# Retiree Volunteerism: Automating "Word of Mouth" Communication

Jeffrey Black<sup>1</sup>, Ishitha Michael<sup>1</sup>, Dan Roberts<sup>1</sup>, Brodrick Stigall<sup>1</sup> and Bart P. Knijnenburg<sup>1</sup>

<sup>1</sup>Clemson University, 105 Sikes Hall, Clemson, SC, United States of America

#### Abstract

Many retired people engage in volunteer opportunities as a means to give back to their communities, stay physically and intellectually active, and build and expand their social networks. However, our semi-structured interviews of six retirees found that they typically avoid searching for volunteer opportunities through websites and social media due to a lack of trust in those tools and a concern for privacy. Instead, they rely on word-of-mouth communication facilitated through emails with individuals and organizations they trust. To support this type of communication, we designed an adaptive interaction mechanism in the form of a newsletter with volunteer opportunities that are personalized using recommender system technology. The newsletter mechanism leverages personal connections through user-defined preference-based communities that allow users to share volunteer opportunities with their peers.

#### **Keywords**

User-centered design, Recommender Systems, Seniors, Volunteering, Retirement, Community, Privacy

#### 1. General Introduction

Retirees are a valuable asset for volunteer organizations, which in turn provide retirees with a means to stay engaged and intellectually active [3]. In this paper we aim to discover what compels retirees to volunteer, how volunteer opportunities are found and shared within their communities, and the extent to which volunteering is a social process and a factor in self-actualization. We then propose an adaptive decision support mechanism that helps retirees find and participate in volunteer opportunities.

Our research team conducted semi-structured interviews with six retirees representing four different lifestyles to understand their decisions about volunteering. Our interview focused on understanding the key factors that motivate retirees to volunteer, how they assimilate into the roles they choose, and how they entice others in their social circles to join them in volunteering. Our expectations were that the volunteering roles each retiree takes on would be a highly personal decision, often reflecting their past professional careers. Futhermore, we expected that they would rely on web sources such as Volunteer-Match, the AARP Volunteering platform, or volunteer recommendations on local websites.

In analyzing our interviews, we found that retirees typically do not use online tools to find volunteer op-

Third Workshop on Social and Cultural Integration With Personalized Interfaces (SOCIALIZE) 2023

☑ jtblack@g.clemson.edu (J. Black); imichae@g.clemson.edu (I. Michael); danny2@g.clemson.edu (D. Roberts); bstigal@g.clemson.edu (B. Stigall); bartk@g.clemson.edu (B. P. Knijnenburg)

© 0000-0003-1341-0669 (B. P. Knijnenburg)

Output Ou

portunities, relying instead on word-of-mouth communication, internal email newsletters, and their knowledge of their community's needs. Secondly, while retirees do select volunteer activities based on personal motivations and interests, they also personalize their experience once they engage in a volunteer role—sometimes in a way that reflects their past careers, but in many instances to do something completely different. Third, retiree volunteers often actively encourage their acquaintances to join them, but do this in a way that is protective of their own privacy and the privacy of their peers.

These findings informed the design of our interaction mechanism that augments existing volunteer opportunity email newsletters with automated recommender system capabilities. Our Personal Community Volunteer System (PCVS) incorporates social recommender system principles to assimilate the word-of-mouth recruitment strategy retiree volunteers are familiar with, while providing a balance between community-building capabilities and privacy.

#### 2. Related Work

Several prior research papers and textbooks informed our research on retiree volunteerism and the development of our resulting interaction mechanism. We used Charmaz's textbook on grounded theory to guide our interview study and data analysis [4]. Knijnenburg et al.'s work on recommender systems for self-actualization provided a core motivation to design a meaningful recommendation experience for older adults [9]. Bradley's work on volunteering among older adults led us to probe participants motivations to volunteer [3]. Bradley's assertion that older adults volunteer to stay engaged and

intellectually active was echoed often in our interviews.

