RESEARCH ARTICLE



WILEY

Volunteer omnichannel behavior in nonprofit organizations: Key antecedents and implications for management

Marta Rey-García² Vanessa Mato-Santiso 1 (D) María José Sanzo-Pérez 3 D

1School of Humanities and Documentation, Universidade da Coruña, Ferrol, Spain

²School of Economics and Business, Universidade da Coruña, A Coruña, Spain

3School of Economics and Business, Universidad de Oviedo, Oviedo, Spain

Correspondence

Vanessa Mato-Santiso, School of Humanities and Documentation, Universidade da Coruña, Campus de Esteiro s/n. 15471 Ferrol, A Coruña, Spain.

Email: vanessa.mato@udc.es

Abstract

The purpose of this research consists of identifying the antecedents that may influence the adoption omnichannel behavior by volunteers. This behavior can be understood as the interchangeable use of online and offline channels, providing volunteers with multiple contact points with nonprofit organizations. To this end, we first propose a conceptual model based on Clary et al.'s motivations framework and other relevant literature. Second, we test our model through quantitative-based research, employing an online questionnaire with a representative sample of 7822 volunteers working for the Spanish Red Cross. We then carry out a hierarchical cluster analysis to group similar volunteers into clusters according to the use they make of the different offline and online channels, followed by an ordered logistic regression analysis to test the hypotheses proposed. First, two volunteer profiles are identified: offline-oriented volunteers with low or no omnichannel behavior, and online-oriented volunteers with high or very high omnichannel behavior. Second, our results suggest that some types of motivations among volunteers (understanding the nonprofit, career

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2023 The Authors. Nonprofit Management & Leadership published by Wiley Periodicals LLC.

or employment opportunities, the advice of family, friends, and acquaintances, and protective reasons), as well as the sense of belonging, perceived usefulness of new technologies, social influence and having feedback channels, all positively influence the adoption of omnichannel behavior by volunteers. Additionally, our findings reveal different effects for the two clusters identified. Finally, and using a contingency approach, implications for nonprofit–volunteer relationship management are drawn.

KEYWORDS

nonprofit organizations (NPOs), nonprofit-volunteer relationship marketing, offline and online channels, omnichannel behavior, volunteer management

1 | INTRODUCTION

The omnichannel perspective, broadly understood as the full integration of offline and online channels and contact points to interact with relevant stakeholders, has become essential for nonprofit organizations (NPOs) in the era of digital transformation, especially after its acceleration by the COVID-19 pandemic unleashed by an infectious disease caused by the SARS-CoV-2 virus (Rey-García et al., 2021). The question for organization managers is no longer whether to execute an omnichannel strategy but, rather, how to implement it effectively (Bell et al., 2014). Although omnichannel management is not a new topic, adoption by all types of organizations tends to face hurdles and few nonprofits have implemented a fully integrated omnichannel strategy. This is due to implementation barriers such as lack of financial resources, scarcity of qualified personnel, insufficient knowledge about individual behaviors related to the use of different channels and touchpoints, challenging data access and integration, and so forth (Cui et al., 2021). From the perspective of volunteers, this research acknowledges the importance and urgency for NPOs to have a strategy capable of meeting their expectations as regard to two-way interaction through online, offline, and mixed channels (Olinski & Szamrowski, 2017). Achieving effective nonprofit-volunteer relationships through a supportive omnichannel strategy is important because this group is one of the key stakeholders for NPOs to carry out their mission.

The challenge of how to implement omnichannel strategies to better manage relationships with volunteers can be addressed from a nonprofit relationship marketing perspective (Grinstein & Goldman, 2011). Relationship marketing focuses on managing relations between the organization and its stakeholders to instill loyal, mutually profitable, and long-term relationships (Ravald & Grönroos, 1996). Although some NPOs do not have sufficient resources (financial or human) to undertake an elaborated marketing strategy, relationship marketing uses many of the capabilities that already exist in nonprofits, for example, the interactions with volunteers and other valued stakeholders. The potentially high degree of interactivity with multiple stakeholders makes NPOs an ideal context to develop this type of marketing that mostly relies on personal contacts and may be facilitated by digital technologies in a cost-effective way.

In addition to creating relationships with (potential) volunteers, it is essential that NPOs focus on the quality of the relationship to encourage its continuation and value over time (Brennan & Brady, 1999). Some of these interactions will be more important to the volunteer than others. These key interactions are described as "moments of truth" (Grönroos, 1990). The moment of truth is every point when an individual interacts with the nonprofit, before, during, and after a certain activity (Carlzon & Peters, 1987). For example, when a volunteer searches for information or investigates potential NPOs to collaborate with, chooses a specific nonprofit or event to get involved with, gives feedback or opinions, makes suggestions and recommendations, and so forth. It is the point when, during the process of engagement between the volunteer and the nonprofit, the relationship can be built, reinforced, or broken (Thompson, 2006). It is essential that organizations recognize and effectively manage these moments of truth, and omnichannel can be a valuable tool to carry out this task, because it creates an integrated volunteer experience, regardless of when, where, or how a nonprofit–volunteer interaction begins, unfolds, or ends.

For this reason, and despite growing literature on new information and communication technologies (ICTs) and digital channels, more research is needed on volunteer omnichannel behavior (Ailawadi & Farris, 2017; Verhoef et al., 2015); and particularly on how individual attitudes towards technology and online channels may influence that behavior (Juaneda-Ayensa et al., 2016). In this context, the present study aims at a threefold contribution to previous research on volunteer management. First, it answers the following research question: "What are the main antecedents or drivers that explain the adoption of omnichannel behavior among volunteers?" Our goal is to understand what factors motivate omnichannel behavior, compared with offline behavior of volunteers. Throughout this study, we analyze how personal or psychological factors (e.g., motivation), perceived skills and usefulness, social factors, and channel availability for two-way interaction potentially influence the adoption of omnichannel behavior, understood as the interchangeable use of online and offline channels by volunteers (Mirsch et al., 2016; Verhoef et al., 2015). Second, we classify the volunteer base depending on the use they make of the different mixes of offline and online channels and adopt a contingency approach towards interacting with volunteers through the most appropriate channel mix for each profile. And third and last, we explore the implications of omnichannel volunteer management as a strategic option for NPOs, a topic under-researched in nonprofit literature.

Regarding the structure of this article, we first provide a brief overview on volunteer management by nonprofits in a digitally transformed context and contextualize the volunteer omnichannel behavior concept. In addition, in this section, we formulate our hypotheses, focused on the antecedents that may influence volunteer omnichannel behavior. For that, we propose a conceptual model based on Clary et al.'s motivations framework and other relevant literature. Second, we describe the methodology applied to carry out our empirical analysis. Finally, we discuss our results and describe the main conclusions, managerial implications, and limitations of the study.

2 | NONPROFIT VOLUNTEERING AND THE OMNICHANNEL ENVIRONMENT

In the digital era, the proliferation of new channels and contact points has provided volunteers new opportunities to interact with organizations (Cao & Li, 2015). Volunteers decide not only whether to help but, also, whom, where, when, and how to help. In a digitally transformed

context, they also decide from where, when, and how to interact with the NPO towards that end (Hübner et al., 2016). Regarding nonprofit-volunteer interaction channels, the "multichannel" concept refers to the separate and isolated management of several channels, where goals and data are independent in each channel. In contrast, from a more integrative perspective, the "omnichannel" approach focuses on different channels and contact points, though all connected and sharing goals and data, leading to the full integration of channels (Mirsch et al., 2016; Verhoef et al., 2015).

In this context, we define volunteer omnichannel behavior as the interchangeable use of online and offline channels, providing volunteers with multiple contact points with NPOs (Cortinas et al., 2019). This combination of contact points reveals a more rational and reflective behavior in which more information is handled, and more time and efforts are invested in the interaction, thus increasing the opportunities to experience multiple emotions (Viejo-Fernández et al., 2019). Adopting an omnichannel behavior allows volunteers to interact with nonprofits across all channels, anywhere and anytime, according to their needs and preferences. Consequently, through this strategy, NPOs have the potential to provide volunteers with a unique, complete, and seamless experience that eliminates barriers between channels (Juaneda-Ayensa et al., 2016; Rodríguez-Torrico et al., 2017).

Nonprofits may benefit from having volunteers who adopt omnichannel behaviors. For instance, NPOs can cross-analyze volunteer behavioral data on their use of online and offline channels to adapt their communications (e.g., campaign dissemination or suggestions and complaints management) to meet volunteers' needs or preferences. Several empirical studies have confirmed that these types of initiatives enhance volunteers' satisfaction levels and reinforce their loyalty (Shankar et al., 2003; Shi, 2017). Furthermore, omnichannel volunteers, by selecting and combining multiple interaction channels with NPOs depending on whom, when, where, and how they want to help, have a more proactive attitude towards nonprofit-volunteer relationships. As these omnichannel volunteers are desirable for nonprofits, knowing the antecedents of volunteer behavior becomes relevant.

ICTs and the use of new digital channels/tools have reconfigured volunteer management by nonprofits in different ways: enhancing the recruitment process by enlarging and diversifying the volunteering base; improving nonprofits' ability to attract professionals; accelerating the assignment of volunteers to specific tasks; and reducing bureaucracy for volunteer management. Nevertheless, new technologies also imply some challenges in volunteer management, including resistance of nonprofit staff to adopt new digital channels and tools, as well as volunteer accountability and quality assurance (Chui & Chan, 2019). Ultimately, nonprofits can effectively manage volunteering with the support of new technologies if nonprofit managers are able to create a friendly volunteer environment and build and develop meaningful relationships with volunteers (Lovejoy & Saxton, 2012).

