

# **The impacts of nonprofit relationship management efforts on social media engagement: The role of organizational identification and online interaction propensity**

**非營利組織關係管理努力對社群媒體參與之影響：組織認同與線上互動傾向之角色**

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**Abstract:** This research analyzes the organizational and stakeholder determinants of social media engagement in the nonprofit sector. Data was collected using a questionnaire administered to nonprofit stakeholders. The findings show that all the relationship management efforts (financial bonding, information sharing, and social bonding) positively affect stakeholders' social media engagement (consumption, contribution, and creation). Information sharing is the primary driver of consumption, whereas contribution and creation are driven mainly by information sharing and social bonding. Beyond their direct effects, information sharing and social bonding also enhance stakeholders' engagement indirectly through organizational identification. Stakeholders' propensity for online interaction moderates the relationships between relationship management efforts and social media engagement. Building on these findings, we offer evidence-based recommendations to help nonprofits strengthen stakeholder engagement on social media.

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**Keywords:** Nonprofit organization, social media engagement, relationship management efforts, organizational identification, online interaction propensity.

**摘要：**本研究探討非營利組織中，組織與利益關係人對社群媒體參與行為的影響因素。本研究針對非營利組織的社群媒體使用者進行問卷調查。研究結果顯示，所有的關係管理努力（財務連結、資訊分享與社會連結）都會正向影響利益關係人的社群媒體參與（消費、貢獻與創作）。其中，資訊分享是促進消費行為的主要驅動力，而貢獻與創作行為則主要由資訊分享與社會連結所驅動。除了直接效果，資訊分享與社會連結亦能透過提升利益關係人的組織認同，間接增強其社群媒體參與。再者，利益關係人的線上互動傾向會調節關係管理努力與社群媒體參與之間的關係。最後，本研究針對研究結果提出管理意涵及建議，協助非營利組織強化利益關係人的社群媒體參與行為。

**關鍵詞：**非營利組織、社群媒體參與、關係管理努力、組織認同、線上互動傾向。

## 1. Introduction

Nonprofit organizations (NPOs) rely on public support to fulfill their missions by raising funds, mobilizing stakeholders, and delivering programs that advance social causes. Social media, by transcending geographical boundaries, offers NPOs with limited financial and human resources a cost-effective channel for communication and outreach (Thomas and Duffett, 2025). In 2014, the Amyotrophic Lateral Sclerosis (ALS) Association in the United States raised USD 88.5 million through the Ice Bucket Challenge, representing an increase of more than thirtyfold compared with the same period in the past. This campaign vividly demonstrated the power of social media in mobilizing engagement, as celebrities shared short videos of themselves participating and encouraged others to do the same, thereby amplifying public awareness and participation. According to a DataReportal report (February 23, 2024), Taiwan had approximately 19.2 million social media users, representing 80.2% of the total

population. Social media has therefore become an integral part of daily life, enabling people to connect, share information, and engage in online communities. However, NPOs often operate with insufficient resources, making it difficult for them to invest in communication and marketing at the level of for-profit organizations (Gee *et al.*, 2023). Consequently, social media plays a crucial and cost-effective tool for NPOs to foster stakeholder engagement among volunteers, donors, and supporters, while also enhancing their visibility and impact (Gee *et al.*, 2023). Building on this premise, the research question of this study is: Which relationship management efforts on social media can effectively promote stakeholders' engagement with NPOs, and what are the mechanisms and boundary conditions of these effects? This is a crucial issue for NPOs and needs further investigation.

Prior research on social media has predominantly focused on for-profit enterprises that use these platforms to promote their products (e.g. Cao *et al.*, 2021; Gross and Von Wangenheim, 2022). Within this stream of research, fostering customer engagement has been a central concern. Social media engagement pertains to consumer behaviors related to a brand, product, or service (Gross and Von Wangenheim, 2022). Schivinski *et al.* (2016, p. 68) defined customer engagement behavior as "the act of consumers interacting with a brand through a variety of tools and resources". Engagement on social media is commonly categorized across three levels of consumer engagement, including consumption, contribution, and creation (Cao *et al.*, 2021; Majeed *et al.*, 2022; Tsai and Men, 2017). These levels reflect varying degrees of consumer interaction (Cao *et al.*, 2021). Consumption refers to passive user engagement with content without actively contributing, sharing, or creating content (Dolan *et al.*, 2016). Contribution represents moderate engagement, including interactions between users and brand or organization-related content, as well as interactions between users themselves, such as likes, shares, or comments on posts (Dolan *et al.*, 2016). Creation represents users actively producing and publishing brand or organization-related content for others to use and contribute (Cao *et al.*, 2021; Dolan *et al.*, 2016).

However, prior research has predominantly focused on for-profit organizations. In contrast, research on social media engagement in the context of NPOs remains limited (Auger and Cho, 2021). For instance, Haruvy and Leszczyc (2024) examined the effect of “likes” on NPO posts on donation intentions and found that likes serve as quality signals that can increase the quantity of fundraising. Suh (2022) argued that NPOs need to leverage multiple social media channels to increase revenue, with financially stable NPOs being more capable and effective in adopting new media. Auger and Cho (2021) found that relationship-oriented interactions through social media significantly enhance volunteers’ willingness to participate and donate. These studies highlight the different research focuses between for-profit organizations and NPOs in the social media engagement literature. While the former primarily focuses on brand-related social media engagement, the latter applies relationship management efforts to the NPO context, focusing on the three tactics, financial bonding, information sharing, and social bonding (Berry, 1995; De Wulf *et al.*, 2001, 2003) and examining outcomes such as fundraising or volunteer participation instead of examining how these tactics influence social media engagement. The social bonding tactic was eventually deemed the least effective. However, their study primarily examined the impact of relationship management on offline engagement, leaving the effects of these tactics on online engagement largely unexplored. Given that NPOs differ from for-profit organizations, being value-driven entities (Gee *et al.*, 2023), their strategies for relationship management and fostering organizational identification may differ from those employed in commercial contexts. Additionally, the online and offline contexts differ, and the effort required for engagement may vary, potentially leading to different behavioral outcomes (Cropanzano and Mitchell, 2005). Building on this distinction, the present study extends Auger and Cho (2021) by exploring the boundary conditions under which NPO relationship management tactics influence social media engagement.

To address these gaps, this study investigates whether NPOs can use relationship management tactics to increase stakeholders’ engagement on social

media. Under the influence of these three tactics, are there any psychological mechanisms that play mediating and moderating roles? This study positions organizational identification as a mediating variable, proposing that relationship management tactics enhance stakeholders' identification with the NPO, which in turn increases their social media engagement. Organizational identification is defined as "a person's self-concept contains the same attributes as those in the perceived organizational identity" (Dutton *et al.*, 1994, p. 239). According to Lai *et al.* (2024), the identity of an organization will vary depending on whether the organization is for-profit or not. Thus, examining how organizational identification operates and influences NPO stakeholders in social media contexts is crucial for advancing both theory and practice. The results of the study will inform NPOs on how to use relationship management to promote social media engagement.

Furthermore, building on social exchange theory, which views interactions between individuals as forms of exchange (Jahan and Kim, 2021), we argue that more frequent interactions on social media foster higher levels of stakeholder engagement (Dessart, 2017) and stronger organizational loyalty (Ferm and Thaichon, 2021). However, Cropanzano and Mitchell (2005) emphasize that the outcomes of social exchanges vary depending on their nature and scope. While Auger and Cho (2021) examined both online and offline exchanges, the effects of purely online exchanges in the NPO context remain unclear and underexplored. Given the distinct characteristics of online environments, this study further proposes that individuals' propensity for online interaction moderates the relationship between relationship management efforts and social media engagement. In doing so, the study contributes to extending social exchange theory to fully online nonprofit contexts, following the call by Cropanzano and Mitchell (2005) to test the theory across organizational types and engagement settings.

