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RESEARCH PAPERS

Humanitarian Relief and Development Organizations' Stakeholder Targeting Communication on Social Media and Beyond

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Abstract Nonprofit scholars have long considered stakeholder targeting communication (STC), an important mechanism of organizational accountability to meet stakeholders' diverse interests and needs. However, research has yet to systematically examine the antecedents and outcomes of organizations' STC to advance a more comprehensive understanding of how organizations manage accountability demands in the digital era. To address this gap, this study proposes a conceptual framework to explain how organizations' STC on social media (SM) is shaped by STC via non-SM channels and their external communication capacity and the resulting STC outcomes in the SM domain. Survey data from 156 humanitarian relief and development organizations on four continents showed that using non-SM channels to engage various groups of stakeholders helped build organizations' external communication capacity, which in turn helped improve their engagement in STC on SM. STC on SM further contributed to organizations' success in information dissemination, community building, and action mobilization outcomes on SM.

Keywords Accountability · Stakeholder theory · Social media · Communication capacity · Information and communication technologies (ICTs)

By engaging in relief and development activities (e.g., disaster preparedness and relief, human service, capacity building for vulnerable communities) that are unattended by the nation states (Lindenberg and Dobel 1999), humanitarian relief and development organizations (humanitarian organizations hereafter) play a crucial role in addressing grand challenges of our era. Because of the characteristics of their operations, humanitarian organizations often grapple with the question of how to manage accountability demands (Kennedy 2019; Mahmoud et al. 2019), or the relationship between organizations and the stakeholders to whom they make promises to perform certain actions and provide an account for their actions (Brown and Moore 2001; Costa et al. 2011).

Information and communication technologies (ICTs) have become important tools for humanitarian organizations to communicate with at-risk populations and increase marginalized groups' resilience in the digital age (Madianou et al. 2015; Merchant et al. 2011; United Nations 2015). In particular, humanitarian organizations have used social media (SM) such as Facebook and Twitter to communicate with a variety of stakeholders, including the media, other organizations, volunteers, and community members (Briones et al. 2011; Hou and Lampe 2015; Lai et al. 2019). But little is known about how humanitarian organizations use ICTs, including SM, to fulfill accountability. This gap is significant because organizations' communication on SM embodies their strategic efforts to meet the expectations of various targeted stakeholders, such as communities, grantseekers, and donors (Saxton and

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Guo 2014). Such public communication with stakeholders helps organizations manage the accountability demands, develop priorities and programs, and gain legitimacy from important stakeholders (Ospina et al. 2002). Because humanitarian organizations have relatively diffused stakeholders, including the populations most at risk to natural and man-made hazards, they consider stakeholder targeting communication (STC) a particularly salient issue in accomplishing operational goals (Brown and Moore 2001; Lindenberg and Dobel 1999). Hence, in order to advance understanding of how humanitarian organizations use SM to achieve accountability, it is necessary to examine how they engage in STC—strategic communication with disparate groups of stakeholders.

However, existing scholarship on STC through SM has several limitations. First, most prior studies have employed content analysis to examine the types of organizational posting on SM to aggregate and infer the types of stakeholders organizations seek to communicate with (e.g., Kim and Yang 2017; Svensson et al. 2015). This ignores targeting, a key component that reflects how organizations *perceive* their relationships with specific stakeholders (Mitchell et al. 1997). Notwithstanding recent interest in how organizations perceive their SM use for general stakeholder communication (e.g., Hambrick and Svensson 2015; Young 2017), empirical efforts have not examined what stakeholders organizations target on SM. This leaves open many questions concerning how organizations intend to use SM to meet diverse stakeholders' interests and needs as part of their accountability and mission fulfillment.

Second, little research has employed a holistic view to understand how organizations select media channels to communicate with various stakeholders based on the characteristics of the targeted stakeholders. Research on the factors (e.g., stakeholder focus and stakeholder ethnicity) that determine organizations' adoption and use of SM (Brown 2015; Nah and Saxton 2013) has not investigated the influence of these factors on organizations' STC. Thus, questions remain as to the factors that influence organizations' STC on SM, particularly the association between organizations' SM use and their use of non-SM channels for STC.

To address these research gaps, this study proposes a conceptual framework to explain organizations' STC on SM, the factors that influence such STC, and the outcomes of STC. The framework is tested through an online survey with 156 humanitarian organizations across the Asia-Pacific region, North America, and Europe. This study contributes to the nonprofit literature in two ways. First, this study examines the antecedents and outcomes of humanitarian organizations' STC on SM, thereby contributing to research on STC as an important mechanism of nonprofit accountability (Ospina et al. 2002). In contrast, prior research on nonprofit accountability has paid scant attention to accountability achieved via different types of ICTs, the factors that influence the fulfillment of accountability, and the evaluation of accountability outcomes in a single study. Meanwhile, this study also offers empirical support to the literature of nonprofit accountability and stakeholder theory by identifying how the stakeholders organizations target on SM and beyond SM reflect differential considerations of stakeholder attributes and relationships.

Second, this research highlights how organizations' use of non-SM channels for STC is related to external communication capacity and how this in turn helps organizations engage in STC on SM. This examination is necessary to understand how organizations may adjust their SM use to accommodate disparate stakeholders' technology access and use (Brown 2015; Campbell et al. 2014). In this way, this study also contributes to the literature on nonprofit capacity building, particularly external communication capacity (Shumate et al. 2017).

Literature Review

Nonprofit Accountability, Stakeholder Theory, and STC

Accountability is a social practice that embodies interdependence of action among stakeholders and organizations (Roberts 1991). Depending on the focus of the operation, nonprofits are accountable to different types of stakeholders (Brown and Moore 2001). Stakeholders "have the right to be involved in all phases and levels of the performance management cycle of an entity" (Murtaza 2012, p. 112). In short, accountability is a duty to perform promised actions and provide an account to stakeholders for these actions (Costa et al. 2011; Gray et al. 1996). Engaging in accountability activities helps nonprofits to maintain relationships with stakeholders and enhance performance (Benjamin 2008; Murtaza 2012).

Recently, studies have examined organizations' SM use in relation to accountability (e.g., Bonsón et al. 2015; Liu and Xu 2019). For example, employing the affordances lens, Stamati et al. (2015) identified a list of SM affordances that facilitates accountability fulfillment in the public sector. Nonetheless, few works have examined how nonprofits undertake accountability through different types of ICTs, including SM, or considered the factors that influence the fulfillment of accountability enabled through ICTs. According to Mashaw (2006) and Murtaza (2012), three important questions to address nonprofit accountability research are: (a) to whom organizations are accountable (i.e., targeted stakeholders), (b) how

accountability is achieved (i.e., accountability mechanism), and (c) what is accountability for (i.e., accountability outcomes). Yet there is a lack of systematic effort that examines these aspects in a single study.

To address these gaps, this study draws on the literature on stakeholder theory, nonprofit capacity, and accountability to develop a conceptual framework to understand STC as an important mechanism of accountability (Ospina et al. 2002). It explicates humanitarian organizations' STC on SM, the factors that influence how STC on SM is carried out (STC via non-SM channels, external communication capacity), and the evaluation of STC outcomes in the SM domain (SM-specific outcomes) (Fig. 1).