However, when it comes to interacting through online channels, it is important to acknowledge that the attitudes and behaviors of volunteers towards digital technologies will influence the effectiveness of such relationship strategies. According to Brudney and Meijs (2014), two alternative approaches to volunteer management exist: universalistic and contingency. The universalistic approach proposes a single form to manage volunteers in all nonprofits/activities, as it "is based on 'one size fits all' management solutions, to be applied to all organizations and volunteers regardless of mission, organizational culture, and volunteer characteristics" (Brudney & Meijs, 2014, p. 307). However, the contingency approach suggests that the way volunteers may be managed depends on volunteer-focused and program/organization-focused factors, and on the context (Brudney & Meijs, 2014; Meijs & Ten Hoorn, 2008).

With the contingency approach in mind, this research acknowledges the importance of customizing management strategies according to the different volunteer profiles that emerge in the context of digital transformation. To that end, it classifies volunteers into more homogeneous groups according to the use they make of different offline and online channels. Once the antecedents of omnichannel behaviors are understood, it is possible to apply a nonprofit–volunteer relationship strategy that is adapted to the needs of each group or cluster.

2.1 | Antecedents of volunteer omnichannel behavior

As occurs with any type of human behavior, we can identify different kinds of antecedents or drivers of omnichannel behavior among volunteers. In this section, we explore the following typologies: (a) personal or psychological factors; (b) perceived skills and usefulness; (c) social factors; and (d) channel availability for two-way interaction.

2.1.1 | Personal or psychological factors

Researchers have highlighted that individuals' emotional states could influence various aspects related to the acquisition and processing of information through different channels (Kulviwat et al., 2004). In fact, Nahl (2004) has demonstrated that some affective variables like motivation or optimism have significant influence on certain information-seeking behaviors. Here, we will focus on volunteers' motivations (Dolnicar & Randle, 2007; Flavián et al., 2012), as this variable has been extensively analyzed by nonprofit literature. Volunteers, like other individuals, can undertake the same activity for different reasons and motivations (Snyder et al., 2000). Previous research has demonstrated that motivations can affect the ways in which volunteers interact with NPOs (e.g., to search for information, register for activities, express opinions, and participate in meetings, among others) through different channels (Flavián et al., 2012). Knowing these motivations allows adapting the messages and channels that can best attract and retain them (Stukas et al., 2014). Clary et al. (1992) developed a relevant framework to understand volunteer motivations, the *Volunteer Functions Inventory* (VFI), consisting of a 30-item measure to assess the reasons for volunteering, grouped into six types of motivations:

- 1. **Prosocial values.** Volunteers seek to express their prosocial values through their volunteer activity.
- 2. **Understanding.** Volunteers aim to better understand the people whom they serve or the nonprofit for which they provide services.
- 3. **Career.** Volunteers seek to obtain particular skills, contacts, or other benefits that can help them with paid employment opportunities.
- 4. **Social.** Volunteering reflects the influence from family, friends, acquaintances, and other social groups.
- 5. Esteem. Volunteers aim to feel needed, useful, important, and happy with themselves.
- 6. **Protective.** Volunteers want to distract themselves from their own problems or reduce their own guilt about being more fortunate than others. The person motivated by protective reasons usually has a lot of free time (for being unemployed or retired) and decides to protect others with the aim to escape from own negative feelings.

Multiple studies detail other possible motivations for volunteering, for instance, enhancing own social problem-solving ability, self-efficacy, or curiosity, providing development assistance, quests to learn more about oneself, change-orientation, and altruism, among others (Lau et al., 2019; Okabe et al., 2019). However, most of the reasons for volunteering are embedded in Clary et al.'s six types of motivations described above.

Overall, our general hypothesis predicts that, regardless of the type of motivation, the intensity of individuals' motivations to volunteer is positively associated with the extent to which they adopt omnichannel behavior. We can find a theoretical justification for this premise in volunteering literature that posits a general positive association between motivations and engagement. The motivations to volunteer enclosed in the VFI framework may explain the variations in the intensity of engagement. In particular, the values and understanding motivations generally have a strongest positive association with volunteers' engagement. However, the career and social motivations have a weaker positive association with engagement (Cox et al., 2018). In addition to motivation being related to individuals' level of involvement, motivation in its turn reflects the importance that volunteers give to a particular activity. In other words, when their motivation to volunteer is more intense, it is likely that volunteers will feel more engaged in the activity, and, therefore, their efforts to use more online channels for twoway interactions with the nonprofit before, during, and after the activity will be higher (Hoefer & Twis, 2018).

Therefore, as the level of motivation to volunteer increases, it is likely that volunteers will be more willing to engage with NPOs in different ways through several channels and contact points. Consequently, we expect that:

Hypothesis 1a. The motivation to volunteer due to prosocial values is positively associated with the adoption of omnichannel behavior.

Hypothesis 1b. The motivation to volunteer due to wanting a better understanding of the nonprofit or its beneficiaries is positively associated with the adoption of omnichannel behavior.

Hypothesis 1c. The motivation to volunteer to obtain skills, contacts, or other benefits related to paid employment opportunities is positively associated with the adoption of omnichannel behavior.

Hypothesis 1d. The motivation to volunteer due to the advice of family, friends, acquaintances, and other social groups is positively associated with the adoption of omnichannel behavior.

Hypothesis 1e. The motivation to volunteer to improve self-esteem is positively associated with the adoption of omnichannel behavior.

Hypothesis 1f. The motivation to volunteer for protective reasons is positively associated with the adoption of omnichannel behavior.

Besides general motivations to volunteer, another relevant personal variable that is more linked to the specific organization with whom volunteers (want to) collaborate, is the positive attitude towards the nonprofit or the sense of belonging. Individuals form and modify these attitudes while they obtain and process information. In addition, information processing may depend on previous attitudes (Cyr et al., 2018).

When volunteers identify themselves as part of a nonprofit and align their objectives and social values with those of that organization, they will be willing to do something for others and become proactively involved even when it does not imply any economic or material gain (Cheung & Lee, 2012). Developing a sense of belonging is crucial to foster volunteers' willingness to engage actively with NPOs. In this way, when they are proud to be part of an organization, we can expect that they will be more willing to interact through multiple offline and online channels with members of the organization and the community for the common good, being more likely to adopt omnichannel behavior (Wang & Handy, 2014). Hence, we predict that:

Hypothesis 2. The degree to which volunteers feel part of the nonprofit (sense of belonging) is positively associated with the adoption of omnichannel behavior.

2.1.2 | Perceived skills and usefulness

Several theories aim to explain the behavior of individuals as regard to new ICTs based on the perceived skills of users and the perceived usefulness of those technologies and, therefore, can help to predict the adoption of omnichannel behavior among volunteers: the Theory of Reasoned Action (TRA), the Theory of Planned Behavior (TPB), and the Technology Acceptance Model (TAM). TRA (Ajzen & Fishbein, 1977) states that only two factors determine behavioral intention: a personal or attitudinal factor and a social or normative factor, without considering the perceived usefulness. As an extension of this theory, TPB (Ajzen, 1991) incorporates the perceived control over the behavior to predict behavioral intentions with a high degree of accuracy (Wolske et al., 2017). Unlike previous theories, TAM (Davis, 1989) does not include subjective norms, but introduces two new variables that may contribute to predict the adoption and use of ICTs: the perceived usefulness and ease of use (Chen et al., 2011). Furthermore, TAM identifies that the perceived usefulness of using ICTs is a possible conditioning variable of omnichannel behavior. A channel with high perceived usefulness "is one for which a user trusts in the existence of a positive use-performance relationship" (Davis, 1989, p. 320).

Based on all these theories, the more resources and opportunities individuals think they possess and the fewer obstacles or impediments they face, the greater their perceived control over a given behavior should be (Ajzen, 1991; Madden et al., 1992). These control beliefs may have their origin in past experiences with the behavior, second-hand information about the behavior, as well as experiences of family members and friends, among others. These factors may increase or reduce the perceived difficulty of performing the behavior (Ajzen, 1991).

Since omnichannel behavior is associated with the interchangeable use of offline and online channels based on new ICTs, individuals may be more likely to adopt this type of behavior if they have the skills, competencies, and knowledge required to use such channels in a specific organization (in the volunteering realm, such "capability" includes actual and perceived skills to adopt a specific behavior, Haski-Leventhal et al., 2018) and, particularly, if they perceive that using those technologies is useful for them. It should be noted that, although volunteers usually require some skills, competencies, and knowledge to use new digital channels such as social media, they can easily acquire and develop them through informal training, support, and learning, both on-the-job while volunteering and at home with the help of friends and family.

Consequently, the perceived usefulness of using ICTs emerges as a key antecedent in the adoption of volunteers' omnichannel behavior. Given this, we propose:

Hypothesis 3. The perceived usefulness of using ICTs (email, web browsing, social media, and mobile applications) among volunteers is positively associated with the adoption of omnichannel behavior.

2.1.3 Social factors

Scholars frequently mention social or interpersonal factors as variables that are likely to affect individuals' behavior (Kumar et al., 2017). Social factors provide individuals with information about the aptness of a particular behavior (Jager et al., 2000) and help them make decisions regarding actions depending on whether such behavior is approved or disapproved (Ajzen, 1991; Ajzen & Fishbein, 1977; Kumar et al., 2017). Social influence, defined as the degree to which individuals perceive that others believe they should use a new system (Venkatesh et al., 2003), emerges as a significant predictor of the intention to use new technologies and social media. Individuals who feel more pressure from their environment (family, friends, and others) to use new technologies, are more likely to intend to engage in using digital channels (Pelling & White, 2009). In fact, many studies demonstrate that individuals adopt and use new technologies because of social influence, contributing to the adoption of omnichannel behavior (Kaba & Touré, 2014). Based on this discussion, we hypothesize that:

Hypothesis 4. The social influence perceived by volunteers from their closest environment (family, friends, and others) to use new technologies is positively associated with the adoption of omnichannel behavior.

