



Barriers to volunteering in the field of intellectual disability: a cluster analysis

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Abstract

This paper aims to characterise the profiles of individuals likely to feel discouraged to volunteer in the field of intellectual disability. The socio-emotional contours of intellectual disability hinder the involvement of volunteers in this field. There is evidence of the particular barriers to volunteering in activities involving intellectually disabled people, but there is a dearth of research on the characteristics of individuals that mention such barriers. A survey applied to 197 individuals allowed, through latent classes, to identify three clusters of individuals—assuming volunteering as having a negative impact; unawareness of the reality of intellectual disability; and no barriers to volunteering; and three groups of barriers to volunteering in the field of intellectual disability—characteristics of intellectually disabled people; awareness; introversion. Based on the characteristics of the clusters identified, the study addresses possible strategies to overcome the constraints, aiming at involving volunteers in activities targeting individuals with intellectual impairments and to better target the recruitment of volunteering actions in this field. The continuous understanding of barriers to donate time can allow institutions to minimise constraints and overcome hurdles by emphasising the value of experiences that meet the motivations of volunteers.

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1 Introduction

The United Nations (UN) plays a critical role in addressing a host of global problems via the implementation of the Seventeen Goals of Sustainable Development (SDGs). Goal ten, “reduce inequality”, assumes that no one is left behind, although the current context of the COVID-19 pandemic has deepened existing inequalities, particularly in the most vulnerable communities. The general goals and objectives include a call for action to help mitigate inequalities. In this sense, the continuous role of non-profit organizations (NPOs) is critically important in addressing these social challenges (Chaves-Avila & Gallego-Bono, 2020) by encouraging individuals to volunteer to causes that support the UN’s SDGs (Badruesham et al., 2021; Ferguson & McFarlane, 2022).

In Europe, volunteering rates vary according to the country under analysis (Southby et al., 2019). In countries like Switzerland, Germany or Spain, the number of volunteers has been decreasing (Studer, 2015). Outside of Europe, there are several countries that are receptive to volunteering. For instance, England has a rate of 27% of adults doing formal volunteering on a regular basis; but, on the other hand, 42% of this population only volunteers on an occasional basis (Southby et al., 2019).

The relationship established between the volunteer and the hosting organisation is key to volunteer retention (Brudney & Meijs, 2014; Ferreira et al., 2012; Tiltay & Islek, 2020; Vinton, 2012). It is critically important that the volunteers positively identify themselves with the organisation and embody its mission, culture and values (Anastasiadis & Barkoukis, 2020), as this attitude will increase the likelihood that they will connect to the organisation (Hager & Brudney, 2004; Karl et al., 2008). Based on the expectations and needs of volunteers, managers can more easily adapt the offer and harmonise the needs of the organisation with those of the volunteers (Bjernerud et al., 2006; Vanderstichelen et al., 2020). Many NPOs rely on volunteers as core resources for the development of their activities (Willems & Dury, 2017), although volunteer work is directly related to a “supply” that constitutes an important productive resource (Gaymard & Chauvet, 2016). This is particularly true in the current pandemic scenario, since the COVID-19 crisis has exposed various vulnerabilities (Kumar et al., 2020), while having simultaneously triggered a massive wave of real concern and empathy for others (Trautwein et al., 2020).

Many researchers argue that volunteers are heterogeneous (Bussell & Forbes, 2002). However, several studies associate certain characteristics with the behaviour of a volunteer, which allows grouping volunteers according to their personal characteristics and/or behaviours (Dolnicar & Randle, 2007; Ramirez-Valles, 2006; Sherer, 2004). On the other hand, the social and family environment significantly contributes to the degree of involvement in volunteer work (Hu et al., 2016). Thus, it is of key importance that NPOs define appropriate strategies to attract volunteers and in parallel manage resources to motivate them, because volunteers are a valuable resource for these organisations (Ivonchik, 2019; Wit et al., 2017).

Besides the motivation to donate time to the social economy, there are several barriers to volunteering (McKenzie et al., 2021; Southby et al., 2019; Sundeen et al., 2007). Although several studies mention that volunteering can bring benefits to the various stakeholders — volunteers, the organisation and its public, as well as the community itself (Ganesh & Mcallum, 2012; Handy & Srinivasan, 2004; Wit et al., 2022) —, not all individuals are equally predisposed to volunteering (Macduff et al., 2009; Netting et al., 2005). Efficient management of non-profit organisations and volunteer recruitment critically implies understanding both the motivations to engage in social economy activities and the barriers that hinder such involvement. NPOs should enhance the value proposition of volunteering activities to address such motivations and reduce potential barriers.

There are currently several studies on volunteering in the most diverse areas. However, the literature mentions that volunteering in the specific area of disability is scarce (Fort et al., 2017; Gaymard & Chauvet, 2016; McConkey et al., 2021; Smith et al., 2018), and NPOs acting in this field face difficulties in recruiting resources due to the negative public opinion associated with people with mental illnesses (Gaymard & Chauvet, 2016). Most contacts with intellectually disabled people are informal and happen through neighbours, friends or family members (Han et al., 2020). Despite the key importance of cultivating practices of inclusiveness in the community and the changing perceptions towards stigma and discrimination regarding intellectual disability, this topic requires more dynamism in recruiting volunteers, given that volunteering plays a key role for NPOs by bringing perceived benefits, but also for the community and the volunteers themselves.

