation as the dependent variable. The results showed that the three-way interaction among donation-recognition source, recognition type, and self-awareness state was significant ($F(1, 443) = 5.03, p = 0.025$). Further simple-effects analyses showed that, when participants were in a state of objective self-awareness, the interaction between donation-recognition source and recognition type was not significant ($F(1, 443) = 0.91, p = 0.340$). When the recognition came from the beneficiary, there was no significant difference in the effects of warmth-type and competence-type donation recognition on self-consistency motivation ($F(1, 443) = 0.16, p = 0.687$); when the

recognition came from a charitable organization, there was likewise no significant difference in the effects of warmth-type and competence-type donation recognition on self-consistency motivation ($F(1, 443) = 2.34, p = 0.129$). By contrast, when participants were in a state of subjective self-awareness, the interaction between donation-recognition source and recognition type was significant ($F(1, 443) = 5.15, p = 0.024$). When the recognition came from the beneficiary, warmth-type (vs. competence-type) recognition promoted stronger self-consistency motivation among participants ($M_{\text{warmth type}} = 4.35, SD = 0.80, M_{\text{competence type}} = 3.83, SD = 0.71; F(1, 443) = 12.54, p < 0.001$); when the recognition came from a charitable organization, there was no significant difference in the effects of warmth-type and competence-type donation recognition on self-consistency motivation ($F(1, 443) = 0.03, p = 0.857$). The detailed results are shown in Table 1.

Table 1. Willingness to Donate Again and Self-Consistency Motivation Under Different Experimental Conditions (Experiment 4)

Self-Awareness State	Experiment Condition	Willingness to Donate Again			Self-Consistency Motivation		
		($M \pm SD$)	F Value	p Value	($M \pm SD$)	F Value	p Value
Objective self-awareness state	Recipient × warmth-based recognition	4.58 ± 0.84	0.51	0.476	4.30 ± 0.79	0.16	0.687
Objective self-awareness state	Recipient × competence-based recognition	4.45 ± 1.17	0.51	0.476	4.25 ± 0.74	0.16	0.687
Objective self-awareness state	Charity organization × warmth-based recognition	4.49 ± 1.28	0.43	0.514	4.31 ± 1.00	2.34	0.129

Self-Awareness State	Experiment Condition	Willingness to Donate Again			Self-Consistency Motivation		
		($M \pm SD$)	F Value	p Value	($M \pm SD$)	F Value	p Value
Objective self-awareness state	Charity organization × competence-based recognition	4.33 ± 1.32	0.43	0.514	4.05 ± 0.92	2.34	0.129
Subjective self-awareness state	Recipient × warmth-based recognition	4.68 ± 1.24	29.76	<0.001	4.35 ± 0.80	12.54	<0.001
Subjective self-awareness state	Recipient × competence-based recognition	3.63 ± 0.70	29.76	<0.001	3.83 ± 0.71	12.54	<0.001
Subjective self-awareness state	Charity organization × warmth-based recognition	3.87 ± 1.01	1.11	0.294	3.70 ± 0.64	0.03	0.857
Subjective self-awareness state	Charity organization × competence-based recognition	3.67 ± 0.95	1.11	0.294	3.67 ± 0.96	0.03	0.857

Willingness to share information. A three-factor analysis of variance was conducted with willingness to share information as the dependent variable. The results showed that the three-way interaction among recognition source, recognition type, and self-awareness state was significant ($F(1, 443) = 8.55, p = 0.004$). Further simple-effects analyses indicated that, when participants were in the objective self-awareness state, the interaction between recognition source and recognition type was not significant ($F(1, 443) = 0.08, p = 0.778$). When the recognition came from the recipient, there was no significant difference in the effect of warmth-based versus competence-based donation recognition on willingness to share information ($F(1, 443) = 0.01, p = 0.911$); when the recognition came from the charity organization, there was likewise no significant difference in the effect of warmth-based versus competence-based donation recognition on willingness to share information ($F(1, 443) = 0.08, p = 0.783$). By contrast, when participants were in the subjective self-awareness state, the interaction between recognition source and recognition type was significant ($F(1, 443) = 13.55, p < 0.001$). When the recognition came from the recipient, there was no significant difference in the effect of warmth-based versus competence-based donation recognition on willingness to share information ($F(1, 443) = 2.56, p = 0.113$); when the recognition came from the charity organization, competence-based recognition (vs. warmth-based recognition) led participants to have a higher willingness to share information ($M_{\text{competence-based}} = 4.13, SD = 0.91, M_{\text{warmth-based}} = 3.47, SD = 1.04; F(1, 443) = 12.12, p < 0.001$).

