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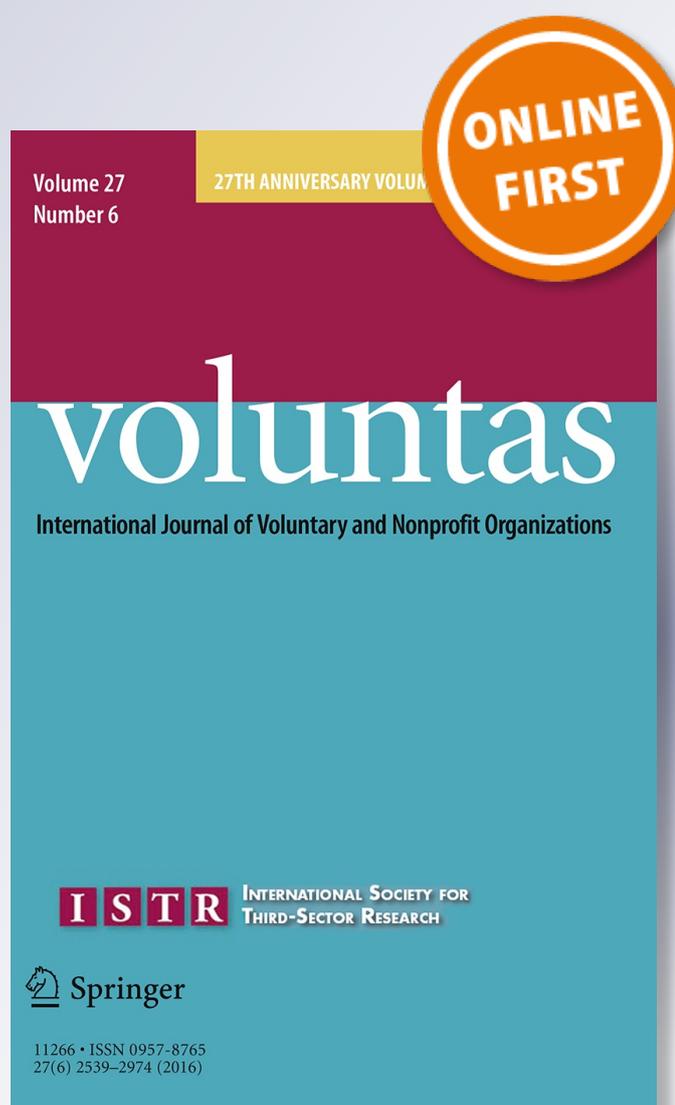
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Classifying and Relating Different Types of Online and Offline Volunteering

Jennifer Ihm¹

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Abstract The contemporary media environment allows for online volunteering where volunteers can participate without being physically present or being affiliated with a traditional organization. Challenging the traditional types of volunteering and accounting for the new trends, this study identifies different types of online and offline volunteering and examines the relationship between them. Drawing on online survey data from 816 U.S.-based volunteers, this study finds that active online volunteers are also active offline volunteers, suggesting that volunteering in one sphere can complement volunteering in the other sphere. This study discusses implications for understanding volunteering as a complex activity where individuals engage in varied organizational contexts to different degrees and extend their participation to both online and offline spheres.

Résumé L'environnement médiatique contemporain favorise le bénévolat en ligne, soit un espace où les bénévoles peuvent s'impliquer sans être physiquement présents ni affiliés à un organisme traditionnel. Questionnant les types traditionnels de bénévolat et de comptabilité des nouvelles tendances, la présente étude identifie différents types de bénévolats en ligne et hors ligne, et examine la relation qui les unit. En utilisant les données en ligne de 816 bénévoles situés aux É.-U., le présent article découvre que les bénévoles actifs en ligne le sont aussi hors ligne, suggérant ainsi que le bénévolat dans une sphère complète celui de la seconde sphère. Cet article traite des implications requises pour comprendre le bénévolat en tant qu'activité complexe, où des individus sont impliqués dans une variété de contextes organisationnels à différents niveaux et étendent leur participation aux deux sphères, en ligne et hors ligne.

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Zusammenfassung Das heutige Medienumfeld macht eine ehrenamtliche Online-Tätigkeit möglich, die ausgeübt werden kann, ohne dass die Ehrenamtlichen physisch anwesend oder mit einer traditionellen Organisation verbunden sind. Die vorliegende Studie stellt die traditionellen Arten der ehrenamtlichen Arbeit in Frage und erklärt die neuen Trends. Sie ermittelt unterschiedliche Arten ehrenamtlicher Online- und Offline-Tätigkeiten und untersucht die Beziehung zwischen ihnen. Unter Berufung auf Daten aus einer Online-Befragung von 816 Ehrenamtlichen in den USA kommt man zu dem Ergebnis, dass Personen, die ehrenamtlich online aktiv sind, sich auch offline ehrenamtlich engagieren, was darauf hindeutet, dass eine ehrenamtliche Tätigkeit in einem Bereich die ehrenamtliche Tätigkeit in einem anderen Bereich ergänzen kann. Der Beitrag diskutiert die Implikationen für das Verständnis der ehrenamtlichen Arbeit als eine komplexe Aktivität, bei der Personen in verschiedenen organisatorischen Kontexten in unterschiedlichem Umfang tätig sind und ihr Engagement sowohl Online- als auch Offline-Tätigkeiten umfassen kann.