In summary, this study addresses four research gaps. First, unlike for-profit organizations, NPOs are driven by social value, and their organizational context differs (Gee *et al.*, 2023). Consequently, the effects of relationship management

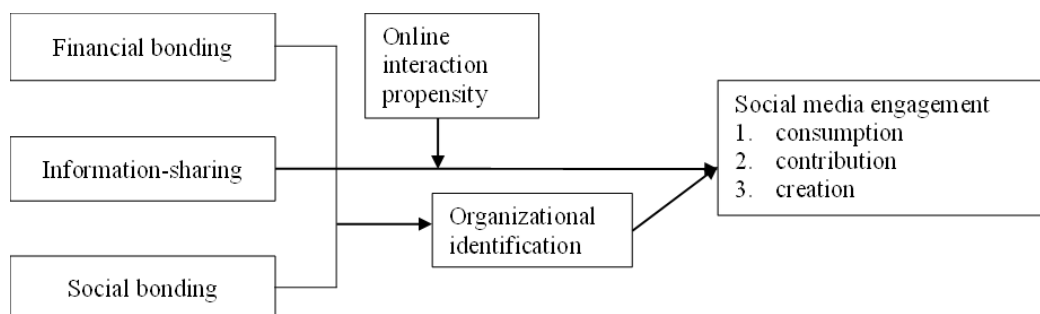
efforts on organizational identification and social media engagement may also differ. Second, while research on social media engagement in the nonprofit sector remains limited, existing studies have not simultaneously examined how different relationship management tactics affect the three forms of engagement, consumption, contribution, and creation (e.g. Haruvy and Leszczyc, 2024). Third, there is a dearth of research on the underlying mechanisms through which relationship management efforts foster social media engagement. Given that organizational identification may vary across organizations with different attributes (Lai *et al.*, 2024) and that prior studies have provided limited insights within digital contexts, this study draws on social exchange theory to test whether organizational identification mediates the effects of relationship management tactics on engagement. Finally, the tendencies of stakeholders' interaction on NPOs' social media platforms may differ from offline settings. Prior work has primarily examined online relationship management efforts in relation to offline behaviors (e.g. Auger and Cho, 2021). To address this gap, we investigate online interaction propensity as a boundary condition that moderates the link between relationship management tactics and social media engagement. In doing so, the study extends social exchange theory to the nonprofit domain and offers a more complete understanding of how NPOs manage stakeholder relationships in digital environments.

For this purpose, the present study aims to examine the effects of three NPO relationship management tactics on stakeholders' varying levels of social media engagement (consumption, contribution, and creation) in an online social media context. Drawing on social exchange theory, we test the mediating role of organizational identification and the moderating role of online interaction propensity. Practically, this research evaluates the applicability of relationship-management strategies originally developed for for-profit organizations and demonstrates their relevance in the nonprofit sector. The findings provide managers with actionable insights to strengthen stakeholders' identification with the organization and increase engagement on social media, thereby enhancing public attention and advancing NPOs' social missions, the key

factors for sustainable development. Theoretically, this study not only tests the effects of the three tactics proposed by Auger and Cho (2021) but also addresses an important gap in research on online exchanges in NPOs, where the nature and targets of exchange differ from commercial contexts. By applying social exchange theory, we identify the effectiveness, mechanisms, and boundary conditions of NPO relationship management in online settings, thereby refining the theoretical understanding of social exchange processes in nonprofit digital environments.

## 2. Literature review and hypothesis development

This study explores how both NPO and stakeholder factors promote engagement on social media and proposes the research framework illustrated in Figure 1. This study investigates the relationship between relationship management efforts and social media engagement from the perspective of NPOs. Relationship management efforts include three tactics: financial bonding, information sharing, and social bonding. These tactics are expected not only to directly influence engagement but also to exert indirect effects through organizational identification, which serves as a mediator. Adopting a stakeholder perspective, this study further investigates whether online interaction propensity moderates the relationship between relationship management efforts and social media engagement.



**Figure 1**  
**Conceptual framework**

## 2.1 Social exchange theory

Social exchange theory conceptualizes interpersonal interaction as an exchange process, in which individuals make rational decisions about whether to engage in interactions based on their perceived costs and benefits (Kelley and Thibaut, 1978). It serves as a central idea for understanding workplace interactions (Cropanzano and Mitchell, 2005) and has also been applied to explain interactions between consumers and brands (e.g. Ferm and Thaichon, 2021; Majeed *et al.*, 2022; Rather and Hollebeek, 2019). Exchanges may involve tangible resources, such as money, or intangible resources, such as trust and emotional support. From a relationship management perspective in for-profit organizations, initial economic exchanges (e.g. monetary transactions) can transform into social exchanges (e.g. emotional bonds), ultimately enhancing relationship quality (Cropanzano *et al.*, 2017).

In contrast to for-profit organizations, NPOs primarily establish relationships with stakeholders through social exchanges. Furthermore, social exchange theory posits that individuals' participation in exchanges and interactions depends on their evaluation of exchange costs and benefits (Kelley and Thibaut, 1978). In the context of social media, the perceived cost of exchange is lower than in physical settings, while the benefits can include positive consumer attitudes and stronger relational bonds (Ferm and Thaichon, 2021). Consequently, the rise of social media underscores the need to consider digital exchange environments when applying social exchange theory to stakeholder engagement.

Prior applications of social exchange theory to relationship management in NPOs' online contexts remain limited. Some studies examined the impact of relationship management tactics on stakeholders' offline behaviors. For instance, Auger and Cho (2021) found that NPOs' online relationship management efforts increased both volunteers' willingness to engage offline and donors' donation intentions. However, because prior research has largely emphasized social exchange in physical interactions (e.g. Auger and Cho, 2021; Majeed *et al.*,



2022), this study investigates social media as the exchange context for NPOs, exploring how exchanges generated through relationship management tactics translate into social media engagement and which tactics are most effective. In doing so, the study also responds to Jahan and Kim (2021) by applying social exchange theory in explaining the antecedents of social media engagement.

## **2.2 Social media engagement**

The rise of social media has ushered in a new era of online marketing, and social media marketing strategies have become the priority for organizations (Li *et al.*, 2021). Some previous studies have focused on NPOs' use of social media for stakeholder relationship management or social media engagement. Table 1 summarizes the key studies. Social media platforms enable consumers to engage in brand-related activities at relatively low costs (Ihm and Lee, 2021), including interactions between brands and consumers (Hanaysha, 2022; Gkikas *et al.*, 2022) or influencers and consumers (Ren *et al.*, 2023; Shah, Webster, and Kour, 2023). These interactions take place within communities on platforms such as Instagram, Facebook, and YouTube, allowing brands and organizations to engage consumers, encouraging them to share their experiences (Tsai and Men, 2013). Compared with volunteering or donating, social media engagement represents a low-cost form of interaction, with 'consuming' a post often being regarded as the lowest-cost type of engagement (Ihm and Lee, 2021). Given the cost differences between online and offline participation, the effects of relationship management tactics on social media engagement may diverge from those on offline engagement. For example, Schumann and Klein (2015) found that the relatively low costs of social media engagement can attract individuals who would not normally attend NPO events to pay attention to organizations, although these individuals remain less likely to participate in offline events.

### **2.2.1 Consumption**

The lowest level of consumer engagement is consumption, which refers to minimal interaction by consumers on social media (Muntinga *et al.*, 2011; Tsai

and Men, 2013). At this level, consumers passively use content without contributing, sharing, or creating content, such as viewing brand-related posts, reading others' comments, or clicking on links (Dolan *et al.*, 2016).

### **2.2.2 Contribution**

The second type of interaction is contribution, representing a moderate level of consumer engagement in online activities, including interaction with brand or organization-related content and interaction among users, such as liking, sharing, or commenting on posts uploaded by brands or organizations (Dolan *et al.*, 2016; Lam and Nie, 2020; Zhang *et al.*, 2023). For example, Lam and Nie (2020) examined the effects of different types of NPO social media posts on likes and shares, finding that informational posts were most effective in increasing likes, whereas actional posts were more likely to be disseminated through shares. By contrast, Zhang *et al.* (2023) found that overly interactive posts can have a negative impact on social media engagement, a difference that stems from the characteristics of the organization. Through these activities, consumers act as advocates for a brand or organization by engaging with content on fan pages or community groups, including blogger reviews, images, videos, and other user-generated content (Muntinga *et al.*, 2011; Schivinski *et al.*, 2016).

### **2.2.3 Creation**

The third level of interaction is creation, representing the highest level of involvement in online activities related to brands or organizations (Muntinga *et al.*, 2011). At this level, users actively generate and publish original content for others to consume and share (Tsai and Men, 2013; Dolan *et al.*, 2016). Examples include writing blog posts, publishing product reviews, uploading relevant images, music, or videos, and authoring articles about brands or organizations (Muntinga *et al.*, 2011).