Impression-management motivation. A three-factor analysis of variance was conducted with impression-management motivation as the dependent variable. The results showed that the three-way interaction among recognition source, recognition type, and self-awareness state was significant ($F(1, 443) = 39.73, p < 0.001$). Further simple-effects analyses indicated that, when participants were in the objective self-awareness state, the interaction between recognition source and recognition type was not significant ($F(1, 443) = 2.17, p = 0.142$). When the recognition came from the recipient, there was no significant difference in the effect of warmth-based versus competence-based donation recognition on impression-management motivation ($F(1, 443) = 0.012, p = 0.915$); when the recognition came from the charity organization, there was likewise no significant difference in the effect of warmth-based versus competence-based donation recognition on impression-management motivation ($F(1, 443) = 3.70, p = 0.057$). By contrast, when participants were in the subjective self-awareness state, the interaction between recognition source and recognition type was significant ($F(1, 443) = 15.86, p < 0.001$). When the recognition came from the recipient, there was no significant difference in the effect of warmth-based versus competence-based donation recognition on impression-management motivation ($F(1, 443) = 2.23, p = 0.138$); when the recognition came from the charity organization, competence-based (vs. warmth-based) donation recognition promoted stronger impression-management motivation among

participants ($M_{\text{competence-based}} = 4.56, SD = 0.76, M_{\text{warmth-based}} = 3.44, SD = 0.82; F(1, 443) = 54.23, p < 0.001$). The specific results are shown in Table 2.

Table 2. Information-sharing willingness and impression-management motivation under different experimental conditions (Experiment 4)

Self-awareness state	Experimental condition	Information-sharing willingness	F value	p value	Impression-management motivation	F value	p value
		($M \pm SD$)			($M \pm SD$)		
Object self-awareness state	Beneficiary × warmth-based approval	3.33 ± 0.82	0.01	0.911	3.44 ± 0.73	0.01	0.915
Object self-awareness state	Beneficiary × competence-based approval	3.35 ± 0.81	0.01	0.911	3.43 ± 0.55	0.01	0.915
Object self-awareness state	Charitable organization × warmth-based approval	3.15 ± 0.94	0.08	0.783	3.68 ± 0.71	3.70	0.057
Object self-awareness state	Charitable organization × competence-based approval	3.11 ± 0.91	0.08	0.783	3.46 ± 0.84	3.70	0.057

Self-awareness state	Experimental condition	Information-sharing willingness	<i>F</i> value	<i>p</i> value	Impression-management motivation	<i>F</i> value	<i>p</i> value
		(<i>M</i> ± <i>SD</i>)			(<i>M</i> ± <i>SD</i>)		
Subject self-awareness state	Beneficiary × warmth-based approval	3.54 ± 0.83	2.56	0.113	3.80 ± 0.83	2.23	0.138
Subject self-awareness state	Beneficiary × competence-based approval	3.27 ± 0.86	2.56	0.113	3.60 ± 0.87	2.23	0.138
Subject self-awareness state	Charitable organization × warmth-based approval	3.47 ± 1.04	12.12	<0.001	3.44 ± 0.82	54.23	<0.001
Subject self-awareness state	Charitable organization × competence-based approval	4.13 ± 0.91	12.12	<0.001	4.56 ± 0.76	54.23	<0.001