Volunteering in the field of intellectual disability to promote social inclusion in the community is of paramount importance and, although the benefits of volunteering and motivations are well documented in the literature, as previously presented, the novelty of our paper is related to (i) the understanding of the volunteer barriers to volunteering in the specific area of disability and (ii) the identification of profiles of potential volunteers that allow us to comprehend the barriers to volunteering in the area of disability. The general goal of this paper is to characterise the profiles of individuals likely to feel discouraged to volunteer in the field of intellectual disability. Accordingly, we specifically intend to (i) understand the reasons why individuals generally tend to avoid volunteer work, (ii) understand the reasons given by individuals for not doing volunteer work in the specific area of intellectual disability, and (iii) identify the profiles of people who feel hindered by the different barriers identified in this particular area.

2 Theoretical framework

2.1 Volunteering in the area of intellectual disability

Social exclusion is a major problem in the lives of intellectually disabled people (Nicholson & Cooper, 2013). Negative attitudes by others influence society's responses and intellectual disability tends to be associated with prejudiced attitudes (Walker & Scior, 2013). Intellectually disabled people are one of the groups most

marginalised by society (Louw et al., 2020), as they are often excluded from participating in social activities and have limited opportunities when it comes to developing friendships (Louw et al., 2020; McKenzie et al., 2021; Walker & Scior, 2013). Thus, finding effective ways to combat negative attitudes and discriminatory behaviours is a key priority for researchers in the field of intellectual disability (Walker & Scior, 2013).

Several studies acknowledge the importance of friendships for an individual's social inclusion process (Botero-Rodríguez et al., 2021; McConkey et al., 2021; Wilson et al., 2017). Such studies prove that people with intellectual disabilities, especially those with a higher degree of disability, have fewer friends and social relationships than people with a lower degree of disability (Robinson et al., 2020); thus, finding a network of friends to provide them with assistance is central and urgent.

Typically, to be part of the community, intellectually disabled people require explicit stimuli to encourage their interaction (Louw et al., 2020), because they desire to interact socially, but lack the ability to relate (Wilson et al., 2017). In this sense, social communication and education play a key role in promoting the inclusion of these people by promoting the acquisition of skills that they would otherwise lack (Louw et al., 2020).

In terms of volunteering, contact with disabled people is central for healthy coexistence and social inclusion of these people (Rimmerman et al., 2000). Therefore, the contact with these people positively affects the subsequent contact between both parties (Rimmerman et al., 2000). Contacts prior to volunteering — i.e., in everyday life, between intellectually disabled people and people without any disabilities — have positively impact the acceptance of people with intellectual disabilities; on the other hand, indirect contacts — e.g., through movies — also produces positive effects and can potentially reach wider audiences (Walker & Scior, 2013). Thus, continuous contact with people with disabilities is an opportunity to draw positive perceptions from these interactions (Rimmerman et al., 2000).

2.2 Motivations for volunteering in the field of intellectual disability

The analysis of a group of volunteers working in the area of disability has found that after coming into contact with this reality volunteers were able to achieve a better understanding and deal differently with this public, even outside the organizations (Silva, 2014). Silva argues that interacting with disabled people emotionally enriches volunteers, i.e., they feel more tolerant, empathetic, humble and supportive, and downplay the opinion of others more, and on a social level they are able to establish a better relationship with the people around them.

The relationship between a so-called normal individual and an intellectually disabled person provides benefits to both parties (Wilson et al., 2017). Socialisation improves personal health and well-being, and expanding the personal circle of friends can enhance social development (Botero-Rodríguez et al., 2021; Wilson et al., 2017; Zboja et al., 2020), and potentially foster greater social contact and improvements in the psychosocial domain (Wilson et al., 2017). On the other hand, volunteers develop a greater sense of self-care (Botero-Rodríguez et al., 2021;

Morris et al., 2017). For example, caregivers in the area of dementia people face great challenges and they need support on many levels, as these people face a higher risk of developing physical and mental health problems, as well as a lower quality of life (Halvorsrud et al., 2020). In this way, volunteers play a major role in supporting caregivers by providing them with social and emotional support, as well as the expertise to help them cope better with their work context (Halvorsrud et al., 2020).

Some studies show that befriending programmes carried out with volunteers bring numerous benefits, as they can reduce depression and loneliness by improving the quality of life of intellectually disabled people (Botero-Rodríguez et al., 2021; Wilson et al., 2017), at the same time, volunteers feel motivated to participate in this type of programme, as they see this as an opportunity to serve the community, help others, grow as a person and increase their awareness of mental health (Botero-Rodríguez et al., 2021; Silva, 2014; Wilson et al., 2017). Appendix Table 1 summarizes the motivations for volunteering in the area of intellectual disability.

2.3 Barriers to volunteering – globally and specifically in the field of intellectual disability

Several studies show that individuals are subject to various barriers to volunteering (McKenzie et al., 2021; Southby et al., 2019; Sundeen et al., 2007), and we can identify internal and external barriers (Brandão & Bruno-Faria, 2017; M'Sallem, 2022; Southby et al., 2019; Sundeen et al., 2007), as we can see in Table 2. Internal barriers can be shaped by the internal environment, and personal characteristics can influence the predisposition to volunteer (Friedman et al., 2015; Oliveira & Pinheiro, 2021; Shinbrot et al., 2021; Southby et al., 2019); in turn, external barriers can be related to the market, government and other external networks (Breeze, 2014; Hansen & Slagsvold, 2020; Oliveira & Pinheiro, 2021; Schwingel et al., 2017; Whittaker et al., 2015) (Appendix Table 2).