In probing the user experience in seeking and reacting to recommendations, we followed the guidance of Knijnenburg et al. [8], particularly focusing on the need to consider the personal and situational characteristics of users and their intention to trust various types of systems. Furthermore, we considered choice overload as a potential reason for retirees to avoid volunteer opportunity websites [2]. Our evaluation of the degree in which volunteers may be motivated by recommendations from friends and acquaintances was influenced by work on the need for inspectability and control [6] and the "social matching" tendencies of individuals in reacting to recommendations [10]. Our interest in probing the privacy concerns of retirees was motivated by research on privacy in recommender systems [5] and social media [1].

Finally, while we found prior research on the phenomenon of word-of-mouth communication in many contexts, we found none specific to retiree volunteers. The current paper makes important contributions on this front.

#### 3. Research Methods

We employed a lightweight version of Charmaz's guidelines for grounded theory research [4] to investigate the processes and tools utilized by older retired individuals in their pursuit of and assimilation into volunteer roles. Our IRB-approved research study involved selecting a sample of individuals with relevant experience, conducting openended interviews, and analyzing the transcripts through a thorough coding process. These codes were subsequently distilled into concepts and categories, which informed the development of theories regarding the motivations and behaviors of the research subjects. Throughout the study, researchers made memo notes and recorded key quotes for documentation purposes.

#### 3.1. Participants

For our study we recruited six retired volunteers from a lifelong learning institute, residents of a local retirement community, and family members of one of the researchers (see Table 1). We selected interviewees from the former two sources through recommendations from administrators, and conducted the interviews in person or via Zoom.

#### 3.2. Procedure and Data Analysis

Our interviews complied with the local IRB's guidelines for the protection of human subjects. All interviewees reviewed a consent form and agreed to have their interviews recorded. Interview questions were posed verbally after the protocol was explained and the consent forms were signed. We conducted individual interviews with six subjects, with one or two researchers present. The interviews were semi-structured, allowing for a natural flow of conversation as the subjects shared their experiences. The interviews lasted 30–75 minutes. We asked retirees about their education and work background, their interest in and motivations for volunteering, how they found volunteer opportunities, and their past and current volunteer activities. Our research protocol and list of questions is available upon request.

The audio recordings of the interviews were autotranscribed and loaded into a shared spreadsheet. Our researchers individually coded each line of the interviewees' comments, capturing memo notes and direct quotes in adjoining cells. These codes were then analyzed to identify the most common codes, categories, and concepts, which informed the development of theories about how retired individuals learn about and pursue volunteer opportunities, personalize their roles, and encourage others to volunteer. Our full data repository is available upon request.

#### 4. Results

Our initial coding efforts resulted in 287 instances of 124 unique *codes*. These codes were aggregated into ten core *categories*: volunteering, teaching, learning, connecting, escaping, staying relevant, contributing, personalizing experience, socializing, community, and commitment. These categories captured the diversity of motivations and preferences among our volunteers, with some being dedicated to their missions and others using volunteering as a social outlet. We further divided these 10 categories into two main groups related to participation in volunteer opportunities.

The first group consists of categories associated with opportunity-volunteer fit. This group captured the degree to which an opportunity relates to an individual's historical or current interests; one's personal motivation for volunteering (e.g., to have an impact, to socialize, to stay engaged, or to escape); aspects related to a volunteer organization's values and demographic make-up; the time or energy commitment required to volunteer in various positions; and one's ability to participate in volunteer opportunities (e.g., accessibility considerations).

The second group of categories examines how individuals find and share information about new volunteering opportunities. This includes the concept of organic recruitment, where individuals learn about opportunities through events, activities, and interpersonal connections related to their interests; explicit recruitment efforts through word-of-mouth, flyers, or websites; and the accessibility of information about volunteering opportu-

**Table 1** Participant Demographics

PID	Age	Retired?	Gender	Ethnicity	Career Role	Volunteer Role
U01	70's	Y	Female	White	Educator	Administrator
U02	80's	Y	Male	White	Educator	Educator, Quiz Master
U03	60's	Y	Female	White	Mental Health Admin	Artist
U04	50's	Y	Female	African American	Educator	Educator
U05	50's	Y	Male	African American	Law Educator	Youth Mentor and Advisor
U06	50's	N	Female	White	Assisted Living Admin	Community & Church Leader

nities, such as the medium used to share information to older adults.

