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Characteristics and motivations of environmental volunteers at episodic events

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ABSTRACT

As climate change disrupts our lives and environmental awareness and concerns rise within society, more individuals invest time contributing to activities and projects that help preserve the environment. This study uses a recent international database containing data on 1383 environmental event volunteers in 13 different countries, composed of both developed and developing nations. A profile of the volunteers was created, exposing their demographic characteristics and preferences. This profile shows a decrease in the average age of participants compared with studies conducted over 10 years ago. Then, a comparison was analyzed of individuals who volunteered in the event individually with those who did so as part of a group of recruits. The latter constitutes a new challenge to volunteer participation, highlighting the emergence of new actors in the recruitment process of volunteers, such as businesses and educational institutes, changing the role of nongovernmental organizations (NGOs) from recruitment to proper volunteer placement. The motivations behind these environmental event volunteer activities were also examined, revealing that individuals volunteering as part of an organized group give more importance to utilitarian motivations than those who volunteer alone. This research contributes to the existing literature by providing an updated and less westernized perspective on environmental volunteers' demographics and preferences. It also explains the influence of new actors in the volunteer-NGO relationship that are reshaping the management of the volunteer workforce.

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Volunteering is a way for people to participate in civil society and provides considerable benefits for individuals. It helps people feel good about themselves (Mirowsky and Ross 1989), in addition to strengthening their physical health and overall satisfaction (Whiteley 2004). As argued by Hyde et al. (2016), it is crucial to recruit and retain volunteers with the adequate level of engagement to ensure the long-term survival of civil society organizations. At the same time, however, new modes of volunteering have emerged including episodic volunteering (Cnaan and Handy 2005), corporate or employee volunteering (Roza 2016), volunteer tourism (Wearing and McGehee 2013), and online volunteering (Liu et al. 2016). These new forms of volunteering respond to increases in working hours and changes in family structures and gender roles (Macduff 2005, as well as to the shift from traditional long-term volunteering to more individualistic one-off or short-term volunteering (Dekker and van den Broek 2006; Hustinx 2001). The emergence of new types of volunteering has led to alternative recruitment methods. This implies

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that volunteers join through a variety of channels, with a variety of motivations and expectations regarding their engagement in such activities (Van Overbeeke et al. 2022). Volunteer organizations should change and adapt their recruitment strategies accordingly (Cnaan et al. 2021) and understand that these new actors might bring additional goals such as transformative learning for the sustainable development goals (SDGs) (Cottafava, Cavaglià, and Corazza 2019).

In addition to the changes in the forms and channels of volunteering, there is an emerging general and academic interest in individuals who volunteer to help the environment. Although some authors argue that volunteers have long engaged in environmental management activities (Measham and Barnett 2009), volunteers currently play a critical role in protecting and helping the environment (Ryan, Kaplan, and Grese 2001). Various studies have analyzed the characteristics of environmental volunteers across an array of activities to understand their motivations and involvement, finding that what motivates volunteers differs across demographic groups (see, e.g. Anđelković et al. 2022; Larson et al. 2020; Liarakou, Kostelou, and Gavrillakis 2011; Sloane and Pröbstl-Haider 2019). Most of the existing literature is based on comparisons of specific countries or events, with a strong focus on Western countries.

This article makes two main contributions to literature on environmental-event volunteering. First, it creates a global profile based on 13 countries, including both developed and developing ones, thereby offering a less westernized perspective of contemporary environmental event volunteers. This profile demonstrates the global presence and potential of environmental-event volunteerism. Second, it analyzes the volunteer involvement of two specific categories of recruitment and participation in these episodic environmental events: comparing individuals who decide to volunteer for the event as individuals with those who join as part of a group (e.g. a company, educational institute, family). This sheds light on changes in the dynamics of volunteering that have accompanied the emergence of new actors including companies and educational institutes (Haski-Leventhal, Meijs, and Hustinx 2010) involved in the process of recruiting volunteers, including environmental volunteers. The current research focuses mostly on outdoor activities (e.g. clean-ups and tree planting); not in the field of citizen science.

Literature review

Episodic environmental volunteering

Apart from traditional, long-term volunteering, new ways emerge in response to changes in cultural and societal behaviors (Macduff 2005). Event-based, or episodic, volunteering is increasing in popularity and acceptance by volunteers and organizations (Cnaan et al. 2021). As defined by Weber (2002), episodic volunteers are those who contribute their time sporadically, only during special times of the year, or who consider volunteering in terms of one-off events. With episodic volunteering, therefore, individuals who offer their time know when activities will start and end before they engage. Although this also results in an increase in the number of volunteers, the volunteers contribute a shorter amount of time (Cnaan and Handy 2005).