Society's "negative view" of people with mental illness reproduces an unfavourable context for their inclusion in society, and having little knowledge about disability or mental illness can generate fear and apprehension, which in turn can lead volunteers to decline carrying out work with this specific audience (Gaymard & Chauvet, 2016).

Some studies mention that volunteers feel confused, afraid and even disgusted by these people, as they fail to understand that people with disabilities behave differently, and look different from what is socially accepted; on the other hand, such social differences between the various individuals can prompt volunteers to feel that they should protect intellectually disabled people, since social norms dictate so (Fort et al., 2017; Khoo & Engelhorn, 2011). The sharing of experiences between them can produce behaviour changes and greater acceptance of these people (Fort et al., 2017), although some volunteers report that contacting with intellectually disabled people is not always enjoyable, and in some cases the experiences can be difficult, as the volunteer feels unable to cope with the problems associated with mental illness and feels that it is necessary to have a professional in the field of psychology to make this contact (Southby et al., 2019).

People with intellectual disabilities are perceived by others on the basis of their disability, and the relationship they may have with other individuals is viewed on the basis of their dependence on the other person (Robinson et al., 2020). On the other hand, intellectually disabled people are often perceived by volunteers as more prone to become violent, which negatively impacts the number of people willing to undertake volunteer work with them (Gaynard & Chauvet, 2016), therefore, these people are often isolated from society and are subject to labels and discrimination (McConkey et al., 2021).

Intellectually disabled people are also perceived as exhibiting maladaptive behaviour and appearance, prompting others to feel shame or embarrassment (Botero-Rodríguez et al., 2021; Woodgate et al., 2020); at the same time, some volunteers feel fear or disgust of people with intellectual disabilities, and the same happens when the volunteer experiences the reality of these people and compares it to their own (Southby et al., 2019).

Studies in the area of childhood show that the type of disability influences how individuals behave; thus, people with disabilities related to active participation, problem solving and emotional self-regulation are less accepted by society (McKenzie et al., 2021; Woodgate et al., 2020). On the other hand, these same authors find that the continuous presence of a support person limits the interaction with the disabled person, which is further compounded by their personal limitations in communication.

However, the greater the informal contact with disabled people, the greater their acceptance (Han et al., 2020). Individuals with previous experiences with people with disabilities are more comfortable carrying out activities with this target audience and demonstrate more favourable attitudes towards their social inclusion (Han et al., 2020); thus, for certain volunteers, intellectually disabled people are perceived as someone who is different and should be accepted and understood (Botero-Rodríguez et al., 2021).

Appendix Table 3 summarizes the barriers to volunteering in the area of intellectual disabilities.

The general goal of this paper is to characterise the profiles of individuals likely to feel discouraged to volunteer in the field of intellectual disability. Thus, we have broken down the general objective into smaller parts that address the various aspects of the problem. Specifically, we intend to (i) understand the reasons why individuals generally tend to avoid volunteer work, (ii) understand the reasons given by individuals for not doing volunteer work in the specific area of intellectual disability, and (iii) identify the profiles of people who feel hindered by the different barriers identified in this particular area.

3 Methodology

The data were collected based on an online questionnaire structured with closed-ended questions. The questionnaire was distributed online, by e-mail, to the Portuguese population for a period of approximately 4 weeks between mid-August and early September 2021, targeting participants aged 18 years or older with internet

access. The questionnaire was divided into three groups. Group I consisted of the sociodemographic characterization of the sample under study, composed by items such as age, gender, level of education and professional situation, as well as information regarding whether or not the respondent had performed volunteering activities, the frequency and area of such volunteering, and whether such volunteering was specifically performed in the area of intellectual disabilities. Group II was made up of 21 questions (see Appendix Table 4) aimed at understanding the barriers to volunteering in general and to find whether there are any reasons that more strongly influence the decision to volunteer. Group III was composed of 16 questions aimed at understanding the barriers to volunteering in the area of intellectual disabilities (see Appendix Table 5).

The data were processed and analysed using the software FACTOR (Ferrando & Lorenzo-Seva, 2017) for the factor analysis, and the R software for the latent class analysis. For the factor analysis, given the nominal nature of the responses (“Yes”, “No” and “Don’t Know”), we considered the Robust Diagonally Weighted Least Squares (RDWLS) extraction method (Asparouhov & Muthén, 2010). Additionally, the parallel analysis method with random permutation of the observed data (Timmerman & Lorenzo-Seva, 2011) was used to decide on the number of factors to be retained, and the rotation used was the Robust Promin (Lorenzo-Seva & Ferrando, 2019). The adequacy of the correlation matrix of the items was analysed using the Bartlett and Kaiser–Meyer–Olkin (KMO) sphericity test. The adequacy of the model was assessed using the Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI) and Tucker–Lewis Index (TLI) fit indices.

Latent class analysis (LCA) was used to group the respondents of the study population according to their perceptions on volunteering to identify response patterns based on observed characteristics and relate them to a set of latent classes (the clusters) — in our case, this was done through the answers to the 16 questions that make up the questionnaire. To carry out this analysis, we used R software, in particular the *poLCA* package (Linzer & Lewis, 2011). To determine the optimal number of clusters, we adjusted several models by considering different numbers of clusters and compared the values obtained for the Bayesian Information Criterion (BIC) (Schwarz, 1978), since it is the most suitable criterion to apply in this methodology (Forster, 2000).

Our sample has 197 fully completed questionnaires, with respondents aged 18 years or older and who had not previously volunteered in the area of intellectual disabilities in Portugal.