Stakeholder identification and engagement is an important element of accountability (Costa et al. 2011). Stakeholder theory posits that organizations should take into consideration the needs and interests of a wide variety of stakeholders during decision-making (Donaldson and Preston 1995). Hence, organizations must determine on an ongoing basis "who is a stakeholder, and what is at stake" (Mitchell et al. 1997, p. 855). Organizational performance depends on satisfying multiple stakeholder interests (Donaldson and Preston 1995).

Two approaches to understanding stakeholder identification explain how organizations' perceptions of stakeholder attributes or their relationships with stakeholders affect their attention to stakeholders through STC. First, Mitchell et al. (1997) identified stakeholders as those who have power to influence organizations, have legitimate relationships with organizations, or hold urgent claims on organizations. They suggested that organizations accord salience to stakeholders based on whether they have some or all these attributes. Second, addressing the question of stakeholder identification from both the perspectives of organization and stakeholders, Friedman and Miles (2002) proposed that an organization's relationship with its stakeholders depends on two key dimensions: (a) necessity and (b) compatibility. Moreover, organizations' operational focus determines their strategies of engaging with different types of stakeholders. For example, when organizations focus on service delivery, service beneficiaries are their value creation stakeholders; resource providers (e.g., donors), service experts, and regulators are support and legitimacy stakeholders; and staff members and partners are operational stakeholders (Brown and Moore 2001). Because of different types of relationships with stakeholders, organizations implement different strategies in communicating with them (Friedman and Miles 2002).

With the growing interest in how ICT use helps organizations manage stakeholder relationships (e.g., Hambrick and Svensson 2015; Young 2017), empirical studies have been dedicated to understanding organizations' STC on SM (Guo and Saxton 2018; Saxton and Guo 2014; Xu and Saxton 2018). For example, during natural disasters, public organizations may prioritize their STC on SM to stakeholders that hold greater urgency or power, such as citizens, media organizations, and peer government agencies (Liu and Xu 2019).

Two issues, however, are observed concerning this line of research. First, most of these studies did not examine

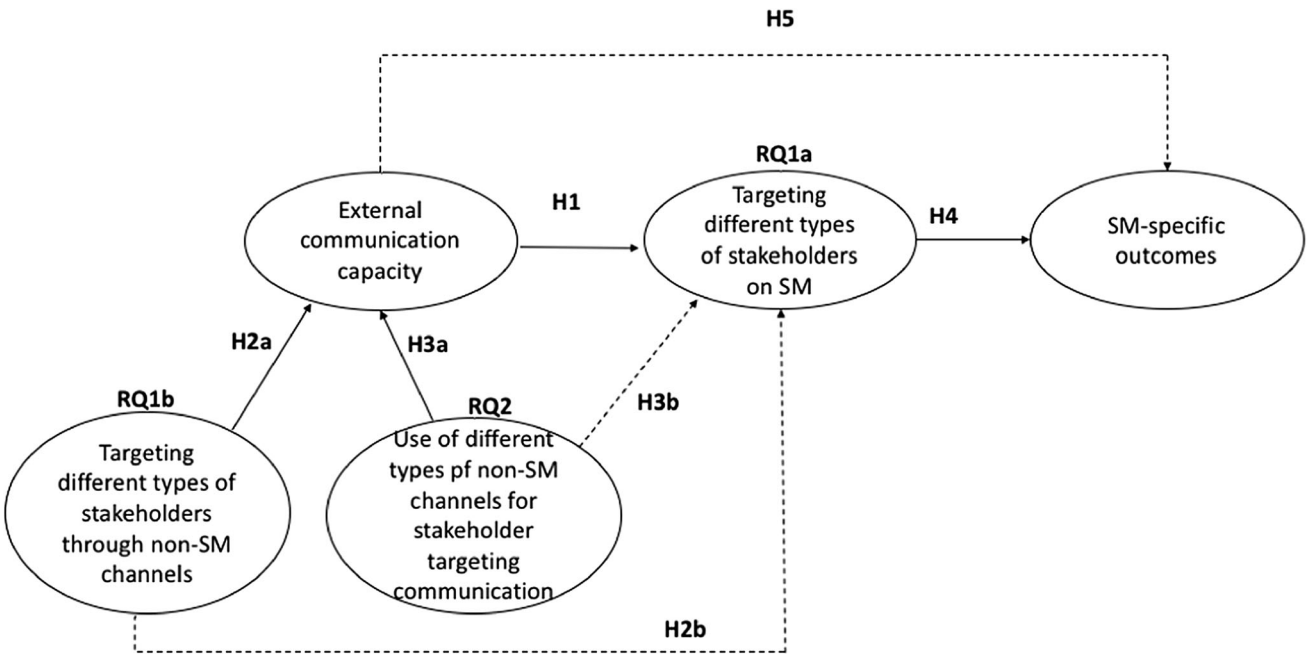

Fig. 1 A conceptual framework of accountability through STC on SM. *Note* Dashed lines indicate indirect effects

organizations' *perceptions* of targeted stakeholders. STC is an inherent part of organizations' decision-making to satisfy multiple stakeholder interests (Friedman and Miles 2002; Mitchell et al. 1997). Stakeholders to whom organizations are held accountable should be considered as context dependent and socially constructed (Sinclair 1995; Williams and Taylor 2013). Therefore, organizations' decisions of who to target and to be accountable for should be approached from the perceptions of organizations.

Second, there is a lack of consideration of STC beyond SM. Stakeholder theory posits that organizations should pay attention to all legitimate stakeholders' interests as they have intrinsic value to the organization (Jones and Wicks 1999). This requires organizations to serve stakeholders who have limited or no access to advanced ICTs (Brown 2015; Campbell et al. 2014; Madianou et al. 2015). This issue is especially important to humanitarian organizations as they often have relatively diffused stakeholders with a diversity of operational foci (Brown and Moore 2001; Lindenberg and Dobel 1999). Invariably, accountability involves the constant monitoring of the extent to which focal organizations do what they have promised to different stakeholder groups (Brown and Moore 2001). STC via different types of media platforms (e.g., face-to-face conversations, newsletters) is thus important to manage accountability demands (Ospina et al. 2002). Further, as Lu Knutsen and Brower (2010) argued, nonprofits often embrace both expressive and instrumental dimensions of accountability in their operations. The former includes advocacy, promotion of values and voluntarism, and civic engagement for public good; the latter includes service delivery and revenue generation for self-interest. Hence, using both SM and non-SM for STC is more likely to help organizations balance both expressive and instrumental accountabilities.

Compared to non-SM channels, targeting specific stakeholders on SM may be associated with the unique characteristics of SM, which may reflect organizations' intended differential symbolic and image-building efforts. For example, organizations may write the message to frontstage and backstage audiences, with the former emphasizing organizations' positive presentation and the latter highlighting their authentic identity (Marwick and Boyd 2011). Some targeted stakeholders, such as fans and followers of organizations' SM accounts, are enabled only through SM. At the same time, organizations may use non-SM channels for STC to hold themselves accountable to stakeholders that may not be reachable through SM.