**Table 1**  
**Key studies on NPOs use social media for stakeholders relationship management and interaction**

| Authors                  | Research questions                                                                                                                                                                                                    | Main findings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Methods                                   | Variables                                                                                                                                                                                                                                                           | Theories                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Auger and Cho (2021)     | How do NPOs' relationship management strategies on social media influence stakeholders' perceived relationship investment, and subsequently affect relationship quality and offline participation behaviors?          | <ul style="list-style-type: none"> <li>Information sharing, interactive communication, and feedback provision by NPOs through social media can enhance the public's perceived relationship investment.</li> <li>Online perceived relationship investment can further improve stakeholders' relationship quality and offline participation behaviors toward the NPO.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | questionnaire survey (N = 334)            | Independent Variables: relationship management strategies (financial, informational, social)<br>Dependent Variable: behavior intention<br>Mediator 1 : perceived relationship investment<br>Mediator 2 : relationship quality (trust, satisfaction, commitment)     | relationship management theory                       |
| Guo and Saxton (2018)    | How do NPOs gain public attention and engagement through social media?                                                                                                                                                | <ul style="list-style-type: none"> <li>Public replies (@user) negatively affect retweets but positively affect likes.</li> <li>Retweeting others' posts positively affects retweet counts but negatively affects likes.</li> <li>Using hashtags can increase both retweets and likes.</li> <li>On social media, NPOs should actively participate in conversations (hashtags, mentions), maintain frequent posting, and expand their follower networks.</li> <li>Whether social media participation promotes subsequent real-world social action depends on whether participants perceive meaningful rewards and value, rather than the low cost of the action itself.</li> </ul>                                                                                                                                                                       | social media data analysis                | Independent Variables: communication strategy (targeting and connecting strategy, timing and pacing, content); network characteristics<br>Dependent Variable: dialogue and mobilization for social change<br>Mediator: attention                                    | attention theory; agenda-setting theory              |
| Ihm and Lee (2021)       | Do people translate their participation in NPO advocacy actions on social media into actual engagement, and if so, how?                                                                                               | <ul style="list-style-type: none"> <li>Organizations receiving private funding tend to maintain more active Facebook pages, whereas organizations receiving regular government subsidies are less inclined to engage online.</li> <li>Posts in the categories of information, community, and action all attract attention; information posts have the greatest impact on likes, while action posts are more likely to be shared.</li> <li>In low-interactivity contexts, emotional messages are more effective than informational messages in increasing the public's willingness to share information.</li> <li>The level of involvement in social issues significantly affects information sharing, information seeking, and donation intentions, and moderates the effects of message appeal and interactivity on behavioral intentions.</li> </ul> | online experiment (N = 100)               | Independent Variables: perceived costs; perceived benefits<br>Dependent Variable: community-based participation<br>Mediator: identification                                                                                                                         | expectancy value theory<br>social identity theory    |
| Lam and Nie (2020)       | How do organizational characteristics influence the choice of social media platforms and the level of usage activeness, as well as the effectiveness of use (public attention, such as likes, shares, and reactions)? | <ul style="list-style-type: none"> <li>Organizations receiving private funding tend to maintain more active Facebook pages, whereas organizations receiving regular government subsidies are less inclined to engage online.</li> <li>Posts in the categories of information, community, and action all attract attention; information posts have the greatest impact on likes, while action posts are more likely to be shared.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                            | social media data analysis (N = 427 NPOs) | Independent Variables: lump-sum grant subvention system; Hong Kong Council of Social Services<br>Dependent Variables: social media adoption; activeness on social media (posts); public attention (likes ∖ shares ∖ comments)                                       | resource dependence theory                           |
| Tao <i>et al.</i> (2021) | Do message appeal, functional interactivity, and cause involvement interact to influence individuals' intentions to share, seek, and donate in response to nonprofit social media messages?                           | <ul style="list-style-type: none"> <li>In low-interactivity contexts, emotional messages are more effective than informational messages in increasing the public's willingness to share information.</li> <li>The level of involvement in social issues significantly affects information sharing, information seeking, and donation intentions, and moderates the effects of message appeal and interactivity on behavioral intentions.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                    | online experiment (N = 294)               | Independent Variables: message appeal (emotional vs. informational); functional interactivity (high vs. low)<br>Dependent Variable: information sharing intention; information seeking intention; donation intention<br>Moderator: cause involvement (high vs. low) | elaboration likelihood model; limited capacity model |

## 2.3 Relationship management efforts and social media engagement

In addition to the research on for-profit brands and consumers, researchers have recently investigated online relationship marketing and stakeholder engagement in NPOs (Auger and Cho, 2021; Cho and Auger, 2017). Drawing on past research in relationship management, these efforts can be broadly categorized into three tactics: financial bonding, information sharing, and social bonding (Berry, 1995; De Wulf *et al.*, 2001, 2003). Following this stream of research, the current research investigates how these three tactics impact stakeholders' engagement on social media.

### 2.3.1 Financial bonding

Financial (or economic) bonding represents the first tactic in relationship management. Berry (1995) defined financial bonding as the motivation to stimulate consumer consumption and loyalty through incentive measures such as discounts, gifts, or other promotional deals. Smith (1998) similarly described this tactic as functional bonding, driven by economic incentives that encourage repurchase and sustain an exchange relationship (Chiu *et al.*, 2005).

In the nonprofit context, financial bonding may involve thank-you gifts for individual donations or tax deductions for organizational contributions (Chapman and Thai, 2025). Volunteers may also receive symbolic gifts or, in some cases, monetary compensation (Dallmeyer *et al.*, 2024). However, evidence of its effectiveness has been mixed. For instance, Chao and Fisher (2022) found that thank-you gifts can be ineffective or even counterproductive for well-known NPOs, whereas Dallmeyer *et al.* (2024) reported that appropriate monetary rewards improved volunteer retention. These findings suggest that although donors, volunteers, and supporters of NPOs are expected to engage with organizations primarily for prosocial reasons, some NPOs still adopt financial bonding tactics as part of their relationship management efforts, yet with varying outcomes. Applied to social media, financial bonding may encourage stakeholders to read, share, or create related content, thereby

increasing their social media engagement. Therefore, this study proposes the following hypothesis:

*H1. The financial bonding tactics of NPOs positively influence stakeholders' social media engagement.*

### **2.3.2 Information sharing**

Past research has identified three main categories of nonprofits' messaging on social media, including information, community building, and action (Lovejoy and Saxton, 2012). Among these, information sharing is the most frequent (Lovejoy and Saxton, 2012; Wang and Yang, 2020). The need for information is also a key driver for users to interact with NPOs on social media (Vale and Fernandes, 2018), particularly during crises or campaigns, when sharing timely and relevant information elevates engagement (Chung, 2016; Olson *et al.*, 2019).

Regarding the significance of information sharing, numerous studies have focused on its impact on social media engagement. Scholars have explored various aspects of information sharing tactics, such as information quality, timing, frequency, images, hashtags, and links (Guo and Saxton, 2018; Gkikas *et al.*, 2022; Kordzadeh and Young, 2022; Lam and Nie, 2020; Zhang *et al.*, 2023). Auger and Cho (2021) found that active and valuable information sharing enhances stakeholders' perceptions of organizational investment, making it the most effective tactic among the three, and in turn, higher perceived investment improved relationship quality, which positively influenced donation willingness, volunteer participation, and advocacy behaviors. Similarly, Lam and Nie (2020) examined how different message types relate to likes and shares (contribution), finding that informational posts were most effective in generating likes. However, such studies did not consider consumption and creation behaviors. In view of previous findings, the current study argues that when NPOs adopt an information-sharing tactic to build closer relationships with stakeholders who receive relevant and useful information, they will be more likely to read, share, or create related content, thereby increasing their social media engagement.

Therefore, this study proposes the following hypothesis:

*H2: The information-sharing tactics of NPOs positively influence stakeholders' social media engagement.*

### **2.3.3 Social bonding**

Social bonding refers to how an organization interacts with the public to establish relationships and is often considered a higher-level tactic than financial bonding. Whereas financial bonding reflects structural or transactional connections, social bonding emphasizes customizing interactions for stakeholders and maintaining long-term relationships (Berry, 1995). Although social bonding is primarily derived from interpersonal relationships, it has become more important in the social media environment due to the interactive nature of social media platforms (Dirin *et al.*, 2021), and some studies have suggested that social bonding is one of the best tactics for building and maintaining organizational public relations in online marketing (Liang *et al.*, 2008).