4 Results presentation and discussion

First, we did a factor analysis to the 21 questions of Group 2 of our questionnaire, and the analysis returned an adequate grouping into 3 factors (Appendix Table 6), with Bartlett’s tests of sphericity (statistic = 750; *g.l.* = 201, *proof value* < 0.001) and KMO (0.75822) suggesting that the correlation matrix of the items is adequate. One item (item 7) showed a very low factor loading (< 0.3), so it was removed from the analysis (Field, 2013; Hair et al., 1998). The items showed adequate factor loadings,

with high factor loadings in their respective factors. The composite reliability of the factors, measured by the ORION estimate (Overall Reliability of fully-Informative prior Oblique N-EAP scores), was adequate (above 0.70) for all factors. The values of the replicability measure of the factor structure (H-index) suggest that the factors may not be replicable in future studies, since they are lower than 0.80. However, in general, the factor structure presented adequate adjustment indexes (RMSEA = 0.027; CFI = 0.983; TLI = 0.976).

Factor 1: Inertia and negative perceptions – this factor focuses on internal barriers related to the willingness to volunteer. Most individuals do not spontaneously seek opportunities to volunteer; sometimes they are only predisposed to do so when invited by others; furthermore, many people do not feel the need to perform volunteer work because they do not recognize its added value or claim not having time to dedicate to this activity (Willems & Dury, 2017).

Factor 2: Scepticism – this factor essentially focuses on external barriers to undertaking volunteering. Trust in organisational leadership is key for the volunteer to feel that they are performing necessary and meritorious work (Souder, 2016); on the other hand, the type of volunteer work is key, as volunteers have to feel in possession of all the necessary skills to perform that work in order to be recognised for merit and gain visibility both within the organization and abroad (Hager & Brudney, 2011).

Factor 3: Mental strength – this factor focuses on the responsibility to be a volunteer. By participating in a voluntary activity, the individual is accepting responsibility and must understand what this entails and whether they meet the necessary conditions to perform this work (Willems & Dury, 2017). Barriers related to physical conditions show a correlation level around 0.500. Meeting physical conditions in certain areas of volunteer work is essential to develop this type of work (Khoo & Engelhorn, 2011; Southby et al., 2019).

Group 3 of our questionnaire comprises 16 questions and the analysis returned an adequate grouping into 3 factors, with Bartlett's tests of sphericity (statistic = 924.9; $g.l. = 120$, proof value < 0.001) and KMO (0.86059) suggesting that the correlation matrix of the items is adequate.

The items showed adequate factor loadings, and the composite reliability of the factors is also adequate (above 0.70) for all factors. However, the values of the replicability measure of the factor structure (H-index) suggest that only factor 2 may not be replicable in future studies, since it is below 0.80, although the value is close to 0.80. Overall, the factor structure presented adequate adjustment indexes (RMSEA = 0.036; CFI = 0.992; TLI = 0.987).

Factor 1: Characteristics of intellectually disabled people with – this factor groups together issues related to knowledge about the reality of people with intellectual disabilities and the potential risks that interacting with these people may entail. Only by being aware of the potential risk that they may run when coming into contact with intellectually disabled people can volunteers feel safe to embrace volunteering in this specific social area (Fort et al., 2017). In our

research, about 1/3 of the sample is composed of individuals who show fear or cannot yet define their opinion regarding coexistence with people with disabilities and their behaviours (Gaynard & Chauvet, 2016).

Factor 2: Awareness – this factor groups together issues related to perceptions and awareness. Society's negative view regarding intellectually disabled people can shape behaviours and attitudes towards these people (Gaynard & Chauvet, 2016). These people are strongly dependent on others as they need constant support in their activities and the fact that they do not have many possibilities to meet people can make them more dependent on the volunteer (Woodgate et al., 2020).

Factor 3: Introversión – this factor groups contains the most varied information. It is important for volunteers to be fully aware that their reality is different from the reality of these people, since in most cases intellectually disabled people face limitations in their social life, go out less and do fewer activities (Southby et al., 2019); if volunteers fail to be fully aware of this reality, they could feel that they are not prepared to deal with this situation (Woodgate et al., 2020).

Second, regarding patterns of responses, the latent class analysis of the answers on the 16 items of Group 3 of the questionnaire resulted in 3 different clusters (see Table 7). This grouping is the most adequate because it presented the lowest BIC when compared to the analyses performed considering two clusters (BIC = 5231.205) and four clusters (BIC = 5056.664) (Appendix Table 7).

In Appendix Table 8, the clusters are characterized according to the demographic data, presenting frequencies (n) and percentages for the variables "Gender", "Educational level", "Professional situation" and "Did you Volunteer in the last year (2020)?" and mean and standard deviation (SD) for the variable "Age", together with the number of participants with complete data for each variable of interest.

Statistically significant differences were found between the medians of the ages in at least one of the clusters, at 1% significance level. Analysing the mean and median values of this variable, one notices that the ages are higher in cluster 1. On the other hand, the ages in clusters 2 and 3 are more similar, but lower in cluster 3.

Additionally, the cluster grouping is independent regarding the variables Gender, Professional situation and Voluntary work done the previous year, since there is no significant difference in the distribution of individuals based on these variables.

By analysing the variable Level of Education, we perceive that the clustering is not independent of the respondents' level of education. Thus, we found that respondents with the 1st cycle of education are grouped in cluster 3; respondents with the 2nd and 3rd cycles of education are mostly grouped in cluster 1. Regarding secondary education, we found that they are mostly distributed by clusters 2 and 3. Finally, clusters 2 and 3 group the individuals who did not specify their level of education.