Given the lack of consideration of organizations' perceptions of their STC and the examination of STC through different types of ICTs, we first ask the following research question (RQ) to examine humanitarian organizations' perceived targeted stakeholders on SM and non-SM channels.

RQ1 What are the types of stakeholders humanitarian organizations perceive they target (a) on SM and (b) through non-SM channels?

External Communication Capacity and STC on SM

Managing accountability demands is related to nonprofit capacity (Lu Knutsen and Brower 2010), which is particularly important to fulfill accountability via ICTs (Saxton and Guo 2011). Indeed, SM use requires resources and various types of capacities (e.g., funding, knowledge, personnel; Brown 2015; Goldkind 2015) and having such capacities predicts nonprofits' use of SM to engage with stakeholders (Anagnostopoulos et al. 2017). In particular, accomplishing strategic actions of mobilizing support and service delivery relies on humanitarian organizations' ability to communicate value and mission to stakeholders (Brown and Moore 2001). Achieving STC on SM thus depends on external communication capacity, or organizations' ability to engage in communication with their stakeholders (Balser and McClusky 2005; Shumate et al. 2017).

External communication capacity refers to the ability of organizations to regularly use ICTs, public relations strategies, and strategic media campaigns to communication with various stakeholder groups (Shumate et al. 2017). It is often associated with an organization's capacity of adapting to changes in the external environment (Shumate et al. 2018). Accordingly, external communication capacity may be an important foundation of humanitarian organizations' STC on SM. As such, we hypothesize that organizations with a higher level of external communication capacity engage in a higher level of STC on SM.

H1 Humanitarian organizations' external communication capacity is positively related to their STC on SM.

STC Beyond SM, External Communication Capacity, and STC on SM

Nonprofits' strategic use of various ICTs for STC is an important way to manage accountability demands (Ospina et al. 2002). Previous research has found evidence that generic ICT use and capacity predict organizations' SM adoption and use (Nah and Saxton 2013; Zorn et al. 2013). Yet prior studies have often overlooked the examination of how organizations use non-SM channels for STC may determine STC enacted on SM. More importantly, it is possible that organizations build external communication capacity in the process of strategizing their communication with targeted stakeholders via non-SM channels (Shumate

et al. 2017). This process enables organizations to improve external communication capacity. Subsequently, enhanced communication capacity equips organizations with the capacity of using SM for STC. Hence, we hypothesize that organizations' STC practiced through non-SM channels helps improve external communication capacity, which in turn facilitates organizations' STC on SM.

H2 Humanitarian organizations' STC via non-SM channels is positively related to (a) external communication capacity and (b) STC on SM through external communication capacity.

Nonprofits may use non-SM channels such as emails, phone calls, news media, or face-to-face conversations to communicate with stakeholders relevant to their operational focus (Brown 2015). Using different types of channels embodies different levels of social presence and social cues (Rice 1993) that organizations can convey to targeted stakeholders. Nonetheless, beyond Web sites (e.g., Saxton and Guo 2011, 2012), few studies have examined the types of non-SM channels used for accountability, and in particular STC, not to mention the differentiation of the types of media channels to build nonprofits' external communication capacity. Building on the literature of accountability that emphasizes the use of various ICTs for accountability management (Ospina et al. 2002), we explore the various non-SM channels humanitarian organizations use for STC. Moreover, we argue that organizations' use of these non-SM channels for STC will be associated with increased external communication capacity, which in turn facilitates STC on SM.

RQ2 What are the types of non-SM channels humanitarian organizations use for STC?

H3 Humanitarian organizations' use of non-SM channels for STC is positively related to (a) external communication capacity and (b) STC on SM through external communication capacity.

Outcomes of STC on SM

Research has explored different measures to evaluate accountability through nonprofits' generic use of online technologies, such as the indices of disclosure and dialogue (Saxton and Guo 2011) and the dimensions of accessibility, engagement, performance, governance, and mission (Dumont 2013). Nonetheless, less attention has been paid to examining the accountability outcomes from nonprofits' STC enabled through ICTs, especially SM. Given that STC involves communication with stakeholders, understanding the outcomes of accountability achieved through STC on SM helps identify the ways to enhance stakeholders' capacities to scrutinize organizations' performance relevant to their mission fulfillment (Murtaza 2012).

Two lines of research have examined the outcomes of nonprofits' SM use. The first examines outcomes of SM use in terms of public reactions, using measures such as the number of retweets and likes (e.g., Kim and Yang 2017; Saxton and Waters 2014). The second focuses on evaluating the extent to which SM helps nonprofits share information, build community, and mobilize action (Campbell et al. 2014; Young 2017), or engage in more personalized communication with specific stakeholders (Goldkind 2015). However, neither stream has associated these outcomes with nonprofits' STC on SM. Meanwhile, the few studies that have tackled the topic of STC outcomes on SM (Guo and Saxton 2018; Saxton and Guo 2014; Xu and Saxton 2018) have measured STC and outcomes through the analysis of the messages (e.g., purpose of the message) or system-generated data (e.g., the number of retweets or mentions, number of users who mentioned the organizations). Given that STC is an inherent part of organizations' decision-making to satisfy stakeholder interests and to achieve organizational performance (Donaldson and Preston 1995; Mitchell et al. 1997; Friedman and Miles 2002), organizations' self-evaluation of STC and the associated outcomes also stands to illuminate their workings.

In one of the most-cited works on nonprofits' SM use, Lovejoy and Saxton (2012) proposed the information–community–action framework, which captures three functions of SM: disseminating information (e.g., providing information about community operations), building community (e.g., responses to inquiries), and mobilizing action (e.g., call for volunteers and donations). These three functions represent the three major types of SM use by nonprofits (Hou and Lampe 2015; Saxton and Waters 2014; Svensson et al. 2015). Most importantly, the extent to which nonprofits are able to disseminate information, build community, and mobilize actions corresponds to the dimensions of disclosure and dialogue in the literature of online accountability (Dumont 2013; Saxton and Guo 2011). These three dimensions can thus be used as a type of performance criteria in determining organizations' accountability mechanism (Murtaza 2012; Williams and Taylor 2013), which is, in this study, organizations' STC on SM. Building on the information–community–action framework, we hypothesize that humanitarian organizations' STC on SM is positively related to their perceived achievement of these outcomes through SM.

H4 Humanitarian organizations' STC on SM is positively related to the accomplishment of SM-specific outcomes (i.e., information, community, and action).

Past research shows that nonprofits' self-evaluation of external communication capacity is positively related to self-perceived outcomes such as program effectiveness and client satisfaction with the products and services organizations provide (Shumate et al. 2017). Considering the association between external communication capacity and STC practiced through SM, we further hypothesize that humanitarian organizations' external communication capacity helps with their STC on SM, which in turn facilitates the achievement of self-perceived SM-specific outcomes.