2.1.4 Channel availability for two-way interaction

NPOs should achieve an effective communication that enhances their social legitimacy, promotes awareness about the causes they endorse, and fosters interaction with their volunteers (Rey-García et al., 2023). ICTs and digital channels provide multidirectional services and facilitate two-way interaction. However, until recently many NPOs continued to use online channels (especially social media) as one-way communication tools for their advocacy objectives, without optimizing the interactive properties that these channels have for reinforcing nonprofitvolunteer dialogue and engagement (Guo & Saxton, 2014; Lovejoy & Saxton, 2012; Mato-Santiso et al., 2021; Svensson et al., 2015). With the emergence of mobile, tablets, social media, and the integration of these new channels and devices, the landscape has continued to evolve, leading to profound changes in individual behaviors (Bauer & Lim, 2019; Gandía, 2011). People not only select which specific channels they use, but also when or from where they use them throughout their relationships with nonprofits.

Depending on what's most convenient at any moment of truth, volunteers will tend to strategically switch channels when seeking information, evaluating different alternatives, or establishing two-way interaction (e.g., providing feedback or making suggestions to the organization or sharing with others their experience as volunteers). In response, NPOs are starting to transition from the traditional channel-specific management style to omnichannel

15427854, 2023, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/mn.121579 by Universidade De La Corata, Wiley Online Library on [29/08/2024]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use. () A articles are governed by the applicable Certaive Commons License

management, integrating different channels (Gao & Su, 2017). One of the necessary conditions for volunteers to adopt an omnichannel behavior is the availability of feedback channels offline and online—for two-way interaction, providing volunteers with different contact points with nonprofits where they can react and share their opinions (Cortinas et al., 2019; Lovejoy & Saxton, 2012). Therefore, we hypothesize that:

Hypothesis 5. The availability of one or more specific channels for volunteers to give feedback to the nonprofit (i.e., contribute with new ideas, make suggestions, etc.) is positively associated with their adoption of omnichannel behavior.

Figure 1 below depicts the conceptual model of our empirical analysis.

METHODOLOGY 3

We selected the Spanish Red Cross (SRC) as empirical setting for this research due to several reasons. First, because, being a national branch of a global nonprofit, its case is of potential interest for other countries where the Red Cross or similar NPOs manage large volumes of volunteers. Second, because this humanitarian organization, apart from being the largest NPO in Spain as measured by an annual income (864 million ϵ), is the organization with the largest

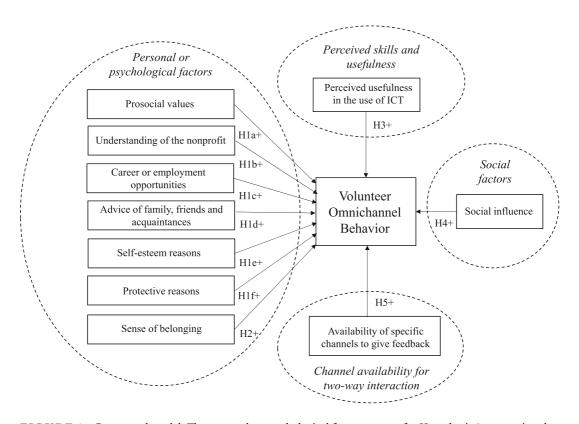


FIGURE 1 Conceptual model. The personal or psychological factors, except for Hypothesis 2, are retrieved from Clary et al. (1992). Source: Authors' own elaboration. ICT, information and communication technology.

15427824, 2023, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/mn.121579 by Universidade De La Cortna, Wiley Online Library on [29/08/2024]. See the Terms and Conditions (https://onlinelibrary.wiley.com/ethorary.wiley.com/eth

number of volunteers in the country (256,380 volunteers; SRC, 2021). Its brand is highly visible at a country level through national fundraising campaigns and emergency interventions, and its volunteers have achieved broad social legitimacy (Rey-García et al., 2013). Third, we have chosen SRC due to the relative stability and diversity of its volunteer base that includes both regular and episodic volunteers. The average time of volunteer service is 7 years and 9 months. However, volunteers also participate episodically in specific events and campaigns (e.g., "Sorteo del Oro", "Día de la Banderita", among others). Fourth, SRC is an interesting case for the breadth of its strategies, combining service provision and advocacy to alleviate the social needs of at-risk individuals. Fifth and last, because SRC covers a diverse range of areas of activity with volunteers that are regularly trained according to their specific tasks: social intervention, international cooperation, assistance and emergencies, childhood and youth, the aged, social exclusion, culture, education, work integration, sports events, health, or environment, among others. To increase the engagement of volunteers, SRC develops two lines of action: the promotion and awareness of the volunteering role in society, and the development of volunteering that is already incorporated in the organization (SRC, 2021).

3.1 | Data collection and sample description

To carry out this research, SRC allowed us to include some additional questions related to omnichannel behavior in its standard survey, called *State of Spanish Red Cross' Volunteering*. SRC prepares and sends an online questionnaire to its national volunteer census through email and actively gathers additional survey answers by phone. We obtained 9774 questionnaires and eliminated 1952 because they were incomplete and/or they presented reliability concerns. Thus, a database including 7822 responses constitutes the final dataset employed in our research.

This online questionnaire allowed us to obtain the following information: (1) the sociodemographic variables to characterize the sample; (2) an assessment of the individual perceptions related to the nonprofit-volunteer relationship based on indicators such as their motivations, perceived usefulness of using ICTs, or sense of belonging and social influence, among others; and (3) the channel(s) through which volunteers establish and maintain relationships with SRC, to identify volunteers' omnichannel behavior. We obtained the data related to this last point by adding our proposed additional questions to the survey.

As illustrated in Table 1, the volunteer profile in this sample is predominantly female (55.8%), aged between 21 and 30 (19.9%), with bachelor's degree (29.5%), and mostly occupied as paid employment (36.8%). The profile of volunteers in the sample is very similar to both the profile of SRC volunteers at the national level and the volunteer profile of the Spanish population. According to 2020 data, there is a higher percentage of volunteers, compared with the general population in Spain, who are women (53.2%), older than 45 years (21.7% 65 or older, 18.6% 55–64 years, and 17.1% of 45–54 years), and with a medium-high level of studies, such as a bachelor's degree (Volunteering Platform in Spain, 2020).

3.2 | Data validation and measures

Although there is no minimum response rate below which survey estimates are necessarily subject to bias (Groves, 2006, p. 650), one of the main problems of using survey-based methodologies is nonresponse bias. To reduce this potential bias, we applied the technique proposed by

TABLE 1 Sample description

TABLE 1 Sample description.		
Descriptors	Spanish Red Cross volunteers (N = 205,626)	Sample (<i>N</i> = 7822)
Gender		
Male	41.9%	44.2%
Female	58.1	55.8
Age		
Younger than 21	5.5	6.9
21–30	26.3	19.9
31–40	23.4	17.5
41–50	19.9	19.1
51–60	12.5	19.7
61 or older	12.3	16.9
Educational level		
No studies	0.7	0.4
Primary-school studies	9.2	8.9
Secondary-school studies	23.7	22.6
Vocational training (medium level)	13.8	14.4
Vocational training (high level)	12.2	12.9
Bachelor's degree	30.5	29.5
Master's, postgraduate or PhD degree	9.9	11.5
Occupation		
Paid employment	31.9	36.8
Self-employment	4.6	4.2
Not in the workforce	27.5	20.9
Retired	11.0	14.2
Student	17.0	15.0
Other situations	8.1	8.9

Source: Authors' own elaboration based on data available from the SRC (2018) Annual Report.

Armstrong and Overton (1977) based on comparing the respondents' results and the "Known values" for the key subgroups of the total population (age, gender, and education level, among others). Using this method, we can argue that there is no evidence of "nonresponse bias" if response rates are similar across subgroups (Groves, 2006). Thus, in our empirical research, we assessed the potential existence of nonresponse bias by comparing the gender, age, educational level, and occupation of volunteers participating in the survey and the total sample of SRC volunteers (see Table 1). After comparing both groups, we can attest that there are no statistically significant differences across subgroups.

We used the variables and metrics included in the national survey conducted by SRC, except for those constructs related to the use of different offline and online channels and the measurement of omnichannel behavior. To check if the analytical constructs measure different concepts, we used the Pearson's correlation coefficient to measure the degree of intensity and the

15427854, 2023, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1002/mn.121579 by Universidade De La Corata, Wiley Online Library on [29/08/2024]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use. () A articles are governed by the applicable Certaive Commons License

direction of the relationship between all variables of the model. After conducting this analysis, we can confirm that there are no overlaps between the different antecedents or factors (Taylor, 1990). We estimated the correlation coefficients for the three regression models.

For measuring the "channel usage" of different offline and online channels (face-to-face, postmail, phone call, email, website, social media, WhatsApp, and other mobile applications), respondents rated this item: "Please rate the use you make of the following channels when you contact Spanish Red Cross", using a 5-point Likert-type scale, ranging from 1 (nonexistent use) to 5 (very high use). We used these variables to conduct the clustering analysis (see Section 4.1).

We measured the dependent variable, "omnichannel behavior", based on the idea that online and offline channels are interchangeably used in nonprofit-volunteer relationships (Verhoef et al., 2015). SRC uses a wide variety of channels to interact with its volunteers: offline channels (face-to-face such as assemblies and committees, postmail, or phone) and online channels (email, website—through the volunteer portal—, social media, WhatsApp, and other mobile applications). This entity generally uses these channels for volunteer management purposes, and for encouraging their active participation (SRC, 2021). The single item used to measure omnichannel behavior was: "I interchangeably use any of the following channels: face-to-face, postmail, phone, email, website, social media, WhatsApp, and other mobile applications". Respondents rated this item using a 5-point Likert-type scale, ranging from 1 (strongly disagree) to 5 (strongly agree). We estimated an ordered logistic regression to explain the behavior of this variable (see Section 4.2).

Taking into account that using different channels is a necessary precondition to use them interchangeably, we also asked respondents about their degree of use of the following offline and online channels when contacting SRC (e.g., to pose questions, register for activities, express complaints or opinions, participate in meetings...): face-to-face, postmail, phone call, email, the organization's official website, social media, WhatsApp, or other messaging applications, and the organization's mobile application. Respondents rated each of these questions using a 5-point Likert-type scale, ranging from 1 (nonexistent use) to 5 (very high use). This information was used to group volunteers into clusters depending on the use they make of the different online and offline channels (see the hierarchical cluster analysis in Section 4.1).

