



How individuals use nonprofit organizations' social media pages: Understanding functions of and networks from individual posts for social change

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ABSTRACT

Previous research has regarded social media pages of nonprofit organizations (NPOs) as the organizations' strategic space for public engagement and further collective action. However, individuals may take advantage of organizations' pages to form networks beyond the organizations to achieve their own goals, extending their engagement to connective action. Based on content analysis of individuals' posts on 100 NPOs' social media pages, this exploratory study develops an original categorization scheme and reveals unique functions of and diverse networks initiated from such posts. In this way, this study combines research on public relations and connective action and captures the transformed roles and dynamics of the public and the organizations as they work toward social change.

(@alzassociation): Alzheimer's is a type of dementia that causes problems with memory, thinking and behavior. Learn the 10 early signs and symptoms at <http://alz.org/10signs>.

Replying to @alzassociation (@anonymized individual 1): I'm not sure which stage my Mom is under but she's to the point where she doesn't see my Dad as her husband anymore and sees him as her Dad but wonders where her husband is. It's truly heartbreaking to see.

Replying to @anonymized individual 1 and @alzassociation (@anonymized individual 2): * hugs* I have been through this terrible disease with both of my parents. Mom, at age 54, battled it for 12 years. She knew my father was her hubby until the last 2 years of her life. She didn't know who my sister and I were by year 5. My Father, 3 years in, thinks I'm his mom.

Replying to @anonymized individual 2 and @alzassociation (@anonymized individual 1): Hi, anonymized individual 2. Sorry to hear about both your parents. Being there for them and doing whatever we can to help them is the best thing we could do. Blessings. ~x.

These are posts that appear on the Alzheimer's Association Twitter page. Previous research would regard this page and other nonprofit organizations (NPOs)' social media pages primarily as their strategic space for promotion of organizational issues to build organization–public networks and mobilize the public for further collective action

(Guo & Saxton, 2018). It has thus interpreted individuals' responses such as these as successful outcomes of organizations' effective social media strategies (Saxton & Waters, 2014).

However, the content of the posts exposes this view as simplistic. The posters are not *responding* to the organization. They are sharing mutual sympathy by taking advantage of the organization's social media pages and building networks among themselves. These posts suggest organizations' social media pages may not function only as the organizations' strategic space but also as the public's space; individuals' posts on organizations' pages may strengthen not only organization–public networks but also networks among the public.

Since the advent of social media, the roles and dynamics of the public and organizations in collective action have changed (Bimber, 2017; Bimber et al., 2012). The public plays autonomous roles in self-organizing, producing what is called “connective action,” while organizations provide “social technology outlays” (Bennett & Segerberg, 2012, p. 756), such as their social media pages, without directly intervening or leading the action. Correspondingly, the public may employ varied functions on their posts and form networks beyond the focal organizations to achieve their own goals, even when posting on the organizations' social media pages. Investigating organizations' social media pages from only *organizations'* point of view may thus overlook

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these transformed roles of the public and organizations and the complex dynamics between the two parties.

The purpose of this paper is to examine the transformed roles and dynamics of the public and organizations as they work toward social change by conducting content analysis on the functions of and the networks from individuals' posts on organizations' social media pages, and to develop an original categorization scheme for the posts. This paper first introduces previous research on the traditional functions of and networks from NPOs' social media posts for public engagement and collective action. Then it analyzes the content of individuals' posts on NPOs' social media pages, drawing from the theoretical framework of connective action research. In this way, this paper combines research on public relations and connective action and provides the theoretical direction to investigate the new roles of and networks between organizations and the public in making social change.

1. Nonprofit organizations' social media posts for public engagement

Public relations research has emphasized how organizations can use varied functions for building and developing networks in the social media environment (Guo & Saxton, 2018; Nah & Saxton, 2013). First, research has identified three functions organizations can use in their social media pages: information, community, and action (Cho et al., 2014; Lovejoy & Saxton, 2012; Saxton & Waters, 2014; Waters & Jamal, 2011). The function of *information* dissemination involves spreading information about organizations' activities, history, or vision to the public; the *community* building function includes activities such as thanking readers for their support or asking questions to spark direct conversation; the *action* mobilization function involves asking the public to take action for the organization such as participating in donation, campaign, or petition in support of organizational causes.

Second, research has also explained how social media enable organizations to form and manage two types of networks: the public and specific stakeholders. Social media allow a broad spread of organizations' posts to the *public*, defined as those who are not intrinsically related to the focal organization, but care about the organizational cause (Wakefield & Knighton, 2019). In the social media environment, organizations' posts may reach from the followers of the organizations, the networks of the followers, and consequently to the *public* (Rice et al., 2017; Treem & Leonardi, 2013), which can be the first step to forming and developing organization–public networks.

