

## “Internet as a pro-social behavioral tool - a qualitative approach”

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### Abstract

Since the creation of the Internet as an information technology, it has become a tool capable of influencing almost all aspects of human life, which include the Internet as a pro-social behavioral tool (Amichai-Hamburger, 2008). Online context is therefore a place full of pro-social promises (Wright & Li, 2012), and as Non-Profit Organizations (NPOS) face increasing challenges (such as resource scarcity), this tool can be an important resource for the involvement of volunteers and the creation of opportunities for participation through online volunteering (Pinho & Macedo, 2006). Online or virtual volunteering is understood as a peculiar form of volunteering, whose great distinction is based on procedure, since it occurs partially or totally on the internet. Strengthened by the evolution and expansion of the internet, this is a recent and understudied phenomenon. Existing studies on volunteering essentially emphasize involvement in offline volunteering, with few of them focusing online (Mukherjee, 2011). Thus, this article seeks to understand the process of online volunteering, from the volunteer's perspective, namely the motivations that lead the individual to volunteer online, as well as the experiences and consequences/benefits provided. Due to the exploratory nature of the research, a qualitative methodology is adopted that incorporates the accomplishment of twenty-four interviews to volunteers of several nationalities that do or have carried out online volunteering activities. The results contribute to the understanding and development of new knowledge about the online volunteering process, more precisely for a better understanding of how NPOs can take advantage of this resource, namely in the management of volunteering. The main conclusions lead to the consideration that altruistic motivations and learning/career are the most determining motivations in entering into online volunteering. Regarding the intention of permanence, the satisfaction associated to the experience and the initial motivations are shown to be decisive, and these motivations turn out to be benefits of the accomplishment of online volunteering. The consequences/benefits are essentially associated with the provided learning, which volunteers consider to be a valuable asset in the future, and the intrinsic reward of self-actualization and e-empowerment, namely by providing an increase in the self-esteem of the volunteer and by allowing the creation of his virtual identity.

**Keywords:** internet, online volunteering, motivations, experiences, consequences.

### 1. Introduction

Since the creation of the Internet as an information technology, it has become a tool capable of influencing almost all aspects of human life, which include the Internet as a pro-social behavioral tool (Amichai-Hamburger, 2008). Online context is therefore a place full of pro-social promises (Wright & Li, 2012), and as nonprofits face increasing challenges (such as resource scarcity), this tool can be an important resource for the involvement of volunteers and the creation of opportunities for participation through online volunteering (Pinho & Macedo, 2006). Online or virtual volunteering is understood as a peculiar form of volunteering, whose great distinction is based on procedure, since it occurs partially or totally on the internet. Existing studies on volunteering essentially emphasize involvement in offline

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volunteering, with few of them focusing online (Mukherjee, 2011). This research seeks to bridge the gap in understanding the motivations of online volunteers and to see if the online context will occupy a particularly prominent place.

## **2. Literature Review**

### **2.1. Volunteering**

There are several volunteering definitions in literature. According to Sampson (2006), there is no consensus regarding the definition, however consensual aspects include helping others and the expenditure of time without any expectation of remuneration. Snyder and Omoto (2008) summarize in their study the essential characteristics of volunteering: (1) actions must be carried out of free will, without any bond of obligation or coercion; (2) involves deliberation or decision making; (3) takes place over a period of time (weeks, months or years); (4) the decision to volunteer is entirely based on the person's own goals, with no monetary reward; (5) involves serving persons or causes who desire/need help; (6) can be simple acts of helping neighbors or volunteer work carried out within organizations (i.e. informal or formal aids).

When analyzing several definitions it is understood that some authors effectively restrict the phenomenon to actions performed without remuneration within an organization (Penner, 2002; Penner, Dovidio, Piliavin, & Schroeder, 2005), as is the case of Penner (2002) who defines volunteering as long-term and planned pro-social behaviors that benefit others and often occur in an organizational environment. While others consider that it can be assumed as formal or informal (Lee & Brudney, 2012, Paço & Agostinho, 2012, Medina, 2011, Parboteeah, Cullen, & Lim, 2004, Snyder & Omoto, 2008). Formal volunteering is the one that is carried out in the organizational sphere, while informal volunteering is a result of pro-social behaviors carried out in our daily lives, outside the organizational framework (Ferreira, Proença, & Proença, 2012, Lee & Brudney, 2012, Parboteeah, Cullen, & Lim, 2004; UNV, 2015). It is often informal given the realization within the communities where people live and work (UNV, 2015) and includes behaviors such as helping neighbors or the elderly (Parboteeah, Cullen, & Lim, 2004).

As far as the frequency of realization is concerned, distinctions are also made. Clary et al. (1998), and later, Paço and Agostinho (2012) distinguish between permanent/regular and occasional volunteers. Regular are considered those who perform a volunteering activity at least once a month for a period of time of at least one year, making a commitment to the organization, while occasional volunteers perform activities with lower regularity, that is, they collaborate during a shorter period of time with specific tasks (Delicado, 2014, Paço & Agostinho, 2012).

The empirical and conceptual analysis on volunteering can, according to Snyder and Omoto (2008), be portrayed by an explanatory model. This model has been the basis of empirical studies on volunteering and on pro-social behavior in more general terms (Penner, 2002; Penner et al., 2005) and portrays, as Table 1 shows, volunteering as a process with three sequential and interactive phases - antecedents,

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lived experiences and their consequences - at various levels of analysis - individual, interpersonal, organizational and cultural (Snyder & Omoto, 2008).