Liarakou, Kostelou, and Gavrillakis (2011) define environmental volunteerism as ‘a conscious decision of the actor, and it indicates his/her desire for further involvement as an active citizen in collective action towards a public purpose, i.e. the solution of environmental problems’ (p. 3). Measham and Barnett (2009) propose five broad modes of environmental volunteering: activism, education, species monitoring, restoration, and sustainable living. These modes encompass a broad range of activities from outdoor initiatives (e.g. clean-ups, tree-planting, and removing invasive species) to educational and awareness-raising methods (e.g. citizen-science programs, fundraising, and protesting).

The individual perspective: demographic characteristics and motives of environmental volunteers

In general, the characteristics of individuals who are likely to volunteer are mixed and dependent on context (national, organizational) and method. Nevertheless, scholars have found that volunteering is more common among women, people 50 years of age or older or young children, those with high-level religious participation, and others who are retired or work part time (Bussell and Forbes 2002; Forbes and Zampelli 2014). Moreover, structural barriers linked to income, knowledge, skills, and time availability pose obstacles that impede individuals with low socioeconomic status from volunteering (Musick and Wilson 2008; Southby, South, and Bagnall 2019).

There are several studies analyzing the demographic characteristics of environmental volunteers, mainly focusing in areas such as natural resource management, conservation, environmental education, and beach and natural area clean-up. In terms of education level, a study by Larson et al. (2020) showed 50% of participants had an advanced degree. Other studies have reported more than 75% of individuals volunteering at environmental events as having completed at least an undergraduate degree (Asah and Blahna 2012; Van den Berg, Dann, and Dirx 2009). Higher education levels tend to be associated with pro-environmental behaviors (Meyer 2015), and in some cases, interest or education in a scientific field increases a person's likelihood of volunteering for some type of environmental event (Martin 2017).

Environmental volunteers also tend to have middle to high incomes (Guiney and Oberhauser 2009; Larson et al. 2020). According to some studies, around half of all respondents held full-time employment (see, e.g. Guiney and Oberhauser 2009; Merenlender et al. 2016), with a relatively small share (15–20%) being students (Bruyere and Rappe 2007).

No clear trend can be identified with regard to gender. Some studies report that women constitute the majority of environmental volunteers (Asah and Blahna 2012; Guiney and Oberhauser 2009), while others report higher numbers of men (O'Brien et al. 2010). And some report an almost equal gender composition (Bruyere and Rappe 2007; Larson et al. 2020). This divergence could be associated with the fact that women and men differ in the types of events in which they participate. Both biological and cultural differences could potentially play a role in such preferences. For example, in general, women tend to exhibit more empathy, have a greater sense of community, be more risk-averse, and be more likely to avoid physical or other forms of danger as compared with men (Wymer 2011).

According to the literature, environmental volunteers tend to be between 40 and 50 years of age (Bruyere and Rappe 2007; Guiney and Oberhauser 2009; Ryan, Kaplan, and Grese 2001). Consistent with the high education levels and full-time employment status described above, teenagers and young adults are represented to only a limited extent in the populations studied. The relative absence of younger people in environmental volunteering (or volunteering in general) could be linked to a lack of time or interest, the priority of finding paid employment, or characteristics of the social environment (e.g. volunteering has not been transferred through the actions of parents) (Sundeen and Raskoff 2000).

In addition, studies suggest a wide range of reasons why individuals volunteer for environmental activities, which may vary according to personal characteristics (e.g. age, income, education, gender, employment status), social settings, and specific volunteer organizations and projects (Asah, Lenentine, and Blahna 2014; Penner 2004). For example, some scholars (see, e.g. Ding and Schuett 2020; Warburton and Gooch 2007) have identified what is termed 'generativity'—the responsibility of society to leave the earth 'in a condition no worse than what we actually received from our predecessors' (Moody 2008, 4)—as one of the strongest motivations for adults to volunteer to help the environment. In contrast, younger people are likely to focus more on opportunities that will help them with their future careers (Cho, Bonn, and Han 2018). Wong et al. (2021) suggest that the main benefits gained by secondary school students'

participation in environmental conservation programs are improved knowledge, personal skills, well-being, and overall awareness of their behavior toward the environment. Other studies have suggested cultural context as a factor explaining differences in motivation among countries. In particular, Sloane and Pröbstl-Haider (2019) report that, compared with their counterparts in Great Britain, environmental volunteers in Austria seem more motivated by self-expression, and less by learning and career opportunities.