Organizations can also have direct dialogues with *specific stakeholders*. While a stakeholder is defined as “any group or individual who is affected by or can affect the achievement of an organization's objectives” (Freeman, 1984, p. 1), organizations can direct their posts to *specific stakeholders* by having “replying to @ stakeholder's name” or “reply” in front of the stakeholder's posts, which can show organizations' commitment to the stakeholders and strengthen networks with them (Saxton & Guo, 2014).

However, research has rarely analyzed how the public and specific stakeholders engage with organizations' social media pages in response to such social media functions by organizations (Lovejoy & Saxton, 2012). Previous studies have investigated only what types of organizations' posts are more likely to receive individuals' responses (e.g., dialogic posts and posts from NPOs with active social media accounts; Bortree & Seltzer, 2009; Cho et al., 2014; Guo & Saxton, 2018; Saxton & Waters, 2014) and counted the number of the responses to examine the effectiveness of NPOs' social media strategies. Because individuals have become autonomous, as with some of the responses to the previously discussed Alzheimer's Association's post, the number of responses on organizations' social media pages may not represent public engagement with the organization itself; some individuals may engage with organizations' social media pages to take advantage of the organizational background and achieve their own goals. Indeed, Yang and Taylor (2021) conceptualized a new form of such engagement called

“network-centric engagement” where individuals “play equal, if not more important, roles” (p. 2) in shaping public opinion and leading the collective action in the social media environment. By examining tweets advocating for the 2020 Green New Deal legislation, Yang and Taylor (2021) found that posts generated by individuals mediate organizational messages and determine the impact of the NPOs' campaigns on social change. They also found that such posts bring new people to the social issue, drive the agenda forward, and broaden the reach of the social issue. Their findings concur with “networked public” (Boyd, 2010) and “autonomous networks among the public” (Ihm, 2019) where individuals autonomously take advantage of technologies and form networks among themselves toward social change without traditional organizational intervention. Considering the new form of public engagement, the next section draws from the connective action scholarship to investigate how individuals, in comparison to NPOs, may employ functions and form networks beyond the organization–public networks on NPOs' social media pages, extending public engagement to connective action.

2. Connective action and individuals' use of organizations' social media pages

Organizations have been at the center of the traditional collective action (Olson, 1965), where they have acted on behalf of groups of individuals to represent them, empower them to function as collectives, and mobilize them for collective action for common goals (Bimber et al., 2012). Correspondingly, after the advent of social media, NPOs have used varied functions for public engagement and mobilization of the public for collective action (Xu & Saxton, 2019).

However, two new forms of collective action emerged along with the advent of social media, referred to as “connective action” (Bennett & Segerberg, 2012). In both types of connective action, individuals and organizations play different roles and have different dynamics. First, *connective action based on self-organizing networks* (self-organizing connective action, from now on) reflects little or no organizational coordination. Previous studies have analyzed individuals' social media posts during mass social movements, such as the Arab Spring, Occupy Wall Street, and Indignados (Theocharis et al., 2015), or times of crisis, such as the swine flu outbreak (Chew & Eysenbach, 2010) and Hurricane Katrina (Macias et al., 2009), when connective action relied on self-organization and individual voices instead of expressing group identities (Bennett & Segerberg, 2012).

By contrast, and of greater relevance to the current study, *connective action based on organizationally enabled networks* (organizationally enabled connective action, from now on) accompanies loose organizational coordination. Organizations provide only “social technology outlays” (Bennett & Segerberg, 2012) and moderate individuals for easier participation in connective action. This type of connective action exists between the traditional collective action and self-organizing connective action, but research has yet to investigate functions of and networks from individuals' actual posts in this type of connective action.

While many studies on connective action have focused on event-based, self-organizing connective action, such as during mass social movements or times of crisis (Bennett & Segerberg, 2012; Chew & Eysenbach, 2010; Macias et al., 2009; Theocharis et al., 2015), organizationally enabled connective action may take place daily based on the organizations' social technology outlay: NPOs' social media pages. For instance, families of those suffering from Alzheimer's disease provide social support or encourage each other to participate in events on the Alzheimer's Association's Twitter page. Individuals also generate posts on NPOs' social media pages about social causes to share information with and mobilize a broader public than their own networks can provide (e.g., to help facilitate bone marrow matching via disease-related NPOs' social media pages). In these examples, the public engages with NPOs' social media pages to achieve their goals for social impact beyond responding to the NPOs. NPOs provide the social and technological

background of social media pages without direct communication with the public.

Organizationally enabled connective action has both organizational and societal implications. Social media interactions among individuals that are pertinent to an NPO induce a strong connection with the NPO and increase donations and volunteering for the NPO (Farrow & Yuan, 2011; Ihm, 2015). They may also enhance public awareness of social causes and act as the first step to further engagement and mobilization for those causes (O'Connor & Shumate, 2018). Further, investigating individuals' posts on NPOs' social media pages provides a comprehensive understanding of the transformed roles of and dynamics between NPOs and individuals in the current topography of social change. Thus, this study investigates what functions individuals employ in their posts and what types of networks they initiate from those posts on NPOs' social media pages.