Résumé El entorno mediático contemporáneo permite el voluntariado online en el que los voluntarios pueden participar sin estar físicamente presentes o estar afiliados a una organización tradicional. Cuestionando los tipos tradicionales de voluntariado y tomando en cuenta las nuevas tendencias, el presente estudio identifica diferentes tipos de voluntariado online y offline y examina la relación entre ambos. Recurriendo a datos de encuestas online de 816 voluntarios estadounidenses, el presente documento encuentra que los voluntarios online activos son también voluntarios offline activos, lo que sugiere que el voluntariado en una esfera puede complementar al voluntariado en la otra esfera. El presente documento trata las implicaciones para comprender el voluntariado como una actividad compleja en la que los individuos se comprometen en contextos organizativos variados en diferentes grados y amplían su participación tanto en la esfera online como en la offline.

Keywords Online volunteering · Virtual volunteering · Offline volunteering · Clicktivism · Slacktivism

Introduction

In the contemporary media environment, individuals take advantage of advanced communication technologies and participate in new types of volunteering, such as online volunteering; individuals can manage websites, provide professional services, promote social issues, or analyze data online (Cravens 2006; Lewis 2013). Online volunteering extends the traditional volunteering contexts [i.e., engaging in an volunteering activity without being physically present (Lewis 2013) or affiliated with a brick and mortar organization (Bennett and Segerberg, 2012)] and diversifies volunteering activities. Because online volunteering has recently become more prevalent, previous research has not yet captured various contexts and

types of online volunteering in relation to offline volunteering or analyzed the relationship between online and offline volunteering.

Specifically, the question of whether online volunteering complements or substitutes offline volunteering is crucial to understanding the relationship between online and offline volunteering as well as the meaning of online volunteering. However, only a few studies, only partially, discuss the relationship between online and offline volunteering (Cravens 2006; Murray and Harrison 2005). Further, some scholars have examined the relationship between other online and offline engagement activities, but they do not give consistent accounts of how engagement activities in one sphere (i.e., offline or online) influence the other sphere (Conroy et al. 2012; Georgetown University's Center for Social Impact Communication [CSIC] 2011; Kristofferson et al. 2014; Lee and Hsieh 2013; Lewis et al. 2014; Paek et al. 2013).

The purpose of this research is to identify different contexts and types of online and offline volunteering in the contemporary media environment and examine the relationship between online and offline volunteering. It makes three contributions to the study of online and offline volunteering research. First, it systematically captures emerging trends of volunteering engagement. Second, it reveals interesting aspects of the relationship between online and offline voluntary actions. Finally, this research reinterprets online volunteering as a significant online engagement activity.

The rest of this study proceeds as follows. It introduces various characteristics of volunteering (i.e., number of organizations and degree of volunteering) in order to identify different types of online and offline volunteering in the current era. Next, this study reviews research on the relationship between online and offline engagement activities. This study relies on online survey data from online and offline volunteers and discusses the implications of identifying various types of online and offline volunteering and examining the relationship between them.

Different Types of Offline and Online Volunteering

Individuals can participate in volunteering in various ways. Participants in yearly events such as Relay for Life might differ from volunteers in museums in terms of the frequency, the amount of time spent, or the tenure. Specifically, the contemporary media allow for online volunteering (Lewis 2013), diversifying ways of volunteering.

Advanced communication technologies allow individuals to participate in volunteering solely online: online volunteering (Lewis 2013). Such activities can include sharing posts, promoting awareness of social issues, eliciting donations, encouraging others to volunteer, or managing websites for good causes. Some volunteers also provide professional services for voluntary organizations or social causes, such as preparing tax returns, writing legal documents, and consulting (Cravens 2006; Murray and Harrison 2005). Online volunteers may develop various relationships to the organizations and participate in volunteering to different degrees. Their engagement dynamics might also differ from offline volunteering dynamics. As such, this section distinguishes different types of online and offline

volunteering by focusing on the number of organizations and the degree of volunteering.

Number of Organizations

Traditionally, offline volunteering has occurred within various organizational settings (Penner 2002) to generate changes to society. Volunteers can serve at one (71.3%) or more organizations (two: 19%; three: 6.6%; four: 1.8%; five: 1.2%; Bureau of Labor Statistics 2013). Specifically, some individuals commit time to volunteering whenever their schedules allow and engage in one-time or short-term volunteering, which is called episodic volunteering (Cnaan and Handy 2004; Lewis 2013). Episodic volunteers may volunteer for different numbers of organizations than other volunteers (e.g., a greater number of participating organizations) as they alternate organizations that fit their schedules and values.

Although many volunteers participate in more than one organization (Bureau of Labor Statistics 2013), most studies on offline volunteering have focused on volunteering for one focal organization or have not distinguished between volunteering for one and volunteering for many organizations (Ferreira et al. 2015; Finkelstein et al. 2005; Omoto and Snyder 1995; Thoits 2012). However, volunteers can concentrate on one organization or distribute the same number of hours to multiple organizations. The total sum of hours may be the same in both cases, but the two types of volunteering might generate different outcomes for the focal organizations. For example, a strong commitment to the focal organization might be more helpful and meaningful for the organization than a strong commitment to multiple organizations, including the focal organization (e.g., longer tenure for the focal organization; Grube and Piliavin 2000).

Further, the contemporary media environment allows for more various organizational contexts in online volunteering. First, volunteers can more easily become affiliated with many organizations, in comparison to the offline sphere. Because online volunteering transcends physical limitations, volunteers can easily support more than one organization in the online sphere.