In the past decade, some researchers have argued that millennials have assumed the leading role in guiding the environmental movement. They have been raised in the shadow of ecological devastation, natural disasters, deterioration of the natural environment, and increasingly extreme weather conditions. At the same time, however, the availability of more educational and research resources has helped to build their awareness of and attitudes toward the environment (McDougale, Greenspan, and Femida Handy 2011; McKay 2010; Woosnam et al. 2019). As new generations enter the volunteer workforce, researchers are increasingly shifting their attention to Gen Z—a generation that, particularly in the global North, has been strongly sensitized about climate change and is actively looking for solutions to pressing environmental issues (Lin et al. 2022). In a study of the motivations, attitudes, and job performance of volunteers from this generation, Cho, Bonn, and Han (2018) identify career-related motivations and learning opportunities—as opposed to altruism or social motivations—as the elements to which these individuals attach the greatest value. In a study of the influence of new tools (e.g. internet search sites) on opportunities to volunteer for nature-related causes in the United Kingdom, Winch et al. (2021) identify new ways for organizations to recruit volunteers. According to their results, current volunteers tend to be between the ages of 25 and 34 years, and thus somewhat younger than suggested in earlier studies. What is more, the motivations driving these individuals appear to differ considerably from those previously reported in literature, such that the currently available opportunities for volunteering do not correspond to current motivations. For example, compared with populations studied previously, these volunteers seemed to be more interested in physical activities rather than social interactions. Winch et al. (2021) therefore argue that nature-related volunteering projects should be adapted to match the interests of twenty-first century volunteers.

Another recent discourse in environmental volunteering literature revolves around the concept of global citizenship, which still offers substantial potential for exploration (Woosnam et al. 2019). This approach considers volunteering in relation to a broader range of political, economic, and social issues occurring on a global scale; not at the local level, where most of the environmental action documented in existing literature has taken place (UN n.d.; Woosnam et al. 2019). This view is based on the idea that some of the most pressing issues (e.g. climate change and environmental deterioration) are global in nature (Dower 2003). Resolving such problems thus requires a less bounded view of the world, in addition to concern for issues beyond one's own local or national borders. Most scholars associate the concept of global citizenship with activities involving volunteering experiences abroad ('voluntourism'), citizen-science projects (Gray et al. 2017; Lorimer 2010; Lyons et al. 2012), or civic engagement and service learning (Meijs et al. 2020). Woosnam et al. (2019) argue that this approach is the most appealing to millennials, who assign considerable importance to fulfilling their global-citizenship ambitions when deciding whether and where to engage in environmental volunteering.

Studies, such as that by Winch et al. (2021), have thus suggested a shift in the motivations and, possibly, the demographic characteristics of environmental volunteers in recent decades. Most previous studies have been conducted in developed nations that also have clear traditions of volunteering, particularly in the USA and the UK. Because previous work has also highlighted substantial differences among developed countries (Sloane and Pröbstl-Haider 2019), it seems likely that the characteristics of volunteers in developing countries also differ substantially from those in developed countries.

The developments and observations outlined above lead to our first research question: Do the demographic characteristics that define environmental (event) volunteers in more Western countries differ from those that define environmental volunteers in other countries with different approaches toward volunteering?

The organizational perspective: changes in the embeddedness of volunteering and management of volunteers

In recent decades, volunteering has undergone significant changes in structure, nature, and motivations (Hustinx and Lammertyn 2003), leading to a need to re-embed and modernize volunteering from collective to reflexive arrangements. In some countries the volunteer landscape has witnessed a decline in both the number of people and the number of hours (Brudney and Gazley 2006), along with an increase in the demand for both (Randle, Leisch, and Dolnicar 2013). More importantly, as pointed out by Hustinx and Meijs (2011), in Western European countries individuals are shifting from traditional long-term volunteer commitments to specific organizations based upon collective embeddedness to more individualized and episodic volunteering activities (Cnaan and Handy 2005).

One important structural change entails the involvement of new organizations in the promotion and encouragement of volunteering. In response to the need to re-embed volunteering (Hustinx and Meijs 2011), Haski-Leventhal, Meijs, and Hustinx (2010) describe three organizations that constitute third parties between volunteers and volunteer-involving organizations: governments, corporations, and educational institutes. As argued by Haski-Leventhal, Meijs, and Hustinx (2010), these third parties enhance both 'volunteerability' and 'recruit-ability'. Specifically, the recruit-ability of an organization consists of three primary components: accessibility to potential volunteers, resources and networks, and cooperation. Brudney, Meijs, and van Overbeeke (2019) extend the third-party model by describing an alternative to secondment, in which companies and educational institutions access the volunteer energy of their employees and students and donate it to nonprofit organizations. This alternative model consists of organizations such as volunteer centers, campaigns like World Cleanup Day¹, and national days of service (Koolen-Maas et al. 2021), as well as such themes as green gymnastics (combining volunteering and physical activity), family volunteering (offering volunteer opportunities to families instead of to individuals), and singles volunteering (combining volunteering and dating), thereby accessing the volunteer energy of the broader public. According to Brudney, Meijs, and van Overbeeke (2019), this new structural embedding of volunteering is based upon separating access to volunteers from the guidance of volunteers across two separate organizations: a sending and a receiving organization. In this vein, Van Overbeeke et al. (2022) present three strategies for the sending organizations, advising them to convince current volunteers to contribute more hours while also encouraging people to start volunteering. Meijs and Koolen-Maas (2022) link this development to the instrumental goals of the sending organizations such as developing employees (corporate volunteering), students (service learning), and citizens in general (local governments).