5.3 Discussion

Experiment 4 manipulated the state of self-awareness and used a moderation-test approach to verify the mediating role of different self-awareness states. The results show that, under the state of subject self-awareness, the differentiated effects of approval source and approval type on willingness to donate again and willingness to share information were consistent with the conclusions of the preceding experiments. When object self-awareness was manipulated, how-

ever, individuals paid greater attention to the consistency between their current or subsequent behavior and their self-values or past behavior, and their responses mainly occurred through the path of “object self-awareness state → self-consistency motivation → willingness to donate again.” Overall, this path increased willingness to donate again, while the differentiated effects of different approval sources and approval types on willingness to donate again were weakened, resulting in a nonsignificant interaction. At the same time, the object self-awareness state also weakened the promoting effect of competence-based approval from charitable organizations on willingness to share information, further indicating that, under the state of object self-awareness, individuals’ internal attitudes and beliefs become more salient (Gibbons, 1990). Therefore, the differentiation in individuals’ behavioral responses under different self-awareness states provides further support for the differentiated effects proposed in this paper and offers a useful supplement to the conclusions of the preceding three experiments.

6 General Discussion

Taking object self-awareness theory as the core theoretical framework, supplemented by self-consistency theory and impression-management theory, this paper systematically explores, through one field experiment and three laboratory experiments, the effects of the source and type of donation approval on donors’ repeat donation and information sharing, as well as the underlying mechanisms. The findings not only extend and deepen the theoretical literature related to donation approval, but also provide practical implications for charitable organizations in formulating donation-approval strategies.

6.1 Theoretical Contributions

First, this paper deepens and extends relevant research in the field of donation approval. As a research hotspot that has emerged after the question of “how to stimulate individuals’ willingness to donate,” donation approval has received broad attention from scholars in China and abroad in recent years. Existing research has already conducted preliminary explorations of the effects of donation approval in promoting donors’ repeat donation or information sharing and of its mechanisms of action (Althoff &

Leskovec, 2015; Chell et al., 2023; Winterich et al., 2013), most studies have focused only on a single dimension, such as the source of donation recognition (Dangubić et al., 2025; Liu Bo et al., 2016) or the type of recognition (Feng et al., 2022; Wang Tao et al., 2016), and have mainly explained its internal mechanisms from relatively broad perspectives such as moral psychology (Winterich et al., 2013) and trust and incentives (Liu Bo et al., 2016). Relatively few studies have understood how different recognition strategies lead to differentiated subsequent behaviors from the perspective of “how the donor’s self is evoked and managed.” This paper is the first to comprehensively consider the two major dimensions of the source and content of donation recognition and, from the more nuanced

perspectives of self-awareness states and motivation, to explore the differentiated effects of their interaction on donors' repeat donation and information sharing. It reveals that donation recognition is not simply an incentive tool, but rather a form of social feedback capable of shaping donors' self-cognition.

Second, by introducing the stereotype content model into the field of donation recognition, this paper extends the application of the stereotype content model. The stereotype content model has long been an important theoretical framework of concern to scholars in China and abroad. Scholars in fields such as marketing and information communication have extended it to areas such as brand building (Kervyn et al., 2012), advertising communication (Zhu Zhenzhong et al., 2020), and charitable donation (Aaker et al., 2010; Chen Siyun et al., 2019). On the basis of practical observations, this paper is the first to divide donation recognition into warmth-oriented and competence-oriented types based on the stereotype content model. This not only enriches the perspectives for classifying types of donation recognition, but also further expands the application of the stereotype content model in the field of charitable donation.

Third, this paper supplements and improves research related to self-awareness states. Self-awareness states are important factors influencing individuals' attitudes and behaviors (Barasch & Berger, 2014; Chang & Hung, 2018). This study extends objective self-awareness theory to the field of donation recognition, further integrates self-consistency theory and impression management theory, and proposes that different self-awareness states will arouse differentiated motivations among donors. Specifically, an objective self-awareness state will arouse self-consistency motivation, whereas a subjective self-awareness state will arouse impression management motivation. Through this theoretical integration, this paper constructs a mechanism path of "self-awareness state—motivation—behavior," providing a new theoretical perspective for understanding the internal mechanism by which donation recognition influences donors' differentiated subsequent behaviors.