3. Functions of individuals' social media posts

While little research has analyzed functions of individuals' posts on NPOs' social media pages, a few studies have captured individuals' employment of functions in their posts on their *own* pages, such as blog posts during Hurricane Katrina (Macias et al., 2009), tweets during the swine flu outbreak (Chew & Eysenbach, 2010), political tweets during active periods in Canadian politics (Small, 2011), and tweets during social movement uprisings in Spain, Greece, and the United States (Theocharis et al., 2015). These studies provide clues to investigate how individuals may post on NPOs' social media pages as a form of organizationally enabled connective action.

Some functions these individuals used were similar to those used by NPOs: information, community, and action (Chew & Eysenbach, 2010; Macias et al., 2009; Small, 2011; Theocharis et al., 2015). They shared information (e.g., uploading official news and providing information about damage, missing persons, and resources), formed communities (e.g., providing social support and assistance), and asked others to take action in their social media posts (e.g., calling for rescue and promoting needed products or services).

However, they differed from NPOs in that they additionally expressed their own opinions and shared their own stories. For instance, individuals conveyed their own opinions and feelings on the current situation instead of adhering to group or collective slogans (Small, 2011; Theocharis et al., 2015). They also shared personal experiences and stories about rescue, damage, and emergent situations with their social media networks (Caraway, 2016; Chew & Eysenbach, 2010; Macias et al., 2009), corresponding with the personal action frames and individualized styles of expression in current forms of connective action (Bennett & Segerberg, 2012). These instances suggest that functions individuals employ on organizations' social media pages may also differ from NPOs' functions of information, community, and action. Therefore, this study examines unique functions individuals may use in posts on organizations' social media pages:

RQ1: What functions do individuals use in posts on NPOs' social media pages?

3.1. Networks from individuals' social media posts

Prior studies have regarded individual posts on organizations' social media pages as individual responses to the focal organizations (Saxton & Guo, 2014; Xu & Saxton, 2019). Indeed, by having "replying to @ organization name" or "reply" in front of their posts, individuals can respond to and build networks with *the focal organization*.

However, individuals may form and manage networks with not only the focal organizations on the NPOs' social media pages. Organizationally enabled connective action represents the increased individual autonomy in using organizations' social media pages to accomplish individuals' own goals. To achieve their goals, individuals may take

advantage of organizations' social media pages for two additional networks beyond the focal NPOs.

First, individuals may form networks with the *public*. When individuals generate posts on organizations' social media pages, those who visit the social media pages, the followers and friends of the organizations, as well as the individuals' own followers and friends, may see the posts (Rice et al., 2017). Just as NPOs spread their posts to the public and build networks with them (Saxton & Guo, 2014), individuals may also use organizations' social media pages to spread their messages of promoting social causes or self-interest to as broad an audience as the public to initiate networks with them and mobilize them for the individuals' goals.

Second, when individuals create posts on organizations' social media pages, they may form networks with *specific stakeholders*. Just as NPOs may direct their posts to specific stakeholders and build communities with them (Lovejoy & Saxton, 2012), individuals may also form networks with specific stakeholders by having "replying to @ stakeholder's name" or "reply" in front of their posts and having direct dialogues with the specific stakeholders. For instance, families of cancer patients direct their posts to each other to share informational and emotional support on social media pages of cancer-related NPOs, which may develop into further networks among specific stakeholders (Ihm, 2019). Together, these studies suggest that individuals may not only respond to the focal NPOs but also initiate and build varied types of networks on NPOs' social media pages based on their goals for connective action. Therefore, this study explores how individuals create and manage varied networks in NPOs' social media pages beyond the focal organizations:

RQ2: What networks do individuals' social media posts form and manage on NPOs' social media pages?

4. Methods

4.1. Sample

This study's data were drawn from the Twitter accounts of the 100 largest NPOs in the United States, following past research (Cho et al., 2014; Lovejoy & Saxton, 2012) by using the 2017 rankings in the *Nonprofit Times* according to revenue (see Appendix A for the full list and organizational characteristics). Twitter was chosen as the research context for this study because it allows users the broad diffusion of their posts to the public and direct replies to a specific counterpart, enabling users to build networks with the public and specific stakeholders; it also has been considered a "proxy" for NPOs' overall social media activities and public engagement (Guo & Saxton, 2018). The study period was the first week of May in 2018. The research sample comprised all posts by the public on the organizations' Twitter accounts during the time period, which were gathered from a data-scraping website, Netlytic (Gruzd, 2016). The author and three undergraduate students (coding team, from now on) accessed the website weekly to download data and compared the first and last 10 gathered posts of each week to the actual posts uploaded on the organization's social media pages to confirm that the scraping website was gathering every activity correctly. The coding team used a function in the Netlytic website (entering "to: organization name" on the website) to gather data that individuals generated in response to the organizations ("replying to @organization name"). Additionally, the coding team visited each organizational Twitter account weekly to gather data for postings that individuals generated to other audiences.