Interventions involving third-party actors are becoming increasingly important in broadening the volunteer landscape with the emergence of various forms of volunteering including corporate (Do Paço and Nave 2013; Roza 2016), episodic (Cnaan et al. 2021; Cnaan and Handy 2005), and service learning (Haski-Leventhal, Meijs, and Hustinx 2010). These third-party organizations are thus able to function as a bridge between others looking for volunteers and individuals who could potentially volunteer (or increase their current commitment). For volunteer organizations, however, managing such new sources of volunteers requires new processes and structures at the organizational level (Hustinx and Meijs 2011). In most cases, third parties realize some instrumental benefit by taking over this action. For example, companies might conduct corporate volunteering programs to strengthen their reputations and corporate social

responsibility (CSR) strategies to increase employee satisfaction and retention (Cycyota, Ferrante, and Schroeder 2016).

This leads us to our second research question: Are the characteristics of environmental event volunteers recruited through a third party different from those recruited through other channels?

Methodology

Overview

This research is divided into two different parts. In the first part, we present a profile of environmental volunteers and compare their demographic characteristics to those reported in previous studies to identify possible changes and national differences in the antecedents of individuals who volunteer at these events. In the second part, we examine differences between environmental volunteers who join events on their own, those who do so as part of a clear third-party group (i.e. a company or educational institute), and those who engage with friends and relatives. We also discuss the practical consequences of the various recruitment channels (i.e. through educational institutions, companies, and relatives and friends). This research received ethical approval from the University of Pennsylvania Institutional Review Board (IRB).

Data collection

The data used for this study was sourced from an international research project on episodic event volunteering in 19 countries, with a sample of more than 10,000 event volunteers. The dataset includes information on 1383 environmental volunteers from events in 13 different countries. These events varied in size and included diverse activities such as beach and other public areas clean-ups, tree and community garden planting, wildlife protection, separation of waste collection, and environmental education—it is interesting to note there is no data on citizen science events. The data were collected during 2017 and 2018 by local research teams across a wide range of events using online surveys or hard copies at event sites. Items in the questionnaire addressed aspects including demographic components, areas of volunteering, organizational matters, volunteer assignments, motivations, behavior, and overall experience and satisfaction.

Motivations of environmental volunteers were measured by asking, 'Did you volunteer with [event] to...' followed by descriptions of different motives. These motives were grouped in three different categories. Altruistic motivations are: 'Set an example for others (family, children, friends)' and 'Fulfill civic duty'. Utilitarian motivations include: 'Show employer involvement with community', 'Fulfill emotional satisfaction', 'Fulfill spiritual satisfaction', and 'Fulfill school requirement'. Finally, social motivations are: 'Looking for some fun or productive activity', 'Meet new people', and 'Asked by a friend'. To assess the degree to which respondents saw each type of motivation as relevant, we combined the number of motives they selected in a particular category. This implies that the score for altruistic motives ranges between 0 and 2; that for utilitarian, between 0 and 4; and that for social, between 0 and 3.

Items about intentions to volunteer again, both for another event by the same organization and for another organization, were assessed on a 5-point scale, with 1 being the lowest likelihood to volunteer again ('definitely will not') and 5 the highest ('very much so'). We assessed overall volunteer experience by asking the question: 'If you volunteer regularly (on-going), how many years have you been volunteering?' This was coupled with the following scale: (1) *I do not regularly volunteer*, (2) *Less than 5 years*, (3) *6–10 years*, (4) *11–15 years*, (5) *16–20 years*, (6) *21 or more years*, and (7) *Hard to answer*. This scale was then recoded into irregular volunteering (category 1) and regular volunteering (categories 2–7).

In most countries, the data for participants' income level was gathered using a question with three answers: 'low', 'middle', and 'high'. In some countries, however, the responses were adapted to reflect the reality of each region and to facilitate the understanding of the responses from the respondents' side. For example, in some countries, a 5-point scale was used, labeled from 'very low income' to 'very high income'. In other countries, more specific labels were used, such as a 6-point scale labeled from 'Money is not enough even for food' to 'Enough for a house and apartment', and a 7-point scale labeled from '<3'000 CHF' to '>15'000 CHF'. With all the different options provided in each country, the researchers classified the responses into the three categories: 'low', 'middle', and 'high' to create a standardized scale.

The common questionnaire was developed with feedback from participating scholars considering the complexities of surveying episodic event volunteering for such a diverse international set. It was translated and evaluated by the team of scholars responsible for the respective country, and slight adaptations were made in response to relevant cultural differences.