For measuring "personal or psychological factors", we first used the question "Why did you decide to become a volunteer?", linked to the motivations described by Clary et al. (1992). Specifically, we considered the following six variables related to "motivations" to volunteer: being a socially committed person and helping others/perceived social needs (prosocial values); the work carried out by SRC is admirable (understanding the nonprofit); to learn or gain new experiences (career); because family, friends or acquaintances advised it (social); to take advantage of time and feel useful (esteem); and due to being unemployed/ retired and having free time (protective reasons). Prosocial values and protective reasons were each measured through two separate items. To measure these eight items, we asked respondents to rate their motivation levels from 1 to 10.

Similarly, and using the same 1–10 scale (from 1: the lowest degree to 10: the highest degree), we measured the "sense of belonging" through the item "Please rate the degree to which you feel part of the Spanish Red Cross", the "social influence" through the item "Please rate the degree to which you feel influenced or pressured by your closest environment (especially family and friends) to use new technologies", and the "channel availability for two-way interaction" by rating "the availability of channels to give feedback to the nonprofit, that is, contribute with new ideas, make suggestions on volunteer management, program operations, event organization, and so forth".

To measure the "perceived usefulness of using ICTs", we asked respondents to evaluate the extent to which they think that digital technologies (email, web browsing, social networks, mobile applications, etc.) can be useful for volunteering based on their experience. To rate this item, respondents used a 5-point Likert-type scale, ranging from 1 (not useful) to 5 (very useful).

Finally, previous research shows that some "sociodemographic factors" are more likely to promote the use of online channels than others, thus making it more likely for volunteers to adopt omnichannel behavior. Park and Lee (2017) demonstrate that gender and age have a significant influence on channel choice behavior. Usually, men tend to use online channels more often than women, and younger people are more likely than older individuals to use internet and digital technologies (Akinci et al., 2004). Furthermore, in terms of education level, people with a higher level of education use online channels more often compared with people with a basic education (Soopramanien & Robertson, 2007; Sorce et al., 2005). Thus, some additional variables were included in the model as control variables. We analyzed gender using a dichotomous variable (0: male; 1: female); age as discrete variable; and educational level was included as categorical variable (0: no studies; 1: primary-school education; 2: secondary-school education; 3: higher education including bachelor's, master's, postgraduate and doctoral degrees; and 4: vocational training including medium and high-level professional training).

Table 2 details all variables in the model with the corresponding questionnaire items and measures.

4 | RESULTS

We analyzed data in two phases. First, we carried out a "hierarchical cluster analysis" using SPSS Statistics 24 software to identify different groups of volunteers depending on their channel profiles, specifically, on the use they make of the different mixes of offline and online channels. This hierarchical clustering technique combines cases (volunteers) into homogeneous clusters by merging them together one at a time in a series of sequential steps (Yim & Ramdeen, 2015). Second, in the next phase, we estimated three "ordered logistic regression (*ologit*) models" using STATA 14 software to measure the possible influence of key antecedents on volunteers' omnichannel behavior.

4.1 | Hierarchical cluster analysis

We conducted a hierarchical cluster analysis to group similar volunteers according to the use they make of the following channels: face-to-face, postmail, phone call, email, the organization's official website, social media, WhatsApp or other messaging applications, and the organization's mobile application. Results show two differentiated groups of volunteers: a larger group with a profile more oriented to offline channels (Cluster 1), and a smaller group with a more online-oriented profile (Cluster 2).

To analyze the two identified clusters, we conducted a factor analysis using two factors created from the eight-channel usage variables mentioned above (see Figure 2). Factor 1 represents volunteers who use online channels (horizontal axis) and Factor 2 volunteers who use offline channels (vertical axis). In Figure 2, it is observed that volunteers from Cluster 2 (in red) have

TABLE 2 Measurement of variables.

	ement of variables.		
Hyp. Variables	Questionnaire items		
Phase I: Hierarchi	cal cluster analysis		Measures
Channel usage (offline)		u make of the following channel panish Red Cross: <i>Face-to-face</i>	1–5 Likert scale (1: nonexistent use; 5: very
	=	u make of the following channel panish Red Cross: <i>Postmail</i>	high use)
	=	u make of the following channel panish Red Cross: <i>Phone call</i>	
Channel usage (online)	=	u make of the following channel panish Red Cross: <i>Email</i>	
	=	u make of the following channel panish Red Cross: Official website	
	•	u make of the following channel panish Red Cross: Social media	
	-	u make of the following channel panish Red Cross: WhatsApp or lications	
	=	u make of the following channel panish Red Cross: <i>Mobile</i>	
Phase II: Ordered	logistic regression		
Dependent variable			
Omnichannel beh	avior (OMNIBEHAV)	Please rate to what extent you agree with the following sentence: "I interchangeably use any of the following channels: face-to-face, postmail, phone, email, website, social media, WhatsApp, and othe mobile applications"	strongly disagree; 5: strongly agree).
Independent variable	es		
Personal or psych	ological factors		
		Motivations: Why did you decide to become a volunteer?	
Hypothesis 1a	Prosocial values (MOTVAL1 & MOTVAL2)	—Because I am a socially committed person and I like to help others —Because of the perceived social needs	1–10 (1: strongly disagree; 10: strongly agree)
Hypothesis 1b	Understanding of the nonprofit (MOTUNDERS)	—Because I admire the work that Spanish Red Cross does	
Hypothesis 1c	Career or employment opportunities (MOTCAREER)	—To learn or gain new experience	es

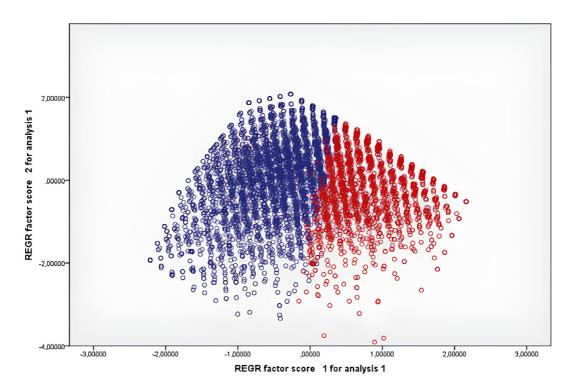
TABLE 2 (Continued)

TABLE 2 (Continu	ecu)		
Phase II: Ordered l	ogistic regression		
Hypothesis 1d	Advice of family, friends and acquaintances (MOTSOC)	—Because others advised me (family, friends, acquaintances)	
Hypothesis 1e	Self-esteem reasons (MOTESTEEM)	—To take advantage of the time and feel useful	
Hypothesis 1f	Protective reasons (MOTPROTEC1 & MOTPROTEC2)	—Because I was unemployed and had free time —Because I was retired and had free time	
Hypothesis 2	Sense of belonging (BELONG)	Please rate the degree to which you feel part of the Spanish Red Cross	1–10 (1: low degree of belonging; 10: high degree of belonging)
Perceived skills an	d usefulness		
Hypothesis 3	Perceived usefulness in the use of ICT (USEICT)	Based on your experience, do you think that digital technologies (email, web browsing, social networks, mobile applications, among others) can be useful for volunteering?	1–5 Likert scale (1: not useful; 5: very useful)
Social factors			
Hypothesis 4	Social influence (SOCINF)	Please rate the degree to which you feel influenced or pressured by your closest environment (especially family and friends) to use new technologies	1–10 (1: very little influenced; 10: very influenced)
Channel availabili	ty for two-way interaction	on	
Hypothesis 5	Availability of specific channels to give feedback (AVAILCH)	Please rate the availability of one or more offline or online channels to give feedback to the nonprofit (i.e., contribute with new ideas, program operations, event organization, etc.)	1–10 (1: low degree of availability; 10: high degree of availability)

Source: Authors' own elaboration.

higher Factor 1 values, indicating that this cluster makes more intensive use of online channels. However, both clusters have similar values of Factor 2, although Cluster 1 (in blue) has the highest values in the use of offline channels.

In addition to this factor analysis, we depict the profile of both clusters according to their channel usage as well as their sociodemographic characteristics in Table 3. On one hand, volunteers belonging to Cluster 1 (4891 individuals), or *offline-oriented volunteers*, mostly use offline channels such as face-to-face and hardly use online channels, with the exception of email or



- Cluster 1: offline profile
- O Cluster 2: online profile

FIGURE 2 Cluster analysis of Spanish Red Cross volunteers. Source: Authors' own elaboration using SPSS.

WhatsApp. These volunteers have face-to-face contact as a priority (3.76) and are more reluctant to manage online channels such as the website, social media and apps. However, they present a high use of email (3.49) and WhatsApp (3.47), because their use is unavoidable given the ubiquitous nature of these channels. Email is essential for both mass and personalized communication of nonprofits, and WhatsApp is one of the most used applications for instant messaging, replacing the traditional SMS.

On the other hand, volunteers included in Cluster 2 (2931 individuals), or *online-oriented volunteers*, also combine both types of channels, but their usage of online channels is more intense than offline ones. These volunteers have a more omnichannel profile than those in Cluster 1, due to the greater interaction through all channels and the fact that they use both types interchangeably despite their preference for online channels. They make intensive use of email (4.55) and WhatsApp (4.47), but without abandoning face-to-face interaction (4.34). As seen in Table 3, there is a large difference (more than 2 points) between the average use of website, social media, and applications by Cluster 2 volunteers and the average use of Cluster 1.

Regarding sociodemographic traits, both profiles do not present significant differences. The profile of volunteers in Cluster 1 is female (55.7%), with an average age of 44.3 and mostly higher education backgrounds (46.1%). Similarly, the profile of volunteers in Cluster

TABLE 3 Volunteer clusters' sociodemographic and channel usage characteristics.