The data set for the actual study initially contained 24,083 tweets uploaded by individuals in the 100 largest NPOs' social media pages in May 2018. Given the large number of tweets, and following previous research (Lovejoy & Saxton, 2012), the coding team made the decision to code a subset of 5289 tweets sent over the first week of the study. Two organizations whose Twitter pages became forums for intense debate over a recent policy change and political controversy in May 2018 were

excluded from the study. The decision of Boy Scouts of America to accept girls as scouts resulted in 1420 tweets in the first week of the study, and National Public Radio attracted 1986 tweets about political controversies that week. Most of the tweets from these two organizations could be categorized as “interactive conversation with specific individuals,” so they were eliminated to prevent any biases in the number of frequencies and percentage of this category over the whole research sample of tweets.

Twenty-eight organizations whose Twitter accounts included no individual activities and one organization that did not have a Twitter account were also excluded from the analysis. Twenty-one spam tweets were additionally excluded from the analysis, leaving 1862 valid posts.

4.2. Coding procedures and intercoder reliability

The main purpose of this paper is to conduct content analysis of individuals' posts on organizations' social media pages, identify varied 1) functions and 2) networks in the posts, and develop an original classification scheme. The coding procedure consisted of five stages: 1) examining previous research for the development of the coding scheme, 2) identifying the coding scheme that resulted from previous research, 3) coding a pilot sample by the developed scheme and identifying additional coding categories that emerged from this process, 4) coding the actual data based on the refined coding scheme, and 5) checking the intercoder reliability. Below are the details.

First, the coding team met for 2 h per week for 3 months to develop the coding scheme from previous research. For functions of posts, this study first drew on the three categories of NPOs' functions for public engagement explained in the previous section: information, community, and action (Cho et al., 2014; Lovejoy & Saxton, 2012; Saxton & Waters, 2014). For networks from posts, this study referred to varied networks that social media technically allow NPOs to initiate, as explained in the previous section (i.e., the public and specific stakeholders, Guo & Saxton, 2018; Rice et al., 2017; Treem & Leonardi, 2013), and drew on previous research that addressed networks on which organizationally enabled connective action is based (i.e., networks to the focal organization; Bennett & Segerberg, 2012). Three network categories that individuals may initiate on organizations' social media pages emerged: the focal organization, the public, and specific stakeholders.

To test and revise the initial scheme, the coding team applied the scheme to a pilot set of tweets from November 2017 and identified posts that served functions different from the three functions addressed in previous research (Lovejoy & Saxton, 2012) and developed two new categories: influence and expression. For the network scheme, this study first focused on the format of the post and then examined the content of the post. For instance, the format of “replying to @ organization name” indicates that the post was directed to the organization, but this format is automatically generated whenever individuals post on NPOs' social media pages. Therefore, this study checked whether the content was also directed explicitly to the organization. When the content did not reveal an explicit direction to the organization regardless of the format, this study regarded the poster as intending to reach beyond the organization to the followers of the organization or the networks of the followers and categorized them as initiating networks to the public.

Next, the coding team began analyzing the actual data by coding the first day of the first week in May 2018 using the developed scheme. Each tweet was assigned a single code from this scheme. In cases where a tweet appeared to belong to multiple categories, the coding team discussed and assigned codes according to what seemed to be the primary category. Discrepancies between coders were discussed and coding criteria were refined until the coding team reached 100% agreement. Using the refined rules, the coding team coded another day of the week, where they reached a Cohen's kappa score of .92, indicating a high level of intercoder reliability (McHugh, 2012). After this process, the tweets from the five remaining days of the week were coded individually. Any tweets with controversies or questions from the five days were also

discussed among the coding team until 100% agreement was reached.

5. Results

This study analyzed the functions each post served (RQ1) and the classified networks initiated from the posts (RQ2) based on the coding scheme (see Table 1). The analysis suggests five functions and three types of networks in individual posts on NPOs' social media pages. Three functions corresponded with NPOs' functions for collective action—information, community, and action—while two other functions—influence and expression—were original to individual posts for connective action. That is, while individuals' posts on NPOs' social media pages also employed functions to disseminate information, build community, and take action, they additionally had functions to influence others and express the individuals' own opinions and stories.

Each function of individual posts formed networks from the individual poster to one (or two) of three actors: the focal organization, the public, and specific stakeholders. Corresponding with the traditional focus of public relations research on organization–public networks (Broom et al., 1997; Grunig et al., 1992; Kent & Taylor, 2002), individuals posted on NPOs' social media pages to respond to the focal organizations and form networks with them. However, just as NPOs can share their posts to reach the public or direct their posts to specific stakeholders, individuals also took advantage of the organizational background to initiate networks to the same two parties. This section explains the types of posts comprising the five functions and the networks initiated from each function in detail.