Finally, by simultaneously focusing on repeat donation and information sharing, this paper remedies the insufficiency of research on information sharing in the field of donation recognition. Previous literature on the effects of donation recognition has mainly focused on donors' repeat donation behavior (Dangubić et al., 2025; Feng et al., 2021; Wang Tao et al., 2016). The development of social media has made information sharing an important and distinctive behavior in the field of charitable donation (Boman & He, 2025; Zhu Yue et al., 2024), but existing literature has relatively rarely explored the influence of donation recognition on donors' information sharing. This paper treats repeat donation and information sharing as two parallel outcome variables with different motivations and independent decision-making mechanisms. In doing so, it not only remedies the lack of research on information sharing in the field of donation recognition, but also deepens understanding of how donation recognition affects information sharing.

6.2 Practical Implications

The conclusions of this paper have important managerial implications for charitable organizations or online public-welfare platforms in carrying out donation-recognition practices. With the development of information technology, more and more charitable organizations are providing donation recognition to donors in order to encourage donors to donate again and share information, thereby promoting the sustainable development of philanthropy. When charitable organizations provide donation recognition to donors, they should base it on specific targeted matching of source and content. According to the findings of this paper, when the source of donor recognition (beneficiary vs. charitable organization) matches the type of recognition (warmth vs. competence), the function of donor recognition can be better realized. When a charitable organization hopes to increase donor retention or promote the long-term development of a specific public-interest project, it should invite beneficiaries to express gratitude and recognition in forms such as handwritten letters, and encourage them to emphasize donors' enthusiasm and kindness in the content (warmth-based recognition), thereby encouraging donors to give again. When a charitable organization hopes to enhance its visibility and attract more potential donors, it should indicate the name of the charitable organization in the signature of the donor recognition (charitable-organization source), and emphasize donors' ability and efficiency in the content (competence-based recognition), thereby promoting donors' information sharing.

6.3 Research Limitations and Future Directions

This paper still has the following limitations, and future research can be further expanded. First, this study used self-report methods to measure donors' information sharing, which may be affected by social desirability bias and thus overestimate individuals' actual sharing behavior. Future research may use real datasets from public-interest platforms, such as forwarding records, to test the robustness of the conclusions of this paper in a more objective manner and enhance their external validity, while also avoiding possible deviations between measured behavioral intentions and actual behavior. Second, the two sources of donor recognition examined in this study are beneficiaries and charitable organizations, whereas sources of recognition in reality are more diverse, such as peers, platforms, and media; future research can conduct a more systematic and comprehensive investigation. Finally, this study only examined the matching effect between recognition source and recognition type. Future research can further explore more potential moderating factors, including situational variables, such as the publicness of recognition (Chell et al., 2023), and individual-difference variables, such as self-construal (Simpson et al., 2018) and the degree of internalization of moral identity (Winterich et al., 2013). This would not only expand the boundaries of the theoretical framework of this study, but also provide more detailed guidance for designing diversified recognition in practice.

References

- Aaker, J. L., Garbinsky, E. N., & Vohs, K. D. (2012). Cultivating admiration in brands: Warmth, competence, and landing in the “golden quadrant.” *Journal of Consumer Psychology*, 22(2), 191–194.
- Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: Firm stereotypes matter. *Journal of Consumer Research*, 37(2), 224–237.
- Alicke, M. D., & Sedikides, C. (2009). Self-enhancement and self-protection: What they are and what they do. *European Review of Social Psychology*, 20(1), 1–48.
- Althoff, T., & Leskovec, J. (2015). Donor retention in online crowd-funding communities: A case study of DonorsChoose.org. In *Proceedings of the 24th International Conference on World Wide Web* (pp. 34–44). International World Wide Web Conferences Steering Committee. <https://doi.org/10.1145/2736277.2741120>
- Aronson, E. (1968). *Dissonance theory: Progress and problems*. In R. P. Abelson et al. (Eds.), *Theories of cognitive consistency: A sourcebook* (pp. 5–27). Chicago, United States: Rand McNally.
- Barasch, A., & Berger, J. (2014). Broadcasting and narrowcasting: How audience size affects what people share. *Journal of Marketing Research*, 51(3), 286–299.
- Boman, L., & He, X. (2025). Sharing to persuade: The role of donor- versus charity-focused word of mouth. *Journal of Marketing Research*, 62(1), 22–39.
- Carver, C. S., & Scheier, M. F. (2012). *Attention and self-regulation: A control-theory approach to human behavior*. New York, United States: Springer.
- Chang, H. H., & Hung, I. W. (2018). Mirror, mirror on the retail wall: Self-focused attention promotes reliance on feelings in consumer decisions. *Journal of Marketing Research*, 55(4), 586–599.
- Chell, K., Mortimer, G., Masser, B. M., & Russell-Bennett, R. (2023). An identity-based model explaining online donor appreciation. *Australasian Marketing Journal*, 31(1), 13–24.
- Chen, S. Y., Wei, H. Y., & Meng, L. (2019). The impact of congruency between moral appeal and social perception on charitable donation. *Acta Psychologica Sinica*, 51(12), 1351–1362.
- [Chen Sifen, Wei Haiying, Meng Lu. (2019). How moral appeal methods enhance donation effects from the perspective of social cognition. *Acta Psychologica Sinica*, 51(12), 1351–1362.]
- Cialdini, R. B., Trost, M. R., & Newsom, J. T. (1995). Preference for consistency: The development of a valid measure and the discovery of surprising