Second, online volunteer activities may not necessitate initiation or management by official organizations because online communication allows the public to organize autonomously without official organizational involvement (Bennett and Segerberg 2012). Online technologies blur the boundary between the private and public domains such that users of social media can publish their individual stories related to social causes for a wide audience as a means to mobilize collective action, often referred to as connective action; formal organizations need not be involved in any way (Bennett and Segerberg 2012; Bimber et al. 2005). The number of organizations pertinent to such cases (i.e., zero organizations involved) can describe the emergent types of online volunteering. As such, this study focuses on the number of participating organizations in volunteering in order to capture different types of offline volunteering (i.e., volunteering for one organization or multiple organizations) and novel features of online volunteering (i.e., easier participation in multiple organizations or participation without organizational affiliation).

Degree of Volunteering

The degree of volunteering refers to the level of volunteers' involvement in and commitment to benefitting a person, group, or social cause (Wilson 2000). Volunteers can participate in volunteering to different degrees; sustained volunteers commit a great length of time to volunteering, as opposed to episodic volunteers who might commit only a short amount of time. Previous studies have measured the degree of offline volunteering by examining frequency (e.g., number of days per month), longevity (e.g., length of years), or amount of volunteering (e.g., number of hours per month; Charng et al. 1988; Finkelstein et al. 2005; Marta et al. 2014; Piliavin and Callero 1991; Thoits 2012, 2013).

Although the three prevalent measures all have evaluated the degree of offline volunteering, each represents different aspects of volunteering. For instance, frequency and length of volunteering are influenced by different volunteer motivations and personalities; in Finkelstein et al. (2005), length of volunteering was negatively correlated to "understanding motivations" (i.e., to acquire new learning experiences and/or exercise skills), while frequency of volunteering was negatively correlated to "social" (to strengthen social relationships) and "career" (to gain career-related experience) motivations. No personality variables were correlated to frequency of volunteering, whereas length of volunteering was negatively correlated to other-oriented empathy (i.e., the tendency to feel empathy and responsibility for others) and positively correlated to helpfulness (i.e., the tendency to engage in prosocial behaviors; Finkelstein et al. 2005). These results indicate that frequency and length of volunteering cover different aspects of the degree of offline volunteering.

Specifically, previous studies suggest that the length of volunteering is closely connected with volunteer role identity, which might distinguish itself from other measures of degree of volunteering. As individuals participate in volunteering, they internalize and adopt the volunteer role identity as an important part of themselves (Piliavin et al. 2002) in order to maintain a stable identity as a volunteer (Hogg et al. 1995; Turner and Onorato 1999), they continue to volunteer over an extended period of time (Charng et al. 1988; Marta et al. 2014). These studies, again, suggest that volunteering longevity might have different aspects (i.e., volunteering based more on role identity) from other measures of degree of volunteering.

In comparison to the other two measures, the number of volunteering hours has been used in a previous study to capture the sum of various volunteer activities (Grube and Piliavin 2000). Grube and Piliavin (2000) measured the number of volunteering hours by adding hours spent per month for all volunteer activities (i.e., fundraising, public education, and providing health-related services). Because some people volunteer for more than one organization or participate in several volunteer activities (Bureau of Labor Statistics 2013), the number of volunteer hours might be more appropriate for measuring the total hours spent for diverse volunteer activities in comparison to other measures.

Many studies have examined the degree of offline volunteering by evaluating the frequency, amount, or longevity (Charng et al. 1988; Finkelstein et al. 2005; Marta et al. 2014; Piliavin and Callero 1991; Thoits 2012, 2013), whereas previous studies

have rarely examined the degree of online volunteering precisely using such criteria. Taking advantage of the online media, online volunteers might volunteer to different degrees from traditional/offline volunteers. For instance, because of the easier participation in online volunteering, individuals might participate in volunteering more frequently. Considering the criticism of online engagement that people engage in the online sphere without serious thought divorced from real impact (i.e., clicktivism or slacktivism; Harlow and Guo 2014; Kristofferson et al. 2014), some online volunteers might stay engaged in volunteering for a short amount of time without truly generating social change.

Previous studies indicate that frequency, length, and amount of volunteering can examine different aspects of offline volunteering (Charng et al. 1988; Finkelstein et al. 2005; Marta et al. 2014; Piliavin and Callero 1991; Thoits 2012, 2013) and that such measures might reveal various types of online volunteering, as well. As such, this study distinguishes the degree of online and offline volunteering based on all three measures in order to capture various types of volunteering (e.g., volunteering for a long time without committing a great amount of hours per month or volunteering frequently for a short term). A greater degree of volunteering leads to mental and physical well being by transforming the volunteer's life, making it more meaningful and purposeful (Thoits 2012, 2013). Classifying volunteering can contribute to a more thorough understanding of how volunteers incorporate volunteering into their lives by engaging in different volunteer degrees and types.

So far, this study has explained characteristics of volunteering: number of organizations and degree of volunteering. This study classifies volunteering according to these two characteristics in order to capture the various types and the current trends in online and offline volunteering:

RQ1 What types of online and offline volunteering exist today?

Relationship Between Volunteering in the Online and Offline Spheres

Volunteers can now participate in both the online and the offline spheres. Because online engagement differs from offline engagement (e.g., lacking physical interactions with others, occurring in different organizational settings, and providing different time-efficiency), scholars have assessed the relationship between online and offline engagement activities (Conroy et al. 2012; Lee and Hsieh 2013; Paek et al. 2013). These studies attempt to answer whether online engagement has the same effect as offline engagement, and whether it complements or substitutes for offline engagement.