In the context of NPOs, the meaning of social bonding is similar to the recently emerging stewardship strategy (e.g. Harrison, 2023; Olinski and Szamrowski, 2020). For example, Harrison (2023) emphasized that stewardship strategies can be applied in nurturing relationships with NPO stakeholders, including disclosing the organization's financial status, organizing networking events, and fostering relationships with volunteers and donors. Also, Auger and Cho (2021) found that social bonding on social media increases donor and volunteer awareness of an NPO's investment in the relationship. Building on this evidence, this research indicates that NPOs can use social media to maintain contact with stakeholders, attend to their needs, send greetings, and cultivate social connections. Stakeholders who feel cared for and socially connected are more likely to read, share, or create related content, thereby enhancing their engagement on social media, so this study proposes the following hypothesis:

*H3: The social bonding tactics of NPOs positively influence stakeholders' social media engagement.*

### 2.3.4 The mediating effect of organizational identification

According to Dutton *et al.* (1994, p. 239), organizational identification refers to a cognitive connection in which "one's self-concept contains the same attributes as the organizational identification of knowledge". Organizational identification is widely used to examine the relationship between employees and organizations, and the results have demonstrated its impact on employee performance, satisfaction, as well as the firm performance (He and Brown, 2013). With the rise of social media, organizations increasingly use these platforms to foster organizational identification. Zagenczyk and Powell (2023) argued that organizational identification is shaped by relational interactions among employees and colleagues, and social media has the potential to strengthen such identification. Consistent with this view, Men *et al.* (2020) found that employees with stronger identification were more likely to engage in organizational activities, while Pang and Zhang (2024) demonstrated that brands can enhance consumer attachment through social media services. Recent work also points to the importance of digital transformation for organizational identification. Weisman *et al.* (2023), for example, emphasized the need to examine how antecedents of identification vary across organizational types. Together, these findings suggest that communication through social media can effectively strengthen stakeholders' identification with organizations, which in turn promotes engagement. This highlights the importance of investigating organizational identification in digital contexts and exploring how it operates within NPO–stakeholder relationships.

Previous research indicates that employees' organizational identification in for-profit organizations is shaped by social media use and interaction, which in turn enhances engagement (Zagenczyk and Powell, 2023; Men *et al.*, 2020). In NPOs, the ways to enhance organizational identification may differ across stakeholder groups, and the expected outcomes may also vary. For example, regarding donors, Chell *et al.* (2023) indicated that publicly acknowledging donors' contributions on social media can strengthen their organizational

identification and influence subsequent donation behavior and word-of-mouth intention. This may be related to the social bonding tactic in relationship management. In addition, regarding volunteers, Huang *et al.* (2020) suggested that volunteers' engagement motivations include the desire for recognition. Therefore, when volunteers perceive organizational inclusion, they are more likely to exhibit stronger intentions for future behaviors. Similarly, Lai *et al.* (2024) used social identity theory to explain that when NPOs form alliances with for-profit organizations, enhancing the employees' identification with the alliance is a key factor for cooperative effectiveness.

Taken together, NPOs should consider the mechanisms through which different stakeholders develop organizational identification and their subsequent behavioral responses in relationship management. Donors, volunteers, and partner organizations differ in their engagement motivations and relationship expectations. However, organizational identification serves as a common mechanism, indicating its potential role as a core factor linking diverse stakeholders with the NPO and promoting the organization's sustainable operations. Extending this logic, we argue that organizational identification is equally relevant for NPO stakeholders, including volunteers and donors, who play a critical role in helping organizations achieve their social missions.

From a relationship-management perspective, NPOs cultivate relationships with stakeholders through financial bonding, information sharing, and social bonding. These interactions strengthen stakeholders' organizational identification as they learn more about the organization, assess its alignment with their values, and take pride in their involvement. Furthermore, members' organizational identification within NPOs can also enhance their intention to engage both online and offline. For example, Ihm and Lee (2021) found that the degree of individual identification with an NPO influences their willingness to interact within the organization's online community. In addition, the level of organizational identification affects the forms of interaction in the organization's community, such as sharing, tagging, or advocacy (Ihm, 2022). Consistent with social exchange theory, when stakeholders identify with an NPO, they are more likely



to feel a sense of obligation to reciprocate by supporting the organization, speaking on its behalf, and promoting it within their networks. This, in turn, increases their engagement on social media and helps NPOs attract greater external resources. However, previous studies have not explicitly distinguished the antecedents that enhance members' organizational identification, focusing instead only on the organization's overall investment costs (e.g. perceived costs).

Accordingly, this study proposes that organizational identification mediates the relationship between relationship-management tactics and stakeholders' social media engagement and therefore proposes the following hypothesis:

*H4. Organizational identification will mediate the relationships between relationship management tactics and social media engagement.*

## **2.5 Online interaction propensity**

According to social exchange theory, individuals assess the costs and benefits associated with social exchanges (Kelley and Thibaut, 1978). Compared with offline engagement, social media engagement generally entails lower costs (Cheng *et al.*, 2024). However, other factors may still reduce individuals' willingness to engage in social media, such as privacy concerns (Chung *et al.*, 2021) and personal competence in using technological tools (Polizzi, 2025). Therefore, this study will incorporate the influence of these costs. To maintain the focus of the research framework, online interaction propensity is adopted as a moderating variable, as it reflects the outcome of factors influencing individuals' tendency to use social media. Furthermore, individuals with higher online interaction propensity may, over time, influence the outcomes of an organization's relationship management efforts.

Prior research has highlighted the role of online interaction propensity as a moderator in virtual communities. Wiertz and de Ruyter (2007) found that members with stronger commitment contributed more knowledge in online communities, and that online interaction propensity strengthened this relationship. Individuals with high online interaction propensity are likely to communicate more frequently, establishing stronger relationships with

community members and the community (Li and Chen, 2022). Simultaneously, these frequent interactions may enhance their sense of obligation, leading them to contribute knowledge to assist other community members. As social media serves as a channel for interaction, understanding the influence of online interaction propensity on NPO relationship management can theoretically extend the application of social exchange theory and relationship management theory to the NPO social media context, while also considering the overall impact of social media engagement costs. In practice, it can provide NPO social media managers with strategic insights for cultivating stakeholder relationships.

In the NPO context, this study argues that stakeholders with a higher online interaction propensity will, through frequent interactions on social media, build stronger relationships with the community. Consequently, relationship management tactics become more effective in connecting relationships, and the sense of obligation arising from frequent interactions further elevates their social media engagement to assist NPOs. Accordingly, this study proposes the following hypothesis:

*H5. Stakeholders with higher online interaction propensity will strengthen the relationship between NPOs' relationship management tactics and stakeholders' social media engagement.*

### **3. Methodology**

#### **3.1 Data and sample**

This study employed a questionnaire survey to collect data, which was designed and administered through Google Forms and targeted NPO stakeholders. Following Gee *et al.* (2023), who identified employees, volunteers, donors, and general advocates as NPO stakeholders, this study focused specifically on donors, volunteers, and social media followers. Data collection took place between August and September 2022, and no incentives were provided. Two sampling approaches were employed. First, the questionnaire link was sent to NPOs by e-mail in the directory of the Taiwan Public Welfare

Information Center, with a total list of about 2,000 NPOs. These NPOs were invited to post the questionnaire link on their official websites, including Facebook fan pages or other social media platforms, and invite their stakeholders to respond. To ensure eligibility, participants were asked at the beginning of the questionnaire to indicate their affiliation with the NPO by answering: “Are you a (1) donor, (2) volunteer, (3) social media follower, or (4) other?”. Second, a snowball sampling method was used. Through personal networks, the researcher invited donors, volunteers, and social media followers of NPOs to participate in the survey, provided they had previously engaged with an NPO’s social media platforms.

During the survey process, each questionnaire was accompanied by an informed consent statement in accordance with research ethics guidelines. On the first page of the questionnaire, respondents were informed that the purpose of the study was “to understand respondents’ use of NPO social media,” and were instructed to complete the questionnaire based on the NPO social media platform they most frequently visited. To ensure eligibility, the questionnaire began with screening questions regarding the organization’s social mission, the name of the social media platform used, and its affiliation. The respondents were invited to fill in the questionnaire directly through the online link, to ensure that the participation of the respondents was voluntary and will not be influenced by the referral agency or introducer. After the first time it was sent to NPOs for distribution, in order to increase the number of questionnaires collected and facilitate subsequent analysis, it was resent once after two weeks. Initially, a total of 368 questionnaires were collected, of which 12 were completed by employees and managers in NPOs. To avoid response bias, these 12 questionnaires were removed. The final valid sample consisted of 356 responses.