			Cluster 1	Cluster 2
Type of variable	Variable	Values	(offline profile)	(online profile)
Sociodemographic	Gender	Male	44.3%	44.1%
		Female	55.7%	55.9%
	Age	Average (in years)	44.3	41.9
	Educational level	No studies	0.3%	0.5%
		Primary education	7.0%	12.0%
		Secondary education	21.1%	24.9%
		Higher education	46.1%	32.2%
		Vocational training	25.4%	30.3%
Channel	Offline channels	Face-to-face	3.76	4.34
usage (average)		Postmail	1.35	2.83
		Phone call	3.20	4.26
	Online channels	Email	3.49	4.55
		Official website	2.10	4.15
		Social media	1.75	3.93
		WhatsApp or other messaging applications	3.47	4.47
		Mobile applications	1.42	3.55

Source: Authors' own elaboration.

2 is female (55.9%), with an average age of 41.9 and mostly higher education backgrounds (32.2%).

4.2 | Ordered logistic regression

To reveal the possible influence that different drivers may have on volunteers' omnichannel behavior, we estimated three *ologit* models. The first model analyzed the effects on the total dataset; the second examined the influence on offline-oriented volunteers (Cluster 1); and the third model studied the effect on online-oriented volunteers (Cluster 2). Results are depicted in Table 4.

4.2.1 | Results of full dataset analysis

We first analyzed the results without distinguishing between clusters. Regarding the "personal or psychological factors" that may positively influence volunteers' omnichannel behavior, the relevant motivations are to seek a better understanding of the nonprofit or its beneficiaries; to obtain skills, contacts or other benefits related to paid employment opportunities; the influence of family, friends, acquaintances, and other social groups; and protective reasons, finding support for Hypotheses 1b, 1c, 1d, and 1f. However, contrary to expectations, results show that the

TABLE 4 Antecedents of volunteer omnichannel behavior.

	Total sample (7822 volunteers)	le teers)		Cluster 1: 0 profile (489)	Cluster 1: Offline-oriented profile (4891 volunteers)	þa	Cluster 2: 0 profile (293	Cluster 2: Online-oriented profile (2931 volunteers)	7
Variables	Coeff.	Std. err.	$ \mathbf{z} < d$	Coeff.	Std. err.	$ \mathbf{z} < d$	Coeff.	Std. err.	$ \mathbf{z} < d$
Hypothesis 1a: Prosocial values									
MOTVAL1	0.011	0.015	0.491	-0.021	0.019	0.263	0.047	0.029	0.102
MOTVAL2	0.011	0.008	0.169	0.001	0.010	0.944	0.011	0.015	0.450
Hypothesis 1b: Understanding of the nonprofit									
MOTUNDERS	0.084***	0.011	0.000	0.048***	0.013	0.000	0.099***	0.023	0.000
Hypothesis 1c: Career or employment opportunities									
MOTCAREER	0.058***	0.010	0.000	0.049***	0.012	0.000	0.036*	0.019	0.055
Hypothesis 1d: Advice of family, friends and acquaintances									
MOTSOC	0.055***	0.008	0.000	0.033***	0.010	0.001	0.017	0.013	0.203
Hypothesis 1e: Self-esteem									
MOTESTEEM	-0.005	0.009	0.593	0.008	0.012	0.512	-0.005	0.018	0.793
Hypothesis 1f: Protective reasons									
MOTPROTECI	0.034***	0.007	0.000	0.001	0.009	0.897	0.027**	0.011	0.018
MOTPROTEC2	0.032***	0.008	0.000	-0.005	0.011	0.654	0.053***	0.013	0.000
Hypothesis 2: Sense of belonging									
BELONG	0.124***	0.011	0.000	0.086***	0.013	0.000	0.071***	0.021	0.001
Hypothesis 3: Perceived usefulness									
USEICT	0.315***	0.028	0.000	0.218***	0.033	0.000	0.261***	0.053	0.000
Hypothesis 4: Social influence									
SOCINF	0.031***	0.010	0.003	0.000	0.012	0.985	0.046**	0.021	0.027

TABLE 4 (Continued)

Pseudo $R^2 = 0.0451$

Pseudo $R^2 = 0.0240$

Pseudo $R^2 = 0.0626$

	Total sample (7822 volunteers)	le teers)		Cluster 1: 0 profile (489	Cluster 1: Offline-oriented profile (4891 volunteers)	ed	Cluster 2: 0 profile (293	Cluster 2: Online-oriented profile (2931 volunteers)	þ
Variables	Coeff.	Std. err.	$ \mathbf{z} < d$	Coeff.	Std. err.	$ \mathbf{z} < d$	Coeff.	Std. err.	$ \mathbf{z} < d$
Hypothesis 5: Availability of channels to give feedback									
AVAILCH	0.037***	0.008	0.000	0.026**	0.010	0.010	0.018	0.015	0.220
Gender (reference: male)									
Female	0.038	0.044	0.384	-0.032	0.056	0.566	0.207***	0.074	0.005
Education (reference: no studies)									
Primary-school education	0.389	0.371	0.294	0.409	0.543	0.451	0.546	0.511	0.285
Secondary-school education	0.372	0.367	0.310	0.573	0.537	0.286	0.514	0.505	0.309
Higher education	0.092	0.366	0.801	0.534	0.535	0.319	-0.039	0.504	0.939
Vocational training	0.472	0.367	0.198	0.661	0.537	0.218	0.503	0.504	0.319
Age	0.006***	0.002	0.000	0.011***	0.002	0.000	0.011***	0.003	0.000
Volunteer experience	-0.000	0.001	0.876	0.000	0.000	0.793	-0.002	0.004	0.735
	Log likelihoo	$Log\ likelihood = -10,993.013$	013	Log likelihoo	$Log\ likelihood = -6485.0676$	929	Log likelihoc	$Log\ likelihood = -3739.8279$	79
	N = 7567			N = 4750			N=2817		
	$LR chi^2 = 1468.13$	68.13		$LR chi^2 = 318.43$	8.43		$LR chi^2 = 353.16$	3.16	
	Prob > $chi^2 = 0.0000$	= 0.0000		Prob > $chi^2 = 0.0000$	= 0.0000		$\text{Prob} > \text{chi}^2 = 0.0000$	= 0.0000	

Note: Bold values indicate that the hypothesis is accepted for that sample. Source: Authors' own elaboration using STATA. $^*p < 0.10; ^{**}p < 0.05; ^{***}p < 0.01.$

motivations to volunteer due to prosocial values and self-esteem reasons do not explain omnichannel behavior. Hence, Hypotheses 1a and 1e are rejected. Additionally, when volunteers are proud to be part of an organization, that is, they have developed a sense of belonging, this is positively linked with volunteers' omnichannel behavior, thus validating Hypotheses 2.

As expected, the "perceived usefulness of using ICTs" (email, web browsing, social media, and mobile applications), the social influence perceived by volunteers from their closest environment to use new technologies, and the "availability of specific channels for volunteers to give feedback" to the nonprofit have a positive relationship with the adoption of omnichannel behavior, supporting Hypotheses 3–5.

As shown in Table 5, around one-third of volunteers adopt no (25%) or low (11%) omnichannel behaviors; one-third have an intermediate omnichannel behavior; and one-third adopt high (17%) or very high (17%) omnichannel behaviors, considering that the rest of the variables are at their mean values.

Reviewing the plots with predicted probabilities of the different variables, we can highlight the evolution of three of them: ICT usefulness, social influence, and availability of channels to give feedback. As the levels of these three variables increase, the probability of adopting a non-existent omnichannel behavior decreases, the probability of having an intermediate behavior remains stable, and a slightly increasing trend is identified for the adoption of a high or very high omnichannel behavior, although the probabilities are low (see Figure 3).

4.2.2 | Results of cluster analysis: Differences between offline-oriented and online-oriented volunteers

We next compared the relationship between omnichannel behavior and its antecedents for Clusters 1 (offline-oriented volunteers) and 2 (online-oriented volunteers). Regarding "psychological factors," while the motivation to volunteer due to the influence of family, friends, and acquaintances positively impacts the adoption of omnichannel behavior only for volunteers of Cluster 1, motivation to volunteer for protective reasons are positively associated with the adoption of omnichannel behavior only for volunteers of Cluster 2. Another difference lies in the comparison of "social factors" and "channel availability for two-way interactions" between clusters. Perceived social influence is a significant antecedent of omnichannel behavior for most online-oriented volunteers, thus validating Hypothesis 4 for Cluster 2. However, the availability of specific channels for giving feedback to the nonprofit has a positive impact in the adoption of omnichannel behavior among offline-oriented volunteers, supporting Hypothesis 5 for volunteers in Cluster 1.

If we analyze the probability of adopting an omnichannel behavior within each cluster, more than half of the volunteers who have a more offline profile present nonexistent (40%) or low (14%) omnichannel behavior, given that the rest of the variables are at their mean values. A third of offline-oriented volunteers (31%) have an intermediate level, while only 15% have high (8%) or very high (7%) omnichannel behavior. In contrast, only a minority of online-oriented volunteers adopt nonexistent (7%) or low (4%) omnichannel behavior. 21% present an intermediate omnichannel behavior, given that the rest of the variables are at their mean values. Moreover, as expected, the probability that this more omnichannel profile of volunteers will adopt a high (29%) or very high (39%) omnichannel behavior exceeds 60% (see Table 5).

After analyzing the plots with predicted probabilities by cluster, we observe some additional differences. As the levels of ICT usefulness, social influence, and availability of channels to

TABLE 5 Probabilities of adopting an omnichannel behavior.