**Table 1:** The Model of the Volunteer Process

Levels of analysis	Stages of the volunteering process		
	Antecedents	Experiences	Consequences
<b>Individual</b>	Personality, motivation, life circumstances	Satisfaction, stigma, organizational integration	Knowledge and attitude change, health
<b>Interpersonal</b>	Group member, rules	Relation of aid, collective estimate	Composition of social networks, relationship development
<b>Organizational</b>	Recruitment strategies, training	Organizational culture, volunteer Work	Retention of volunteers, job evaluation
<b>Cultural</b>	Ideology, programs and service institutions	Service provision, program development	Social capital, resource saving

Source: Snyder e Omoto (2008)

The present research focuses on the individual analysis level and the three stages of the volunteering process: the antecedents, more precisely in the understanding of the motivations of the volunteers to engage in volunteering in the online context (Wright & Li, 2012), but also in the perception of their own experiences and consequences. In this way, a greater understanding of the whole phenomenon will be possible.

## 2.2. Online Volunteering

### 2.2.1. Technologies in Service of Online Volunteering

Technology is a necessary condition for the emergence of a new form of social organization network characterized by sociability, based on a virtual dimension, made possible by the new Information and Communication Technologies (ICT) and transcends space time (Castells, 2000), which is disseminated through integrated power in the global networks of capital, goods, services, communication, information, science and technology. In a concise way, the Internet can be used by NPOS as a marketing and communication tool (Cravens, 2000; Dhebar & Stokes, 2008; Jaskyte, 2012; Tuckman, Chatterjee, & Muha, 2004). Amichai-Hamburger (2008) seeks to demonstrate in his study precisely these advantages. In informational terms, it is considered the availability of a variety of channels and the easy access and exchange of information allowing the creation of a collective database and, in communicational terms, the greater interaction between volunteers and organizations and better monitoring and control of programs. Technology can be used as a mean to obtain donations, but also for the management of

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resources and capacities more efficiently and effectively, and for the improvement of internal services and operations (Pinho & Macedo, 2006). The use of ICT helps maximize their potential in multiple areas, positioning them to face contemporary challenges proactively (Jaskyte, 2012). This type of organization must, like profit organizations, adapt to change and innovate (Gomes & Knowles, 2001) in order to transcend physical presence and to have a greater impact on society (Gomes & Knowles, 2001; Tuckman, Chatterjee, & Muha, 2004).

Based on the United Nations Volunteers Program (UNV, 2015) report on the status of volunteering in the world, volunteers network begin to use technology to build alliances that promote volunteering. Existing studies have evidenced the increasing use of technology by profit companies. However, with regard to NPOS, adoption has been considered slower (Pinho & Macedo, 2006). In some cases, insufficient financial resources, lack of know-how and experience are considered as common obstacles that lead to a less positive attitude towards this tool (Walczuch, Van Braven, & Lundgren, 2000). However, the heterogeneous and intangible nature of the services rendered by NPOS makes the Internet a more attractive tool (Pinho & Macedo, 2006) and, thus, begins to be considered an important vehicle for the involvement and creation of participation opportunities through online volunteering (Cravens, 2000; Pinho & Macedo, 2006).

### **2.2.2. Types of Online Volunteering**

In literature, online volunteering is, just like offline volunteering, classified as formal and informal. Some research on online volunteering essentially suggests forms of formal online volunteering (Amichai-Hamburger, 2008, Cravens, 2000, Dhebar & Stokes, 2008, Mukherjee, 2011, UNV, 2015, Wright & Li, 2012), while others also refer to more informal forms (Reuter, Heger & Pipek, 2013; Sproull, 2011), although in smaller numbers. In the first case, formal online volunteering "allows anyone without leaving home or office to contribute time and experience to NPOS, schools, governmental agencies and other organizations that use volunteering services" (Cravens, 2000, p. 211), given that it is based on the institutional aspect of online volunteering. In the second case, informal online volunteering, we face people offering advice and services, and there is no organization directly associated with the activities they develop (Cravens, 2000).

Online volunteering services provides organizations and volunteers worldwide with a way to make virtual connections. An example of this is the United Nations Online Volunteer Program which, through its website, establishes a connection between development organizations and volunteers. The service provides online volunteering opportunities from organizations around the world, for which volunteers can contribute with online skills in collaboration with their organizations. In 2009, it covered 1347 NPOs (government institutions, academic institutions and organizations of the United Nations) benefiting from the support of nearly 9500 people from 182 countries (UNV, 2015). According to Dhebar and Stokes (2008, p.498) for an online volunteering program to succeed it is needed "clearly defined objectives, clear and regular communications with volunteers, and a results monitoring process", these

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aspects are similar to traditional management techniques, however an adaptation to the virtual environment is required. In their study, the authors seek to develop advice to help volunteer managers expand or improve online volunteering programs, so it is essential to: (1) plan clearly: clarity of objectives and expectations; (2) communicate: regular communication since recruitment and selection and (3) supervise and learn from results.

The activities that can be considered online volunteering are several. The various perspectives on how this kind of volunteering can be achieved have been specified in studies by several authors and may have different levels of virtuality (Cravens, 2000). Cravens (2000, 2006) addresses in his study the meaning of online volunteering work in NPOS. According to the author, volunteers can use the Internet and contribute to this type of organization by conducting online surveys (collecting data and information, for example, for writing newsletters, articles or news), online tutorials (interaction, orientation and virtual assistance), manage an online support line through the answering questions, translations of materials in another language, collaboration with other volunteers in the creation of a project, contribution with their professional experience in specific subjects (response to questions and help in areas such as human resources, accounting, management, marketing, among others) and contribution to the creation of newsletters, logotypes, databases and websites.