Data on the sample of 1383 environmental volunteers were collected in Australia, Bahrain, China, Colombia, India, Israel, Japan, Kuwait, Mexico, Russia, Saudi Arabia, South Africa, and Switzerland. Four countries—Australia, Israel, Japan, and Switzerland—had 25 or fewer environmental volunteers. For this reason, when making cross-country comparisons, we grouped respondents from these countries together in the category 'others'.

Due to the complexity of gathering this data in 19 countries, we do not have detailed information on the specific events for all countries represented in the dataset. The types of environmental events at which these volunteers worked nevertheless differed widely across countries. For example, India had a variety of events including cleanliness drives (a nation-wide program aimed at managing the disposal of resources) and more local-level volunteering at flood-relief camps. In Russia most of the events consisted of clean-ups in public areas, while the main initiatives in Mexico were reforestation programs.

Results

Descriptive analysis of environmental volunteers

In this section, we present descriptive information on a number of variables of interest. To compare data from different countries, we created cross-tabulations to describe relationships between pairs of categorical variables, with countries on one side and the variables of interest on the other.

Almost three fourths (74.2%) of all respondents were between the ages of 18 and 44 years, with the average falling within the 35–44 age range. The sample consisted of slightly more women (57.7%) than men. According to the analysis, environmental volunteers in India, Mexico, and Saudi Arabia tended to be younger, while those in Colombia tended to be somewhat older. As further shown in [Table 1](#) (see the Tables section at the end of this paper), men constituted a clear majority in three countries: Bahrain, India, and Kuwait. And women predominated in three other countries: Colombia, Russia, and South Africa. The gender composition was relatively equal in Mexico and Saudi Arabia. Data for these two variables were not collected in China.

With regard to education, the results indicate that, in general, environmental volunteers had completed high levels of formal education, with 66.66% holding an undergraduate, graduate, or doctoral degree (see [Table 1](#)).

Slightly more than half (50.61%) of the environmental volunteers reported having a middle income, with only 3.33% reporting having a high income. As to occupational status, full-time employees were most common (29.72%), followed by students (18.58%). It is important to note, however, that more than one fourth (27.04%) of all respondents indicated 'other' for their occupational status. Only 11.93% of the survey respondents were not in the workforce. One interesting finding was that a majority (77%) of respondents in Russia reported 'other' for occupational

status. This was probably because respondents tended to answer this question by listing their actual work positions instead of selecting one of the given options, as the open answer accompanying 'other' included such responses as 'head of department' and 'businessman'.

As shown in Table 2, most environmental volunteers reported engaging in volunteering on a regular basis, and in most cases, together with other people, whether as part of an organized group (e.g. through work or school) or with friends or relatives.

The overall levels of satisfaction of volunteers at environmental events were high, with an average of 4.37 out of 5, as most volunteers rated their experiences as either good or excellent. As shown in Table 1, volunteers in Kuwait, Saudi Arabia, and South Africa reported the highest levels of satisfaction, with an average of 4.58, 4.65, and 4.57, respectively.

Volunteering in the event individually or as part of a group

In the second part of the study, we explored differences between three categories of volunteers: those who engaged as volunteers in the event individually, those who engaged in the events as part of third parties (through school or workplace), and those who volunteered with friends or family. We used these three categories as the independent variable for further analysis.

We started by assessing the likelihood that volunteers in each category would volunteer again, whether for the same organization or a different organization, shown in Table 4. Based on the results of Levene's tests, which revealed significant differences between the variances of the three groups, we performed a robustness test for equality of means (Welch's F). We were able to conclude that the means differed across groups, as these statistics were significant ($F_{2,712.342} = 27.109$ for the likelihood of volunteering for the same organization and $F_{2,679.304} = 5.831$; both $p < 0.001$). This was followed by Games-Howell tests to identify exactly which means differed. With regard to the likelihood of volunteering again with the same organization, all means differ significantly except for 'organized group' and 'family and friends', with mean differences of around 0.5 and 0.6, corresponding to estimates of Cohen's d of around 0.4, which according to Cohen (1988) is slightly below a medium effect size (see Table 2). Given that the ratings were assigned on a scale of 1 to 5, these effects can be regarded as medium size. The results thus suggest that those participating in events alone were more likely to volunteer again with the same organization, as compared with those volunteering as part of organized groups or with family and friends. Regarding the likelihood of volunteering with another organization, the means for the categories 'alone' and 'organized group' differed significantly, albeit with a smaller effect (mean difference = 0.2, Cohen's $d = 0.2$). This result suggests that the likelihood of volunteering again for another organization was higher for volunteers who participated as part of an organized group, as compared with those volunteering alone or with family or friends.

The distribution between regular and non-regular volunteers across those participating in events individually, as part of organized groups, or with friends and relatives is presented in Table 3. This distinction between regular and non-regular volunteers refers to general volunteering habits, not specifically meaning that they volunteer regularly for the organization hosting the event. The results reveal a significant and small- to medium-sized relationship between these two variables (Cramer's $V = 0.186$; $p < 0.001$), with volunteers who engaged in events as part of organized groups substantially more likely to be regular volunteers than those who volunteered either alone or with friends or relatives.