Using contrastive coding practices, we then developed several *axial codes* based on these groups and categories. The major takeaways from each axial code are presented in the following subsections.

#### 4.1. Interests and Motivation

When opportunities align with a retiree's interests or personal motivations, they are more likely to volunteer. For example, participant U03, who used to play polo, now volunteers to teach children how to ride horses and play polo. They also volunteer at grade schools to provide art presentations and encourage others to pursue the arts, saying "I guess I've used volunteering as more of an escape" and "to give back." U02, a former English teacher, volunteers to teach reading and English, stating "Well, I've been a teacher for 42 years, and they were offering me the opportunity to continue doing what I always loved" and "It's been very important. It's changed my life. It's kept my brain alive." U05 believes that good volunteers "select volunteer opportunities in which that volunteer has a deep interest," with volunteering being where interests meet needs. The degree to which these volunteering interests and motivations are related to the users' past experiences varies, however. For instance, in the case of U01 and U06, these users chose volunteering roles that were not so closely related to their prior careers. U01 moved from a career in education to a role in administration, and U03 moved from being an assisted living administrator to being a leader for the local church and community. In the case of U03, in addition to volunteering for opportunities related to her interests in horseriding and polo, she is primarily involved with art events and wishes to get involved with the National Parks Service. While interests and motivations may vary from person to person, these findings highlight the importance of personalizing volunteer experiences to the individuals' interests and motivations.

#### 4.2. Organic Recruitment

Participating in any activity (even those not related to volunteering) can organically cultivate an interest in volunteering and help retirees discover new volunteer opportunities. For instance, U01 and U02 discovered volunteering opportunities by participating in lifelong learning classes, and were later approached about those opportunities, which they accepted. These individuals now regularly learn about new volunteer opportunities through word-of-mouth because of their involvement in the organization and organized events.

Some organizations take advantage of this organic recruitment effect by actively recruiting new volunteers at events—participants noted that the Lifelong Learning Institute had made efforts to get people to congregate, such as socials and book exchanges. Finding volunteer opportunities is often not a case of retirees outside an organization looking in, but rather current volunteers and staff inside an organization looking outward to find new volunteers. U01, for example, noted that she regularly "makes a plea" for new volunteers at such events, and several interviewees remembered being approached at events about opportunities within the organization. These findings highlight the importance of existing organizational structures in recruiting retiree volunteers.

#### 4.3. Organizational Culture

Organizational culture significantly influenced retirees' decision to participate in volunteer opportunities. For instance, U01 stated that when she brings friends to see the lifelong learning institute and they meet the organizers and volunteers, and experience the general culture, "they are sold!" Conversely, some volunteers make substantial contributions to the organizational culture, attracting many members and potential recruits. For example, U01 mentioned volunteers with notable careers, such as a doctor who fought HIV and distinguished academics, who deliver interesting lectures and draw in potential volunteers. This means that recruitment efforts not only increase volunteer numbers but also enhance the organizational culture. For example, U01 mentioned that the

doctor who fought HIV decided to start an annual recruitment event for the organization, thereby making a positive impact. Again, these findings emphasize the importance of existing organizational structures.

#### 4.4. Required Commitment

How much time, energy, and overall commitment is required for an individual to volunteer great impact on their ability to participate. For example, as U01, U02, and U03 noted, retirees lead very busy lives—many visit family members that live far away, are involved with organizations around them, or are doing other activities with their retirement time—making regular time commitments can be difficult for some. Furthermore, some volunteers may experience age-related issues that reduce the feasibility of participating, with U02 noting the restrictions of arthritic volunteers. Another restriction is that some retirees eventually return to work in some capacity—U04 and U05 both expressed that they would do more volunteering if their job did not take up so much of their time.