The analysis performed by Dhebar and Stokes (2008) shows that most online volunteering tasks are related to functional or operational activities (such as fundraising, communication and marketing), consulting and management advice, and mission-related program activities (such as research and editing). On the other hand, the UNV (2015), also from a purely formal perspective, considers that online volunteers can provide NPOS with technical support and resource management (such as volunteer management through the creation of databases), contribute to knowledge management (e.g. through the collection of information) and facilitate communication and networking (for example through the creation of newsletters, translations and moderation of online discussion groups). In a broader perspective, Sproull (2011) considers that volunteers can help others by donating funds to causes, by contributing to the development of open source software, by donating time and attention to organized groups on the internet and discussion groups, and through information and emotional support in groups. In a slightly different perspective, Starbird and Palen (2011) consider online volunteers as elements of the phenomenon known as crowdsourcing. Crowdsourcing is considered a phenomenon that involves the use of volunteers to achieve a goal or objective. Open source software is considered crowdsourcing applied to software development (Olson & Rosacker, 2013). In this way, it is a process in which several individuals work together to perform tasks on a voluntary basis, and can be successful in many situations, especially in the management of disaster situations (Hossain & Kauranen, 2015). One of the forms of crowdsourcing is the collective cooperation of people with the objective of raising money and other resources (Oomen & Aroyo, 2011). Currently, civic crowdfunding is considered a subtype, through which citizens raise funds to provide a service to the community (Stiver et al., 2015). Civic crowdfunding has great potential for facilitating networking and encouraging collaboration

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between citizens and the government. As a web-based process, it is shaped by online philanthropy and use of the internet by NPOs (Waters, 2007).

### **2.2.3. Potentials and Limitations**

Online volunteering has potential but also limitations for both volunteers and NPOs itself. From a volunteer perspective, Amichai-Hamburger (2008) believes that volunteers have a greater opportunity to achieve self-realization at the top of the pyramid of Maslow's<sup>1</sup> needs. It is considered important since allows the participation of people who are not willing to volunteer offline due to a disability, obligation at home, difficulties in transportation or working hours (Cravens, 2000; UNV, 2015). Therefore, this type of volunteering becomes more attractive given the flexibility in location and time, especially for people who feel marginalized by society or have specific interests (Cravens, 2000). Volunteers can search the Internet and find an online volunteering project that they consider relevant and be a part of it, namely it becomes easier to get the role they want and provides an opportunity for the development of certain skills (Amichai-Hamburger, 2008). On the other hand, from the point of view of NPOs, online volunteers have great potential to benefit the NPOs (Moon & Sproull, 2008) since they increase the diversity and openness of organizations, namely access to specialized skills that may not be available and, naturally, lower costs (Cravens, 2006). In this way, online volunteers are a new resource for this type of organization.

Regarding their limitations, volunteers and organizations consider the lack of face-to-face contact as the greatest disadvantage (Cravens, 2000). Online volunteering requires skills, especially in the use of ICT. Access to ICTs is also a necessary condition and access is often determined by the digital division (Amichai-Hamburger, 2008), i.e., by inequality in terms of access to the internet, particularly between developed and less developed countries, which is a limitation for the evolution and expansion of online volunteering. From the perspective of organizations, it is a great challenge for volunteer managers since the dynamics are different from the interactions existing in traditional volunteering. Cravens (2006) notes in his study that the biggest obstacle to organizational success is the lack of volunteer management resources. In this context, online volunteer managers must have the capabilities of an e-leader (distance leadership) (Amichai-Hamburger, 2008). In particular, the lack of time for the program manager to manage the program and the lack of a system to create tasks and to combine volunteers with these tasks (Cravens, 2000) can be a limitation. Another obstacle is that online volunteering tasks, which do not require the physical presence of volunteers and can be carried out at a distance, are often more expensive for NPOs, especially in less developed countries where they operate entirely on external donations (Mukherjee, 2011). The cost of hardware, software and network connections, lack of computer skills, lack of adequate and continuous technical support and high turnover rates are obstacles to the development of online volunteering (Pinho & Macedo, 2006).

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<sup>1</sup> Hierarchical division proposed by Abraham Maslow that defines the needs of lower level that the human being must satisfy before the needs of higher level. Once basic needs are met, the human being seeks to achieve the self-realization that is at the top of the hierarchy.

### **2.3. Motivations of Volunteering**

Motivation is a complex psychological process that results from an interaction between the individual and the environment that surrounds him (Latham & Pinder, 2005). The reasons why individuals become volunteers is a critical factor in voluntary activity (Agostinho & Paço, 2012), since their knowledge facilitates the structuring of roles in order to match these motivations (Burns et al., 2006). Therefore, constitute a valuable component to be considered in an approach to volunteering (Clary & Snyder, 1991). People engage in volunteer work for several different reasons (Finkelstien, 2009) that result from a complex interaction, particularly with the environment that surrounds them (Hustinx, Cnaan, & Handy, 2010).

Currently, the theme of volunteer motivation has been the subject of a variety of studies from which classifications of motivations emerge (Agostinho & Paço, 2012; Clary et al., 1998; Degli Antoni, 2009; Ferreira, Proença, & Proença, 2012, and Shine 2010). Each likely motif comprises multiple dimensions and their fulfillment may satisfy both intrinsic and extrinsic needs (Finkelstien, 2009). Intrinsic motivations are those that translate into an internal reward, such as the volunteer's increased self-esteem, and extrinsic motivations translate into external benefits, such as the acquisition of new experiences Meier & Stutzer (2008).

Clary et al. (1998) identified in their study the Volunteer Function Inventory (VFI) that contemplates six central motives for volunteering: values (desire to express values related to altruistic and humanitarian concern), social (strengthening social relations and/or obtaining approval by some of the community), understanding (desire to acquire new learning experiences and/or skills), career (obtaining career related experience and increasing employment prospects), protection (reducing negative feelings) and, finally, reinforcement (increased self-esteem and feel useful).

The analysis carried out on the different articles focused on the motivations of volunteering shows that there are motivations that are repeated independently of the existence of a specific context of voluntary action: altruistic motivations, social motivations associated with belonging and social recognition, ego and associated career motivations To learning and development.

### **2.4. Motivations in Online Volunteering**

Taking into account that online volunteering is a recent area of study (Dhebar & Stokes, 2008), the motivations inherent to the phenomenon have not yet been explored as an object of research. Through the analysis of articles developed around the theme of online volunteering, it was possible to identify different types of motivations: altruism, reciprocity, e-empowerment and/or self-actualization, social motivations, learning and freedom/flexibility.