behavioral implications. *Journal of Personality and Social Psychology*, 69(2), 318-328.

Dai, B. (2014). *Who is better to be the thanker? The influence of thank-you letter's actor on receiver's subsequent help willingness* (Unpublished doctoral dissertation). Wuhan University.

[Dai Bin. (2014). *Who should do the thanking? The influence of the subject of a thank-you letter on donors' willingness to continue donating* (doctoral dissertation). Wuhan University.]

Dangubić, M., Politi, E., Storz, N., Roblain, A., Favre, Y., & Green, E. G. T. (2025). Feelings of recognition and long-term engagement in favour of refugees. *Journal of Community & Applied Social Psychology*, 35(3), Article e70087. <https://doi.org/10.1002/casp.70087>

Dirisam, J. V., Bein, D., & Verma, A. (2021) Predictive analytics of donors in crowdfunding platforms: A case study on Donorschoose.org. In *2021 IEEE 11th Annual Computing and Communication Workshop and Conference (CCWC)* (pp. 834-838). IEEE. <https://doi.org/10.1109/CCWC51732.2021.9376094>

Duval, S., & Wicklund, R. A. (1972) *A theory of objective self-awareness*. New York: Academic Press.

Faulkner, M., Romaniuk, J., & Stern, P. (2016). New versus frequent donors: Exploring the behaviour of the most desirable donors. *Australasian Marketing Journal*, 24(3), 198-204.

Fei, X. Z., Wang, H. Y., & Li, R. X. (2024). "Viewing self" or "Viewing the world"? How consumers' self-awareness influences advertising effectiveness in the use of social media. *Nankai Business Review*, 27(2), 193-205.

[Fei Xianzheng, Wang Haiyan, Li Ruoxi. (2024). "Viewing self" or "viewing the world"? The influence of consumers' self-awareness states in social media use on advertising effectiveness. *Nankai Business Review*, 27(2), 193-205.]

Feng, W. T., Shen, X. Y., & Yin, Z. W. (2022). Self-focused or other-focused: The influence of acknowledgment type on subsequent donation desires. *Frontiers in Psychology*, 13, Article 959369. <https://doi.org/10.3389/fpsyg.2022.959369>

Feng, W. T., Xu, Y. P., & Wang, T. (2021). Beneficiaries or charity: The influence of the source of acknowledgments. *Frontiers in Psychology*, 12, Article 602410. <https://doi.org/10.3389/fpsyg.2021.602410>

Fiske, S. T., Cuddy, A. J. C., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11(2), 77-83.

Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82(6), 878-902.