In comparison to the active research on the relationship between online and offline engagement activities (Conroy et al. 2012; Lee and Hsieh 2013; Paek et al. 2013), few studies have focused on the relationship between online and offline *volunteering*. Two studies explain that many online volunteers are also supporters of onsite organizations, and many onsite volunteers also volunteer virtually (Cravens 2006; Murray and Harrison 2005). However, these surveys were taken more than 10 years ago based on limited samples (e.g., volunteers for a single organization, Volunteer Victoria), so they cannot capture the current trend of online and offline

volunteering; when the surveys were taken, online volunteering was not as prevalent or as easy to participate in as at the present time. Volunteering without organizational affiliation did not occur as much as in the contemporary media environment either, because social media did not exist.

Only studies on other online and offline engagement activities hint at the possible relationship between online and offline volunteering. However, these studies do not tell a consistent story about the relationship between the two activities. For example, a few case studies and surveys suggest a positive connection between the online and offline spheres. In a case study of an online civic campaign via social media, Every Child Is Yours, Paek et al. (2013) find that participation correlates with offline volunteering for the organization as well as donating money to it. A study of Facebook political group membership shows it positively and strongly predicts offline engagement (e.g., voting, persuading someone to vote, or working for a candidate or campaign; Conroy et al. 2012). A third study suggests that people who become involved with social causes through social media (e.g., joining a cause group or posting a cause logo to a social profile) are more likely to participate in offline engagement than are people who promote the cause outside of social media (CSIC 2011). These studies indicate that online media extends the range of engagement activities instead of replacing offline engagement. However, researchers' focus on a specific activity on specific online media—a specific campaign on social media (Paek et al. 2013) or Facebook political group membership (Conroy et al. 2012)—limits the studies' ability to illuminate the dynamics and causes in online engagement activities.

Other studies suggest that online engagement may not generate meaningful impact in the offline sphere. For instance, the vast majority of members who sign up for the Cause website (an Internet site based on Facebook postings in support of a good cause) recruit no one else to their cause and contribute no money to it (Lewis et al. 2014). The study (Lewis et al. 2014) suggests that being a member of cause-related online media does not guarantee active participation in social causes. Kristofferson et al. (2014) also suggest that online activism reflects participants' impression management (e.g., their desire to represent themselves as moral and responsible citizens) but does not correlate with their other actions.

The inconsistent findings across different studies suggest that volunteering online versus volunteering offline may also have varying correlations. This research explores the relationships between online and offline volunteering in order to illuminate these dynamics:

RQ2 What is the relationship between online and offline volunteering? (i.e., are they complements of or are they substitutes for each other?)

Method

Sample and Procedures

To examine different types of online and offline volunteering and their relationships to each other, I first conducted a preliminary interview in March 2015 with 31

participants. The purpose of this interview was to get an idea of the participants' volunteering experiences, learn what words they used to identify volunteering, and refine the measures for the actual survey. By sending online recruitment materials to student organizations and nonprofit organizations of a Midwestern university, this study recruited "survey participants (18 years and older) who have given time to one or more good causes in the last 3 months." From unstructured, in-depth interviews with these participants, I determined the scope of online and offline activities they considered volunteering. In the actual survey, I referred to the words that these interviewees used to describe volunteering. Four questions addressed offline volunteering: one each about advocacy, protests, and demonstrations, volunteering, and promoting social issues. Six questions addressed online volunteering: one each about signing an online petition, commenting, or creating a post in an online forum or social networking site about a good cause, initiating an online petition, encouraging others online to act to support a good cause, sharing or forwarding information about a good cause with others online, and online volunteering for a good cause (i.e., providing labor for a good cause via the Internet).

A pilot study followed in May 2015 to examine the validity of the survey I created based on the preliminary study. The pilot study drew on an undergraduate research participant pool at a Midwestern university. The students received an extra point for their grade by signing up for the study. A total of 28 students participated. The purpose of the pilot study was to check the time it would take for participants to complete the actual survey, and to identify any confusing questions for revision. The results and comments from the pilot study suggested that the survey did not ask any confusing questions. The survey generally took no more than 15 min to complete, so the survey questions were kept in their original format.

The sample for the actual study was obtained from general panel data in Qualtrics. In June 2015, I surveyed 816 people who answered "yes" to the qualifying question that they had participated in one or more of the aforementioned online or offline volunteering activities in the past three months. According to the power analysis, the minimum sample size of this model needed to detect an effect is 218. By recruiting 816 volunteers, I aimed to ensure at least 218 would respond, even in the event of a low response rate. Recruiting recent volunteers minimized limitations from *ex post facto* surveys (Vaillancourt 1994).

Eight hundred sixteen volunteers in the United States responded to the survey consisting of measures of the degree of volunteering and the number of organizations in both spheres. On the average, the participants were 41-year old and earned \$52,200 a year. Sixty-one percent of them were female. They had diverse ethnicities: 77% were Caucasian; 10% were African American; 6% were Hispanic; and 5% were Asian. Following the request from IRB, the survey did not force the participants to answer all the questions; the volunteers skipped some questions if they did not want to answer, generating fewer than 816 respondents for some questions.

Measures

Offline Volunteering

The survey asked participants to list the names of organizations for which they had volunteered offline in the previous three months in order to count the *number of organizations* (see Table 1 for the descriptives). Regarding the degree of volunteering, the survey used previous measures (Finkelstein et al. 2005; Finkelstein 2008; Grube and Piliavin 2000). The participants indicated the *frequency* (days per month), the *amount* (hours per month), and the *longevity* (years) for which they had volunteered offline for every organization they mentioned.