5.1. Information

This function involved individuals spreading information on NPOs' social media pages. Just as NPOs provided organizational information on their social media pages (Lovejoy & Saxton, 2012), individuals also made information posts, comprising 8.22 % of total tweets in this study. However, the importance and the nature of this function differed from previous findings on NPOs' information functions. One-way distribution of information to the public has been NPOs' major and basic social media function (Lovejoy & Saxton, 2012), but individuals used information functions second to the least. Further, they did not disseminate information only to the public, as NPOs do. This function initiated networks to *specific stakeholders* as well. Individuals shared information with specific stakeholders, not as a one-way communication but in response to the specific stakeholder. For instance, some individuals shared information to help families of patients overcome hardships. Other individuals provided information to refute the previous poster's posts and support their own posts, usually by indicating links to news articles. Below are examples:

(on the Alzheimer's Association Twitter Page) Replying to @anonymized individual: thought you might like to DVR/watch this: (website address to help families of patients with Alzheimer's disease).

(on the Planned Parenthood Twitter Page) Replying to @anonymized individual: Absolutely not. Do some research. (website address to a news article on the myth of maternal instinct in support of abortion).

(on the Girl Scouts of the USA Twitter Page) Replying to @anonymized individual: This is all on the BSA, not the Girl Scout. (website address to a news article about how Boy Scouts made their decision to accept girls without the Girl Scouts' consent).

This function also initiated networks with the *public* to broadly share information related to the focal organization or the organization's cause. Individuals used the organizational background (i.e., organizations' social media pages) to distribute information that organizations did not officially post. In this way, individuals may have wanted to simply provide useful information to the public or to reveal the truth that the organizations concealed. Examples included policy changes, controversial news about the organization, or facts about the focal disease, as below:

Table 1
Functions and Networks in Individual Posts (Study 1).

	Networks				Sum	
	Specific stakeholder	Freq. (%)	Organization	Freq. (%)	Public	Freq. (%)
Information Community	Information sharing	50 (2.69)	Responding to organization Asking an organization a question	89 (4.78) 35 (1.88)	Information sharing	103 (5.53)
	Interactive conversation	262 (14.07)			Sharing stories and experiences	22 (1.18)
Action					Promotion for social campaigns	87 (4.67)
					Promotion of personal interests	34 (1.83)
Influence			Monitoring and commenting on organizational issues and campaigns			346 (18.58)
Expression					Emotional responses and opinions regarding organizational posts and performance	834 (44.79)
Total						1862

Replying to @UNICEFUSA, @vicenews: The U.S. State of Florida just passed a law banning child marriage. This is 2018 in a First World Nation.

Replying to @AmericanHeart: Tobacco Control scientific fraud: falsely blaming smoking for heart disease that's really caused by cytomegalovirus [CMV] NHANES: 40% of cardiovascular disease is due to CMV, with more among working class.

Replying to @MentalHealthAm: Ask your doctor to check your iron levels. Restless legs lead many people to have very poor sleep, and often are a sign of low iron in the blood.

5.2. Community

This function involved sparking conversations and strengthening community with others, comprising 21.91% of total tweets in this study. Previous research suggests that organizations have used dialogic features of media for community functions (Bortree & Seltzer, 2009; Kelleher, 2009; Lovejoy & Saxton, 2012). Individuals also seem to use the same function on NPOs' social media pages.

Corresponding with NPOs using this function to improve organization-public networks (Lovejoy & Saxton, 2012), some individuals used this function to create networks with the focal organization. Individuals asked the organizations about ways to participate in the organization or simple information related to the organizational issues, as below:

Replying to @PPFA (Planned Parenthood): Where can I sign up to volunteer?

Replying to @FeedingAmerica: How would someone start a food pantry?

Replying to @CatholicRelief: Does Vatican City take immigrants and/or refugees?

Individuals also responded to the organization's posts. Response solicitation has been one of NPOs' social media strategies to create an online community with the public (Lovejoy & Saxton, 2012). The public, in turn, reciprocated NPOs' posts by replying to the posts. This type of post was not prevalent (4.78 % of total posts), but such posts may indicate the first step to developing an online community between the organization and the public. Further, both asking questions of and responding to organizations represent the posters' attention to the focal NPOs or the organizational issues, a key prerequisite for organization-public networks and the survival of the organization (Guo & Saxton, 2018).

The Nature Conservancy (@nature.org): If you have a minute, take a look at these shots of the amazing biodiversity coming from a Kenyan camera trap. If you have a FEW minutes, you can help this project out by identifying animals in these pictures.

Replying to @nature.org: Grant's gazelle? Or possibly a Gazelle Grantova. They have similar appearances.