- Gibbons, F. X. (1990). Self-attention and behavior: Review and theoretical update. *Advances in Experimental Social Psychology*, 23, 249-303.
- Han, J., & Balabanis, G. (2024). Meta-analysis of social media influencer impact: Key antecedents and theoretical foundations. *Psychology & Marketing*, 41(2), 394-426.
- Heider, F. (1960). *The gestalt theory of motivation*. In M. R. Jones (Ed.), Nebraska symposium on motivation (Vol. 8, pp. 145-172). Lincoln, United States: University of Nebraska Press.
- Judd, C. M., James-Hawkins, L., Yzerbyt, V., & Kashima, Y. (2005). Fundamental dimensions of social judgment: Understanding the relations between judgments of competence and warmth. *Journal of Personality and Social Psychology*, 89(6), 899-913.
- Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2), 166-176.
- Kim, D., Jang, S., & Adler, H. (2015). What drives café customers to spread eWOM? *International Journal of Contemporary Hospitality Management*, 27(2), 261-282.
- Kristofferson, K., White, K., & Peloza, J. (2014). The nature of slacktivism: How the social observability of an initial act of token support affects subsequent prosocial action. *Journal of Consumer Research*, 40(6), 1149-1166.
- Labrecque, L. I., & Milne, G. R. (2012). Exciting red and competent blue: The importance of color in marketing. *Journal of the Academy of Marketing Science*, 40(5), 711-727.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin*, 107(1), 34-47.
- Liu, B., Ma, Y. B., & Lu, L. H. (2016). The effect of gratitude feedback sources on donation intention: A moderated mediation model. *Chinese Journal of Applied Psychology*, 22(2), 162-172.
- [Liu, B., Ma, Y. B., & Lu, L. H. (2016). The effect of the source of gratitude feedback on donation intention: A moderated mediation effect. *Applied Psychology*, 22(2), 162-172.]
- Mehdizadeh, S. (2010). Self-presentation 2.0: Narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking*, 13(4), 357-364.
- Merchant, A., Ford, J. B., & Sargeant, A. (2010). "Don't forget to say thank you" : The effect of an acknowledgment on donor relationships. *Journal of Marketing Management*, 26(7-8), 593-611.
- Morin, A. (2004). A Neurocognitive and socioecological model of self-awareness. *Genetic, Social, and General Psychology Monographs*, 130(3), 197-224.

- Moskalenko, S., & Heine, S. J. (2003). Watching your troubles away: Television viewing as a stimulus for subjective self-awareness. *Personality and Social Psychology Bulletin*, 29(1), 76-85.
- Osgood, C. E., & Tannenbaum, P. H. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review*, 62(1), 42-55.
- Ponnappan, V., Nivsarkar, A., Satyavageswaran, P., & Bharadwaj, S. (2026). Fit to persuade: The role of source-appeal congruence in cancer screening decisions. *Journal of Marketing*, 90(4), 97-121.
- Pryor, J. B., Gibbons, F. X., Wicklund, R. A., Fazio, R. H., & Hood, R. (1977). Self-focused attention and self-report validity. *Journal of Personality*, 45(4), 513-527.
- Rifkin, J. R., Du, K. M., & Berger, J. (2020). Penny for your preferences: Leveraging self-expression to encourage small prosocial gifts. *Journal of Marketing*, 85(3), 204-219.
- Sargeant, A. (2013, August 15). *Donor retention: What do we know and what can we do about it?* Retrieved August 17, 2026, from <https://nonprofitquarterly.org/donor-retention-nonprofit-donors/>
- Silver, I., & Small, D. A. (2024). Put your mouth where your money is: A field experiment encouraging donors to share about charity. *Marketing Science*, 43(2), 392-406.
- Simpson, B., White, K., & Laran, J. (2018). When public recognition for charitable giving backfires: The role of independent self-construal. *Journal of Consumer Research*, 44(6), 1257-1273.
- van Dongen, A. (2015). Easy come, easy go. Retention of blood donors. *Transfusion Medicine*, 25(4), 227-233.
- Wang, T., Feng, W. T., Lei, W. H., & Zhou, N. (2016). How to recognize donors: The influence of recognition's type on donation performance. *Journal of Marketing Science*, 12(3), 101-114.
- [Wang Tao, Feng Wenting, Lei Weihua, Zhou Nan. (2016). How to thank kind-hearted people: The influence of types of recognition on donation behavior. *Journal of Marketing Science*, 12(3), 101-114.]
- White, K., & Peloza, J. (2009). Self-benefit versus other-benefit marketing appeals: Their effectiveness in generating charitable support. *Journal of Marketing*, 73(4), 109-124.
- Winterich, K. P., Mittal, V., & Aquino, K. (2013). When does recognition increase charitable behavior? Toward a moral identity-based model. *Journal of Marketing*, 77(3), 121-134.
- Worldmetrics. (2026, February 12). *Nonprofit fundraising statistics*. Retrieved June 25, 2026, from <https://worldmetrics.org/nonprofit-fundraising-statistics/>

Zhu, Y., Xu, Z. L., & Lu, H. (2024). Research on the influencing factors and generating mechanism of sharing donation recognition on charity platforms. *LuoJia Management Review*, 57(6), 57-74.