Below is a description of each cluster obtained.

Cluster 1: assuming volunteering as having a negative impact – this cluster (estimated at 23.30% of the population) includes individuals who are, on average, 41 years old and mostly female (63.64%). With regard to the level of education, there are individuals having from the 2nd cycle to higher education, with the latter comprising most of the respondents (42.42%). Regarding the pro-

fessional situation, the vast majority are employed (93.94%). Figure 1 (Appendix 2) shows cluster 1 (where each V_i represents question Q_i of the Group 3 of the questionnaire). This cluster brings together the individuals who mostly answered "yes". This group of individuals assumes that the barriers indicated regarding volunteering in the field of intellectual disabilities are real for their specific situation and may prevent them from engaging in volunteering.

Cluster 2: unawareness of the reality of intellectual disability – this cluster (estimated at 31.10% of the population) comprises individuals who are, on average, 34 years old and mostly female (63.38%). Regarding the level of education, Secondary Education (26.76%) and Higher Education (64.79%) prevail. Regarding the professional situation, most individuals in this cluster are employed (71.83%), followed by a smaller number of students (22.54%).

Figure 2 (Appendix 2) shows cluster 2. This cluster groups the individuals who mostly answered "No" or "Don't know". This group assumes two situations: on the one hand, they do not have enough knowledge about the reality of intellectual disability to be able to take an informed position on the issues raised; on the other hand, when they have doubts, they assume that this lack of knowledge would not be an obstacle to volunteering.

Cluster 3: no barriers to volunteering – this cluster (estimated at 45.50% of the population) groups mostly female respondents (73.12%); regarding the level of education, most individuals have completed Higher Education (70.97%). Regarding their professional situation, the majority of respondents are employed (67.74%) followed by students (26.88%).

Figure 3 (Appendix 2) shows cluster 3. This cluster groups the individuals whose highest frequency of answers is "No". This group of individuals implicitly assumes that they could do volunteering with people with intellectual disabilities, as they do not consider that the issues raised could be barriers to this activity.

5 Discussion, implications and managerial recommendations

No single sector, organization or individual can be isolated in tackling the social, economic and environmental challenges emphasized in the UN's Sustainable Development Goals (Chaves-Avila & Gallego-Bono, 2020). In this sense, coherent efforts by governments, private, public and social sectors are critical to deal with these major difficulties. It is vitally important for NPOs to identify barriers to volunteering and find ways to tackle them, particularly in the area of intellectual disabilities, which combines barriers to volunteering itself and the stigma inherent in this area of action, aiming at reducing inequalities.

Three major groups of barriers to volunteering in the specific area of intellectual disabilities were identified in our results:

- Characteristics of intellectually disabled people
- Awareness
- Introversión

The first major barrier regards the characteristics of intellectually disabled people, where issues related to "volunteering with people with intellectual disabilities can be dangerous for me" or "people with intellectual disabilities can become violent" are grouped together. In other words, many individuals do not volunteer because they are afraid of interacting with intellectually disabled people, which demonstrates that they are unaware of the specific characteristics of these people (Willems & Dury, 2017; Woodgate et al., 2020).

Regarding **awareness**, we found that it focuses on points related to both the intellectually disabled person and the volunteer. Many volunteers find it difficult to interact publicly with people who are considered different and who may display behaviours that are considered maladaptive by society. Many individuals are not aware of the needs and specific differences of intellectually disabled people. We also find individuals that do not know how to cope when they become aware that "people with intellectual disabilities are less likely to make friends" or to "lead an active social life" (Gaymard & Chauvet, 2016; Willems & Dury, 2017).

Finally, **introversion** brings together the barriers related to the volunteer's psychological makeup and feelings, as well as the socialization limitations of people with intellectual disabilities (Willems & Dury, 2017). The respondents recognized that the lack of knowledge about people with intellectual disabilities may result in the volunteers not knowing how to handle the situation when faced with the limitations that they perceive in intellectually disabled people. Each individual has their own way of reacting to the other and sometimes it is difficult to understand the limitations to which people with intellectual disabilities are subjected.

The clusters that were found suggest an analysis that can help organisations operating in the field of intellectual disabilities to create different strategies to attract, recruit and retain volunteers. The clusters present a division into three distinct groups. The first cluster groups the individuals who consider that all the questions are barriers to volunteering, as mentioned in some studies of the literature review. In the second cluster, most of the individuals are unaware of the reality of people with intellectual disabilities; contrary to the literature review, this group is not able to clearly define their perceptions. Finally, the third cluster includes individuals who do not perceive any barriers to volunteering, but for some reason do not engage in such activities.

Our results provide empirical support of the importance of understanding the barriers to volunteering in a particular area. These findings suggest that NPO practitioners should consider all the available possibilities to expand volunteering opportunities. The call to action can be streamlined through different methods, such as persons (CEOs, endorsers, older volunteers, among others), symbols, or other options that might include more traditional media, social networks, or more recent formats, such as podcasts. In this vein, the general justifications for the strategies presented below consider that significant predictors of the willingness to volunteer include age, reliance on information sources and past volunteering activities (Brewis & Holdsworth, 2011; Rosychuk et al., 2008); therefore, it seems appropriate to use activities such as organising sessions in schools and other public places (e.g., parishes) where volunteer activities might have taken place in the past, as well as in companies, since corporate volunteering is a growing trend

with win–win impact (Licandro et al., 2022). At the same time, confronting the disability stigma among the general public might produce important positive benefits (Walker & Scior, 2013).