	All volunteers (both clusters)	iteers isters)			Offline-oriented volunteers (Cluster 1)	riented rs (Clust	er 1)		Online-oriented volunteers (Cluster 2)	riented rs (Clust	ter 2)	
Probabilities (marginal effects)	Margin	Std. err.	N	z < d	$p> \mathbf{z} $ Margin	Std. err.	и	$ \mathbf{z} < d$	Margin	Std. err.	и	$ \mathbf{z} < d$
Non-existent omnichannel behavior (Level 1)	0.255	0.005	49.15	0.000	0.401	0.007	55.26	0.000	0.067	0.005	14.76	0.000
Low omnichannel behavior (Level 2)	0.111	0.004	29.48	0.000	0.143	0.005	27.54	0.000	0.042	0.004	11.55	0.000
Intermediate omnichannel behavior (Level 3)	0.301	0.006	52.61	0.000	0.305	0.007	44.63	0.000	0.210	0.008	27.02	0.000
High omnichannel behavior (Level 4)	0.166	0.004	36.95	0.000	0.083	0.004	20.87	0.000	0.292	0.009	32.38	0.000
Very high omnichannel behavior (Level 5)	0.167	0.004	38.64	0.000	0.067	0.004	18.92	0.000	0.388	0.009	40.95	0.000

Source: Authors' own elaboration using STATA.

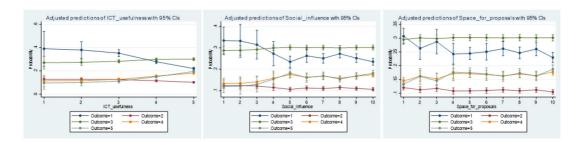


FIGURE 3 Predicted probabilities of information and communication technology usefulness, social influence and availability of channels to give feedback (all volunteers). *Source*: Authors' own elaboration using STATA.

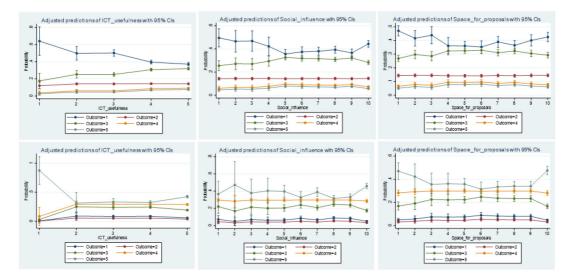


FIGURE 4 Predicted probabilities of information and communication technology usefulness, social influence and availability of channels to give feedback (Clusters 1 and 2). *Source*: Authors' own elaboration using STATA.

provide feedback increase in Cluster 1, results are similar to those of the total sample, in which offline-oriented volunteers predominate. In contrast, when these three variables increase in Cluster 2, the probabilities of adopting a specific omnichannel behavior are shown to be stable. In other words, increasing the level of these variables does not entail a significant change in the omnichannel behavior of online-oriented volunteers (see Figure 4).

4.2.3 | Sociodemographic variables

First, regarding gender, the fact that volunteers are women is positively linked to the adoption of omnichannel behavior among online-oriented volunteers (Cluster 2). Second, our results

show a positive relationship between the age of the volunteers and the implementation of omnichannel behavior. And third, educational level and volunteer experience do not explain the adoption of omnichannel behavior among volunteers. Except for gender, the results of the other sociodemographic variables do not show any difference between clusters.

5 | DISCUSSION AND CONCLUSIONS

This study aims to contribute to existing nonprofit management literature by identifying the main antecedents that may explain the adoption of omnichannel behavior by volunteers. Our goal is to better understand how personal or psychological factors, perceived usefulness, social factors, and channel availability for two-way interaction potentially influence the adoption of this behavior, both in general and among different profiles of volunteers in terms of channel mix, so that NPOs can enhance volunteer engagement and customize their relationship strategies contingent on the particularities of each profile.

5.1 | Discussion of main findings

If we analyze the effects of the different motivations from Clary et al.'s framework on SRC volunteers, differentiating between the two identified volunteer profiles (offline-oriented vs. online-oriented volunteers), we can state that motivations based on relationships with the social environment (family, friends, the nonprofit, etc.) influence omnichannel behavior among volunteers with a more offline profile. Nevertheless, motivations that affect the adoption of omnichannel behavior among volunteers with a more online profile include personal factors based on individual priorities (having free time, wanting new experiences, etc.). This information can be useful for nonprofit relationship marketing strategies. Knowing what motivates their volunteers, depending on their channel-based profile, may allow these organizations to adapt their relationship strategies, in this case reinforcing more community oriented or, alternatively, more individually oriented approaches towards them.

Regarding the sense of belonging, when volunteers feel they are a part of the nonprofit, they are more willing to indistinctly interact through several channels and contact points with members of that community for a common aim, being more likely to adopt omnichannel behavior (Wang & Handy, 2014). Volunteers, feeling that they are an integral part of the organization (intrinsic motivation), positively value the opportunity to interact bidirectionally with NPOs in the broader context of virtual communities that connect them multidirectionally with other volunteers. Given this, nonprofit managers must take advantage of the opportunities offered by social media as a two-way communication channel. Social media's interactive properties foster new relationship and engagement models between nonprofits and their volunteers. In this participatory, co-operative channel, people actively participate and share digital content that inspires others to care about important issues. That is, social media play a key role in volunteer management improvement, encouraging communication and interactions among individuals (Seelig et al., 2019). In this way, sense of belonging may be also nurtured by omnichannel strategies.

With respect to the perceived usefulness, previous research has mostly focused on the importance of perceived skills and self-efficacy as prerequisites for the adoption of new technologies (Haski-Leventhal et al., 2018). Under this view, volunteers will not be able to

interchangeably use offline and online channels in interactions with NPOs, if they do not have any basic knowledge or skills when using at least some online channels. The fact that perceived usefulness of using ICTs encourages the adoption of omnichannel behavior by offline-oriented volunteers (Cluster 1), even though they have a more traditional profile in terms of channel mix (and probably lower-level capabilities with online channels such as email or WhatsApp relative to Cluster 2) suggests that perceived usefulness is a key lever for the integrated use of offline and online channels.

As we can see in our findings, we cannot conclude that social influence affects omnichannel behavior among the offline-oriented volunteers in Cluster 1. A possible explanation for this is that, in the digital era, social influence mainly manifests itself through online means, namely social media, and offline-oriented volunteers are subject to such pressures to a lesser extent. Additionally, we should underscore that volunteers not only perform or adopt a specific behavior (e.g., omnichannel behavior) due to social influence, but also due to individuals from their immediate environment judging if the behavior in question is appropriate or not (Jager et al., 2000). This type of influence, in contrast, is mostly deployed face-to-face.

In relation to channel availability for two-way interactions, in recent years with the proliferation of ICTs and social networks, volunteers with a more online profile do not just consider a single channel; rather, they strategically use multiple channels when seeking information, evaluating alternatives, and making suggestions depending on what is convenient at each moment of truth (Gao & Su, 2017). For this reason, the availability of several channels is necessary to provide volunteers with multiple contact points with NPOs (Cortinas et al., 2019). Interestingly, our findings show that having specific channels for volunteers to give feedback to the nonprofit stimulates the adoption of omnichannel behavior, except among those volunteers who have a more online-oriented profile. This is because these volunteers do not need a specific feedback channel for this purpose due to their intensive use of online channels that allow for potential interactivity at any time, from anywhere, such as social media. In contrast, volunteers who have a more traditional profile and usually use offline channels, will tend to value more highly the existence of specific channels (especially online) to provide feedback to the nonprofit.

5.2 | Managerial implications

After analyzing the antecedents of the omnichannel behavior of volunteers from a relationship marketing perspective, it is necessary to explain the managerial consequences of adopting an omnichannel approach from the perspective of nonprofits. On one hand, omnichannel management represents an opportunity for nonprofits to leverage synergies between channels/tools in synchronizing their interactions with volunteers across multiple contact points (Brynjolfsson et al., 2013). By implementing an omnichannel strategy, NPOs can deploy a wide range of technologies to track volunteer behavior across both physical and virtual environments, obtaining a more comprehensive knowledge of each volunteer. This may imply the fulfillment of volunteers' expectations, ultimately improving their experience. In fact, some researchers demonstrate that individuals who utilize multiple channels to interact with an organization tend to exhibit higher levels of satisfaction and loyalty (Chen et al., 2018).

On the other hand, despite the potential of omnichannel management, nonprofits also face relevant challenges. The omnichannel approach implies that organizations must manage the data, campaigns, services provided, and so forth, in an integrated and coordinated manner through multiple channels. This requires digital infrastructures that may put a strain on the

cost organizations should assume, as well as the availability of qualified staff. Additionally, tighter integration between online and offline channels/tools raises concerns about data security, ethical violations, and privacy infringements. Thus, nonprofit managers must come up with solutions to these problems (Chen et al., 2018).

Additionally, our findings show certain effects of sociodemographic factors on the adoption of omnichannel behavior. Marketing literature has provided evidence that men tend to use online channels more often than women, while younger people are more likely than older individuals to use internet and digital technologies (Akinci et al., 2004). Similarly, individuals with a higher level of education use online channels more often compared with people with a basic education (Soopramanien & Robertson, 2007). However, in a nonprofit setting, these premises may not work the same way. In relation to gender, being female encourages the adoption of omnichannel behavior among the volunteers with an online-oriented profile. However, educational level and volunteer experience (number of years providing volunteer services) do not contribute to the adoption of this behavior.

In particular, and contrary to our expectations, the effect of age on this type of behavior is opposite to expectations. Although it could be expected that younger volunteers adopt an omnichannel behavior more easily, compared with older volunteers, results show that this is not necessarily the case. Although younger people tend to make greater use of ICTs, better managing these technologies does not necessarily imply the adoption of omnichannel behavior in the nonprofit sector, where older people maintain a stronger direct relationship (personal contact) with the nonprofit using offline channels, such as face-to-face or telephone. Additionally, because nonprofits like SRC encourage the use of certain online channels, it becomes easier for all volunteers to use channels like social media or WhatsApp. In other words, older volunteers may become accustomed to using online channels because, through participation in offline activities or training opportunities, the nonprofit has reinforced their perception that they may be useful for them to go online in some cases, and they now indistinctly use some online channels in addition to offline ones. In contrast, younger volunteers may exclusively use online channels in many cases to interact with the nonprofit, hardly using offline channels. They are more digital, but not necessarily more omnichannel.