H5 Humanitarian organizations' external communication capacity is positively related to the accomplishment of SM-specific outcomes through STC on SM.

Method

Sample

Data were collected through an online survey with organizations that provide humanitarian relief and development services (e.g., environment conservation, community and economic development, disaster education) in Asia, Oceania, North America, and Europe. The sampling frame was the directory of the Global Network of Civil Society Organizations for Disaster Reduction (GNDR).[1] We chose this list because humanitarian relief and development services encompass a broad range of disaster risk reduction measures, including preventing new risks, reducing the impact of existing risks, and increasing the resilience of individuals, organizations, and communities (United Nations 2015).

Procedure

We worked with *Research Now* (now known as Dynata), a global market research company, to reach out to the 452 organizations that operate in the Asia-Pacific region, North America, and Europe listed in the GNDR directory, from July 11 to August 5, 2016. In addition, we contacted the organizations in these regions that focus on services broadly relevant to humanitarian relief and development (e.g., environment protection and development) through *Research Now*'s partners. Over 5000 phone calls to the receptionists of these organizations produced 700 responses from the qualified organizational members (response rate = 14%) who were invited to answer the survey. In the invitation phone call, we expressed our preference to speak to the personnel in charge of SM policy in each organization. SM policy and implementation were defined broadly that included organizations' ICT use for external communication. Because most organizations had multiple members in charge of SM policy, we permitted more than one respondent to fill out the survey on behalf of an organization.

Among the 700 invited respondents, 379 answered the survey. But only 357 respondents from 156 organizations completed the survey with valid responses (M = 2.28, SD = 0.83). The responding organizations were located in Japan (n = 49, 31.41%), the USA (n = 47, 30.13%), the UK (n = 25, 16.03%), the Philippines (n = 12, 7.69%), Singapore (n = 9, 5.77%), Switzerland (n = 6, 3.85%), Australia (n = 5, 3.21%), and Germany (n = 3, 1.92%). On average, the participants had been working in their organization for 4.06 years (SD = 2.58). Among the 156 organizations, 144 organizations have an SM account, with Facebook (90%) being nominated as the most popular SM, followed by Twitter (75.5%) and YouTube (51.2%).

Because we had multiple respondents from each organization in the majority of the sample (n = 151), we computed the mean percentage agreement. Following Shortell and Zajac (1990), we calculated the percentage of paired responses that were either identical or within one interval of one another (see also Boyer and Verma 2000). The average percentage agreement across organizations for all the variables in this study was 85.87%. The good percentage agreement suggested that we could continue to calculate the mean scores for each organization. For binary variables, in the case of discrepancies between/among respondents from the same organization, we settled on the "yes" option on the assumption that a "no" might indicate ignorance of the organization's use of certain media channels.

Measures

Types of targeted stakeholders on SM were developed based on existing research identifying the most important stakeholder groups for nonprofits involved in environment protection and development operations, including news media, institutional and citizen collaborators/competitors, beneficiaries, funders, and service regulators (Brown and Moore 2001; Friedman and Miles 2002; Hou and Lampe 2015; Van Puyvelde et al. 2012). We asked respondents to indicate how often they imagine each of 11 types of stakeholders read their posts on SM on a 5-point scale (from 1 = never to 5 = always). They were: (1) news organizations, (2) other nonprofits providing similar services, (3) other nonprofits providing different services, (4) citizen-based groups, (5) volunteers, (6) general members of the community, (7) donors, (8) companies/ firms, (9) public agencies, (10) abstract audience, and (11)

[1] https://community.gndr.org/s/gndr-members?language=en_GB.

fans/followers of SM account. The categories of abstract audience and fans/followers embody the unique or expressive aspect of behavior on SM (Litt and Hargittai 2016). By presenting these 11 types individually, we invited respondents to think of them as mutually exclusive categories.

Types of targeted stakeholders via non-SM channels were evaluated by asking respondents to identify whether they used non-SM channels to target nine types of stakeholders not reached/reachable through SM. The nine categories were the same as those used to measure organizations' targeted stakeholders on SM, except for abstract audience and fans/followers of the organization's SM account. In light of the difficulty in assessing the frequency of targeting those stakeholders across different media channels, the binary option (0 = no, 1 = yes) was used.

Types of non-SM channels used to target stakeholders were evaluated by asking respondents to identify the types of non-SM channels organizations use to communicate with stakeholders not reached/reachable through SM on a 5-point scale (from 1= never to 5 = always). These included nine categories: (1) face-to-face conversations, (2) text messaging, (3) mobile messaging, (4) organizational Web site, (5) print flyers/newsletters, (6) emails, (7) online newsletters, (8) phone calls, and (9) traditional media.

External communication capacity was measured adopting Shumate et al.'s (2017) instrument of nonprofits' external communication capacity on a 5-point scale (1= strongly disagree, 5 = strongly agree). Two items (i.e., cause-related funding activities and communication campaigns) were removed due to low loadings (see Appendix).

SM-specific outcomes referred to the ways that SM use helps organizations fulfill the functions of information dissemination, community building, and action mobilization. Following Lovejoy and Saxton's (2012) information–community–action framework, we asked respondents how they think SM use helps their organization accomplish the 12 aspects on a 5-point scale (1 = strongly disagree, 5 = strongly agree; see Appendix).

Organizational size described the number of full-time and part-time employees and was included as a control variable (1 = fewer than 10, 2 = 11–50, 3 = 51–100, 4 =101–500, 5 = more than 500).

Analysis

In answering RQ1 and RQ2, we performed principal component factor analysis with varimax rotation to identify organizations' targeted stakeholders on SM (i.e., *SM STC*; RQ1a) and the types of non-SM channels used to target stakeholders beyond SM (i.e., *non-SM channels*; RQ2). Because the types of stakeholders targeted via non-SM channels (i.e., *non-SM STC*; RQ1b) were measured using binary data, we used cluster analysis. Hierarchical cluster analysis with squared Euclidean distances was chosen because its versatility accommodates the situation without any assumption about the priori number of clusters to be detected (Jain et al. 1999). The appropriate number of clusters was determined by the scree plot (number of clusters plotted against distance coefficients), between-cluster distance coefficients ratios (larger ratios representing greater separation between clusters), and theoretical examination (Flanagin and Metzer 2001). Factor analysis and cluster analysis were then followed by the verification of measure reliability and validity through partial least squares (PLS) modeling (average variance extracted, AVE, above .50 and composite indicator reliability above .70; Henseler et al. 2009) (Table 1).

PLS path modeling was used to test the five hypotheses. Similar to structural equation modeling (SEM), PLS tests both measurement and structural models. Unlike SEM, PLS focuses on model prediction and is appropriate for exploratory studies with moderate sample sizes (Henseler et al. 2009). In this study, we used Smart PLS 3 for PLS modeling (Temme et al. 2010).

To aid interpretation of the results, in addition to the original model, we developed a second-order level model by creating second-order constructs for the four multidimensional variables (*SM STC, non-SM channels*, *non-SM STC*, and *SM-specific outcomes*). The latent scores for these second-order constructs and the first-order construct (external communication capacity) were first generated from the initial model containing all the variables.[2] Then, these latent scores were used to estimate the final model.