Regarding **cluster 1**, since this is a group of individuals who perceive volunteering as something negative and worthless, it is important to reverse this perception and promote volunteering as a valuable activity that has a positive impact on various aspects. Organizations may have little weight individually, but they may develop partnerships either through social networks, the media (television and radio, among others), or even with municipalities in order to promote activities aimed at raising awareness, such as:

- Dissemination of a promotional video on social networks about disability and the importance of volunteering;
- Provision of information about volunteering and intellectually disabled people in places of common access, such as health centres, tax offices, social security offices, schools, employment centres and vocational training centres;
- Information sessions in schools, large companies and other groups (e.g., parishes).

Individuals in **cluster 2** are unaware of the reality of intellectual disability. Therefore, it is critically important to inform them about this specific reality. Once well informed about intellectual disability, this group may be able and willing to do volunteer work with intellectually disabled people. In order to promote such predisposition and greater awareness, it would be important to reach potential volunteers from an early age, for which it is crucial to create partnerships with different schools and promote activities such as:

- Dissemination of a promotional video on social networks to showcase the daily life of these people;
- Distribution of appealing flyers containing concise and specific information about intellectual disabilities;
- Promoting clarification and information sessions, focusing on what intellectual disability is, how to act towards these people, and what to expect.

Finally, in **cluster 3** there is a group of individuals who mention no barriers to volunteering but fail to engage in such activities. It will be important to work on a set of activities to provide knowledge about volunteering and ensure simple ways to start engaging in this activity or even to understand its importance. Thus, to motivate this group of individuals it would be important to establish partnerships between organisations and student associations and/or companies to dynamize activities such as:

- A podcast including interviews with caregivers, NPOs and psychologists, among others, to highlight the importance of volunteering;
- A campaign for recruiting volunteers by sponsoring people with intellectual disabilities;

- Open day at the NPO with activities and socialisation with intellectually disabled people.

6 Conclusions

Volunteering motivations, intentions and behaviours have been extensively researched, with significant positive implications for volunteer recruitment in non-profit organisations. However, understanding barriers to volunteer is a less explored area. Our research deeply explored the barriers to volunteering in the field of intellectual disabilities and identifies three clusters of profiles that are faced with three distinct groups of barriers. These results pinpoint the importance of giving people opportunities to start volunteering so it is essential to deconstruct the perceptions related to intellectual disability, create awareness, and fight the lack of knowledge. Organising the clusters of barriers related to the profiles of individuals facilitates the perception of the barriers encountered and suggests a set of possible strategies to attract volunteers.

In terms of theoretical implications, based on the theoretical knowledge of motivations and barriers to volunteering, this paper discusses the area of intellectual disabilities, which is one of the priority research areas to address inclusiveness and reduce inequalities. As so, we have identified and discussed the major groups of barriers to volunteering in the specific area of intellectual disabilities. The analysis of clustering provides additional comprehension on the importance of individual giving behaviour and advances in the field of non-profit marketing. In fact, the practical implications of our work were shown by presenting, for each identified cluster, a set of activities that aimed at reducing barriers regarding volunteering in the specific area of intellectual disabilities, which potentially will help organisations to attract, recruit and retain volunteers.

The main limitation of the study is the sample size, which hinders the generalizability of the conclusions. Another limitation is that we assume volunteers' intention to volunteer as the actual behaviour, although it might not be true, and finally we should mention that there are other variables not considered here that might be part of volunteers' barriers.

Volunteering can be one of the means to reduce inequalities, particularly in vulnerable communities, therefore there is a need to work together in order to make NPOs stronger in the way they attract and work with volunteers, further research may explore this topic with a broader population in other geographies. Other opportunities for future research may include specific volunteers from other areas (e.g., sports) inquiring if they consider volunteering in the area of intellectual disabilities and try to understand potential barriers. A final challenge for future research lies in defining which resolutions are suitable to manage the ongoing changes and the vicissitudes of the non-profit sector and volunteerism.

Appendix 1

Table 1 Motivations for volunteering in the field of intellectual disability

Motivations	Authors
personal enrichment	(Silva, 2014)
improved interpersonal relationships	(Silva, 2014; Wilson et al., 2017)
improved health and well-being	(Botero-Rodríguez et al., 2021; Wilson et al., 2017)
improved psychosocial control	(Wilson et al., 2017)
opportunity to serve the community	(Halvorsrud et al., 2020; Morris et al., 2017)

Table 2 Barriers to volunteering in general

Barriers	Authors	
Internal Barriers	reconciliation of responsibilities	(Colibaba et al., 2019; Shinbrot et al., 2021; Southby et al., 2019; Willems & Dury, 2017)
	personal skills	(Colibaba et al., 2019; Southby et al., 2019; Willems & Dury, 2017)
	economic situation	(Southby et al., 2019; Sundeen et al., 2007)
	self-will	(Willems & Dury, 2017)
	other hobbies	(Oliveira & Pinheiro, 2021)
	family disapproval	(Oliveira & Pinheiro, 2021)
	health barriers	(Hansen & Slagsvold, 2020)
External Barriers	commuting and time	(Joag et al., 2020; Oliveira & Pinheiro, 2021; Shinbrot et al., 2021)
	organisational leadership	(Kappelides et al., 2018; Souder, 2016)
	recognition of work	(Hager & Brudney, 2011; Kappelides et al., 2018)
	unfamiliarity with volunteering	(Sundeen et al., 2007; Willems & Dury, 2017)
	lack of training	(Oliveira & Pinheiro, 2021; Shinbrot et al., 2021)
	lack of interesting activities	(Oliveira & Pinheiro, 2021)
lack of information	(Hansen & Slagsvold, 2020)	