The demographic characteristics of the respondents show that females constitute 64.3% ( $n = 229$ ). In terms of age, the majority fall within the 31-40, accounting for 28.4% ( $n = 101$ ), followed by 21-30 ( $n = 92$ , 25.8%), 41-50 ( $n = 77$ , 21.6%), 51-60 ( $n = 59$ , 16.6%), below 20 ( $n = 15$ , 4.2%) and above 61 ( $n = 12$ , 3.4%). Regarding the social missions of NPOs, a multiple-choice item

revealed that this study covered NPOs of various types, with the majority focusing on helping disadvantaged groups (59.6%), followed by environmental protection (34.0%), providing educational resources (27.0%), creating employment opportunities (17.1%), improving community life (16.9%), and promoting fair trade (6.5%). Similarly, according to the multiple-choice responses, respondents' affiliations included donors (54.0%), volunteers (50.0%), and social media followers (59.3%). Regarding social media usage, a multiple-choice item indicated that respondents used various platforms, with the majority using Facebook (74.2%), followed by Instagram (41.0%) and LINE (32.3%). The relevant descriptive statistics are presented in Table 2.

**Table 2**  
**Descriptive statistics**

| Items                                       | Options                            | Number | Percentage (%) |
|---------------------------------------------|------------------------------------|--------|----------------|
| Sex                                         | male                               | 127    | 35.7 %         |
|                                             | female                             | 229    | 64.3 %         |
| Age                                         | below 20                           | 15     | 4.2 %          |
|                                             | 21-30                              | 92     | 25.8 %         |
|                                             | 31-40                              | 101    | 28.4 %         |
|                                             | 41-50                              | 77     | 21.6 %         |
|                                             | 51-60                              | 59     | 16.6 %         |
|                                             | above 61                           | 12     | 3.4 %          |
|                                             | helping disadvantaged groups       | 212    | 59.6 %         |
| NPO's social goals<br>(multiple choice)     | protecting the natural environment | 121    | 34.0 %         |
|                                             | providing educational resources    | 96     | 27.0 %         |
|                                             | creating employment opportunities  | 61     | 17.1 %         |
|                                             | improving community live           | 60     | 16.9 %         |
|                                             | promoting fair trade               | 23     | 6.5 %          |
| Identity<br>(multiple choice)               | donors                             | 192    | 54.0 %         |
|                                             | volunteers                         | 178    | 50.0 %         |
|                                             | social media followers             | 211    | 59.3 %         |
| Social media platforms<br>(multiple choice) | Facebook                           | 264    | 74.2 %         |
|                                             | Instagram                          | 146    | 41.0 %         |
|                                             | Line                               | 115    | 32.3 %         |

### 3.2 Measures

To measure the latent variables, we referred to the items, adapted items from established scales used in prior research and modified them to fit the NPOs' context. All items except demographic information are measured on a 5-point Likert-type scale from "strongly disagree" (1) to "strongly agree" (5).

Relationship management efforts were measured through three dimensions: financial bonding, information sharing, and social bonding. *Financial bonding* measures the extent to which an NPO rewards donors or volunteers. Three items are adapted from Auger and Cho (2021) and De Wulf *et al.* (2001), such as "This NPO rewards regular donors or volunteers" and "This NPO allows donors or volunteers to participate in special events". *Information sharing* measures the extent to which an NPO actively shares valuable information on social media. Six items are adapted from Auger and Cho (2021) and Porter and Donthu (2015), such as "This NPO consistently updates content on social media" and "This NPO provides important information on social media." *Social bonding* measures the degree to which an NPO interacts with stakeholders to establish social relationships. Four items are adapted from Auger and Cho (2021) and Liang *et al.* (2008), such as "This NPO kept in touch with me" and "This NPO asked me what I thought of their services."

*Online interaction propensity* measures the extent to which donors or volunteers enjoy engaging with others online. Four items are adapted from Dessart (2017) and Wiertz and de Ruyter (2007), such as "I am someone who enjoys interacting with like-minded individuals online" and "I am someone who likes actively participating in online discussions."

*Organizational identification* measures the degree to which stakeholders identify with the NPOs. Six items are adapted from Mael and Ashforth (1992), such as "I take pride in participating in the charitable activities of this NPO" and "I feel that this NPO aligns with my values."

*Social media engagement* measures the extent to which stakeholders engage with the NPOs' social media, including consumption, contribution, and creation.

*Consumption* measures the extent to which stakeholders read or view content on the NPOs' social media, such as "I read posts published by this NPO on social media." *Contribution* measures the extent to which stakeholders like, share, or comment on content on the NPOs' social media, such as "I share content published by this NPO on social media with my friends." *Creation* measures the extent to which stakeholders create and publish content related to the NPOs on their social media, such as "I write comments related to this NPO on social media." Four items for each engagement are adapted from Schivinski *et al.* (2016) and Vale and Fernandes (2018). There are twelve items in total. All the items are listed in Appendix A.

## 4. Results

Partial Least Squares Structural Equation Modeling (PLS-SEM) was selected as the analytical approach for this study due to its suitability for analyzing causal-predictive relationships. The objective of the study is to test a set of hypotheses derived from a theoretical model, while also aiming to derive predictive managerial implications. The analysis begins by examining the measurement model to ensure instrument reliability and validity. Subsequently, Smart PLS 3.0 is employed to evaluate the structural model and its hypotheses using partial least squares structural equation analysis.

### 4.1 Common method variance (CMV)

Since all data were collected from a single source, this study took measures to minimize CMV concern (Podsakoff *et al.*, 2012). First, the respondents were reminded that there was no right or wrong answer to each item. Second, the current study adopted Harman's single-factor test to assess CMV (Podsakoff and Organ, 1986). The unrotated factor solution does not emerge as a single factor, and the first factor only explained 41.56%, less than the 50% threshold.

Moreover, to validate the structure of the measurement model, a confirmatory factor analysis (CFA) was conducted to compare the results of two models (Podsakoff *et al.*, 2003). We tested models and compared: (1) a

single-factor model, which assumes all items load onto a single latent factor, and (2) a multivariable model, which posits that the observed variables load onto their respective theoretical constructs as defined by the research framework. The purpose of this comparison is to assess which model better represents the data and provides a superior model fit. For the single factor model, these indices suggest a poor fit, as evidenced by the high chi-square value ( $\chi^2 = 6627.132$ ,  $df = 560$ ,  $p < 0.05$ ). On the other hand, the multivariable model, which includes seven construct variables, the chi-square value for this model was significantly improved ( $\chi^2 = 1629.900$ ,  $df = 532$ ,  $p < 0.05$ ). As indicated, the chi-square value decreased substantially and the difference between the two models is significant ( $\Delta\chi^2 = 4997.232$ ,  $\Delta df = 28$ ,  $p < 0.001$ ). Considering the above results, we believe that this study is not affected by CMV.

#### **4.2 Analysis of the measurement model**

The measurement model was evaluated using SmartPLS 3.0, involving a two-stage analytical procedure. In the first stage, the reliability of the individual indicators was evaluated by examining their factor loadings. Items with loadings below 0.6 were eliminated. Table 3 presents the reliability results of the individual items, ranging from 0.780 to 0.948, indicating a high level of item reliability. All Cronbach's  $\alpha$  estimates exceeded the threshold of 0.7, demonstrating a satisfactory level of internal consistency for each construct. Then, composite reliability (CR) was used to further test the reliability of each variable. All latent variables in Table 3 demonstrated sufficient reliability by surpassing the threshold of 0.7 (Nunnally, 1978).

**Table 3**  
**Factor loadings, Cronbach's  $\alpha$ , means, and standard deviations**

| Construct                           | Item  | Factor loading | Alpha | Mean  | SD    |
|-------------------------------------|-------|----------------|-------|-------|-------|
| Financial Bonding (FB)              | FB1   | 0.837          | 0.764 | 3.596 | 0.679 |
|                                     | FB2   | 0.740          |       |       |       |
|                                     | FB3   | 0.879          |       |       |       |
|                                     | IS1   | 0.854          |       |       |       |
| Information-sharing (IS)            | IS2   | 0.908          | 0.953 | 4.243 | 0.682 |
|                                     | IS3   | 0.912          |       |       |       |
|                                     | IS4   | 0.911          |       |       |       |
|                                     | IS5   | 0.914          |       |       |       |
|                                     | IS6   | 0.897          |       |       |       |
|                                     | SB1   | 0.780          |       |       |       |
| Social Bonding (SB)                 | SB2   | 0.882          | 0.872 | 3.653 | 0.789 |
|                                     | SB3   | 0.878          |       |       |       |
|                                     | SB4   | 0.858          |       |       |       |
|                                     | OI1   | 0.846          |       |       |       |
| Organizational identification (OI)  | OI2   | 0.896          | 0.937 | 4.256 | 0.709 |
|                                     | OI3   | 0.784          |       |       |       |
|                                     | OI4   | 0.907          |       |       |       |
|                                     | OI5   | 0.880          |       |       |       |
|                                     | OI6   | 0.920          |       |       |       |
|                                     | CONS1 | 0.915          |       |       |       |
| Consumption (CONS)                  | CONS2 | 0.904          | 0.917 | 4.132 | 0.695 |
|                                     | CONS3 | 0.883          |       |       |       |
|                                     | CONS4 | 0.875          |       |       |       |
|                                     | CONT1 | 0.901          |       |       |       |
| Contribution (CONT)                 | CONT2 | 0.915          | 0.911 | 3.622 | 0.823 |
|                                     | CONT3 | 0.898          |       |       |       |
|                                     | CONT4 | 0.837          |       |       |       |
|                                     | CR1   | 0.932          |       |       |       |
| Creation (CR)                       | CR2   | 0.948          | 0.929 | 3.464 | 0.933 |
|                                     | CR3   | 0.887          |       |       |       |
|                                     | CR4   | 0.861          |       |       |       |
|                                     | OIP1  | 0.912          |       |       |       |
| Online Interaction Propensity (OIP) | OIP2  | 0.903          | 0.924 | 3.636 | 0.922 |
|                                     | OIP3  | 0.882          |       |       |       |
|                                     | OIP4  | 0.912          |       |       |       |