Besides posts pertinent to organization-public networks, individuals

employed community functions to initiate two more types of networks. First, they addressed their posts to *specific stakeholders*. Examples included interactive conversations among stakeholders who have interests in the focal issue (see Appendix B for examples of the full conversations). Some such posts offered mutual social support, such as sharing empathy among relatives of individuals with a similar health condition. Others were encouragement to attend events or make donations related to the organization. Offensive interactions also appeared, such as among supporters and opponents of abortion who fought regarding Planned Parenthood's decision to fund another organization supporting abortion. NPOs' social media pages seem to provide the social and technological background for both empathetic solidarity and intense debates.

Second, individuals employed community functions to the *public*. They revealed their personal stories pertinent to an NPO's missions or actions, such as their experiences participating in the NPO's events or programs. Although such posts included content related to organizational activities and issues, they were not directed to the organization or designed to influence the organization. Their main purpose seems to be to connect with the public; individuals opened themselves up to the public for the sake of interaction and sharing. Such opening up, and the networks it builds among individuals, may develop into supportive communities for the focal NPOs or deeper participation in connective action (O'Connor & Shumate, 2018; Valenzuela, 2013). Below are examples:

Replying to @girlscouts: When I was in @girlscouts I found it as a safe-haven to be away from boys at times. Being around other females was very empowering!

Replying to @PBS: There is nothing like Call the Midwife - the stories, acting, costumes, makeup, hair, sets, narration. You're stronger than I am if you don't cry at least once per episode. #callthemidwife #unparalleled.

5.3. Action

Individuals uploaded posts to mobilize the *public* to take action for causes related to the focal organization or the individuals themselves. Such posts comprised 6.5 % of the sample. This function suggests that NPOs may not always lead to collective action, but individuals may also initiate changes they want by taking advantage of organizations' social media pages. This function, much like NPOs' use of the action function, targeted to form one type of network: networks among the public. Some action posts by individuals promoted social campaigns to the public, often with hashtags or links to websites for donations or petitions. The social campaigns were not directly related to the organizations, but the posters used the organizations' social media pages as the social technological background to reach the public who were interested in similar issues. Below are examples:

Replying to @UNICEFUSA, @UNICEFinnovate: We at @Federation

have a wonderful methodology called #PASSAYouth that gives young people a voice and skill set to make a difference in their built environment and community. Shall we join forces?

Replying to @UNICEFUSA: Don't ignore <http://Yemen>. Help get this fund-raising page to trend so charitable kind people can see it.

Others promoted the poster's personal interests to the public, such as by asking for direct help, mostly of an economic nature. Individuals, again, used NPOs' social media pages as a supportive context to speak to the public that might be more interested in the focal causes or more sympathetic than other individuals. Below are examples.

Replying to @AmericanCancer, @Delta: My wife was diagnosed with cancer and due to much complication she cannot be home alone, we have no home care, social services is taking long for medicaid if any at all so I have lost many months of work staying home <https://www.gofundme.com/ygg7vk-help-me-beat-cancer>.

Replying to @ClintonFdn: Hi, I have a 21 years old son he is displayed need I ask you to help him do surgery operation in Turkey cast 15000 US \$ all documents available 0096590922021 phone and was up thank you.

5.4. Influence

This function involved monitoring and commenting on organizational issues and campaigns to have influence on the focal organization. NPOs did not have this type of function, so this function was unique to individual posts on NPOs' social media pages, comprising 18.58% of the total sample. Social media are a virtual outlet for organizations' promotion of campaigns (Guo & Saxton, 2018). Individuals, in turn, did not simply follow or engage with the organizational campaigns. As active agents, individuals showed their intent to influence the *focal organization*. They revealed their opinions on the organizations' decisions not only to disclose their thoughts but also to affect and make changes to the decisions.

This function involves one type of network, the organization–public network, but it extends the traditional understanding of organization–public networks (Broom et al., 1997; Grunig et al., 1992; Kent & Taylor, 2002); it is not the organization, but rather the public, that initiates networks to the organization. Below are examples:

Replying to @theIRC: I support your decision, but using words like “sabotage” is just going to create division.

Replying to @SusanGKomen: You should not partner with @BankofAmerica.

5.5. Expression

This function included expressing individuals' feelings, thoughts, and opinions. This was another function that organizations' posts did not have. It was more common than any other type of individual post, comprising 44.79 % of the total sample.

This function directed attention to the focal organization and its performance, but it ultimately generated networks to the *public*. In comparison to the influence function, this function did not serve the function of changing or affecting the organization in a specific way. The main purpose of this function was to broadly share individuals' opinions or even vent their feelings to the public beyond the focal organization. Corresponding with the individualized styles of expression discussed in previous research on connective action (Bennett & Segerberg, 2012), individuals conveyed their feelings, thoughts, and opinions about the organizations and the organizational performance to the public. The sentiment of the content ranged from positive, such as appreciation and excitement, to negative, such as disappointment, sadness, or hostility, in response to organizational posts or performance. Below are examples:

Replying to @StJude: My heart goes out to you all as well. God bless y'all hearts. our babies will continue to be strong little fighters.

Replying to @StJude: This is such a great organization. I'm so glad I'm able to donate 10 % of what I sell on eBay!