Table 2. Cohen's d of differences among volunteers.

Organization	Same Organization	Another Organization
Alone—Organized group	0.43	-0.22
Alone—Friends and relatives	0.37	-0.09
Organized—Friends and relatives	-0.07	0.13

According to the results of the ANOVA presented in Table 5, volunteering alone, as part of an organized group, or with friends and relatives is associated only with utilitarian motivations, as this was the only result for which the F -test was significant ($F_{2,1325} = 4.196$; $p = 0.015$). Moreover, the average score of volunteers engaging in events as part of organized groups was 0.150 higher (on a scale of 0 to 4) for the mean of utilitarian motivations, as compared with those participating alone.

As shown in Table 6, in India, Russia, and South Africa, most respondents participated in the events as part of an organized group (76.2%, 63.9%, and 60.2%, respectively), as compared with Kuwait and Mexico, where most volunteers participated alone (52.9% and 55.9%, respectively). Interestingly, and in contrast to the results of our earlier analysis showing that volunteers participating as part of organized groups report more utilitarian motivations, the cross-country comparison of the motivations to volunteer show that the countries in which most volunteers participated as part of organized groups were also the ones with the lowest scores on the various volunteer motivations. In India many respondents reported extremely low levels of the various motivations (37%, 34%, and 52.8% of individuals presented no motivations for either altruistic, utilitarian, or social motivations, respectively). Similar levels were observed in Russia (44.5% none for altruistic and 43.5% none for social) and South Africa (59% none for altruistic

Table 3. Regularity of volunteering among volunteers.

Group		Regular volunteering	Non-regular volunteering	Total
Alone	Count	218	225	443
Organized group	Count	411	179	590
Group—Friends and relatives	Count	164	125	289
Total	Count	793	529	1322

Table 4. Descriptive statistics for the likelihood of volunteering again.

Organization	Group	n	Mean	Standard deviation
Same organization	Alone	436	3.93 _a	1.35
	Organized group	585	3.27 _b	1.67
	Group - Friends and relatives	280	3.39 _b	1.61
	Total	1301	3.52	1.58
Another organization	Alone	435	3.77 _b	1.26
	Organized group	582	4.01 _a	0.99
	Group - Friends and relatives	279	3.87 _{ab}	1.12
	Total	1296	3.90	1.12

Note. Means with different subscripts are significantly different at $p < 0.05$.

Table 5. Descriptive statistics of the motivations of volunteers.

Motivations	Group	n	Mean	Standard deviation
Altruistic motivations	Alone	445	0.83 _a	0.72
	Organized group	594	0.82 _a	0.73
	Group - Friends and relatives	289	0.84 _a	0.73
	Total	1328	0.83	0.73
Utilitarian motivations	Alone	445	0.89 _b	0.97
	Organized group	594	1.04 _a	0.98
	Group - Friends and relatives	289	0.88 _{ab}	0.91
	Total	1328	0.96	0.97
Social motivations	Alone	445	0.68 _a	0.82
	Organized group	594	0.76 _a	0.84
	Group - Friends and relatives	289	0.65 _a	0.80
	Total	1328	0.71	0.83

Note. Means with different subscripts are significantly different at $p < 0.05$.

Table 6. Type of volunteering by country.

Organization	Bahrain	China	India	Kuwait	Mexico	Russia	Saudi Arabia	South Africa	Others	Total
Alone	40.9%	45%	23.8%	52.9%	55.9%	10%	35%	18.6%	42.1%	33.5%
Organized group	50%	47.5%	76.2%	33.3%	19.1%	63.9%	39.8%	60.2%	34.2%	44.7%
Group - Friends and relatives	9.1%	7.5%	0	13.7%	25%	26.1%	25.2%	21.2%	23.7%	21.8%

Table 7. Reasons for volunteering.

Variables		Yes (%)	No (%)
To show employer involvement with community	Alone	13	87
	Organized group	27.8	72.2
	Group - Friends and relatives	16	84
School requirement	Alone	6.4	93.6
	Organized group	9.2	91.8
	Group - Friends and relatives	6.3	93.7

and 76.5% none for social). In Russia 30% of the environmental volunteers had heard about their events through work and 13% had heard about them through school. In South Africa 52% had heard about their events through work and 23.5% had heard about them through school. The situation was different in countries where higher levels of motivations were reported. For example, in Kuwait 53% of the volunteers had gone to their events alone and only 8% had heard about them through work or school; most had heard about their events through social media (31%) or directly from the organizers (29%).

When asked about their reasons for volunteering at their events, 27.8% of those participating as part of organized groups reported having done so to demonstrate community involvement on the part of an employer, with 9.2% stating that they had volunteered to fulfill a school requirement (see Table 7).