In the second stage of analysis, average variance extracted (AVE) was examined to evaluate the validity of each variable. As depicted in Table 4, the AVE values for each variable exceeded 0.5 (Fornell and Larcker, 1981), confirming the presence of convergent validity. Finally, discriminant validity was examined by comparing the square roots of the AVE values with the correlations between variables (Barclay *et al.*, 1995). The results, presented in Table 4, indicate that the square roots of the AVEs were greater than the correlations



between the specific construct and others. In addition, the heterotrait-monotrait ratio of correlations (HTMT) values in Table 5 were below 0.85, providing evidence of discriminant validity (Fornell and Larcker, 1981; Hair *et al.*, 2014).

**Table 4**  
**Reliability and discriminant validity\_Fornell-Larcker Criterion**

| Construct | CR    | AVE   | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. FB     | 0.860 | 0.673 | 0.821 |       |       |       |       |       |       |       |
| 2. IS     | 0.962 | 0.809 | 0.291 | 0.900 |       |       |       |       |       |       |
| 3. SB     | 0.913 | 0.723 | 0.572 | 0.445 | 0.850 |       |       |       |       |       |
| 4. OI     | 0.951 | 0.763 | 0.614 | 0.567 | 0.614 | 0.831 |       |       |       |       |
| 5. CONS   | 0.941 | 0.800 | 0.355 | 0.698 | 0.457 | 0.589 | 0.895 |       |       |       |
| 6. CONT   | 0.937 | 0.789 | 0.369 | 0.470 | 0.447 | 0.490 | 0.624 | 0.889 |       |       |
| 7. CR     | 0.949 | 0.824 | 0.407 | 0.455 | 0.542 | 0.497 | 0.539 | 0.790 | 0.908 |       |
| 8. OIP    | 0.946 | 0.815 | 0.100 | 0.075 | 0.046 | 0.068 | 0.195 | 0.443 | 0.482 | 0.903 |

*Note.* Values in bold are the square root of AVE.

FB = financial bonding; IS = information-sharing; SB = social bonding; OI = organizational identification; CONS = consumption; CONT = contribution; CR = creation; OIP = online interaction propensity

**Table 5**  
**Discriminant validity\_Heterotrait-monotrait ratio (HTMT)**

| Construct | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8 |
|-----------|-------|-------|-------|-------|-------|-------|-------|---|
| 1. FB     |       |       |       |       |       |       |       |   |
| 2. IS     | 0.324 |       |       |       |       |       |       |   |
| 3. SB     | 0.691 | 0.481 |       |       |       |       |       |   |
| 4. OI     | 0.459 | 0.596 | 0.675 |       |       |       |       |   |
| 5. CONS   | 0.408 | 0.744 | 0.503 | 0.633 |       |       |       |   |
| 6. CONT   | 0.430 | 0.504 | 0.492 | 0.523 | 0.682 |       |       |   |
| 7. CR     | 0.468 | 0.484 | 0.599 | 0.529 | 0.584 | 0.848 |       |   |
| 8. OIP    | 0.115 | 0.078 | 0.080 | 0.077 | 0.211 | 0.482 | 0.519 |   |

### 4.3 Analysis of the structural model

PLS-SEM was adopted to examine the hypotheses. In this study, bootstrapping with 5,000 bootstrap samples was utilized to assess the significance of both main effects and interaction effects (Hair *et al.*, 2016).

### 4.3.1 Main effects

To assess the predictive validity of the research model, Stone–Geisser’s  $Q^2$  values were calculated using the blindfolding procedure in SmartPLS 3.0. The results showed that all endogenous variables had  $Q^2$  values greater than zero (OI = 0.365; CONS = 0.274; CONT = 0.185; CR = 0.199), confirming the model’s predictive relevance (Hair *et al.*, 2019). In addition, as shown in Table 5, all path  $R^2$  values ranged from 0.302 to 0.517, indicating that the model has at least moderate explanatory power for different social media engagement behaviors. Taken together, the  $R^2$  and  $Q^2$  results confirm that the research model not only explains the sample data but also demonstrates predictive validity that can serve as a practical reference for NPO managers.

Regarding the main effects, financial bonding was found to positively influence stakeholders’ consumption ( $\beta = 0.106$ ,  $p < 0.05$ ), contribution ( $\beta = 0.149$ ,  $p < 0.01$ ), and creation ( $\beta = 0.130$ ,  $p < 0.05$ ) on social media, supporting H1. Similarly, information sharing had a significant positive effect on consumption ( $\beta = 0.612$ ,  $p < 0.001$ ), contribution ( $\beta = 0.333$ ,  $p < 0.001$ ), and creation ( $\beta = 0.262$ ,  $p < 0.001$ ), supporting H2. Finally, social bonding was found to have a significant positive effect on consumption ( $\beta = 0.123$ ,  $p < 0.05$ ), contribution ( $\beta = 0.215$ ,  $p < 0.01$ ), and creation ( $\beta = 0.352$ ,  $p < 0.001$ ), confirming H3. These results are summarized in Table 6.

**Table 6**  
**Results of the structural model for main effects.**

| Structural relation | Path coefficients ( $\beta$ ) | t-value | R2         |
|---------------------|-------------------------------|---------|------------|
| FB → CONS (H1a)     | 0.106*                        | 2.202   | R2 = 0.517 |
| FB → CONT (H1b)     | 0.149**                       | 2.683   | R2 = 0.302 |
| FB → CR (H1c)       | 0.130*                        | 2.283   | R2 = 0.358 |
| IS → CONS (H2a)     | 0.612***                      | 15.681  | R2 = 0.517 |
| IS → CONT (H2b)     | 0.333***                      | 6.800   | R2 = 0.302 |
| IS → CR (H2c)       | 0.262***                      | 5.077   | R2 = 0.358 |
| SB → CONS (H3a)     | 0.123*                        | 2.232   | R2 = 0.517 |
| SB → CONT (H3b)     | 0.215**                       | 2.923   | R2 = 0.302 |
| SB → CR (H3c)       | 0.352***                      | 5.452   | R2 = 0.358 |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

### 4.3.2 Mediating effects

To examine the mediating role of organizational identification within this framework, bootstrapping (5,000 bootstrap samples with a 95% confidence interval) was adopted to analyze the indirect effects of relationship-building tactics of NPOs on stakeholders' social media engagement through organizational identification of their stakeholders (Hair *et al.*, 2016). The findings demonstrate that the mediating effects of organizational identification on the relationship between information sharing/social bonding and social media engagement were positive and statistically significant, as the confidence intervals did not encompass 0 and  $p < 0.001$  (Table 7).

In terms of the financial bonding, the results indicate that the mediating effect of organizational identification on the relationship between this tactic and social media engagement was not significant (the confidence intervals encompass 0, and  $p > 0.05$ ). Hence, H4 was partially supported.

To further assess the nature of mediation, this study followed Hair *et al.* (2014) and calculated the variance accounted for (VAF), defined as  $VAF = \text{indirect effect} / (\text{indirect effect} + \text{direct effect})$ . A VAF between 20% and 80% indicates partial mediation. As shown in Table 6, all significant mediation effects fell within this range, with the lowest VAF being 25.9% (information sharing  $\rightarrow$  organizational identification  $\rightarrow$  consumption) and the highest being 66.8% (social bonding  $\rightarrow$  organizational identification  $\rightarrow$  consumption). These results indicate that organizational identification partially mediates the relationships between NPOs' relationship-management tactics and stakeholders' social media engagement.