Online Volunteering

The survey asked participants to list the names of organizations for which they had volunteered online in the previous three months in order to count the *number of organizations* (see Table 1 for the descriptives). The participants also indicated the *frequency* (times per month), and the *longevity* (years) for which they had volunteered online, both for every organization they mentioned and for volunteerism without an organizational basis. Out of 708 respondents, a little more than half (52.68%, $n = 373$) participated in online volunteering with an organizational base. The rest of the respondents indicated they had participated in connective action (47.32%, $n = 335$). The average number of organizations was 0.97 when including connective action. Excluding connective action, the average number of organizations in which they participated was 1.84.

Analysis

For RQ1, this study conducted separate cluster analyses on online and offline volunteering. I applied a k-means clustering approach in R (R Core Team 2014) to identify different sets of the 816 participants' volunteering, based on volunteering space (online and offline spheres), degree of volunteering, and number of organizations. This cluster analysis groups cases according to their similarities across the volunteering dimensions.

Table 1 Descriptive statistics of key variables

Variable	Offline			Online		
	<i>M</i>	SD	<i>n</i>	<i>M</i>	SD	<i>N</i>
Volunteering						
Amount (h/month)	15.94	18.87	764	–	–	–
Frequency (times/month)	7.63	8.19	762	6.21	9.37	502
Longevity (years)	5.44	8.70	768	2.62	1.67	548
No. of org	1.46	0.93	780	0.97	1.21	708

The validity of cluster analysis results depends on the selection of the most appropriate number of clusters (Kathuria 2000) and the balance between parsimony and accuracy (Kathuria 2000; Boyer et al. 1996; Miller and Roth 1994). This study used several rules of thumb as guides for determining the appropriate number of clusters employed in previous studies (Kathuria 2000; Shumate et al. 2016).

First, this study employed a scree plot of k-means clustering (Hothorn and Everitt 2014), which graphically illustrated the percentage of variance explained by the clusters against the number of clusters. The appropriate number of clusters was four for offline volunteering and three for online volunteering as the marginal gain of the percentage of variance per the number of clusters dropped dramatically at number four and three, respectively, giving an angle (“elbow”; Kodinariya and Makwana 2013) in the scree plot. Based on the scree plot of the number of clusters, the offline volunteering clustered into four groups explaining 88.1% of the variation of the offline participants. The online volunteering formed three clusters, explaining 82.7% of the variation of the online participants.

Second, to check the stability of membership in the clusters, this study performed three iterations of k-means clustering approach, with the number of clusters set at three, four, and five for offline clusters. This study also performed three iterations of k-means clustering approach, with the number of clusters set at two, three, and four. A comparison of the three solutions indicated that cluster membership was stable across solutions and new clusters were formed only by splitting apart larger clusters. Overall, the results suggest four offline and three online volunteering types, which this study terms low-level, medium-level, high-level, and lifetime offline volunteering type, and low-level, medium-level, and high-level online volunteering type.

Finally, this study performed a series of tests to further interpret the four offline cluster and three online cluster solutions. In the first step, the study used one-way analysis of variance (ANOVA) to test for differences in the defining variables among clusters. The null hypothesis that the four offline clusters are equal for the four defining variables was rejected for every variable. The null hypothesis that the three online clusters are equal for the three defining variables also was rejected for every variable. In the second step, the study performed the Tukey post hoc test to determine which pairs were significantly different. The Tukey post hoc test of offline volunteering, at the 0.05 level or less, indicated that 44% of cluster means were different from the other three cluster means, 19% of cluster means were different from two other cluster means, and the rest were different from one other cluster mean. The Tukey post hoc test of online volunteering, at the 0.05 level or less, indicated that five over nine of cluster means were different from both of the other two cluster means, and the rest were different from one of the other cluster means. The four-cluster model best met the above criteria for offline volunteering; the three-cluster model best met the above criteria for online volunteering. For RQ2, I used a pairwise correlation, ANOVA and Tukey post hoc test, to examine the relationship between online and offline volunteering.

Results

Offline and Online Volunteering Types

The results suggest that volunteers maintain four distinct types of offline volunteering and three distinct types of online volunteering. This study describes the four offline types as low-level, medium-level, high-level, and lifetime offline volunteering. The three online types are called low-level, medium-level, and high-level online volunteering.

Offline Type 1: Low-Level Offline Volunteering

Low-level offline volunteering type describes individuals who engage in offline volunteering at the lowest level of the four offline types. This type comprises the largest portion of offline volunteers ($n = 385$, 57%). They participate in the smallest number of organizations, the shortest hours per month, the fewest days per month, and the shortest length of years (see Table 2 for details).

Offline Type 2: Medium-Level Offline Volunteering

Medium-level offline volunteering type includes individuals whose degree of engagement is stronger than the low-level type and weaker than the high-level type. This type comprises the second largest portion of offline volunteers ($n = 174$, 26%). This type ranks second after the lowest in every variable of offline volunteering.

Table 2 Descriptive statistics of four offline volunteering types

	Offline type				F value
	1 Low	2 Med	3 High	4 Lifetime	
Degree of volunteering					
Amount (h/month)	9.96 (2,3,4)	18.47 (1)	17.39 (1)	17.94 (1)	18.79**
Frequency (days/month)	5.28 (2,3)	7.86 (1)	8.06 (1)	7.00 (1)	8.95***
Longevity (years)	0.79 (2,3,4)	4.29 (1,3,4)	11.15 (1,2,4)	23.29 (1,2,3)	2774.47***
No. of org	1.06 (2,3,4)	1.56 (1,3,4)	1.94 (1,2)	2.22 (1,2)	50.73***
No. of vols.	385	174	84	32	

The numbers in parentheses show the cluster number from which this cluster was significantly different at the 0.05 level, based on Tukey post hoc test

** $p < .01$; *** $p < .001$

Offline Type 3: High-Level Offline Volunteering

Both *High-level* and *Lifetime offline volunteering types* consist of active volunteers who participated in the greatest number of volunteering organizations and for the most hours per month compared to the other two types. However, the two types differ in terms of the length of participation in volunteering. *High-level offline volunteering type* ranks second to highest in terms of the volunteering tenure. Volunteers of *high-level offline volunteering type* make up a small percentage of offline volunteers ($n = 84, 12\%$).