[Zhu Yue, Xu Zhengliang, Lu Heng. (2024). Influencing factors and mechanism of sharing donation recognition information on online public-welfare platforms. *LuoJia Management Review*, 57(6), 57-74.]

Zhu, Z. Z., Liu, F., & Chen, A. (2020). Warmth or competence? The influence of advertising appeal and self-construal on consumer-brand identification and purchase intention. *Acta Psychologica Sinica*, 52(3), 357-370.

[Zhu Zhenzhong, Liu Fu, Haipeng Allan CHEN. (2020). Competence or warmth? The influence of advertising appeals on consumer brand identification and purchase intention. *Acta Psychologica Sinica*, 52(3), 357-370.]

Warmth or Competence? Exploring the Impact of Donation Recognition on Subsequent Donations and Information Sharing

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Abstract

Donation recognition refers to the certificates or badges provided by charities to acknowledge donors' contributions to charitable causes. It aims not only to maintain relationships with donors and encourage subsequent donations but also to promote information sharing. Donation recognition can be classified according to two dimensions: source and type. Recognition sources include beneficiaries and charitable organizations, while recognition types are categorized as warmth-based recognition and competence-based recognition. Drawing on objective self-awareness theory, self-consistency theory and impression-management theory, this paper examines the interaction effect between recognition source and type, as well as the underlying mechanism of this interaction.

One field study and three experimental studies were conducted to examine our hypotheses. Study 1 employed a 2 (source: beneficiaries vs. charitable organizations) $\times$ 2 (type: warmth vs. competence) between-subjects field experiment to examine the interaction effect between recognition source and type on subsequent donations and information sharing. Study 2 adopted a 2 (source: beneficiaries vs. charitable organizations) $\times$ 2 (type: warmth vs. competence)

between-subjects design and replicated the interaction effects on subsequent donations and information sharing in a laboratory experiment, thereby enhancing the internal validity and the robustness of the conclusions. Study 3 employed a 2 (source: beneficiaries vs. charitable organizations) $\times 2$ (type: warmth vs. competence) between-subjects design to examine the serial mediating roles of self-awareness and motives in explaining the interaction effects. Study 4 further examined the mediating role of different self-awareness states using a moderation model. Participants were randomly assigned to one condition of 2 (source: beneficiaries vs. charitable organizations) $\times 2$ (type: warmth vs. competence) $\times 2$ (self-awareness: objective vs. subjective) between-subjects design. Study 4 replicated the findings of previous studies, increasing the robustness of our conclusions.

The findings suggest that there is a significant source-type matching effect in donation recognition, such that optimal behavioral responses are achieved only when recognition sources and recognition types are congruently matched, rather than producing universal positive effects. Specifically, when beneficiaries provide warmth-based recognition, donors enter an objective self-awareness state, becoming more concerned with maintaining consistency between their past and future behaviors, thereby increasing their intention to donate again. Conversely, when charitable organizations provide competence-based recognition, donors maintain a subjective self-awareness state, focusing

more on presenting a positive image to others, thereby increasing their information-sharing intention.

These effects are mediated by self-consistency motives and impression-management motives. These findings contribute novel insights to the donation recognition literature, suggesting that charities should consider the match between recognition source and type when designing donation recognition.

Keywords donation recognition, subsequent donations, information sharing, self-awareness, self-consistency motives, impression-management motives

Appendix 1 Experimental Materials

Experiment 1

WESLEY FOOD PANTRY

I appreciate that [Volunteer' s Name] has generously contributed the patience and benevolence as a volunteer at Wesley to help me get the food.

Thanks for giving your kindness and compassion,
you warmed us.

[The beneficiary' s name]

Beneficiary & warmth-type recognition

WESLEY FOOD PANTRY

This certifies that [Volunteer's Name] has effectively contributed the time and effort as a volunteer at wesley to help me get the food.