Replying to @Redcross: Maybe since you steal most of the donated

money your “volunteers” should be paid employees. Red Cross is a scam.
Replying to @WorldVisionUSA: tragic....

6. Discussion

This exploratory study analyzed the functions of and networks from individual posts on NPOs' social media pages to understand the transformed roles of and dynamics between NPOs and the public in making social change. The results suggest that individuals sophisticatedly take advantage of NPOs' social media pages to form varied networks, stretching NPOs' traditional focus on organization–public networks (Broom et al., 1997; Grunig et al., 1992; Kent & Taylor, 2002). Individuals also employ varied functions that are both similar to (i.e., information, community, and action) and different from (i.e., influence and expression) NPOs' functions for public engagement (Cho et al., 2014; Lovejoy & Saxton, 2012; Saxton & Waters, 2014). However, individuals maintain their own ways even when using the similar functions.

First, both information and community functions in this study suggest that individuals' employment of social media functions differ from NPOs' interaction and network formation with the public. Individuals' use of information and community functions were similar to NPOs' information and community functions, as they both intended information dissemination and community building. However, individuals not only spread information to the public, as NPOs did (Lovejoy & Saxton, 2012), but also provided specific information to a specific stakeholder. Individuals also employed community functions by sharing their personal stories and experiences with specific stakeholders or the public, instead of centering on the organization–public networks (Broom et al., 1997; Grunig et al., 1992; Kent & Taylor, 2002). Extending previous research on how NPOs employ social media functions for improved organization–public networks (Cho et al., 2014; Lovejoy & Saxton, 2012; Saxton & Waters, 2014), these results suggest that individuals have their own ways of creating intimate interactions and network building among themselves while using the organizational background.

Action and influence functions in this study suggest that individuals may play autonomous roles in making social change that is distinguished from NPOs' leading public engagement and collective action. The results suggest that individuals themselves may mobilize the public to promote self-interest and social campaigns or act as individual agents to influence public opinion and organizational performance, challenging the traditional “logic of collective action” where organizations are at the center of leading and organizing actions (Olson, 1965). Individuals' use of action functions for self-interest also suggest that individuals do not gear toward the collective slogans and collective identities for which traditional NPOs use action functions (Bennett & Segerberg, 2012; Bimber et al., 2012).

Expression function was the most predominant function in this study. Creating social media posts is a self-expression behavior (Ihm & Kim, 2018; Marwick & boyd, 2011); individuals create social media posts to express their feelings, thoughts, and opinions actively and strategically to conform to the way they want to present themselves to the public. Indeed, individuals have employed the expression function in their social media pages related to social issues such as swine flu outbreak or social movement uprisings in Spain, Greece, and the U.S. (Small, 2011; Theocharis et al., 2015). The dominance of expression function in this study indicates that individuals' tendency of self-expression in their social media pages extends to the organizational context of NPOs' social media pages. Although individuals employ varied functions on NPOs' social media pages, they seem to employ self-expression as a major function, whether the context is personal or organizational.

This finding induces theoretical reinterpretations of organizations' social media pages. As the boundaries between public and private domains are porous and easily crossed in the social media environment (Bimber et al., 2005), organizations' social media pages seem to become a space of intersection between personalized expression and

organizational context, challenging the organization-centric perspective emphasizing organizations' strategic use of their social media pages for public engagement (Guo & Saxton, 2018; Lovejoy & Saxton, 2012). Further, while previous research has understood the exhibition of individuals' emotions and opinions on organizations' social media pages as improved organization–public networks (Jiang et al., 2016), this study suggests that individuals express themselves in “networks among the public” (Ihm, 2019; Yang & Taylor, 2021), beyond responding to the focal organization. In this way, this study stretches the traditional focus on the organization–public networks (Broom et al., 1997; Grunig et al., 1992; Kent & Taylor, 2002) to encompass networks among the public (Yang & Taylor, 2021) and reifies the content that individuals exchange in the networks. This study also theoretically enriches the public relations scholarship by identifying the transformed role of individuals in the contemporary media environment, who declare and reinforce their identities in relation to the focal issue beyond group slogans on NPOs' social media pages (Khalil & Storie, 2021).

Practically, this finding provides practitioners a nuanced understanding of organizations' social media pages as a space where individuals' personalized identity and expressive tendency persists. It suggests that individuals may create posts to support their own goals instead of responding to the organizational goals (Jiang et al., 2016). Therefore, practitioners should focus not only on increasing the number of responses (Guo & Saxton, 2018; Saxton & Waters, 2014), but also on using posts to capture the public's feelings, thoughts, and opinions about the organizational issues to support future organizational strategies and behavior. Considering the predominance of the expression function, practitioners may also devise ways to foster individuals' positive expression toward the organizational issues, reinforcing positive expressions by interaction among the public (Farrow & Yuan, 2011) and developing the expression into organizational commitment (Khalil & Storie, 2021).