Altruism, like offline context, is associated with the need to improve the well-being of another person (Wang & Wang, 2008; Wright & Li, 2012). As for reciprocity, it is associated with the need of the volunteers to help each other, hoping that when they need this help, they will be rewarded - the theory

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of social exchange (Wang & Wang, 2008). On the other hand, volunteers can volunteer online given the need for empowerment, in this case a new form of empowerment emerges - e-empowerment (Amichai-Hamburger, McKenna & al, 2008). As already stated, the context of online volunteering is the internet. For this reason, it is possible for anyone to build their own identity in order to increase their self-esteem and achieve self-realization. The online dynamic environment allows greater control over the interaction with others and consequently offers the possibility to shape the personality and create a new image of itself. Anonymity favors expression without fear, especially without fear of judgments that may occur by others (Bandura, 1990). Thus, online volunteers are judged based on contribution to the interaction, community or project (Amichai-Hamburger, McKenna & al, 2008). E-empowerment is thus considered a motivation intrinsically associated with the desire to create its own identity and self-expression (self-realization) (Amichai-Hamburger, 2008; Amichai-Hamburger, McKenna & al, 2008).

Social motivations, also present in the offline context, are associated with the desire to be part of a group (Amichai-Hamburger, 2008; Mukherjee, 2011; Wright & Li, 2012). In addition, learning is a motivation associated with the need to develop skills and abilities. Finally, the need for freedom/flexibility is considered a motivation. Online volunteering provides greater flexibility with regard to cause selection and location (Mukherjee, 2011). As already demonstrated, the internet allows anyone to volunteer online, and people who are geographically distant, with less availability in terms of time and/or time or with a limitation that stops them from leaving the home are not a factor of exclusion. People framed in these circumstances can find online volunteering an opportunity.

### **3. Empirical Study**

The general objective of this paper is to understand the process of online volunteering. In specific terms, it is intended to answer three research questions: *What are the motivations of individuals who engage in online volunteering?*, in order to determine the reasons that lead an individual to donate time and work to online volunteering and to what extent they are different from those found in the volunteer literature; *What are the experiences of online volunteering?*, in order to understand existing patterns of behavior, of what kind and how they are established (for example with other volunteers and recipients of the service) and, finally, *What are the consequences of online volunteering?* (Omoto & Snyder, 2002), as well as the benefits and obstacles associated with the intention to remain/abandon the activity.

#### **3.1. Methodology**

The use of semi-structured and open response interviews was considered more appropriate as a research technique. As a target audience, once the results are critically dependent on the appropriate selection of respondents, the interviews will be directed to volunteers whose requirement is to participate or have already participated in online volunteering activities. The sample consisted mainly of female volunteers. With regard to age, the distribution is between 18 and 61, with the interval between 24-32 being the one with the highest number of interviewees. In terms of academic qualifications, they have a high degree of qualifications. Only one element has completed high school, sixteen of them have



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a bachelor degree, six have a master's degree and one has doctorate degree. As for the professional situation, half of the interviewees work for others. Of the remaining twelve, six of them are students, one student-worker, three self-employed, and one unemployed. Finally, the nationality of the interviewees are diverse: seven of them are Portuguese, six Spanish, four English, one Japanese, one French, one Canadian and the other four do not have corresponding information.

Seven semi-structured interviews were carried out in person or through Skype (given the impossibility of performing face-to-face), with a maximum duration of fifty minutes. The interviewees were initially contacted via email and it was also through this route that the entire interview scheduling process was proceeded. In addition to these interviews, two communities of online volunteers were contacted: *Fundación Cibervoluntarios*<sup>2</sup> and *Translations for Progress*<sup>3</sup>, who demonstrated their willingness to assist in the study. After sending the questions to a representative of the community, in english for *Translations for Progress* and in spanish for *Fundación Cibervoluntarios*, these were transmitted to the volunteers who developed the answers and sending it via email. Through these two communities it was possible to obtain responses from seventeen online volunteers, making a total of twenty-four online volunteers participants in the study. Subsequently, the interviews were transcribed and translated . The identification of the interviewees will not be carried out, given the request for anonymity by some of them.

### **3.1.1. Dimensions of analysis**

Based on the literature review, a set of analysis dimensions were explored, visible in Table 2. The existence of more open-ended questions allows respondents to develop their personal experiences.

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<sup>2</sup> To know more about the community consult: <https://www.cibervoluntarios.org/es/la-fundacion>.

<sup>3</sup> To know more about the community consult: <http://www.translationsforprogress.org/whatistp.php>.

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**Table 2:** Dimensions of analysis

Dimensions of analysis	Questions of script	Authors
Entry into online volunteering activities	<i>Q1. How did you decide to take part in online volunteering?</i>	(Mukherjee, 2010, 2011; Snyder & Omoto, 2008)
Motivations	<i>Q2. What were the reasons for that decision?</i>	(Mukherjee, 2010, 2011; Omoto & Snyder, 2002; Snyder & Omoto, 2008)
Involvement in other volunteer activities and preference	<i>Q3. Do you volunteer in addition to online volunteering? If so, do you have a preference for which one?</i>	
Experience	Online Volunteer Formats	<i>Q4. What kind of tasks do you perform? What is the associated organization? Why do you do these tasks?</i> (Mukherjee, 2011)
	Relationship established	<i>Q5. How does it relate to the organization?</i> (Omoto & Snyder, 2002; Snyder & Omoto, 2008)
	Regularity and durability of activities	<i>Q7. How often do you volunteer online? Is the organization you are volunteering for the same?</i> <i>Q8. What is the duration of the last activity in which you were involved?</i> (Snyder & Omoto, 2008)
	Guidance and follow-up activities	<i>Q6. Who accompanies your actions? Do you miss orientation?</i> (Mukherjee, 2010, 2011)
	Satisfaction of expectations	<i>Q9. Do you feel that your expectations and motivations have been (are being) met?</i> (Omoto & Snyder, 2002; Snyder & Omoto, 2008)
	Consequences obtained	<i>Q10. What are the consequences (benefits) you take away as an online volunteer?</i> (Snyder & Omoto, 2008)
Consequences	Unintended / unexpected consequences when beginning voluntary activity	<i>Q11. With the development of relationships have emerged benefits in exercising online volunteering that had not been considered? If so, which ones?</i> (Snyder & Omoto, 2008)
	Future consequences	<i>Q12. What future expectations do you have regarding your participation?</i> (Omoto & Snyder, 2002; Snyder & Omoto, 2008)
	Intention to stay	<i>Q13. Do you intend to continue this kind of volunteering? If so, what are the reasons for your stay? If not, what were the reasons for the removal intent?</i> (Omoto & Snyder, 2002; Snyder & Omoto, 2008)
Personal opinion regarding the future of online volunteering	<i>Q14. What's your perspective on the future of online volunteering?</i>	