Offline Type 4: Lifetime Offline Volunteering

Lifetime offline volunteering type also consists of active volunteers who participated in the greatest number of volunteering organizations and for the most hours per month. Although these individuals make up the smallest percentage of offline participants ($n = 32, 5\%$), they, by far, volunteer for the greatest number of years among the four offline types.

Online Type 1: Low-Level Online Volunteering

Low-level online volunteering type describes individuals who engage in online volunteering at the lowest level of the three online types (see Table 3 for details). They participate in the smallest number of organizations, the fewest times per month, and the shortest length of years. This type includes the largest number of online volunteers ($n = 273, 63\%$).

Online Type 2: Medium-Level Online Volunteering

Medium-level online volunteering type includes individuals whose degree of online volunteering is at the middle level of the three types. Online volunteers of this type rank second to the lowest in every variable. This type comprises 25% of the online volunteers ($n = 109$).

Online Type 3: High-Level Online Volunteering

High-level online volunteering type consists of active participants whose degree of online volunteering is the highest among the three types. These individuals make up the smallest percentage of online volunteers ($n = 48, 11\%$).

Relationship Between Online and Offline Volunteering

The pairwise correlation between online and offline volunteering types suggests a significant positive relationship between low-level online and low-level offline volunteering types ($r = .24, p < .001$) as well as high-level online and high-level offline volunteering types ($r = .12, p < .05$). The pairwise correlation results also

suggest negative associations between low-level types in one sphere and all higher-level types in the other sphere (see Table 4 for full results).

The results from the one-way ANOVA and the Tukey post hoc test also suggest relationships between two spheres. The four offline volunteering types differed in terms of the participation in the online sphere as well. There was a statistically significant difference between four *offline* volunteering types as determined by the one-way ANOVA in terms of frequency ($F [3, 428] = 14.46, p < .001$), length ($F [3, 466] = 13.47, p < .001$), and the number of organizations in *online* volunteering ($F [3, 584] = 3.88, p < .01$). A Tukey post hoc test revealed that volunteers of the low-level offline volunteering type ($M = 3.39, SE = 0.39$) participated in online volunteering fewer times per month than medium-level ($M = 6.58, SE = 0.63, p < .001$), high-level ($M = 8.33, SE = 0.97, p < .001$), and lifetime offline volunteering types ($M = 9.93, SE = 1.70, p < .001$). In terms of the length of the tenure, a Tukey post hoc test revealed that volunteers of the low-level offline volunteering type ($M = 2.22, SE = 0.09$) participated in online volunteering for fewer years than medium-level ($M = 2.93, SE = 0.14, p < .001$), high-level ($M = 3.39, SE = 0.21, p < .001$), and lifetime offline volunteering types ($M = 3.39, SE = 0.37, p < .05$). A Tukey post hoc test revealed that volunteers

Table 3 Descriptive statistics of three online volunteering types

	Online type			F value
	1 Low	2 Med	3 High	
Volunteering				
Frequency (times/month)	1.33 (2,3)	7.31 (1,3)	21.33 (1,2)	1323.77***
Longevity (years)	2.53 (2,3)	3.59 (1)	3.81 (1)	46.60***
No. of org	0.75 (2,3)	1.94 (1)	2.25 (1)	125.64***
No. of volunteers	273	109	48	

The numbers in parentheses show the cluster number from which this cluster was significantly different at the 0.05 level, based on Tukey post hoc test

*** $p < .001$

Table 4 Relationships between offline and online volunteering types

	Low-level online	Med-level online	High-level online
Low-level offline	.24***	-.15**	-.17***
Med-level offline	-.11*	.07	.07
High-level offline	-.16**	.09	.12*
Lifetime offline	-.10*	.07	.06

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

of low-level offline volunteering type participated in a smaller number of online organizations ($M = 0.75$, $SE = 0.05$) than volunteers in high-level offline volunteering type ($M = 1.06$, $SE = 0.09$, $p < .05$).

The three online volunteering types differed in terms of participation in the offline sphere. There was a statistically significant difference between three online volunteering types as determined by the one-way ANOVA in terms of the number of days spent per month ($F [2, 391] = 15.71$, $p < .001$), the number of years ($F [2, 400] = 12.33$, $p < .001$), and the hours per month spent for offline volunteering ($F [2, 397] = 11.67$, $p < .001$), and the number of organizations volunteered for in the offline sphere ($F [2, 403] = 9.33$, $p < .001$). A Tukey post hoc test revealed that there were significant differences ($p < .05$) among the three online types regarding the number of days spent per month on offline volunteering. Low-level online volunteering types participated in offline volunteering for the fewest days ($M = 4.78$, $SE = 0.38$); medium-level online volunteering types participated in offline volunteering for second fewest days ($M = 7.11$, $SE = 0.61$); high-level online volunteering types participated most frequent number of days per month ($M = 10.05$, $SE = 0.96$). In terms of the length of years spent volunteering, a Tukey post hoc test revealed that volunteers of the low-level online volunteering type ($M = 2.49$, $SE = 0.46$) participated in offline volunteering for fewer years than medium-level ($M = 4.49$, $SE = 1.29$, $p < .001$) and high-level online volunteering types ($M = 5.60$, $SE = 0.73$, $p < .001$). A Tukey post hoc test also revealed that volunteers of the low-level online volunteering type ($M = 8.96$, $SE = 0.80$) participated in offline volunteering for fewer hours per month than medium-level ($M = 14.41$, $SE = 1.29$, $p < .01$) and high-level online volunteering types ($M = 17.32$, $SE = 2.01$, $p < .001$). Regarding the number of organizations, a Tukey post hoc test suggested that volunteers of the low-level online volunteering type ($M = 1.15$, $SE = 0.05$) participated in fewer organizations than medium-level ($M = 1.53$, $SE = 0.09$, $p < .001$) and high-level online volunteering types ($M = 1.53$, $SE = 0.14$, $p < .05$).