To summarize, NPOs have traditionally led collective action (Olson, 1965). Previous public relations research has focused on organization–public networks (Broom et al., 1997; Grunig et al., 1992; Kent & Taylor, 2002) and ways for NPOs to take advantage of social media for public engagement and mobilization of the public for further collective action (Lovejoy & Saxton, 2012; Xu & Saxton, 2019). However, the results from this research suggest that the functions NPOs employ may not be the only mechanism of engaging the public, mobilizing the public, and making social change in the current era. Taking advantage of the organizations' social technological backgrounds, individuals play active roles in targeting and forming networks to influence and mobilize the public beyond the organization itself. Individuals may not only provide official information but also share personal stories, feelings, and opinions. They may not only focus on organization–public networks but also build networks among the public based on empathy and similar interests. Individuals who initiate their networks on organizations' social media pages may diversify their voices and influences in the social media environment, and potentially contribute to public engagement in diverse social causes, which the focal organization alone cannot accomplish. In this way, this study challenges the traditional organization–public networks that NPOs have focused on (Broom et al., 1997; Grunig et al., 1992; Kent & Taylor, 2002) and practitioners' traditional understanding of public engagement as a successful response to organizational strategies (Saxton & Waters, 2014). Consistent with recent research suggesting the “equal, if not more important, roles” of networks among the public (Yang & Taylor, 2021, p. 2) than traditional NPOs in shaping the public opinion and leading the public engagement with collective action, this study captures the emergent roles of individual posts and networks among the public to which practitioners should pay attention.

7. Conclusion

This paper analyzed the content of individual posts on organizations'

social media pages and analyzed the transformed roles of and dynamics between individuals and NPOs in making social change. However, it has several limitations. First, the sample consisted of the 100 largest NPOs in the United States. Sampling large organizations has been predominant in previous studies (e.g., Lovejoy & Saxton, 2012; Saxton & Waters, 2014), and creating a manageable sample may be necessary to capture a substantial amount of individual activity, but the results are not generalizable to midsize or small NPOs or for-profit organizations. Future research might examine other types of organizations. Second, the data-scraping website Netlytic uses a public API. Although the author and three undergraduate students compared the first and last 10 posts gathered each week to the actual posts appearing on the organizations' social media pages to confirm that the scraping website was gathering all of the activity correctly, there may have been tweets unindexed or unavailable to the search interface. Finally, this study is based on manual coding, so the findings may suffer from insufficient replicability despite the high intercoder reliability (i.e., 0.92; McHugh, 2012 describes anything above .08 as strong). Reexamination and reapplication of the coding scheme to other contexts may increase the reliability of the coding scheme.

This research contributes to research on public relations and organization communication. First, this study enhances the understanding of public engagement on organizations' social media pages by combining research on connective action. Previous research has interpreted individuals' posts on organizations' social media pages as successful outcomes of organizations' social media strategies (Cho et al., 2014; Guo & Saxton, 2018). This study, instead, reveals varied functions public engagement may employ and varied networks it may generate. In this way, this study provides diverse perspectives in interpreting public engagement and advances theoretical explanations about organizations' transformed roles and relationships to the public in generating social change in the current era. The original schemes developed in this study also offer systematic approaches and new realms to understand public engagement on organizations' social media pages.

This research also provides practical implications for organizational practitioners in two ways. First, it offers analytic schema for practitioners to understand the nature of individual posts on NPOs' social media pages and the new dynamics of public engagement in the contemporary media environment. Organizational practitioners can use this scheme to assess the response and outcome of their organizations' social media strategies (Saxton & Waters, 2014) and accommodate their future strategies based on the new understanding of the autonomous roles of individuals and the emerging networks among the public (Yang & Taylor, 2021).

Second, this study introduces ways for practitioners to take advantage of social media. Organizations' traditional social media strategies for public engagement included creating dialogic posts or keeping the organizational social media accounts active (Bortree & Seltzer, 2009; Cho et al., 2014; Guo & Saxton, 2018). Considering the scarce resources of most NPOs, connecting with influencers the organization thinks necessary for the organization (Yang & Taylor, 2021) or creating original posts, instead of reposting or following other actors, related to the social issue the organization regards as important (Ihm, 2019) may be an effective social media strategy to leverage networks among the public and broaden the organization's social impact.

Just as social media have opened new possibilities for organizations, they have for individuals as well. Individuals' personalized posts on NPOs' social media pages are publicly accessible, allowing individuals to initiate and manage varied types of networks for mass spread of information, mobilization of the public, and autonomous interactions for social change. In this way, public engagement with organizations' social media pages goes beyond the organizational boundaries. Taking advantage of the organizational background, individuals' posts on organizations' social media pages are forming diverse networks and extending their engagement to support diverse types of social change.

Declarations of interest

None.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.pubrev.2022.102252](https://doi.org/10.1016/j.pubrev.2022.102252).

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