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Regarding the online volunteer projects/organizations for which volunteers are or have already volunteered, we present Table 3 with a brief presentation of each of the online volunteering initiatives and the respective number of respondents involved.

**Table 3:** Projects/Organizations

Project	Country	Description	Nº
<b>The Son-Rise</b>  <b>Program</b>	USA	Association whose goal is to help autistic parents and children in therapeutic and psychological terms.	1
<b>Coursera</b> 	USA	A teaching platform that partners with universities and educational institutions around the world for the development and availability of free online courses for the general public.	1
<b>Rede ex aequo</b> 	Portugal	Association to support lesbian, gay, bisexual and transgender youth in Portugal.	1
<b>Portugal a Programar</b>	Portugal	Community of Portuguese programmers.	2
<b>Sahana Software Foundation</b> 	USA	NPOS dedicated to the mission of saving lives through information management solutions that enable organizations and communities to prepare for and respond to disasters more quickly.	1
<b>Random Hacks Of Kindness</b> 	Australia	Community of "hackers for good" volunteers who meet twice a year to collaborate with charities, community groups and social enterprises.	1
<b>Para onde?</b> 	Portugal	Website that gathers information about free or low cost volunteer opportunities, work exchange, internships and temporary jobs worldwide.	1
<b>Adoeci</b> 	Portugal	Free platform that promotes the union of people who have been diagnosed with the same pathology, encouraging the sharing of information about these pathologies.	1
<b>Fundación Cibervoluntarios</b> 	Spain	NPOS that promote the use of new technologies to improve the world: to combat social gaps and to social innovation.	4
<b>Translations for Progress</b> 	USA	Online forum created to mediate the relationship between NPOS who need translations and volunteer translators who want to contribute to a cause.	13

### **3.2. Data Analysis**

The interviews were transcribed and later treated according to the content analysis method. Three central and sequential phases were followed in this analysis: (1) the pre-analysis, where the "floating" reading of the interviews already transcribed was carried out; (2) the exploitation of the material in which the messages are categorized and coded and (3) the treatment of the results and its interpretation. To assist in this process we used the NVivo qualitative data analysis software, which proved to be extremely useful to facilitate the analysis of the interviews (Rowley, 2012).

## **4. Results and Discussion**

### **4.1. Background to Online Volunteering**

In order to understand the background of online volunteering [Table 4], a set of circumstances, such as the knowledge of opportunities through friends, the curiosity of the individuals resulting from the research of related themes, and the relationship with the respective academic and/or professional training was considered important. In addition, given the specific situation of creating an online volunteering initiative, it has essentially been shown to be related to the social or citizenship awareness that triggers the entire project development process.

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**Table 4:** Online Volunteer Background Testimonials

Sub dimension in analysis	Testimony
Opportunities knowledge	<p><i>It was a friend of mine who at the time shared a Facebook link about an online volunteering project ... and they were looking for people who could translate some videos in the most basic languages: English, Spanish, Portuguese ... and at the time I thought: why not? And basically I opened the link and signed up. (...)</i> <b>(E1)</b></p> <p><i>I was doing online research on disaster management and disaster management software and found the foundation (...) wanted to know more, how it was done, who was behind it, how things worked. With a little more research I saw the request of volunteers to program (...)</i> <b>(E4)</b></p>
Academic education	<p><i>I no longer knew much of Japanese and was not prepared for some exams so I thought I should make an effort to keep it.</i> <b>(E11)</b></p> <p>For real-world translation experience <b>(E13)</b></p>
Social consciousness	<p><i>(...) especially in the initial phase of diagnosis people are very lost: What is this? What is happening to me? What is going to happen to me? (...) there are a number of diseases that are not well known and people have nowhere to find such support, and it is often here [on the platform] that they find that support ... they can go to these groups and talk to people, even to have access to information, because they often search the internet and then there is the danger of misinformation (...)</i> <b>(E6)</b></p>
Professional situation	<p><i>Being that I worked full time as a social worker I could not definitely devote (...)</i> <b>(E5)</b></p> <p><i>It is appropriate to my current lifestyle.</i> <b>(E15)</b></p>

Taking into account that this is a recent phenomenon, it is assumed that online volunteers have, or have already had, an offline involvement. The research results show that there may actually be a connection with offline volunteering, however, it is noted that half of the respondents are dedicated exclusively to online volunteering. A distinguishing factor for preference of online volunteering [Table 5] is the flexibility provided and the lack of personal contact in the sense that it allows volunteers to feel more comfortable in performing tasks. This aspect meets the definition of online volunteering in the literature "many people look for volunteering opportunities that they can complete from home or work because of limitations of time, personal preference, disability, or an obligation at home that prevents them of volunteering offline" (Cravens, 2000, p 121) and find this opportunity in online volunteering.