Results

Research Questions

In answering RQ1 and RQ2, we present the findings regarding the types of targeted stakeholders on SM and outside of SM (RQ1) and the types of non-SM channels used for STC (RQ2).

Types of stakeholders targeted on SM. The preliminary factor analysis revealed three groups of stakeholders targeted on SM, which accounted for 60.13% of the variance. In the PLS model, the item of abstract audience was removed due to low loading. Following the dramaturgical

[2] The first-order constructs were modeled as formative indicators of the second-order constructs. For example, three groups of stakeholders (backstage, frontstage, and border) were combined to form the second-order construct—SM STC. More details are available from the authors.

Table 1 Summary of intercorrelations among the study variables

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Organizational size	–	− .08	− .21*	− .14	− .04	− .05	− .20*	.00	.05	.05	− .05	− .11	− .04	− .21*	− .12
2	SM backstage stakeholders		–	.47***	.41***	.14	.14	.26**	.17*	.03	− .15	− .09	.40***	.29***	.24**	.28**
3	SM frontstage stakeholders			–	.52**	.30***	.40***	.53***	.23**	.09	.00	− .02	.44***	.39***	.38***	.55***
4	SM border stakeholders				–	.29**	.37***	.40***	.19*	.09	.04	.02	.49***	.33***	.37***	.46***
5	SM information outcome					–	.46***	.42***	.11	.03	.02	.03	.24***	.18*	.34***	.47***
6	SM community outcome						–	.64***	.08	.27**	.06	.11	.38***	.24**	.44***	.59***
7	SM action outcome							–	.10	.15	− .07	.11	.49***	.32***	.46***	.66***
8	Non-SM cross-sector partners								–	.09	.09	− .03	− .04	.15	.05	.18*
9	Non-SM citizen-based groups									–	.02	.22**	.01	.01	.13	.18*
10	Non-SM volunteers										–	.21**	− .09	.02	− .07	.03
11	Non-SM news organizations											–	− .03	.13	.16	.20*
12	Non-SM social channels												–	.19*	.35***	.48***
13	Non-SM semi-social channels													–	.35***	.48***
14	Non-SM low-social channels														–	.59***
15	External communication capacity															–
	# of items	1	2	6	2	1	3	3	2	1	1	1	3	2	3	5
	Mean	2.98	3.76	3.80	3.77	4.01	4.07	4.03	0.33	0.65	0.56	0.28	3.84	3.91	3.93	4.01
	SD	0.89	0.61	0.49	0.56	0.56	0.50	0.45	0.37	0.48	0.50	0.45	0.46	0.49	0.49	0.41
	AVE	–	0.73	0.52	0.71	–	0.51	0.56	0.63	–	–	–	0.55	0.68	0.61	0.51
	Composite reliability	–	0.85	0.86	0.83	–	0.76	0.79	0.77	–	–	–	0.79	0.81	0.83	0.84

*$p < .05$, **$p < .01$, ***$p < .001$

metaphor in understanding SM use for self-presentation and image-building (Marwick and Boyd 2011), we labeled Group 1 as *backstage stakeholders*, featuring two types of entities: other nonprofits providing similar services and news organizations. Organizations may present a more authentic identity to those entities, given similar background or journalistic ways of obtaining insights from the organization. Group 2, labeled as *frontstage stakeholders,* had six types of entities: other nonprofits providing different services, volunteers, general members of the community, donors, companies/firms, and public agencies. Organizations may be more conscious of presenting themselves in a positive way in front of this group of stakeholders for mission and accountability fulfillments than those in the first group. Group 3 was labeled as *border stakeholders* because organizations may have relatively limited arenas of interaction with them. This group included citizen-based groups and fans/followers of organizations' SM account. Connecting back to Mitchell and colleagues' (1997) theorizing, border stakeholders are likely those who have limited power to influence organizations, have no legitimate relationships with organizations, or do not hold urgent claims on organizations. This group of stakeholders is often less prioritized by the organization unless in certain circumstances such as organizational scandals (Alpaslan et al. 2009). Essentially, the type of relationships with border stakeholders determines how organizations communicate with them (Friedman and Miles 2002).

Types of stakeholders targeted via non-SM channels For the stakeholders targeted via non-SM channels, the results of cluster analysis showed that the scree plot leveled off after four clusters. In the agglomeration schedule, we found the dissimilarity ratio was the greatest between Clusters 1 and 2 (ratio: 1.10) and between Clusters 3 and 4 (ratio: 1.10). Combining these tests and coupling them with the identification of multiple stakeholder groups from previous research (e.g., Brown and Moore 2001; Van Puyvelde et al., 2012), we chose a 4-cluster solution. In the PLS model, we removed the items of other nonprofits providing similar and different services, donors, and general members of the community due to low loadings. Following existing research on stakeholder groups (Brown and Moore 2001; Van Puyvelde et al. 2012), we labeled Cluster 1 as *cross-sector partners*, which included companies/firms and public agencies. The other three single-entity clusters were labeled as *citizen-based groups*, *volunteers*, and *news organizations*, respectively.

Types of non-SM channels As for the types of non-SM channels organizations used for STC, the preliminary factor analysis revealed three tiers of channels, which accounted for 59.47% of the variance. In the PLS model, we removed the item of mobile messaging due to low loading. The three tiers of non-SM channels represented different levels of social presence and social cues conveyed through the medium (Rice 1993). We labeled Tier 1 as *social channels*, featuring face-to-face conversations, text messaging, and organizational Web site. This group included media channels that provide ample social cues or allow diverse ways of feedback and interaction. Tier 2 was associated with *semi-social channels*, including phone calls and traditional media. Tier 3, *low-social channels*, had three items: print flyers/newsletters, emails, and online newsletters.

Hypothesis Testing

Hypotheses were tested by examining the significance of the path coefficients through asymptotic *t*-statistics, which we obtained through bootstrapping resampling ($n = 5000$). External communication capacity positively predicted STC on SM, which was then positively associated with the accomplishment of SM-specific outcomes (Fig. 2). Hence, H1 and H4 were supported. Inspecting further, we found that external communication capacity predicted all three types of stakeholders targeted on SM (Fig. 3). Yet targeting different groups of stakeholders resulted in different outcomes. Targeting frontstage stakeholders on SM was positively associated with all three SM outcomes, whereas targeting border stakeholders only predicted community building. External communication capacity was indirectly related to SM outcomes through SM STC, supporting H5 (Fig. 2). In particular, external communication capacity was positively related to all three types of SM outcomes through SM STC (information: $\beta = .19$, $t = 3.37$, $p < .01$; community: $\beta = .28$, $t = 4.69$, $p < .001$; action: $\beta = .31$, $t = 5.72$, $p < .001$).