Discussion

This study illustrated that different types of online and offline volunteering and how volunteering in different spheres are related to each other. The results from the first research question suggest that there are four offline volunteering types and three online volunteering types. Each volunteering type is discussed in turn.

Offline Volunteering Types

The result of the low-level offline volunteering type suggests that there is a large group of offline volunteers who participate in about one organization, which is consistent with previous research (Penner 2002). Characterizing more than half of offline volunteers, this type indicates that most volunteers might be traditional volunteers who participate in about one organization in the offline sphere, approximately once a week, and for less than a year. This group also suggests a

large composition of episodic volunteers who participate for only a short amount of time (i.e., less than a year) when time permits (Cnaan and Handy 2004; Lewis 2013).

Regarding medium-level offline volunteering types, they compose the second largest portion of offline volunteers after the low-level offline volunteering type and commit more to volunteering than low-level offline volunteering types in every aspect. Even though these volunteers divide their time between more than one organization (1.56), they volunteer for longer hours, more frequent times, and for a greater number of years than low-level offline volunteering types. This type includes various kinds of volunteers, including those who participate in more than one organization (Bureau of Labor Statistics 2013).

The high-level and the lifetime offline volunteering types both represent a few active volunteers who participate in about two organizations to the greatest degree. These two types suggest important criteria to distinguish between active and less-active volunteering types. The two types differ from the other two lower types in terms of the number of organizations in which they participate. That is, active volunteers who participate in volunteering to a great degree also seem to diversify their participating organizations. As individuals engage more in volunteering, they might also become more involved in various issues and more organizations.

The number of years committed to volunteering was also a crucial characteristic of the two types. High-level volunteering types engaged in more than 10 years in volunteering, and lifetime volunteering types committed more than 20 years to volunteering—nearly a lifetime, as the name indicates. Previous studies suggest that individuals internalize a volunteer role identity as they engage in volunteering, continue to volunteer, and maintain the role identity (Charng et al. 1988; Hogg et al. 1995; Marta et al. 2014; Piliavin et al. 2002; Turner and Onorato 1999). Volunteers of these two types might have internalized the volunteer role identity as an important part of themselves and committed to volunteering for such an extended period of time based on their identity.

As a whole, the four offline volunteering types suggest an interesting positive relationship between the degree of offline volunteering and the number of organizations. Instead of focusing on one organization, more active volunteering types seem to increase the number of participating organizations. Their degree of participation does not seem to be divided by multiple organizations, but multiplies as they extend their reach to the organizations.

Additionally, the most important measure to classify the four types was the number of years of volunteering. Considering that the number of years of volunteering specifically has a positive relationship to volunteer role identity as compared to other volunteer measures (Charng et al. 1988; Marta et al. 2014; Piliavin et al. 2002), the critical differences between the four volunteering types might be the continuity of volunteering, or the importance of volunteering in their lives, in other words (Thoits 2012, 2013).

Online Volunteering Types

The low-level online volunteering type constituted the largest portion of online volunteers, who participated at the lowest degree in the smallest number of organizations. Corresponding with previous literature on connective action (Bennett and Segerberg 2012), the average number of organizations was less than one; some individuals in this type do not affiliate with formal organizations to engage in volunteering.

In both medium-level and high-level online volunteering types, the degree of volunteering and the number of organizations were greater than in the low-level online volunteering type. They participated in about two organizations for more than three years. Again, as in offline volunteering types, the more active ones support more than one organization in the online sphere. Considering that online volunteering has become more prevalent recently (Lewis 2013), these types represent a new group of active online volunteers who take advantage of the contemporary media for voluntary engagement.

The critical distinction between medium-level and high-level online volunteering types was the frequency of participation. High-level online volunteering types participate almost three times as frequently as the medium-level type. In fact, the frequency of volunteering was the most critical measure in distinguishing the three online volunteering types.

To summarize, the number of organizations was positively related to the degree of volunteering in both the offline and online spheres. Active volunteers participated in more than one organization in both spheres, extending previous results on offline volunteering to online volunteering (Bureau of Labor Statistics 2013). This result suggests that active volunteers multiply their commitment to multiple organizations in both spheres. They might have a strong commitment to a primary organization, but this does not prevent them from volunteering for other organizations.

Further, the length of volunteering was the most critical measure to distinguish the types in the offline sphere, while in the online sphere, it was the frequency. First, the comparative novelty of online volunteering over offline volunteering might have caused this difference. The range of online volunteering length was by far smaller than the offline counterpart (see Table 1 for descriptives). Second, the length and the frequency of volunteering might represent different aspects of offline and online volunteering. The length of offline volunteering might suggest the traditional way of offline volunteers sustaining and incorporating volunteering into their lives (e.g., role identity; Charng et al. 1988; Marta et al. 2014; Piliavin et al. 2002). The frequency of online volunteering, on the other hand, might represent the new forms of online participation, such as logging in and out to actively perform tasks.