**Table 5:** Testimonials of Online Volunteer Preference Regarding Offline

Sub dimension in analysis	Testimony
Online Preference	<p><i>Offline has its advantages, online has other advantages. I feel more comfortable online because I do not have to be face-to-face with anyone, I can be in my corner and whenever I want to stop I stop. (E4)</i></p> <p><i>I prefer online volunteering because it is more flexible in terms of time and schedule. (E24)</i></p>

#### 4.2. Motivations

Regarding motivations [Table 6], based on the results analysis, it was verified that altruistic motivations are one of the most mentioned motivations and are intrinsically associated with the willingness shown by volunteers to exercise online activities to help others (individuals or organizations). An individual always enters in the activity with the thought that the result will be beneficial to others. In this way, it can be seen that the main motivations of online volunteering described by the interviewees are included in the volunteer literature, highlighting altruism.

The motivations for learning, associated with the professional career and the need to acquire skills and experience, are also one of the reasons considered relevant and are shown to be decisive in the involvement in online volunteering. In particular, in the case of volunteer translators it has proved to be the main motivation. Volunteers who in the future intend to carry out a professional activity linked to translation see in online volunteering an opportunity to acquire skills and experience in this area, skills that will be valuable when looking for a professional activity.

E-empowerment, or self-actualization, also proves to be a motivation. This motivation is associated with the opportunity offered by online volunteering to build their own visual identity, which results in greater confidence in the performance of tasks. The volunteer can build his own personality and convey only the characteristics he considers most relevant. In this way, you can create a new image of yourself, which will contribute to increasing your confidence and self-esteem. In this form of volunteering the virtual surpasses the physical, and for that reason, the image that others create in relation to each one results from the interactions that occur online and the contribution to the project and/or community.

Social motivations, though less determinant, are also present. A justifying factor is the absence of face-to-face contact that makes it difficult to create interpersonal relationships. Despite this, it allows, in some cases, the development of activities together with people who have common interests.

In addition to the motivations previously described, the existence of a new motivation specific to the online context is noted: the freedom/flexibility provided. Online volunteering allows for greater freedom with regard to cause selection and location (Mukherjee, 2011). In this way, anyone can contribute to a

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cause and/or organization, regardless of location and the existence of a condition that prevents him/her from leaving home. Thus, we can say that online volunteering attracts volunteers who, eventually, do not have opportunities to participate in offline volunteering actions.

**Table 6:** Testimonials of Motivations

Sub dimension in analysis	Testimony
Altruism	<i>(...) I thought that having an autistic child should be hard work for a parent, it really takes a lot of time and patience and it was a reality that I never really got close to, but I knew a few things ... and I thought that they need that help, and the reasons were just those: to try helping others (...) (E1)</i> <i>I wanted to help others and contribute with something positive to the international community. (E19)</i>
Learning / Career	<i>It seemed the best way to gain experience (...) (E10)</i> <i>I wanted to gain experience as a translator since, as in many other professions, it is difficult to gain experience without work, but it is difficult to get an inexperienced job. (E9)</i>
Flexibility	<i>(...) Taking into account that I have not been in Portugal, online volunteering turns out to be the way I find of being able to maintain a long term relationship with an entity (...) (E3)</i> <i>(...) Online volunteering fits perfectly with my current lifestyle. Flexibility is an advantage that allows us to organize (...) (E22)</i>
E-empowerment and /or self-realization	<i>I think we gain a lot of confidence, because we work in a very autonomous way. (E17)</i>
Social	<i>I relate to many people who have things in common (E21)</i>

#### 4.3. Experience

Regarding the experience of online volunteering, it has been shown that this can cover several activities [Table 7]. Standard activities of these research can be considered translations, assist NPOS in developing better communication with the international community, writing, reviewing and editing articles (for example on topics related to programming), online surveys for information and data collection for articles or for understanding a specific subject by NPOS, programming and software development that enables organizations and communities to prepare for and respond to disasters more quickly, online training on a particular subject matter (for example the use of new technologies) available to the general public, the management of social networks of NPOS to support young people and the moderation of online behavior.

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**Table 7:** Online Volunteering Formats

<b>Format</b>	<b>Nº of interviewees</b>
Translations	16
Writing, Reviewing and Editing Articles	4
Online Surveys	3
Software Development and Programming	2
Creation and Management of an Online Volunteer Initiative	2
Online Training	2
Social Networking Management	1
Online Moderation	1

Source: self-elaboration

Still regarding experience, it is pertinent to perceive the relationship established with the organization [Table 8], namely how the communication, orientation and follow-up of volunteer activities are carried out. This research shows that there is usually an associated supervisor, however the relationship with the organization itself is minimized, that is, generally the performance of activities does not require a direct relationship with the organization. In this form of volunteering communication is carried out through communication tools such as email, chat and skype, predominating communication via email. Through these means the volunteers receive support, if necessary, or instructions for the exercise of the activity. The e-leader, the person responsible for guiding and monitoring the work of online volunteers, is considered only fundamental at the beginning of the activity for the transmission of knowledge regarding the operation and mode of execution of the activities, as well as at the end for the verification of the developed work. In this way, the volunteers essentially carry out activities in a self-regulated way, and the activities to be carried out do not require a great effort at the level of guidance and follow-up. As such there was no evidence in the literature that in online volunteering there must be an online volunteer manager and that the supervisor's lack of time to manage the program, as well as the absence of a system to create tasks and combine volunteers for these tasks may be a failure factor (Cravens, 2000).

Regarding the duration of the activities it was perceived by the analysis of results that this could be of long or short duration. Thus, on the basis that volunteers can be considered as permanent/regular and occasional (Paço & Agostinho, 2012), the sample is considered to have both. Permanent/regular online volunteers can be considered those who collaborate continuously with an organization or are responsible for creating a project/initiative to which they are linked, ensuring their development and maintenance over the years, as was the case of "Adoeci", a free platform that promotes the union of



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people who have been diagnosed with the same pathology, and “Where?”, a site that gathers information about free volunteer opportunities or low cost, work exchange, internships and temporary jobs around the world. In turn, occasional online volunteers can be considered those who do not continuously contribute to an organization, accomplishing specific short-term tasks for various organizations, especially in specific projects, as verified in this study in relation to Translations for Progress, a forum that mediates the relationship between NPOS who need translations and volunteer translators who want to contribute to a cause, thereby enabling volunteers to be aware of the needs of various partner organizations and various projects. Thus, volunteers can contribute to more than one project/NPOS with their expertise.