**Table 7**  
**Results of the structural model for mediating effects.**

| Structural relation                    | Path coefficients ( $\beta$ ) | t-value | 95% confidence interval | Variance accounted for | effect            |
|----------------------------------------|-------------------------------|---------|-------------------------|------------------------|-------------------|
| FB $\rightarrow$ OI $\rightarrow$ CONS | 0.033                         | 1.213   | [-0.017; 0.090]         | -                      | no effect         |
| FB $\rightarrow$ OI $\rightarrow$ CONT | 0.028                         | 1.223   | [-0.015; 0.074]         | -                      | no effect         |
| FB $\rightarrow$ OI $\rightarrow$ CR   | 0.028                         | 1.237   | [-0.015; 0.074]         | -                      | no effect         |
| IS $\rightarrow$ OI $\rightarrow$ CONS | 0.214***                      | 5.535   | [0.143; 0.295]          | 25.9 %                 | partial mediation |
| IS $\rightarrow$ OI $\rightarrow$ CONT | 0.178***                      | 5.675   | [0.121; 0.242]          | 34.8 %                 | partial mediation |
| IS $\rightarrow$ OI $\rightarrow$ CR   | 0.180***                      | 6.324   | [0.122; 0.243]          | 40.7 %                 | partial mediation |
| SB $\rightarrow$ OI $\rightarrow$ CONS | 0.247***                      | 8.073   | [0.185; 0.306]          | 66.8 %                 | partial mediation |
| SB $\rightarrow$ OI $\rightarrow$ CONT | 0.206***                      | 6.324   | [0.145; 0.273]          | 48.9 %                 | partial mediation |
| SB $\rightarrow$ OI $\rightarrow$ CR   | 0.208***                      | 6.056   | [0.144; 0.278]          | 37.1 %                 | partial mediation |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

### 4.3.3 Moderating effect

To test the significance of moderation effects, this study employed a two-stage approach with bootstrapping (5,000 bootstrap samples) in equation modeling to generate the moderation terms (Henseler and Chin, 2010). H5 proposed that stakeholders' online interaction propensity moderates the relationships between NPOs' financial bonding, information sharing, and social bonding tactics and stakeholders' social media engagement. The results provide partial support for H5. Except for the financial bonding tactic, online interaction propensity strengthens the effects of information sharing and social bonding tactics on stakeholders' social media engagement ( $p < 0.05$ ). Consistent with the hypothesis, when stakeholders' online interaction propensity is high, NPOs' information sharing and social bonding tactics exert stronger positive effects on social media engagement. Table 8 presents a summary of the moderation effects, along with the corresponding path coefficients and t-values.

**Table 8**  
**Results of the structural model for moderation effects**

| Structural relation       | Path coefficients ( $\beta$ ) | t-value |
|---------------------------|-------------------------------|---------|
| IOP*FB $\rightarrow$ CONS | 0.013                         | 0.323   |
| IOP*FB $\rightarrow$ CONT | 0.065                         | 1.806   |
| IOP*FB $\rightarrow$ CR   | -0.009                        | 2.162   |
| IOP*IS $\rightarrow$ CONS | 0.119**                       | 3.270   |
| IOP*IS $\rightarrow$ CONT | 0.181***                      | 4.875   |
| IOP*IS $\rightarrow$ CR   | 0.136***                      | 3.664   |
| IOP*SB $\rightarrow$ CONS | 0.126*                        | 2.052   |
| IOP*SB $\rightarrow$ CONT | 0.125*                        | 2.186   |
| IOP*SB $\rightarrow$ CR   | 0.082*                        | 2.084   |

\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05

#### 4.3.4 Extra analysis

To further examine the role of online interaction propensity, this study conducted a moderated mediation analysis (PROCESS Model 5). With financial bonding, information sharing, and social bonding respectively as the predictor variables, online interaction propensity as the moderator, organization identification as the mediator, and consumption, contribution, and creation respectively as the dependent variables, a bootstrap analysis with 5000 resamples was conducted. The results showed that only information sharing had a positive and significant moderated mediation effect on consumption, contribution, and creation ( $\text{Index}_{\text{consumption}} = 0.061$ ,  $\text{SE} = 0.019$ , 95% CI = [0.027, 0.102];  $\text{Index}_{\text{contribution}} = 0.073$ ,  $\text{SE} = 0.024$ , 95% CI = [0.029, 0.122];  $\text{Index}_{\text{creation}} = 0.094$ ,  $\text{SE} = 0.030$ , 95% CI = [0.041, 0.158], all excluding 0).

## 5. Discussion and suggestions

This study introduces relationship management into the context of NPOs' social media and explores how NPOs can use social media to promote stakeholders' social media engagement from the influencing factors of both NPOs and stakeholders. This study found that NPOs can employ relationship management tactics to strengthen their relationships with stakeholders to

enhance their identification with NPOs, which in turn can promote their social media engagement. In addition, stakeholders' online interaction propensity plays a moderating role, influencing the relationship between relationship management and social media engagement.

## 5.1 Discussion

This study found that relationship management efforts, financial bonding, information sharing, and social bonding positively influenced stakeholders' social media engagement behavior. Auger and Cho (2021) found that relationship management tactics affect donors' donations (offline engagement behavior), and this study applied them to online engagement behavior and found that the same effect exists. Furthermore, Banerjee *et al.* (2023) reported that financial bonding promotes consumer review behaviors (e.g. contribution), but their work focused on a single level of engagement behavior. In general, this study simultaneously explores three levels of engagement behavior and finds that different relationship management tactics have different effects on different levels of engagement behavior.

There are three levels of social media engagement behaviors, including consumption, contribution, and creation. For consumption, where users simply read or view content, the attractiveness and relevance of information sharing are more influential than financial or social bonding. In terms of contribution, stakeholders engage in higher levels of interaction by liking, sharing, or commenting on social media content, so beyond the attractive content of the post itself, the strength of the relationship between NPOs and their stakeholders becomes an important determinant of such engagement. Therefore, the impacts of information sharing and social bonding are more important than financial bonding. In terms of creation, the highest level of interaction on social media, is the most closely related to NPOs to create relevant content, so social bonding has the highest effect, followed by information sharing, and finally, financial bonding. In general, the findings suggest that social bonding and information sharing are more critical than financial bonding for fostering deeper levels of engagement,

highlighting their importance in building long-term relationships with NPO stakeholders.

Furthermore, this study found that organizational identification plays a partial mediating role, indicating that relationship management tactics not only have a direct effect on social media engagement, but also exert an indirect influence through stakeholders' identification with NPOs. These findings confirm that organizational identification plays a psychological mechanism in NPO stakeholder relationship management and that social exchange theory can be used to explain NPO stakeholder behavior in an online environment. This result is consistent with the findings of Lee *et al.* (2015), who demonstrated that organizational identification influences stakeholders' social media engagement. However, the analysis also showed that organizational identification did not mediate the relationship between financial bonding and social media engagement. A possible explanation is that financial bonding represents a lower-level relationship tactic. Because NPOs primarily pursue charitable and prosocial goals, stakeholders may place less value on financial incentives, making it difficult for such tactics to strengthen their organizational identification.

Moreover, this study found that online interaction propensity moderates the effects of information sharing and social bonding on stakeholders' social media engagement, but not the effect of financial bonding. This result supports prior evidence that online interaction propensity shapes the intensity of social media engagement (Wiertz and de Ruyter, 2007). In addition to financial bonding, stakeholders with a higher online interaction propensity are more sensitive to information sharing with NPOs and more aware of the importance of NPOs for social bonding, so they strengthen their relationships with NPOs and engagement in social media to help NPOs.

The moderated mediation analysis further revealed that the mediating role of organizational identification in the relationship between relationship-management tactics and social media engagement is contingent on online interaction propensity. In particular, the indirect effect of information sharing on social media engagement through organizational identification was

stronger when stakeholders had a higher propensity to interact online. This suggests that online interaction propensity amplifies the psychological mechanism of identification by increasing stakeholders' exposure to, and resonance with, the information shared by NPOs. As a result, stakeholders are more likely to perceive alignment with the organization and engage on its behalf. These findings are consistent with Blazevic *et al.* (2014), who showed that differences in online interaction propensity produce variations in online behaviors. Extending their insight, the present study demonstrates that interaction propensity not only shapes direct engagement behaviors but also conditions the psychological processes, such as organizational identification, through which NPOs foster stakeholder engagement. This highlights the central role of information sharing in digital exchange relationships and expands the application of social exchange theory to the online NPO context.