Relationship Between Offline and Online Volunteering

The second research question asked about the relationship between online and offline volunteering. The results suggest that there is a positive relationship between low-level participants in online and offline spheres and between high-level participants in online and offline spheres, respectively. The results also suggest

that low-level participants in one sphere are negatively correlated to higher-level participants in the other sphere. Overall, those who participate at the low level in one sphere also participate at the low-level in the other sphere; those who participate at the high level in one sphere also participate at the high level in the other sphere.

This result suggests interesting aspects of the relationship between offline and online volunteering. It complicates the cynical view of online engagement as clicktivism, or as an impression management strategy in which individuals seek to present a positive self to a virtual audience rather than to really engage (Harlow and Guo 2014; Kristofferson et al. 2014). The cynicism seems to align with this group of volunteers who participate at a low level in both the online and offline spheres.

However, the cynical view may not apply to all online volunteering, as results suggest some online volunteers have a strong engagement in the offline sphere. High-level offline and online volunteers definitely participated longer and more frequently than just clicking a button; they engaged highly in both spheres, in contradiction of the clicktivism argument (Harlow and Guo 2014; Kristofferson et al. 2014).

The positive relationship between the offline and online spheres indicates that the two spheres are not completely separate, but are correlated. This relationship also suggests that clicktivism does not come from the limitation of online activity itself, but from the positive relationship between the two spheres; some online volunteers do not participate much in the offline sphere because they do not participate online much, either. They are just less-active volunteers.

The high degree of volunteering in both spheres distinguishes high-level volunteers from lower-level volunteers; they are active volunteers who are engaged in more than clicktivism. Because they are committed to volunteering to a great degree, represented by the length, frequency, amount, and number of organizations in volunteering, they take advantage of both spheres to extend their engagement reach (Cravens 2006; Murray and Harrison 2005) and carry their volunteering in one sphere to the other sphere. For the active volunteers, the two spheres might not be separate spheres, but broader realms and more diverse ways for social change. This result adds a volunteering case to previous studies on the positive relationship between other online and offline engagement activities (Conroy et al. 2012; Paek et al. 2013).

Additionally, the high-level offline volunteering type was positively related to the high-level online volunteering type, whereas the lifetime offline volunteering type was not. No pairwise correlation to lifetime volunteers suggests that lifetime volunteers who have volunteered for more than 20 years are more likely to stick to their traditional volunteering habits and stay in the offline sphere rather than going online to complement their offline volunteering. High-level offline volunteers' shorter number of years compared to the lifetime volunteers suggests that they might be younger and more flexible volunteers who are willing to broaden their reach to the online sphere.

Conclusion

This research examined different types of online and offline volunteering and the relationship between them. The results classify different types of volunteering in both spheres. The results also suggest that volunteering in two spheres are positively related and are complementary to each other.

The survey source and qualifier limit the generalizability of results to the general population. The survey was conducted online through Qualtrics, so the survey participants might have been more accustomed to online media and more likely to participate in online volunteering than the general population. Additionally, the survey participants were already offline or online volunteers, so the results could have been overestimated or underestimated for the general population. By asking the same questions of non-volunteers, and using methods other than online surveys, futures studies can generalize the results to the overall population.

This research makes three contributions to online and offline volunteering research. First, it captures the emerging trends of engagement activities. This study departs from previous research that focuses on traditional volunteering in the offline sphere, but addresses the dynamics of nontraditional types of volunteering such as online volunteering, or volunteering based on affiliation with no organization (Bennett and Segerberg 2012; Lewis 2013). The results also provide implications for practitioners in voluntary organizations not only to take advantage of advanced technologies (Burt and Taylor 2001; Zorn et al. 2013) but also to understand individuals' participating dynamics in the contemporary media environment.

Second, this research reveals an interesting association between online and offline volunteering. The cynical view of clicktivism suggests that online and offline spheres are separate and that online participants do not participate much offline. The positive relationship between the two spheres suggests that volunteering in the online sphere does not limit or substitute for offline volunteering. Volunteers' participation spans both spheres, indicating that activities in both spheres might complement each other. This study can be a first step in answering the controversial question of clicktivism versus close links between the online and offline spheres (Enjolras et al. 2013; Kristofferson et al. 2014; Gil de Zúñiga et al. 2012).

Finally, this research reinterprets online volunteering as a significant activity among many online engagement activities. Many studies have paid attention to the relationship between online and offline engagement activities (Harlow and Guo 2014; Kristofferson et al. 2014; Cravens 2006; Murray and Harrison 2005), but few studies have included online volunteering. Corresponding with few online volunteering studies (Cravens 2006; Murray and Harrison 2005), this research suggests that volunteers might extend their capacity to broader spheres and complement their engagement by actively taking advantage of advanced technologies or generating actual impact to the offline sphere. Their capacity can reach even more than two organizations in the online and offline spheres and for even more than 20 years.

This research identified different types of online and offline volunteering in the current era and examined the relationships between them. Departing from the

traditional image of volunteering, this research introduces various types of online and offline volunteering and suggests a positive relationship between them. The results from this study indicate that volunteering is a complex activity where individuals manage their commitment and time to participate within varying organizational contexts, to different degrees, in order to maximize their reach to both online and offline spheres.

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