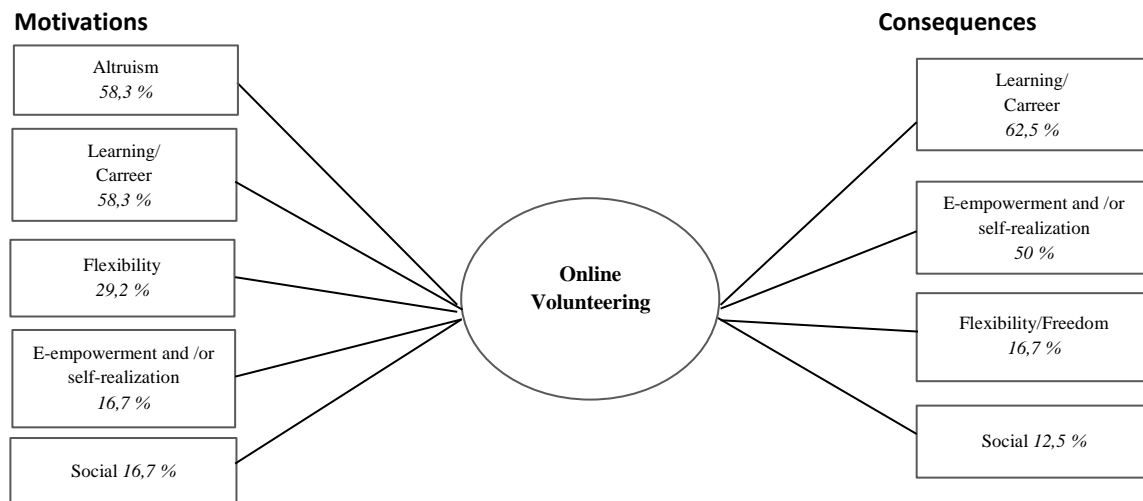
Most of the volunteers are satisfied with the experience of volunteering and do not feel they lack guidance and monitoring in the performance of their duties. Satisfaction with the overall experience of volunteering is associated, for the most part, with reasons related to the motivations and the correspondence to the expectations created. Thus, volunteers' satisfaction is related to the extent to which their expectations and motivations are met (Clary et al., 1998). However, in this research it was possible to identify some particular cases that refer to a dissatisfaction associated to the low level of feedback on the part of the organization.

**Table 8:** Testimonials of Experience

Sub dimension in analysis		Testimony
Relationship organization	with	<i>I have a good relationship with the organization. I am easily heard and my proposals are taken into account (E7) I identify with the organizational goal (E16)</i>
Form communication	of	<i>That's very easy, so I do not know exactly how it works in terms of hierarchies, but for example, the one who sends me the emails is a volunteer of the organization (...) and she basically created me an account on the website and sends me videos there, I translate one and when I have just translated I send her an email saying that the video is translated and she puts me another one. It's how it always works, so the contact is very easy. (E1) There is no relationship itself, I just follow the web instructions (E14)</i>
Guidance and follow-up		<i>(...) It is not something that really needs guidance in the truth. To the online trainer, i.e., this volunteer who was assigned to me when I signed up, sent me an email with the basics, gave me the skills to move the program, which is a translation program that seems very complicated, but it's not, it's very easy ... It's really easy to use the program and then the doubts that may arise are just related to that, because translation doubts they cannot help, because it's my job (E1) I'm connected to the group leader in several ways. He confirms that he received the translation, reviews it and tells me whether he should change anything or not. It also informs me when it launches the translations online. (E11)</i>
Activity duration		<i>Most translation projects do not last very long. No more than a few days or a week normally. (E9) I do this kind of volunteering since November 2014 ... it turns out to be a task or a set of tasks that oblige me to think about them daily and devote a few hours a day to them ... (E3)</i>
Regularity execution activities	of of	<i>It has to do with the time I have for this, sometimes there are a lot busier times, sometimes I have freer time and I pay more attention. (E6)</i>
Satisfaction		<i>Yes, I think so, because the ultimate goal was to help people, I know this has already happened. Obviously not with everyone, but in fact I am happy and hope even in the future to continue to help other people. (E6)</i>
Dissatisfaction		<i>(...) My expectations sometimes end in disappointment due to lack of feedback. (E19)</i>

#### 4.4. Consequences

The third and final research question focuses on understanding the consequences of online volunteering. It was proved by the results analysis that the consequences correspond essentially to the realization of the initial motivations. From the observation of Figure 1, which summarizes the motivations and consequences of online volunteering, it is shown that four motivations explain proportionate benefits: learning, often associated with career, e-empowerment or self-actualization, flexibility and social benefits.



**Figure 1:** Synthesis of Motivations and Consequences of Online Volunteering

From the consequences presented, it was verified that the majority of volunteers seek to acquire skills and curriculum with the experience of volunteering. This is due to the fact that a high percentage of volunteers perform translation functions, since these volunteers gain experience in order to carry on an associated professional activity in the future. Already the consequences of self-realization result from the sense of personal fulfillment instilled by the performance of functions that contribute to the well-being of others. Freedom/flexibility, as already reinforced, is precisely to allow activities to be carried out according to their availability, without the existence of geographical and/or temporal restrictions. In online volunteering it may be possible to create a long-term online relationship with volunteers or members of the organization with whom you collaborate with high frequency. It was proved by the results analysis that volunteers themselves consider the creation of interpersonal relationships as an unequalled consequence. In this case it has not been proven that the lack of face-to-face contact prevents the creation of interpersonal relationships.

Although many volunteers contribute to more than one organization in short periods of time, they do not show intentions of abandonment. It was noticed that the majority of the volunteers reveals an intention of permanence in the exercise of voluntary activities online. The reasons are mostly associated with the flexibility provided and the fondness for the activities performed, namely the feeling of usefulness for helping other or society in general.