Discussion

Profiling environmental volunteers

According to our results, slightly more than half of environmental volunteers are women, and most are between the ages of 18 and 44 years. The average age of environmental volunteers thus appears to be decreasing, as compared with studies published in the early 2000s (Bruyere and Rappe 2007; Guiney and Oberhauser 2009; Ryan, Kaplan, and Grese 2001), when most volunteers were in their forties and fifties. This new age range reflects the relatively large representation of younger generations in the environmental volunteer workforce, possibly due to increased environmental awareness and education. The income level of environmental volunteers also appears to have decreased slightly, as compared with the results of studies published one or two decades ago (Bruyere and Rappe 2007; Guiney and Oberhauser 2009). This difference may also be due to the incorporation of younger generations into the volunteer workforce, whose incomes are likely to be lower than those of older generations. Moreover, it could be that most of the existing literature is based on studies conducted in Western countries, primarily the US and the UK, whereas the present study includes data from a more diverse group of countries with different economic and social situations. One factor that does not appear to have changed in recent decades is the high education level of environmental volunteers (Asah and Blahna 2012; Bruyere and Rappe 2007; Van den Berg, Dann, and Dirx 2009).

The results also indicate that most of the environmental volunteers in this study tended to volunteer on a regular basis (i.e. ongoing volunteering regardless of organization), even though the data were collected during episodic events. These volunteers were more likely to volunteer as part of organized groups rather than alone. And their satisfaction levels were high. This could be a key factor in retaining them, as satisfying an individual's needs has been shown to increase their likelihood to volunteer in the future (Bang and Ross 2009).

Group involvement in environmental volunteering

Our results reveal a clear distinction between individuals who volunteer alone and those who do so as part of organized groups. This distinction reflects the emergence of new parties—businesses and schools—within the volunteer-organization dynamic. These third parties are changing the process of recruiting volunteers. As the results suggest, the emergence of third-party recruitment is largely due to the increasing involvement of businesses in volunteering, primarily through corporate programs (Do Paço and Nave 2013).

Many organizations that manage environmental events do not only recruit individual volunteers but are also likely to contact, or to be contacted by, companies, schools, and other organizations willing to send workers or students to volunteer in the events as groups. Environmental NGOs are thus shifting away from only recruiting volunteers themselves to receiving them from sending organizations and placing them in appropriate activities within specific events.

The emergence of third-party or sending organization recruitment raises questions concerning the relative voluntary or compulsory nature of such recruitment. In the case of schools, our results indicate that a small percentage of the volunteers participated in these events to fulfill a school requirement. For companies, however, it was not clear whether participation was required or mandatory. In general, the research indicates that most volunteers who participated in events as part of an organized group were also regular, individual volunteers outside their group. This suggests that companies are highly likely to offer their employees the opportunity to volunteer at environmental events, and the employees who do participate in such activities tend to be those who usually volunteer anyway. That is, it seems that companies are not functioning as a gateway to new volunteers (Van Overbeeke et al. 2022).

This is a surprising finding because it could be expected that many non-regular volunteers or novice volunteers (Compion et al. 2021) will only participate in such event activities when recruited through a group combined with pressure from their peers. An individual's behavior is influenced by internalized moral principles of reference groups and, in the case of corporate volunteering, Hou, Qian, and Zhang (2020) revealed that pressure from peers of the same level is more effective than pressure from a superior. This social pressure to volunteer is especially relevant in collectivist countries (Guidi et al. 2021), although Botero, Fediuk, and Sies (2013) argue that this pressure may reduce the intrinsic motivations of individuals to volunteer. The latter could perhaps explain why in our study, especially regular volunteers, are inclined to participate through their employers.

These results could also explain the difference between the relative likelihood of various categories to volunteer again in the future. In the case of volunteering for another organization, those respondents who joined as part of a group were more likely to answer in the affirmative, as they were already volunteering at other events and were planning to continue doing so in the future. In contrast, they were less likely to volunteer again for the same event. Given that these volunteers had not personally researched and contacted the environmental organizations for which they volunteered, they might not have volunteered for them if their companies or schools had not offered them the opportunity. This is a potential disadvantage of third-party recruitment. If organizations and volunteers do not develop a strong relationship, the retention of this workforce for participation in future events with the volunteer organization could pose a challenge.

Our results further point to several differences in the characteristics of volunteers who participate in events alone, those who do so as part of organized groups, and those who participate with friends and relatives. This choice is related to the prominence of utilitarian motivations. More specifically, individuals who volunteer as part of an organized group assign more importance to utilitarian motivations than do those who volunteer alone. Examples of utilitarian motivations include the fulfilment of school requirements and the demonstration of community involvement on the part of an employer, thus reinforcing the notion that this difference in utilitarian motivations among groups is due to the emergence of the third-party model in the recruitment structure for volunteer energy.