This research also has relevant implications for nonprofit practitioners who adopt a contingency approach based on identifying different profiles of omnichannel behavior among volunteers. To encourage their engagement and loyalty, NPOs should segment their volunteer base into two groups of volunteers, that is, more offline-oriented versus more online-oriented volunteers. In this way, they could give them what they want through the channel they prefer, increasing their involvement in the NPO's activities and loyalty. Furthermore, the knowledge about the differences between the two clusters may be useful for different communication systems, depending on the means available and the participants involved in the system. Although it would be interesting to analyze this in detail in future research lines, in Table 6, we can see some advice for practitioners to better manage the relationships with offline-oriented and online-oriented volunteers.

5.3 | Limitations and further research

Finally, our research has some inevitable limitations. First, due to the novelty of this topic in the nonprofit sector, we do not have an established body of nonprofit literature to guide the discussion of our research findings. Second, the empirical study is limited to the channels/tools

Strategies for managing relationships with offline-oriented volunteers (Cluster 1)	Strategies for managing relationships with online-oriented volunteers (Cluster 2)
Provide face-to-face a more individualized treatment to better identify the needs and expectations of volunteers	Reinforce the virtual community with volunteers (created through online channels and social media) to better identify their individual needs and expectations
Promote the acquisition of basic knowledge or digital skills for using at least some online channels (WhatsApp, email, the nonprofit website, etc.)	Guarantee an adequate attention through the different online channels used by volunteers, providing consistent information services, etc. regardless of channel
Organize face-to-face events where volunteers can interact with professionals and other volunteers, also using influencers to reinforce community-oriented motivations for intensifying omnichannel commitment	Invest resources in training nonprofit practitioners in digital competences to improve relationships through online channels
Use the "word of mouth" strategy, reaching a greater number of volunteers through their family, friends, and closest environment	Strategically use multiple channels, depending on what is the objective at each moment: recruiting new volunteers, engaging the existent ones, etc.
Identify new sources of perceived usefulness that volunteers may have to use online channels in the future (reach new places, networks, or communities, increase interactions at an international level, etc.)	Using new technologies to track volunteer behavior across virtual environments, obtaining a more comprehensive knowledge of each volunteer through data analytics
Provide adequate information and support to convince volunteers that the use of online channels does not necessarily entail a loss of privacy or an unsurmountable risk to personal data	Provide solutions to concerns about data security, ethical violations, and privacy infringements
Increase availability of online channels between volunteers and the NPO, coupled with NPO usage of such channels for two-way interaction	Improve the integration between offline and online channels for two-way interaction, and stimulate the use of new channels

Source: Authors' own elaboration.

Abbreviation: NPO, nonprofit organizations.

used in Spain by SRC volunteers. There are country differences in NPO types, volunteer profiles (e.g., the mix between formal and informal, or regular and episodic), regulations, and management practices that must be considered before attempting any generalization of our results to other countries. Likewise, there are differences in channel usage by volunteers across countries, although there are some relevant commonalities too, like the unstoppable growth in the use of social media (Nahkur et al., 2022). Third, we used an online questionnaire sent by the SRC to its volunteers via email. This fact may imply some biases despite our attempts to mitigate them. Fourthly, adequately measuring the omnichannel behavior of volunteers is difficult, as it entails seamless marketing integration across multiple channels. This concept is not only based on the use of channels by volunteers, but also on individual perceptions of such usage and on supportive organizational strategies. Finally, although relevant antecedents of the volunteer

omnichannel behavior have been considered in this work (especially multiple motivations), we have not examined all potential determinants. The identification of additional antecedents of omnichannel behavior could be an interesting future research line, together with differentiation according to volunteer and NPO types.

ACKNOWLEDGEMENT

Funding for open access charge: Universidade da Coruña/CISUG.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from Spanish Red Cross. Restrictions apply to the availability of these data, which were used under license for this study. Data are available from the author(s) with the permission of Spanish Red Cross.

ORCID

Vanessa Mato-Santiso https://orcid.org/0000-0002-8158-0179 Marta Rey-García https://orcid.org/0000-0002-9453-8551 María José Sanzo-Pérez b https://orcid.org/0000-0001-5510-5924

REFERENCES

- Ailawadi, K. L., & Farris, P. W. (2017). Managing multi-and omnichannel distribution: Metrics and research directions. Journal of Retailing, 93(1), 120-135.
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179-211.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. Psychological Bulletin, 84(5), 888-918.
- Akinci, S., Aksoy, Ş., & Atilgan, E. (2004). Adoption of internet banking among sophisticated consumer segments in an advanced developing country. International Journal of Bank Marketing, 22(3), 212-232.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. Journal of Marketing Research, 14, 396-402.
- Bauer, S., & Lim, D. (2019). Effect of communication practices on volunteer organization identification and retention. Sustainability, 11(9), 2467.
- Bell, D. R., Gallino, S., & Moreno, A. (2014). How to win in an omnichannel world. MIT Sloan Management Review, 56(1), 45.
- Brennan, L., & Brady, E. (1999). Relating to marketing? Why relationship marketing works for not-for-profit organisations. International Journal of Nonprofit and Voluntary Sector Marketing, 4(4), 327-337.
- Brudney, J. L., & Meijs, L. C. P. M. (2014). Models of volunteer management: Professional volunteer program management in social work. Human Service Organizations: Management, Leadership & Governance, 38(3), 297-309.
- Brynjolfsson, E., Hu, Y.-J., & Rahman, M. S. (2013). Competing in the age of omnichannel retailing. MIT Sloan Management Review, 54(4), 23-29.
- Cao, L., & Li, L. (2015). The impact of cross-channel integration on retailers' sales growth. Journal of Retailing, 91(2), 198–216.
- Carlzon, J., & Peters, T. (1987). Moments of truth. Ballinger.
- Chen, S. C., Shing-Han, L., & Chien-Yi, L. (2011). Recent related research in technology acceptance model: A literature review. Australian Journal of Business and Management Research, 1(9), 124-127.
- Chen, Y., Cheung, C. M., & Tan, C. W. (2018). Omnichannel business research: Opportunities and challenges. Decision Support Systems, 109, 1-4.
- Cheung, C. M., & Lee, M. K. (2012). What drives consumers to spread electronic word of mouth in online consumer-opinion platforms. Decision Support Systems, 53(1), 218-225.

- Chui, C. H. K., & Chan, C. H. (2019). The role of technology in reconfiguring volunteer management in non-profits in Hong Kong: Benefits and discontents. *Nonprofit Management and Leadership*, 30(1), 89–111.
- Clary, E. G., Snyder, M., & Ridge, R. (1992). Volunteers' motivations: A functional strategy for the recruitment, placement, & retention of volunteers. *Nonprofit Management and Leadership*, 2(4), 333–350.
- Cortinas, M., Cabeza, R., Chocarro, R., & Villanueva, A. (2019). Attention to online channels across the path to purchase: An eye-tracking study. *Electronic Commerce Research and Applications*, *36*, 100864.
- Cox, J., Oh, E. Y., Simmons, B., Graham, G., Greenhill, A., Lintott, C., Masters, K., & Woodcock, J. (2018). Doing good online: The changing relationships between motivations, activity, and retention among online volunteers. *Nonprofit and Voluntary Sector Quarterly*, 47(5), 1031–1056.
- Cui, T. H., Ghose, A., Halaburda, H., Iyengar, R., Pauwels, K., Sriram, S., Tucker, C., & Venkataraman, S. (2021). Informational challenges in omnichannel marketing: Remedies and future research. *Journal of Marketing*, 85(1), 103–120.
- Cyr, D., Head, M., Lim, E., & Stibe, A. (2018). Using the elaboration likelihood model to examine online persuasion through website design. *Information and Management*, 55(7), 807–821.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, & user acceptance of information technology. MIS Quarterly, 13, 319–340.
- Dolnicar, S., & Randle, M. (2007). What motivates which volunteers? Psychographic heterogeneity among volunteers in Australia. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 18(2), 135–155.
- Flavián, C., Gurrea, R., & Orús, C. (2012). An integrative perspective of online foraging behavior with search engines. *Psychology and Marketing*, 29(11), 836–849.
- Gandía, J. L. (2011). Internet disclosure by nonprofit organizations: Empirical evidence of nongovernmental organizations for development in Spain. Nonprofit and Voluntary Sector Quarterly, 40(1), 57–78.
- Gao, F., & Su, X. (2017). Online and offline information for omnichannel retailing. Manufacturing and Service Operations Management, 19(1), 84–98.
- Grinstein, A., & Goldman, A. (2011). Beyond the final consumer: The effectiveness of a generalist stakeholder strategy. *European Journal of Marketing*, 45(4), 567–595.
- Grönroos, C. (1990). Relationship approach to marketing in service contexts: The marketing and organizational behavior interface. *Journal of Business Research*, 20(1), 3–11.
- Groves, R. M. (2006). Nonresponse rates and nonresponse bias in household surveys. *Public Opinion Quarterly*, 70(5), 646–675.
- Guo, C., & Saxton, G. D. (2014). Tweeting social change: How social media are changing nonprofit advocacy. Nonprofit and Voluntary Sector Quarterly, 43(1), 57–79.
- Haski-Leventhal, D., Meijs, L. C., Lockstone-Binney, L., Holmes, K., & Oppenheimer, M. (2018). Measuring volunteerability and the capacity to volunteer among non-volunteers: Implications for social policy. Social Policy and Administration, 52(5), 1139–1167.
- Hoefer, R., & Twis, M. K. (2018). Engagement techniques by human services nonprofits: A research note examining website best practices. *Nonprofit Management and Leadership*, 29(2), 261–271.
- Hübner, A., Wollenburg, J., & Holzapfel, A. (2016). Retail logistics in the transition from multi-channel to omnichannel. *International Journal of Physical Distribution and Logistics Management*, 46(6/7), 562–583.
- Jager, W., Janssen, M. A., De Vries, H. J. M., De Greef, J., & Vlek, C. A. J. (2000). Behaviour in commons dilemmas: Homo economicus and homo psychologicus in an ecological-economic model. *Ecological Eco*nomics, 35(3), 357–379.
- Juaneda-Ayensa, E., Mosquera, A., & Sierra Murillo, Y. (2016). Omnichannel customer behavior: Key drivers of technology acceptance and use and their effects on purchase intention. *Frontiers in Psychology*, 7, 1117.
- Kaba, B., & Touré, B. (2014). Understanding information and communication technology behavioral intention to use: Applying the UTAUT model to social networking site adoption by young people in a least developed country. Journal of the Association for Information Science and Technology, 65(8), 1662–1674.
- Kulviwat, S., Guo, C., & Engchanil, N. (2004). Determinants of online information search: A critical review and assessment. *Internet Research*, 14(3), 245–253.
- Kumar, B., Manrai, A. K., & Manrai, L. A. (2017). Purchasing behaviour for environmentally sustainable products: A conceptual framework and empirical study. *Journal of Retailing and Consumer Services*, 34, 1–9.
- Lau, Y., Fang, L., Cheng, L. J., & Kwong, H. K. D. (2019). Volunteer motivation, social problem solving, self-efficacy, and mental health: A structural equation model approach. *Educational Psychology*, 39(1), 112–132.