Table 3 Barriers to volunteering in the field of intellectual disability

Barriers		Authors
Volunteers' characteristics	perception of intellectual disability	(Gaymard & Chauvet, 2016)
	lack of knowledge about intellectual disability	(Gaymard & Chauvet, 2016; Southby et al., 2019)
	fear and apprehension	(Gaymard & Chauvet, 2016; Robinson et al., 2020)
Intellectually disabled person's characteristics	maladaptive behaviour and appearance	(Botero-Rodríguez et al., 2021; McConkey et al., 2021)
	dependency	(Robinson et al., 2020; Woodgate et al., 2020)
	limitations in communication	(Woodgate et al., 2020)

Table 4 Barriers to volunteer (group II – questionnaire)

Barriers	Item	Authors	
Internal	Responsibility	Q1	Volunteering carries a lot of responsibility (Willem & Dury, 2017)
		Q2	By volunteering I can be given responsibilities that I don't want (Willem & Dury, 2017)
	Physical boundaries	Q3	Volunteering is physically hard for me (Willem & Dury, 2017)
		Q4	I need more energy to volunteer (Willem & Dury, 2017)
		Q5	I don't have the right skills to volunteer (Willem & Dury, 2017)
	Economic situation	Q6	Volunteering does not bring me any benefits (Willem & Dury, 2017)
		Q8	Volunteering brings expenses that I cannot afford (Sundeen et al., 2007)
		Q9	I have more important things to do than volunteering (Willem & Dury, 2017)
	Stress from volunteering	Q10	I associate volunteering with depressing work (Willem & Dury, 2017)
		Q11	Volunteering makes me unhappy (Willem & Dury, 2017)
	Lack of time	Q12	I have no interest in volunteering (Sundeen et al., 2007); Willem & Dury, 2017)
		Q13	I don't have the time to volunteer (Sundeen et al., 2007)
		Q14	I don't have transportation to commute to do volunteering (Willem & Dury, 2017)
External	Organization	Q15	I consider volunteering to be a waste of time (Willem & Dury, 2017)
		Q16	The organisations where I can volunteer serve the wrong purposes (Sundeen et al., 2007)
	Lack of benefits	Q17	I feel that volunteering is not recognised (Willem & Dury, 2017)
		Q18	Volunteering does not give the recognition (visibility) that I want (Willem & Dury, 2017)
	Lack of knowledge	Q19	I have not had opportunities to volunteer (Willem & Dury, 2017)
		Q20	I don't know organisations where I could volunteer (Willem & Dury, 2017)
		Q21	I have never been invited to do volunteering (Willem & Dury, 2017)

Table 5 Barriers to volunteer in the area of intellectual disability (group III – questionnaire)

Barriers	Item	Authors	
Volunteer characteristics	Intellectual disability perception		
	Q1	Volunteering with people with intellectual disabilities would make me unhappy (Willems & Dury, 2017)	
	Q2	When I compare my reality with that of people with intellectual disabilities, I realise that they have less chances to fulfil activities/dreams (Gaymard & Chauvet, 2016; Willems & Dury, 2017)	
	Q3	I feel that I don't know how to deal with the specificities of people with intellectual disabilities (Gaymard & Chauvet, 2016; Willems & Dury, 2017)	
	Q4	I feel that when I started volunteering with people with intellectual disabilities, I might be disappointed (Willems & Dury, 2017)	
	Q5	Realising that people with intellectual disabilities have a less active social life and few friends would make me more aware of their situation (Willems & Dury, 2017)	
	Lack of knowledge about intellectual disability	Q6	I feel that volunteering with people with intellectual disabilities could be dangerous for me (Woodgate et al., 2020)
		Q7	I am afraid of the reaction of people with intellectual disabilities (Willems & Dury, 2017; Woodgate et al., 2020)
		Q8	I feel that people with intellectual disabilities are prone to become violent (Willems & Dury, 2017; Woodgate et al., 2020)
Risks	Q9	I feel that volunteering with people with intellectual disabilities carries a lot of risks for me (Willems & Dury, 2017)	

Table 5 (continued)

Barriers	Item	Authors
Characteristics of persons with intellectual disability	Q10 I would feel uncomfortable volunteering with people with intellectual disabilities	(Willems & Dury, 2017)
	Q11 I feel that people with intellectual disabilities have maladaptive behaviours	(Botero-Rodríguez et al., 2021; McConkey et al., 2021)
	Q12 I feel that living with people with intellectual disabilities in public would be difficult for me because of their appearance	(Botero-Rodríguez et al., 2021; McConkey et al., 2021)
Dependency	Q13 I feel that the tasks involved in volunteering with people with intellectual disabilities would make me anxious/stressed	(Willems & Dury, 2017)
	Q14 I fear that people with intellectual disabilities would become too dependent on the volunteer	(Willems & Dury, 2017; Woodgate et al., 2020)
Communication skills	Q15 I feel that the dependence of people with intellectual disabilities on their carer will be a barrier to my relationship as a volunteer	(Woodgate et al., 2020)
	Q16 I feel that realising the limitations that people with intellectual disabilities have in reality would make me feel disappointed	(Willems & Dury, 2017)