The PLS results showed that using non-SM channels and non-SM STC significantly predicted external communication capacity directly and were associated with SM STC indirectly through external communication capacity (Fig. 2). Hence, H2 and H3 were supported. Specifically, use of each of the three groups of non-SM channels had significant indirect effects on SM STC. For example, use of social channels was significantly positively related to the targeting of backstage stakeholders ($\beta = .09$, $t = 2.82$, $p < .01$), frontstage stakeholders ($\beta = .17$, $t = 4.87$, $p < .001$), and border stakeholders ($\beta = .14$, $t = 3.69$, $p < .001$) on SM through external communication capacity. At the same time, among the four stakeholder groups, only targeting cross-sector partners (public agencies and companies) via non-SM channels was positively associated with external communication capacity (Fig. 3). Moreover, targeting cross-sector partners was positively related to targeting frontstage stakeholders on SM indirectly through external communication capacity ($\beta = .07$, $t = 1.99$,

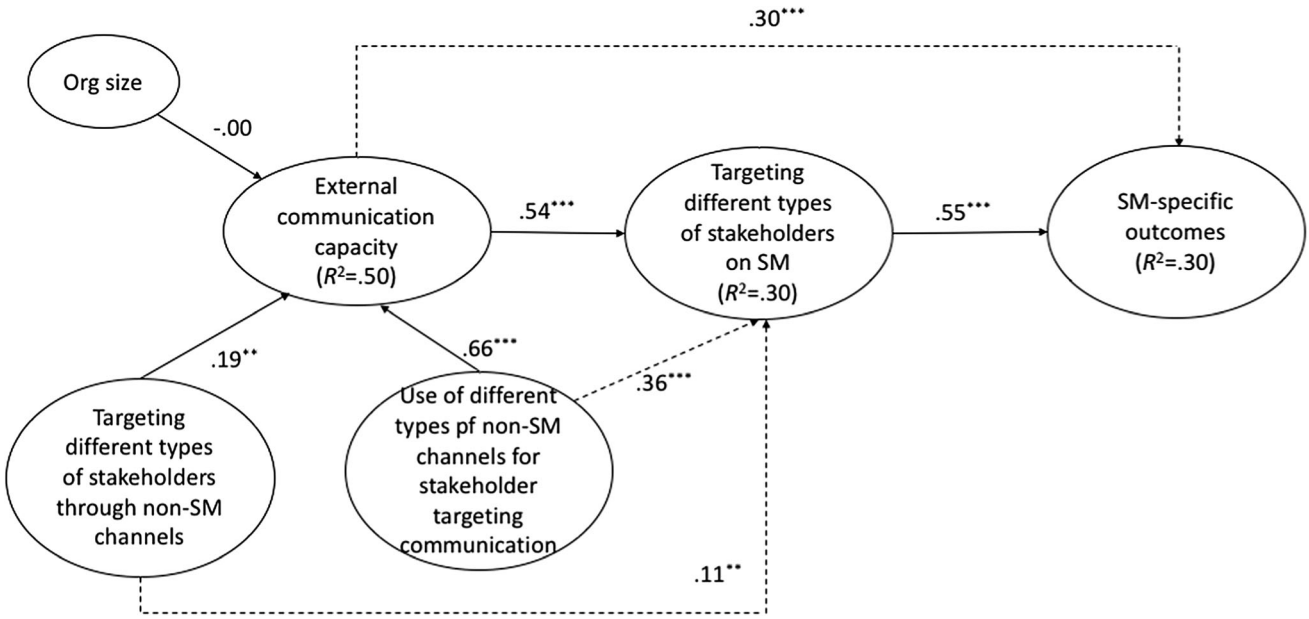

Fig. 2 Resulting PLS model with second-order constructs. *Note* Dashed lines indicate indirect effects. Standardized coefficients are displayed. $^{**}p < .01$, $^{***}p < .001$

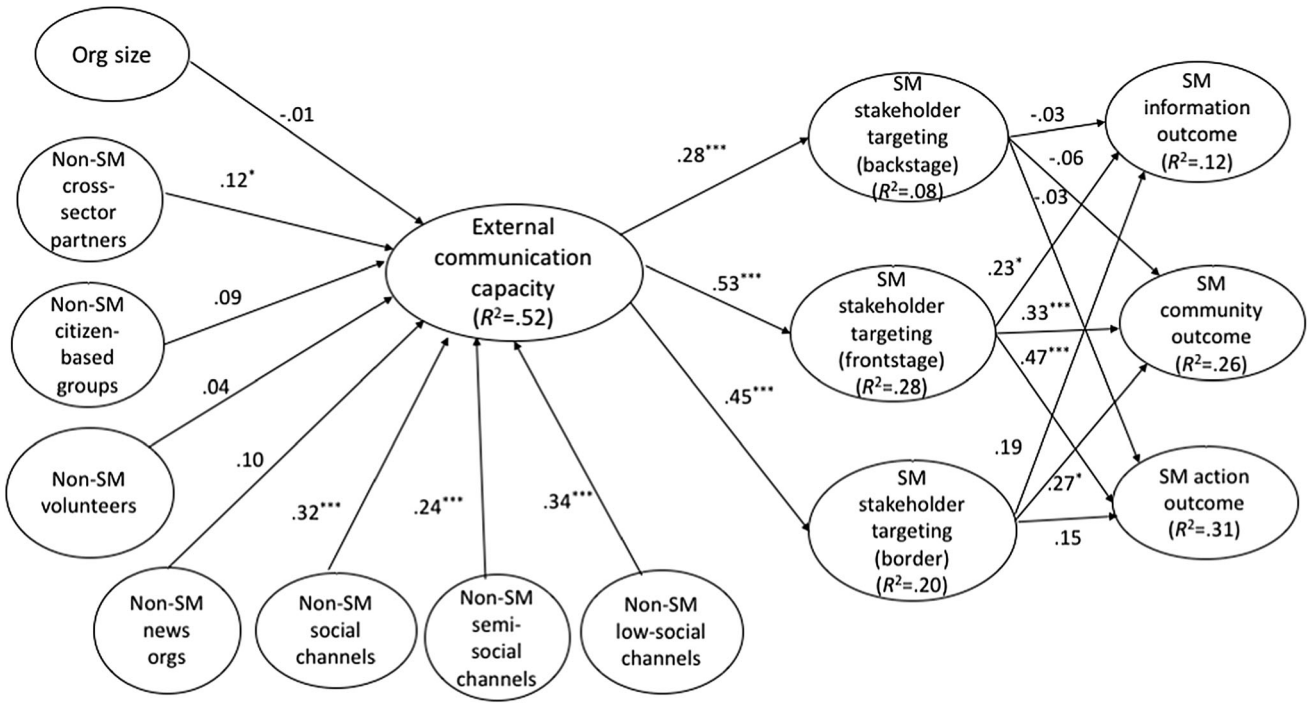

Fig. 3 Resulting PLS model. *Note* Standardized coefficients are displayed. $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$

$p < .05$). Thus, organizations' STC through non-SM channels, particularly targeting cross-sector partners, enhanced their external communication capacity, which in turn helped their SM STC.