- Madden, T. J., Ellen, P. S., & Ajzen, I. (1992). A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and Social Psychology Bulletin*, 18(1), 3–9.
- Mato-Santiso, V., Rey-García, M., & Sanzo-Pérez, M. J. (2021). Managing multi-stakeholder relationships in non-profit organizations through multiple channels: A systematic review and research agenda for enhancing stakeholder relationship marketing. Public Relations Review, 47(4), 102074.
- Meijs, L., & Ten Hoorn, E. (2008). No "one best" volunteer management and organizing: Two fundamentally different approaches. In M. Liao-Troth (Ed.), Challenges in volunteer management (pp. 29–50). Information Age.
- Mirsch, T., Lehrer, C., & Jung, R. (2016). Channel integration towards Omnichannel management: A literature review. In Proceeding of the 20th Pacific Asia conference on information systems (PACIS 2016).
- Nahkur, O., Orru, K., Hansson, S., Jukarainen, P., Myllylä, M., Krüger, M., Max, M., Savadori, L., Nævestad, T.-O., Frislid Meyer, S., Schieffelers, A., Olson, A., Lovasz, G., ... Rhinard, M. (2022). The engagement of informal volunteers in disaster Management in Europe. *International Journal of Disaster Risk Reduc*tion, 83, 103413.
- Nahl, D. (2004). Measuring the affective information environment of web searchers. Proceedings of the American Society for Information Science and Technology, 41(1), 191–197.
- Okabe, Y., Shiratori, S., & Suda, K. (2019). What motivates JapanJapan's international volunteers? Categorizing Japan overseas cooperation volunteers (JOCVs). *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 30(5), 1069–1089.
- Olinski, M., & Szamrowski, P. (2017). Using dialogic principles on websites: How public benefit organizations are building relationships with their public. *Nonprofit Management and Leadership*, 28(2), 271–280.
- Park, S., & Lee, D. (2017). An empirical study on consumer online shopping channel choice behavior in omnichannel environment. *Telematics and Informatics*, 34(8), 1398–1407.
- Pelling, E. L., & White, K. M. (2009). The theory of planned behavior applied to young people's use of social networking web sites. *Cyber Psychology and Behavior*, 12(6), 755–759.
- Ravald, A., & Grönroos, C. (1996). The value concept and relationship marketing. *European Journal of Marketing*, 30(2), 19–30.
- Rey-García, M., Álvarez-González, L. I., & Valls-Riera, R. (2013). The evolution of National Fundraising Campaigns in Spain: NPOs between the state and emerging civil society. Nonprofit and Voluntary Sector Quarterly, 42(2), 302–323.
- Rey-García, M., Mato-Santiso, V., Salido-Andrés, N., & Bouzada-Novoa, V. (2023). Construyendo Ecosistemas de Innovación Social. La contribución del tercer sector de acción social a una transición digital y ecológica justa en España. POAS. https://www.plataformaong.org/ARCHIVO/documentos/biblioteca/1676993896_estudiocualitativo-barometro-2022.pdf.
- Rey-García, M., Mato-Santiso, V., & Sanzo-Pérez, M. J. (2021). Stakeholder Management, Multichannel and Omnichannel. In R. A. List, H. K. Anheier, & S. Toepler (Eds.), *International encyclopedia of civil society*. Springer. https://doi.org/10.1007/978-3-319-99675-2_9581-1
- Rodríguez-Torrico, P., Cabezudo, R. S. J., & San-Martín, S. (2017). Tell me what they are like and I will tell you where they buy. An analysis of omnichannel consumer behavior. *Computers in Human Behavior*, 68, 465–471.
- Seelig, M. I., Millette, D., Zhou, C., & Huang, J. (2019). A new culture of advocacy: An exploratory analysis of social activism on the web and social media. *Atlantic Journal of Communication*, 27(1), 15–29.
- Shankar, V., Smith, A., & Rangaswamy, A. (2003). The relationship between customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing*, 20, 153–175.
- Shi, F. (2017). Omnichannel retailing: Knowledge, challenges, & opportunities for future research. In *Marketing at the Confluence between entertainment and analytics* (pp. 91–102). Springer.
- Snyder, M., Clary, E. G., & Stukas, A. A. (2000). The functional approach to volunteerism. In G. R. Maio & J. M. Olson (Eds.), *Why we evaluate: Functions of attitudes* (pp. 365–393). Lawrence Erlbaum.
- Soopramanien, D. G., & Robertson, A. (2007). Adoption and usage of online shopping: An empirical analysis of the characteristics of "buyers" "browsers" and "non-internet shoppers". *Journal of Retailing and Consumer Services*, 14(1), 73–82.

- Sorce, P., Perotti, V., & Widrick, S. (2005). Attitude and age differences in online buying. International Journal of Retail and Distribution Management, 33(2), 122-132.
- Spanish Red Cross [SRC]. (2018). Memoria 2018 [Annual report 2018]. Spanish Red Cross, Madrid, Spain, 1-236. Spanish Red Cross [SRC]. (2021). Memoria 2021 [Annual report 2021]. Spanish Red Cross, Madrid, Spain, 1-174.
- Stukas, A. A., Hoye, R., Nicholson, M., Brown, K. M., & Aisbett, L. (2014). Motivations to volunteer and their associations with volunteers' well-being. Nonprofit and Voluntary Sector Quarterly, 45(1), 112-132.
- Svensson, P. G., Mahoney, T. Q., & Hambrick, M. E. (2015). Twitter as a communication tool for nonprofits: A study of sport-for-development organizations. Nonprofit and Voluntary Sector Quarterly, 44(6), 1086-1106.
- Taylor, R. (1990). Interpretation of the correlation coefficient: A basic review. Journal of Diagnostic Medical Sonography, 6(1), 35-39.
- Thompson, B. (2006). Customer experience management: the value of "moments of truth". Customer Think Corporation white paper, Customer Think, 1-18.
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425-478.
- Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multichannel retailing to omnichannel retailing: Introduction to the special issue on multichannel retailing. Journal of Retailing, 91(2), 174-181.
- Viejo-Fernández, N., Sanzo-Pérez, M. J., & Vázquez-Casielles, R. (2019). Different kinds of research shoppers, different cognitive-affective consequences. Spanish Journal of Marketing-ESIC, 23(1), 45-68.
- Volunteering Platform in Spain. (2020). La acción voluntaria en 2020. Voluntariado en tiempos de pandemia [Voluntary action in 2020. Volunteering in times of pandemic].
- Wang, L., & Handy, F. (2014). Religious and secular voluntary participation by immigrants in Canada: How trust and social networks affect decision to participate. Voluntas: International Journal of Voluntary and Nonprofit Organizations, 25(6), 1559-1582.
- Wolske, K. S., Stern, P. C., & Dietz, T. (2017). Explaining interest in adopting residential solar photovoltaic systems in the United States: Towards an integration of behavioral theories. Energy Research and Social Science, 25, 134-151.
- Yim, O., & Ramdeen, K. T. (2015). Hierarchical cluster analysis: Comparison of three linkage measures and application to psychological data. The Quantitative Methods for Psychology, 11(1), 8-21.

AUTHOR BIOGRAPHIES

Vanessa Mato-Santiso is an assistant lecturer in the School of Humanities and Documentation at the University of A Coruña (Spain). She currently serves as methodologicaltutor for service-learning projects of the Inditex Chair of Sustainability at the UDC. Her research interests focus on stakeholder relationship marketing, omni channel strategies, nonprofit management, nonprofit marketing, digital business transformation, CSR, sustainability and social innovation, participating in international congresses and publications. She has been a visiting fellow in the Rotterdam School of Management at the Erasmus University.

Marta Rey-García is an associate professor in the School of Economics and Business at the University of a Coruña (Spain). She currently serves as director of the Inditex Chair of Sustainability at the UDC. Prior to joining the academy in 2009, she held executive management positions in the nonprofit sector. She has written, co-written, edited or co-edited more than 100 publications, including books, book chapters and papers in refereed journals. Her research interests focus on the interface between civil society and business organizations, business models for sustainability and social innovation, and social and nonprofit marketing.

María José Sanzo-Pérez is a professor in the School of Economics and Business at the University of Oviedo (Spain). She currently serves as director of the Ramón Areces Foundation Chair of Commercial Distribution. Her research interests focus on stakeholder relationship marketing, social innovation, and retailing, and she has published in Industrial Marketing Management, Supply Chain Management, Journal of Business and Industrial Marketing, Journal of Business Research, Nonprofit and Voluntary Sector Quarterly, Voluntas, and other academic and also practitioner journals. She has visited scholar at the Institute for International Integration Studies (Trinity College Dublin), and at Portsmouth Business School.

How to cite this article: Mato-Santiso, V., Rey-García, M., & Sanzo-Pérez, M. J. (2023). Volunteer omnichannel behavior in nonprofit organizations: Key antecedents and implications for management. *Nonprofit Management and Leadership*, *34*(2), 433–463. https://doi.org/10.1002/nml.21579