**Table 9:** Testimonials of Consequences

Sub dimension in analysis	Testimony
Learning/ Career	<i>In a way I was practicing, knowing new realities, knowing other technologies that I did not know and all this ends up being interesting. If you do not practice programming, you have reached a point where you no longer remember the syntax, you no longer remember the instructions ... it is a way to keep the practice for when you need to apply. (E4)</i> <i>It has been a good opportunity to gain experience and receive feedback on the quality of the work I do. (E10)</i>
E-empowerment and /or self-realization	<i>It's great to receive such loving messages from people I've never had the pleasure of meeting. I feel that my work is very valued and it is amazing how so many people take time out of their day just to write me to thank for what I do online. (E5)</i> <i>I feel quite satisfied, since there is a sense of accomplishment, especially when translating a particularly difficult text or video. (E11)</i>
Freedom and/or flexibility	<i>The biggest benefit is the flexibility offered by this type of volunteering. (E22)</i> <i>I do not have the time to volunteer physically in an NGO, so let me volunteer online so that I can also contribute to a better world. (E24)</i>
Social	<i>(...) made it possible to create bonds with some people, especially people from the team with whom I speak every day and in one way or another end up creating friendships. (E3)</i> <i>The relationships created, though not physical ones, are a highlight. I keep in touch with several people I met in this way (...) (E7)</i>

#### 4.5. Future of Online Volunteering

Lastly, regarding the future of online volunteering, it has been demonstrated that the existence of an inequality in access to Internet, also called the digital divide, advocated by Amichai-Hamburger (2008) is a limitation that contributes negatively to the evolution of this type of volunteering. An additional limitation is the existence of egocentric societies very focused on the "I" to the detriment of the "we". At the other end, it is possible to affirm as potentialities the rapid expansion and evolution of ICT, as well as the flexibility provided and the fact that it allows the creation of the volunteer's own identity, also defended by Amichai-Hamburger (2008) and Cravens (2000). In addition to these, contrary to the consideration of limiting the existence of egocentric societies, the growing promotion of a culture of sharing is an opportunity for the expansion and evolution of online volunteering.

In relation to the current context and to the adhesion, it is expected that this form of voluntary work is still little known by the population in general. However, it is projected that the tendency is for growth, derived exactly from the associated potentialities, previously described, of online volunteering.

**Table 10:** Testimonials in Relation to the Future of Online Volunteering

Sub dimension in analysis	Testimony
Current knowledge of the phenomenon	<i>I do not know any [other volunteer project online], because there it is, this was my only project that I was involved online (...) (E1)</i> <i>Many people do not even know it's something they can do, even in my generation. (...) (E11)</i>
Future	<i>If there is a future for online volunteering? There is a lot, I think so, nowadays the future is all online (...) (E1)</i> <i>With all the technological growth we are increasingly connected to the web, so I think it is normal that this form of volunteering starts to appear more and more. (E6)</i>

## 5. Conclusion, Limitations and Sugestions of Future Lines of Investigation

Research focusing on online volunteering has revealed a theoretical and empirical contribution to understand the online volunteering process. Its theoretical and empirical contributions focus on deepening the three central research questions: What are the motivations of individuals who engage in online volunteering?, What are the experiences of online volunteering?, and What are the consequences of online volunteering?. This understanding was supported by the testimonies collected, based on the sharing of volunteers personal online experiences. In this way, it has become possible to answer the three central questions. The results of the research contribute to the reduction of a gap detected in the literature in relation to the phenomenon, as well as to provide support and understanding for the way in which NPOS can take advantage of this new resource.

The main conclusions lead to the consideration that altruistic motivations and learning/career are the most determining factors in entering into online volunteering.. These activities encompass translations, writing, reviewing and editing articles, online surveys, software development and programming, online training, social media management and online moderation. Regarding the intention of permanence, the satisfaction associated to the experience and the initial motivations are shown to be decisive, and these motivations turn out to be benefits of the accomplishment of online volunteering. The consequences/benefits are essentially associated with the provided learning, which volunteers project to be valuable in the future, and the reward of self-realization, namely by providing an increase in the self-esteem of the volunteer and by allowing the creation of his virtual identity.

As shown in the literature review this is still a recent phenomenon, and therefore there are still few empirical studies centered on the theme. In this way, it is believed that the research contributes to the understanding of the whole process of online volunteering and to an increasing dissemination of the

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phenomenon, and can serve as a basis for the deepening of the subject in future investigations. Despite the contributions provided, the research has limitations that could translate into the realization of new studies. Throughout the research development it was noticed that there are motivations and benefits of online volunteering that are considered more relevant in relation to others, however an order of importance has not been defined. In this way, it could be pertinent in a future research explore this aspect in order to perceive the motivations and benefits more and less important for the involvement in this phenomenon. Another limiting aspect is associated with the reduced number of people involved in this phenomenon, particularly in the national context. In this sense, a greater opening of the study and the use of volunteers online of other nationalities was necessary. It would be interesting to carry out studies focusing on a single society, or a comparative study between societies, in order to understand the divergences and similarities, namely at the level of openness to online volunteering. On the other hand, given that the sample includes volunteers of all age groups, it is considered that it would be interesting, given the current technological context and generation, to conduct a youth-centered study to see if, given the connection to the online context, there would be greater involvement and knowledge of the phenomenon.

The present study sought to understand the whole process of volunteering. However, studies focusing only on one part of the process may contribute to a greater depth of knowledge. In turn, since the research focuses on understanding and deepening the online volunteering process from the perspective of the volunteer, it would also be important to see the other side of the NPOS. In this context, and finally, it is understood that the study of online volunteering may still be the subject of new studies that will contribute to the deepening and production of new knowledge, not only theoretical, but essentially empirical. The present study results in a theoretical and empirical contribution to the theme. However, it is expected triggered interest for future investigations in the area.

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