Thanks for giving your time and talent,
you nourished us.

[The beneficiary's name]

Beneficiary & competence-type recognition

WESLEY FOOD PANTRY

I appreciate that [Volunteer's Name] has generously contributed the patience and benevolence as a volunteer at wesley to assist in food distribution activities.

Thanks for giving your kindness and compassion,
you warmed our community.

WESLEY FOOD PANTRY

Charity organization & warmth-type recognition

WESLEY FOOD PANTRY

This certifies that [Volunteer's Name] has effectively contributed the time and effort as a volunteer at wesley to assist in food distribution activities.

Thanks for giving your time and talent,
you nourished our community.

WESLEY FOOD PANTRY

Charity organization & competence-type recognition

Experiment 2

DONATION

Dear kind-hearted person:
Thank you for bringing us warmth.
Your enthusiastic help has brought us hope.

Xiaohong

Please scan the QR code to enter the follow-up questionnaire survey.

Beneficiary & warmth-type recognition

DONATION

Dear donor:
Thank you for donating books to us in the village.
Your donation has brought us knowledge.

Xiaohong

Please scan the QR code to enter the follow-up questionnaire survey.

Beneficiary & competence-type recognition

[Image text]
DONATION

Dear kind-hearted person:
Thank you for bringing warmth to the children in the village.
Your kind help has brought hope to the children.
Qingshan Philanthropy

Charitable organization & warmth-based recognition

[Image text]
DONATION

Dear donor:
Thank you for donating books to the children in the village.
Your donation has brought knowledge to the children.
Qingshan Philanthropy

Charitable organization & competence-based recognition

Experiment 3

[Image text]
DONATION

Dear kind-hearted person:
Thank you for your warm-hearted help for Xiaoming.
Your donation has allowed us to feel warmth in the cold ICU.
Xiaoming's family

Recipient & warmth-based recognition

[Image text]
DONATION

Dear donor:
Thank you for your donation for Xiaoming.
It solved the difficulty of paying for his treatment in the ICU.
Xiaoming's family

Recipient & competence-based recognition

[Image text]
DONATION

Dear kind-hearted person:

Thank you for your warm-hearted help for Xiaoming.
Your donation has allowed Xiaoming to feel warmth in the cold ICU.
Tencent Philanthropy

Charitable organization & warmth-based recognition

[Image text]

DONATION

Dear donor:

Thank you for your donation for Xiaoming.
It solved the difficulty of paying for his treatment in the ICU.
Tencent Philanthropy

Charitable organization & competence-based recognition

Experiment 4

Thank you for your warm companionship;
Your patience and kindness keep me from feeling alone.
—Grandma Zhang

Beneficiary & Warmth-Based Recognition

Thank you for your hard work; your attentiveness and
sense of responsibility give the service greater strength.
—Grandma Zhang

Beneficiary & Competence-Based Recognition

Thank you for your warm companionship;
Your patience and kindness keep me from feeling alone.
—Elderly Care Service Center

Charitable Organization & Warmth-Based Recognition

Thank you for your hard work; your attentiveness and
sense of responsibility give the service greater strength.
—Elderly Care Service Center

Charitable Organization & Competence-Based Recognition

Appendix 2 Scales

Impression Management Motive Scale (White and Peloza, 2009) (1 = strongly disagree, 7 = strongly agree)

- (1) I care about how positively others view me;
- (2) I want to present myself in a positive way;
- (3) I want to leave a positive impression on others;
- (4) I want to make myself look better;
- (5) I want to be the kind of person others expect me to be;
- (6) I want to do what other people in this situation think

is right; (7) I want to act in accordance with norms; (8) I want to do what society considers right; (9) I want to do what other people support.

Self-Consistency Motive Scale (Cialdini et al., 1995) (1 = strongly disagree, 7 = strongly agree)

- (1) It is important to me that others see me as a stable person; (2) It is important to me that my behavior is consistent with my beliefs; (3) I do not like making others think I am inconsistent; (4) I prefer to do things in the same way; (5) If my behavior is inconsistent, I am not too bothered by it (reverse-coded).

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv. Machine translation. Verify with the original.