We used two criteria to evaluate the overall performance of the model. First, the R^2 values for the three endogenous variables all exceeded .26 (Cohen 1988) for large effect sizes, which supported the argument that the conceptual model offered an adequate explanation of the analytical results (Fig. 2). For the first-order level model (Fig. 3), the R^2 values for five of the seven endogenous variables exceeded .20. This was acceptable given that three

endogenous variables were only estimated by one predictor. Second, the goodness-of-fit (GoF) index, a global criterion of GoF for PLS path modeling, was 0.39, exceeding the cutoff value of 0.36 for large effect sizes (Wetzels et al. 2009).[3] In sum, the results indicated a good predictive performance of the model.

Discussion

Nonprofit accountability research typically focuses on addressing (a) the types of stakeholders to whom nonprofits are accountable, (b) the mechanisms of how accountability is fulfilled, and (3) the evaluation criteria of accountability outcomes (Mashaw 2006; Murtaza 2012). Nonetheless, few works have systematically addressed these aspects in a single study, even less attention paid to the humanitarian organizations, who play critical roles in addressing global challenges such as poverty, disaster, health pandemics, and climate change (Lindenberg and Dobel 1999). Given that STC is an important mechanism of accountability (Ospina et al. 2002), this study offers a comprehensive understanding of humanitarian organizations' STC across different ICTs and the resulting STC outcomes in addressing these gaps.

Types of Stakeholders Targeted on SM and Non-SM Channels

Research on accountability has noted the lack of attention to nonprofit accountability mechanisms directed to stakeholders other than donors and governments (Murtaza 2012) or the stakeholders that provide resources (Hug and Jäger 2014). In filling the void, this study sheds light on the specific stakeholders that humanitarian organizations target through SM and non-SM channels to enhance accountability fulfillment. Findings of this study are important for future research to explore how organizations communicate and are held accountable to different types of stakeholders via various types of channels. Echoing the existing literature on stakeholder identification (Friedman and Miles 2002; Mitchell et al. 1997), this study reveals that humanitarian organizations' STC on and beyond SM reflects varying considerations of salient stakeholders. Specifically, Mitchell et al. suggest that organizations give salience to stakeholders based on the extent to which they hold the attributes of power, legitimacy, and/or urgency, whereas Friedman and Miles consider stakeholders based on the dimensions of necessity and compatibility.

On SM, humanitarian organizations appear to engage in the trio strategies of STC. Three groups of targeted stakeholders on SM emerge. Backstage groups may hold power, legitimacy, and/or urgent claims over the organizations in different domains. In comparison, frontstage stakeholders represent mixed levels of attributes as salient stakeholders; their relationships with the organizations may be both necessary/contingent and compatible/incompatible on and beyond SM. Border stakeholders may possess limited power, legitimacy, or urgency over the organizations in sporadic cases (e.g., SM only, in the community context).

Outside the SM domain, however, the need to be accountable to the types of stakeholders relevant to operational focus (Brown and Moore 2001) or those that provide resources (Hug and Jäger 2014) may drive humanitarian organizations' stakeholder targeting. Organizations use three major tiers of non-SM channels—social (e.g., text messaging), semi-social (e.g., phone calls), and low-social channels (e.g., emails)—to target four groups of stakeholders: (1) cross-sector partners who provide resources (i.e., public agencies and companies), (2) citizen-based groups, (3) volunteers, and (4) news organizations. While the first of these holds power, legitimacy, and urgency (Mitchell et al. 1997), we speculate that the other three may hold only one or two of these attributes, and they may have contingent and incompatible relationships with the organizations (Friedman and Miles 2002). Together, these findings yield insights into the reasoning behind humanitarian organizations' accommodation of diffused stakeholders' needs and interests by resorting to different types of media channels (Madianou et al. 2015).

A Conceptual Framework of Accountability through STC on SM

This study responds to the call for a more holistic understanding of nonprofit accountability by considering the types of stakeholders and the mechanisms of accountability in defining the meaning of accountability outcomes (Williams and Taylor 2013). Specifically, this research examines humanitarian organizations' STC on SM, the factors that influence STC on SM (i.e., STC via non-SM channels and external communication capacity), and the resulting STC outcomes in the SM domain. Addressing organizations' perceptions of their STC, this research complements existing research that either examines general stakeholder communication on SM (Hambrick and Svensson 2015) or performs content analysis of nonprofits' messages on SM to infer STC (Saxton and Guo 2014). The results suggest that organizations build their external communication capacity through the use of three tiers of non-SM channels

[3] GoF=sqrt(average(AVE)*average(R^2)) = sqrt (0.60*0.25) = 0.39 (Tenenhaus et al. 2005), which was calculated based the first-order level model.

for STC and that communication capacity links organizations' STC beyond SM to that enacted on SM.

On the one hand, this study advances research on nonprofit capacity (Shumate et al. 2017). The data support the observation about organizational capacity (Anagnostopoulos et al. 2017; Goldkind 2015), particularly the capacity of using non-SM channels and the capacity of external communication, as an important precondition for nonprofits' SM use. On the other hand, this study sheds light on how STC on SM and outside of SM may intertwine with organizations' broader strategic consideration of STC. In particular, targeting cross-sector partners through non-SM channels is indirectly associated with targeting of frontstage stakeholders on SM. This suggests that humanitarian organizations' targeting of frontstage stakeholders on SM may reflect underlying complex consideration of pursuing partnerships. Essentially, such public communication with stakeholders on SM may influence how stakeholders evaluate organizations' strategic partnership efforts and organizations' capital mobilization outcomes (Shumate and O'Connor 2010).

Evaluating the antecedents and outcomes of capacity-building initiatives is a way for nonprofits to enhance performance (Shumate et al. 2017). Our data show that using different tiers of non-SM channels and targeting cross-sector partners (public agencies and companies) are significantly related to humanitarian organizations' external communication capacity. It is worth mentioning that a set of communication media are used similarly by organizations in engaging in communication with targeted stakeholders. Across three tiers, there is at least one medium (e.g., face-to-face conversations in Tier 1, phone calls in Tier 2, print flyers/newsletters in Tier 3) that does not require access to advanced online technology. This illustrates the way that humanitarian organizations accommodate diverse stakeholders' technology access and use (Brown 2015; Campbell et al. 2014). Moreover, these results also reflect the circumstances of the operations of humanitarian relief and development services, where relationships with (potential) cross-sector partners (i.e., businesses and governments) are critical for enhancing organizational capacity (Le Pennec and Raufflet 2018) and public value creation during disaster response and recovery (Simo and Bies 2007). Moreover, given their varying degrees of association with external communication capacity, the three tiers of non-SM channels may reflect organizations' prioritization of media channels based on the perceived levels of usefulness (Rice et al. 2017) in building organizational capacity.

The SM research commonly suggests that organizations' performance on SM relies on targeting online fans/followers (Mergel 2017). Addressing organizations' evaluations of their STC and outcomes, our study shows that STC on SM is critical as it helps translate organizations' external communication capacity into SM-specific outcomes, such as information dissemination, community building, and action mobilization. Nonetheless, only tailoring messages to the frontstage stakeholders on SM is consistently instrumental to organizations' achievement of information, community, and action outcomes on SM. This finding implies the necessity of seeking a more nuanced understanding of the types of stakeholders organizations target on SM that would influence their SM outcomes. It suggests that nonprofits that lack resources for expanded SM use should target frontstage stakeholders for more effective goal attainment.