## 5.2 Theoretical implications

Based on the results of the study, this study has the following theoretical contributions. First, previous research on relationship management and social media engagement has focused on for-profit enterprises and the relationship between consumers and brands. The results of this study indicate that financial bonding has the weakest effect in driving NPO stakeholders' social media engagement. This finding aligns with Gee *et al.* (2023), who argued that NPO stakeholders prioritize organizational legitimacy, and altruistic missions over material incentives. Since financial bonding involves tangible items or monetary rewards, its effect on enhancing stakeholder engagement on social media is limited, which differs from for-profit organizations. Therefore, this study extends the work of Banerjee *et al.* (2023), who examined financial bonding in isolation, and highlights the need to re-examine social exchange theory within the context of NPOs. Specifically, although social exchange theory encompasses relational and symbolic rewards, our findings suggest that in mission-driven contexts, these forms of exchange play a more prominent role than material incentives, underscoring the unique relationship management dynamics of NPOs on social



media.

Second, this study addresses the limitation of previous research, which has examined multiple relationship management tactics in isolation rather than simultaneously. Drawing on the three tactics proposed by Auger and Cho (2021), this study systematically evaluates their effect within online contexts. Unlike earlier research focused primarily on offline participation, this study provides the first comprehensive analysis of these tactics in NPO social media contexts. The results support the social exchange theory perspective (Cropanzano and Mitchell, 2005): stakeholders assess exchange costs when deciding engagement behaviors. Low-cost forms of engagement, such as consumption, are most strongly influenced by information sharing, whereas high-cost behaviors like creation depend more heavily on social bonding. Importantly, the finding that social bonding exerts stronger effects on organizational identification and social media engagement than financial bonding departs from Auger and Cho (2021) and demonstrates the greater relevance of relational tactics in digital social environments. This comparative analysis enriches the understanding of NPO relationship management by clarifying how different tactics correspond to varying engagement levels.

Third, this study advances theory by uncovering the psychological mechanism and boundary conditions underlying the relationship between relationship management and social media engagement. Organizational identification is shown to partially mediate this relationship, confirming its role as a key psychological process through which stakeholders translate relationship investments into engagement. This extends the application of social exchange theory to online NPO environments, where organizational identification fosters reciprocity and participation. Moreover, by introducing online interaction propensity as a boundary condition, the study identifies individual differences that shape the effectiveness of relationship-management tactics. This responds to calls to contextualize social exchange theory (e.g. Blazevic *et al.*, 2014) and provides a theoretical basis for understanding when and for whom relationship tactics are most effective in digital communities.

### 5.3 Managerial implications

NPOs often operate under resource constraints, making it essential to leverage cost-effective tools such as social media to strengthen public relations and promote organizational goals. This study offers several practical insights for managers. The first is prioritizing relationship cultivation. This involves applying relationship management efforts to strengthen mutual linkage and enhance organizational identification. By applying tactics such as information sharing and social bonding, NPOs can strengthen stakeholders' organizational identification and, in turn, encourage higher engagement. Managers should view social media not only as a broadcasting channel but also as a relational platform where mutual trust and identification are actively built.

Second, NPOs should recognize that there are three levels of social media engagement and adjust tactics accordingly. For example, if a Facebook fan page shows a large fan base but limited reach, managers should emphasize information-sharing tactics: develop a posting schedule, share timely and relevant content, and ensure updates align with stakeholders' interests. If reach is adequate but likes, shares, and comments remain low, then social bonding becomes critical. Managers can implement low-cost interactive strategies, such as polls, Q&A sessions, or "Annual Goals Wish" activities that invite stakeholders to co-create organizational objectives. Direct responses to comments or private messages, along with seasonal greetings or short videos of appreciation, can further signal attentiveness and strengthen relational bonds. These activities are inexpensive, rely on built-in platform features, and are feasible even for resource-limited NPOs.

Third, in terms of stakeholder characteristics, stakeholders with high online interaction propensity play a pivotal role in amplifying NPO visibility and influence. Managers can identify these individuals through platform features, such as Facebook's "Top Fan" or "Most Frequent Commenter" badges. By closely monitoring their comments, providing timely responses, and offering exclusive recognition (e.g. special events or meet-ups for top fans), NPOs can

cultivate strong advocates who drive organic engagement. At the same time, for new or less active stakeholders, relationship management should focus on gradually strengthening organizational identification, ensuring that engagement is not limited to highly active users alone.

In sum, these insights suggest that effective NPO social media management is not about maximizing output but about strategically targeting relationship-building efforts. By differentiating tactics across engagement levels and stakeholder types, and by leveraging platform features that require minimal additional resources, NPOs can enhance stakeholder participation, improve organizational visibility, and advance their social missions.

#### **5.4 Limitations and future research suggestions**

This study provides new insights into the impact of relationship management efforts on NPOs' social media engagement, yet several limitations should be noted, each suggesting avenues for future research. First, although the sample included NPOs with diverse missions and respondents across different age groups, variations in social missions and generational differences may still shape stakeholders' reliance on and engagement with social media. Stakeholders affiliated with different types of NPOs may also hold distinct expectations and behaviors. Future research should therefore compare NPOs across social missions and generational cohorts to develop a more nuanced understanding of how relationship management tactics influence social media engagement.

Second, Facebook emerged as the dominant platform among respondents, with limited representation from other social media platforms. Given that engagement behaviors differ by platform (e.g. Instagram, YouTube, TikTok), future research should investigate cross-platform comparisons to assess whether the effects of relationship management efforts are platform-specific.

Third, this study concentrated primarily on relationship management tactics. While prior research has emphasized message design and presentation style, these two areas remain largely unintegrated. Future studies could combine both perspectives to investigate which types of messages are most effective when

paired with specific relationship management tactics, thereby advancing knowledge on how content and relational strategies jointly shape engagement.

Fourth, social media engagement is inherently dynamic and evolves over time. Because this study employed a cross-sectional design, it failed to capture longitudinal patterns. Future research should conduct long-term trend analyses or panel studies to understand how to sustain stakeholder enthusiasm and advocacy over time, as well as how relationship tactics contribute to ongoing visibility and resource mobilization for NPOs.

Finally, the relatively high average score of organizational identification and the moderate scores for financial and social bonding suggest that the risk of self-selection bias is limited. The survey design inherently requires participants to have some level of organizational identification, meaning that newer or less-committed stakeholders were underrepresented. Future research should explore how relationship management tactics influence newer stakeholders with weaker identification, possibly through longitudinal studies or experimental designs. Such studies could also incorporate control variables (e.g. frequency of information sharing) to more precisely capture how relationship-building strategies affect stakeholders at varying levels of identification.

## **Appendix A**

### **Financial bonding**

1. This NPO rewards regular donors or volunteers.
2. This NPO offers something extra to those who give a certain amount or volunteer.
3. This NPO allows donors or volunteers to participate in special events.

### **Information sharing**

1. This NPO consistently updates content on social media.
2. This NPO provides content that is relevant.
3. This NPO provides important information on social media.
4. This NPO provides credible information.
5. This NPO provides access to valuable information.
6. This NPO provides content that is useful.

### **Social bonding**

1. This NPO keeps in touch with me.
2. This NPO is concerned with my needs.
3. This NPO helps me resolve any problems I may have with them.
4. This NPO asked me what I thought of their services.

### **Organization identification**

1. I like this NPO.
2. I identify with the NPO's philosophy.
3. I know this NPO.
4. I take pride in participating in the charitable activities of this NPO.
5. I feel that this NPO sticks to its original social philosophy.
6. I feel that this NPO aligns with my values.

### **Online interaction propensity**

1. In general, I like to get involved in online discussions.
2. I am someone who enjoys interacting with like-minded individuals online.
3. I am someone who likes actively participating in online discussions.
4. In general, I thoroughly enjoy exchanging ideas with others online.

### **Consumption**

1. I read the content posted by the NPO on social media.
2. I view pictures or photos posted by the NPO on social media.
3. I watch videos posted by the NPO on social media.
4. I read posts or comments of others about the NPO on social media.

### **Contribution**

1. I 'like' content posted by the NPO on social media.
2. I share content posted by the NPO on social media with my friends.
3. I comment on content posted by the NPO on social media.
4. I comment on the content of others about the NPO on social media.

### **Creation**

1. I initiate posts related to the NPO on social media.
2. I post pictures or videos related to the NPO on social media.
3. I add labels or hashtags on my posts related to the NPO on social media.
4. I write reviews related to the NPO on social media.

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