Table 6 Factorial structure of group 2

Item	Factor 1	Factor 2	Factor 3
Q1 Volunteering carries a lot of responsibility			0.379
Q2 By volunteering I can be given responsibilities that I don't want			0.574
Q3 Volunteering is physically hard for me			0.546
Q4 I need more energy to volunteer			0.5
Q5 I don't have the right skills to volunteer		0.442	
Q6 Volunteering does not bring me any benefits	0.416		
Q8 Volunteering brings expenses that I cannot afford			
Q9 I have more important things to do than volunteering	0.407		
Q10 I associate volunteering with depressing work	0.335		
Q11 Volunteering makes me unhappy	0.446		
Q12 I have no interest in volunteering	0.399		
Q13 I don't have the time to volunteer	0.432		
Q14 I don't have transportation to commute to do volunteering	0.336		
Q15 I consider volunteering to be a waste of time	0.367		
Q16 The organisations where I can volunteer serve the wrong purposes		0.562	
Q17 I feel that volunteering is not recognised		0.795	
Q18 Volunteering does not give the recognition (visibility) that I want		0.583	
Q19 I have not had opportunities to volunteer	0.435		
Q20 I don't know organisations where I could volunteer	0.558		
Q21 I have never been invited to do volunteering	0.485		
Reliability (ORION)	0.763	0.771	0.711
H-Index	0.756	0.77	0.723

Table 7 Factorial structure of group 3

Item	Fator 1	Fator 2	Fator 3
Q1			0.826
Q2			0.352
Q3			0.793
Q4			0.686
Q5		0.473	
Q6	0.593		
Q7	0.709		
Q8	0.608		
Q9	0.799		
Q10			0.593
Q11			0.377
Q12	0.472		
Q13			0.593
Q14		0.592	
Q15		0.682	
Q16			0.522
	0.84	0.747	0.862
	0.834	0.742	0.857

Table 8 Distribution of the cluster according to demographic data

	Cluster 1 (n = 33)		Cluster 2 (n = 71)		Cluster 3 (n = 93)		p-value
Age							
Mean (sd)	41.39 (12.51)		34.62 (12.14)		32.71 (11.02)		0,004*
Median	39,00		33,00		32,00		
Gender	n	%	n	%	n	%	
Male n(%)	12	36,36%	26	36,62%	25	26,88%	
Female n(%)	21	63,64%	45	63,38%	68	73,12%	
Education level							
1st cycle of basic education n(%)	0	0%	0	0%	3	3,23%	<0,001**
2nd cycle of basic education n(%)	6	18,18%	1	1,41%	0	0%	
3rd cycle of basic education n(%)	7	21,21%	3	4,23%	2	2,15%	
Secondary education n(%)	6	18,18%	19	26,76%	19	20,43%	
Higher education n(%)	14	42,42%	46	64,79%	66	70,97%	
Other n(%)	0	0%	2	2,82%	3	3,23%	
Professional situation							
Unemployed n(%)	1	3,03%	1	1,41%	3	3,23%	0,1848**
Employed n(%)	31	93,94%	51	71,83%	63	67,74%	
Student n(%)	1	3,03%	16	22,54%	25	26,88%	
Other n(%)	0	0%	2	2,82%	1	1,08%	
Retired n(%)	0	0%	1	1,41%	1	1,08%	
Did you Volunteer in the last year (2020)?							
No n(%)	29	87,88%	61	85,92%	78	83,87%	0,8405**
Yes n(%)	4	12,12%	10	14,08%	15	16,13%	

Appendix 2

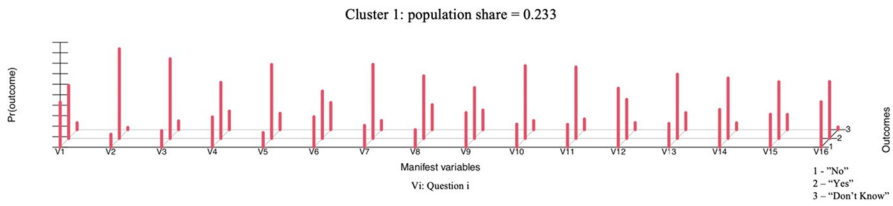


Fig. 1 Cluster 1

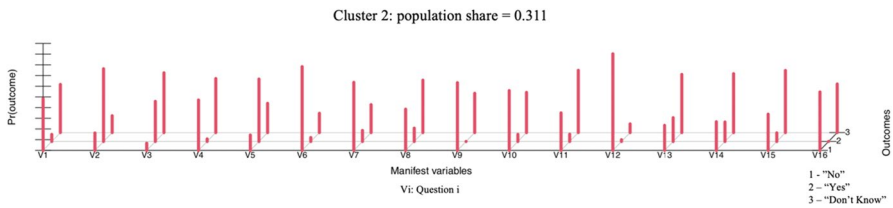


Fig. 2 Cluster 2

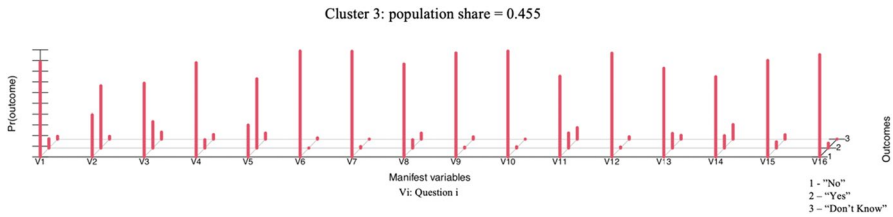


Fig. 3 Cluster 3

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Declarations

Conflicts of interests/Competing interests The author(s) declare(s) that there is no conflict of interest.

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