In sum, findings of this study highlight the importance of holding a holistic view of incorporating different media channels in developing STC strategies, as well as self-evaluation of the antecedents and outcomes of accountability. Organizations may be able to transfer the capacity they build through one type of media channel for STC to another domain, which results in outcomes that can be used to evaluate organizations' accountability (Murtaza 2012; Williams and Taylor 2013) undertaken across different ICTs. The adjustment of Lovejoy and Saxton's (2012) information–community–action scale in this study also points to the necessity of considering the purpose of SM use by specific types of nonprofits (Campbell et al. 2014). The humanitarian organizations under study tend to consider SM useful for achieving the functions of information dissemination, community building, lobby and advocacy, and market-based purposes. This topic of whether different types of nonprofits achieve varying SM outcomes merits future research.

Findings of our study have important practical implications for humanitarian organizations regarding the use of SM for accountability fulfillment. In order to meet and balance diverse stakeholder needs, nonprofit practitioners in charge of external communication should set priorities in terms of the type of stakeholders to target through the channels beyond SM. In doing so, nonprofit organizations will likely build their communication capacity and improve the subsequent use of more advanced ICTs to communicate with other groups of stakeholders. Depending on the type of accountability outcomes organizations seek to accomplish, nonprofit practitioners can strategize the SM messages when writing to different groups of stakeholders. For example, organizations can use SM to target those for whom they intend to present a positive image (e.g., volunteers and public agencies), which would be associated with the acquisition of different types of positive outcomes (e.g., information dissemination, community building, and action mobilization).

Limitations and Future Research

This study has four limitations. First, the data analysis was based on those humanitarian organizations operating in eight countries in the Asia-Pacific region, North America, and Europe. Because of the difficulty in collecting data at the organizational level, we combined different sources for data collection. Even though we maintained the same selection criterion of reaching out to organizations with similar operational backgrounds, this approach may reinforce self-selection bias. That is, larger or more established organizations, or organizations having more experience with social media marketing are likely to answer the survey. It is also important to highlight the influence of social origins on civil society development and the nonprofit sector (Salamon et al. 2017). Future research may conduct comparative research to examine how institutional factors influence the use of SM for nonprofit accountability and STC in different countries and contexts.

Second, this study relied solely on the self-report survey data, which helped inform organizations' consideration of STC and resulting SM-specific outcomes. Future research may use mixed methods (e.g., content analysis, surveys, SM usage data) to gather insights from both organizational and stakeholder perspectives, as well as the actual interaction between organizations and stakeholders, to enrich our understanding of the dynamics of stakeholder communication. Third, this research is a cross-sectional study, and hence the causality claims need to be interpreted with caution. Finally, due to the constraint of the survey length, we did not match the non-SM channels with the specific targeted stakeholders. Future study is needed to derive a more accurate understanding of STC beyond SM.

In addition to the methodological improvement for future research, a topic worth exploring is the stakeholder network constructed through SM. This study focused on organizations' STC on SM, without considering the possibility that stakeholders may engage in direct and indirect communication with one another without the focal organization involved (Balser and McCluksy 2005; Ihm 2019; Sedereviciute and Valentini 2011). Another related future topic is how STC influences organizations' other dimensions of capacities, such as board leadership and strategic planning capacity (Shumate et al. 2017). This study focuses on the relationships between STC, external communication capacity, and SM-specific outcomes. It is necessary to examine the process in which organizations negotiate and engage in the deliberation with different groups of stakeholders about accountability outcomes (Williams and Taylor 2013). Future research should also more explicitly examine the criteria to evaluate both outcome- and process-oriented accountabilities (Lu Knutsen and Brower 2010) beyond SM in identifying the balance or tensions in STC.

Conclusion

This study presents theoretical and practical insights into organizations' STC through SM and non-SM channels. Addressing the gaps in the research on nonprofit accountability, this study builds on the stakeholder theory and the literature of nonprofit capacity and accountability and proposes a conceptual framework that answers three questions. The first concerns the types of stakeholders humanitarian organizations target on SM and beyond SM and the non-SM channels used for STC and the extent to which organizations' STC on SM and non-SM channels is similar or different. The data reveal that compared to STC on SM, organizations tend to use non-SM channels to manage accountability to stakeholders relevant to operational focus or resource acquisition. The second question is how humanitarian organizations' accommodation of different groups of stakeholders through non-SM channels is related to external communication capacity building, SM STC, and the resulting SM-specific outcomes. Results show that organizations use non-SM channels to target different groups of stakeholders (particularly cross-sector partners), which is important for the enhancement of external communication capacity. This in turn predicts STC on SM and the accomplishment of SM-specific outcomes. This study also informs the answer to the third question of how humanitarian organizations perceive their STC on SM and the resulting SM-specific outcomes. Results show that organizations use SM to target different groups of stakeholders. Targeting those who participate in their frontstage image building especially helps the accomplishment of SM-specific outcomes, including information dissemination, community building, and action mobilization.

Issues related to technology access and user attributes are often overlooked or downplayed in the existing trend of embracing SM for stakeholder management by nonprofit organizations, particularly humanitarian organizations. These issues, however, determine the outcomes of organizations' social mission fulfillment. With more research approaching stakeholder management from a broader and holistic view, we will be able to derive more complete theoretical understanding of strategic ICT use for resilience building and develop more concrete action plans to help vulnerable communities better prepare themselves for new hazards and cope with existing hazards.

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Appendix

External Communication Capacity (Based on Shumate et al. 2017)

	1	2	3	4	5
1. Information technology is regularly used for communicating with external stakeholders (i.e., donors, media, and other organizations)					
2. Our organization has developed cause-related fundraising activities					
3. A public relations strategy is in place					
4. Information about organizational activities is regularly disseminated to the public					
5. Our organization has the ability to develop key messages for potential supporters					
6. Our organization has experience with developing communication campaigns					
7. Our organization has established media relationships					

Items 2 and 6 were removed in this study due to low loadings

SM-Specific Outcomes (Lovejoy and Saxton 2012)

	1	2	3	4	5
Information					
1. Disseminating information (e.g., about the organization's activities, highlights from events)					
Community					
1. Giving recognition and thanks to stakeholders (e.g., donors, supporters, or volunteers)					
2. Acknowledgements of current and local events (e.g., holiday greetings, or community)					
3. Responding to public messages directed to the organization					
4. Response solicitation (e.g., polls, contests, direct questions)					
Action					
1. Promoting an event					
2. Donation appeal (e.g., direct requests for a donation, support of companies making)					
3. Selling a product or service (e.g., gift shopping)					
4. Calls for volunteers and employees					
5. Asking followers to join the organization's account on another social media or vote for the organization					
6. Asking followers to support lobbying and advocacy for a cause					
7. Helping followers to learn how to help (e.g., providing information about how to make donation or offer other form of support)					

Items italicized were removed due to low loadings

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