When making comparisons among countries, volunteers in countries where most individuals participated in events as part of organized groups (e.g. through school or work) report low levels of all types of motivations. This may be due to the fact that they had not actively sought to volunteer in the events in which they engaged but had instead been asked by an employer or school authority. In contrast, in the countries where most people volunteered alone, individuals reported higher levels of motivations. In these countries volunteers had been motivated in some way to seek the opportunity to volunteer in these events on their own (e.g. through direct contact with the organization or through social media).

It is important for NGOs to recognize the differences in the ways in which volunteers learn about events, as well as in whether they participate alone or as part of organized groups. This is because these aspects involve differences in motivational triggers and different expectations with regard to volunteering again in the future. They therefore call for different techniques of volunteer management that are presented by Brudney, Meijs, and van Overbeeke (2019). They propose to differentiate between the service model of volunteer management, in which the potential volunteers are recruited from the broader community by the event organization which also guides them, and the secondary model of volunteer management, in which the potential volunteers are recruited by a third party (e.g. a company), or a very specific population (employees of a certain company) and sent to the event organization. This difference influences the first steps of volunteer recruitment as in the service model, the recruiting organization has no prior knowledge of the potential volunteers. This is the opposite in the secondary model. Another aspect to consider is to move away from creating complex tasks into crafting simpler assignments that can be done with either general skills or very specific special skills (Meijs and Brudney 2007). In fact, in their study on national days of service, Koolen-Maas et al. (2021) show that episodic event organizers can benefit from designing tasks that provide the volunteers with 'a sense of adding value, a sense of productivity, and a sense of feeling comfortable' (p. 881). However, they also point out that for events, volunteer managers should understand that one-off, limited time volunteers do 'experience responsibility and the need to make many decisions as a burden' (p. 881).

Conclusion

Through this study, we aim to add to the literature on environmental-event volunteering by creating a profile of volunteers based on both developed and developing countries, thereby offering a less westernized perspective of contemporary environmental event volunteers than previous studies. In addition, we aim to compare the volunteer involvement of individuals who decide to volunteer for the event as individuals to those who join as part of groups (such as companies, educational institutes, families). This sheds light on changes in the dynamics of volunteering that have accompanied the emergence of new actors including companies and educational institutes (Haski-Leventhal, Meijs, and Hustinx 2010) involved in the process of recruiting environmental volunteers. Our findings, based on a survey conducted in 13 countries, suggest that the demographic characteristics of environmental volunteers

have not changed substantially, as compared to the results reported in previous studies. At the same time, however, the incorporation of younger generations into the volunteer workforce seems to be causing a gradual shift in some of these characteristics (e.g. income and education level). Our data do not allow strong conclusions concerning demographic differences between countries, as such differences could also be explained by characteristics of specific events besides those of specific countries. Another explanation might be that the combination of 'episodic' and 'event' is a kind of equalizer that leads to similar volunteer profiles. Therefore, the answer to our first research question: 'Do the demographic characteristics that define environmental (event) volunteers in more Western countries differ from those that define environmental volunteers in other countries with different approaches towards volunteering?' seems to be 'no, not really'.

Our research contributes to the existing literature on the participation of third parties in the recruitment of volunteers, which is still a relatively new recruitment model for volunteer organizations, thereby highlighting that volunteers recruited through these channels are more likely to volunteer again for a different organization. And they are likely to have increased levels of utilitarian motivations, as compared with volunteers participating alone or with friends and relatives. The answer to our second research question: 'Are the characteristics of environmental event volunteers recruited through a third party different from those of environmental event volunteers recruited through other channels?' therefore seems to be 'yes'. These results point to several important issues that volunteer organizations should consider when preparing their strategies for recruiting and managing volunteers. It also offers potential to reach different audiences with educational goals attached to event volunteering.

Limitations

Several factors should be considered when using and interpreting the results of this study. First, the reliability of the answers given by survey respondents could be questioned, as the interpretation of the measures of some of variables might differ between people, especially with regard to abstract variables (e.g. motivation). Another potential limitation is related to non-response bias. In some countries, some demographic questions (e.g. about age or how respondents had found out about the event) were not answered, thereby limiting the generalizability of the results. Finally, the political climate in some of the countries included in our sample could influence our findings. Levels of freedom of speech are different among countries. Moreover, in certain countries religion and faith-based volunteering are approached differently than in others. As a result, the answers given to our questionnaire, which was developed from a Western perspective, may differ from the reality of some respondents.

It must also be noted that not all realities of environmental volunteerism are reflected in the study. Some types of episodic environmental volunteering activities, such as participating in the environmental justice movement, did not seem to have been prevalent in the population that we studied, and therefore, have not been considered in this paper. It would be interesting to examine such activities in future studies.

Note

1. <https://www.worldcleanupday.org/>.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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