Some people have personal motivations that may affect their desire to commit themselves to volunteering opportunities. For instance, U01 started a center for helping abused children. This created a high-stress, highcommitment role for herself, but she remained motivated by her strong commitment to causes that help children. On the other hand, if the commitment required by an opportunity exceeds one's threshold, they may move on to other volunteering opportunities that better fit their abilities. For example, U03 mentioned that their volunteer work sometimes felt more like a job than something she was passionate about, and she often left events feeling dissatisfied. Likewise, U01 and U02 noted that people sometimes "get up to here!" with responsibilities and just say "I've done enough," ultimately quitting their volunteering role. These findings emphasize the importance of matching the required commitment with the abilities of the retiree volunteer.

### 4.5. Word-Of-Mouth Recruitment

Many of our participants reported rather limited technology usage, relying on email and word-of-mouth for communication more than social media or other websites. This makes recruiting volunteers through word-of-mouth more effective than other recruitment methods. For instance, U03 and her friends learned about volunteer possibilities mostly by word of mouth, and she suggested that many in her age group do not use online resources when looking for opportunities.

Another key aspect of the retirees' technology choice involves the desire to protect their privacy and to avoid scams. For instance, U01 cited specific concerns about misinformation as a reason for avoiding social media, and stated that she is trying to avoid "getting hooked" to email. Most participants expressed a level of trust in emails from organizations and individuals they know, but signaled a lack of trust in other resources.

Overall, interviewees emphasized that word-of-mouth is the key to finding and recruiting volunteers. As U01 stated, "I have no idea of anybody who finds volunteer jobs via computers. [...] The way you find volunteers is through other people, word-of-mouth."

#### 4.6. Volunteer Habits Change Over Time

Lastly, abilities of retirees change as they advance in age, which may affect their desire and ability to participate in volunteer activities. For example, U06 participated in a horse welfare camp but she felt she was getting too old for this high-energy commitment, so she terminated her participation. Additionally, personal motivations may change, and volunteers may decide they want to try something different. For example, U03 stated that she would like to explore new volunteering opportunities and that she has always wished to work for the National Parks Service. Similarly, U06 said she would like to volunteer for the Dollywood Foundation and also would like to take care of sea turtles.

It is in organizations' best interest to accommodate changes in volunteers' motivations and abilities, as this may lead to them leaving a greater impact on an organization than might have otherwise been possible. For example, U01 mentioned that the doctor who fought HIV had originally made plans to give a lecture about COVID-19, but eventually decided to be more interested in organizing a variety of fundraising efforts that ended up drawing large crowds.

#### 4.7. A Theory of Retiree Volunteering

Figure 1 summarizes our findings in a Theory of Retiree Volunteering. Upon retiring, people often turn to volunteer activities as a means of adapting to new life circumstances. The process of finding and committing to a volunteer opportunity is a deeply personal process driven by retirees' activity of seeking relevance. This process crucially depends on retirees connecting with available volunteer organizations-something that primarily happens through interpersonal relationships and communications. Additionally, volunteering opportunities must be a good fit for the volunteer (i.e., be related to their interests, fulfill their goals, and be accessible to them). In many cases, this means personalizing the experience—something that also ascertains that the role remains a good fit for the volunteer, even as their motivations, interests, and abilities change. The ultimate goal of this process is contributing to the volunteer

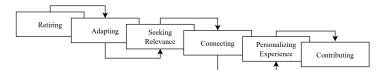


Figure 1: Process Model of Retiree Decision-Making.

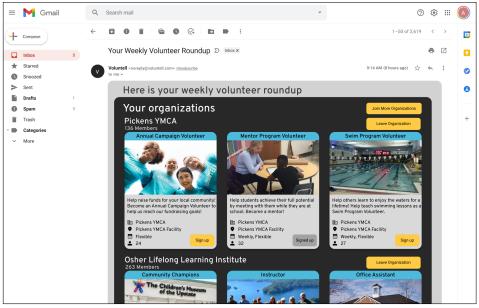


Figure 2: Overview of the PCVS

organization, not only through the volunteer activities themselves, but also by contributing to the organizational culture and by recruiting others to join the organization.

From finding opportunities, to participating, to recruiting others into an organization; every step in the volunteering process is deeply personal for retired volunteers. A decision support mechanism must therefore support this highly personal process, rather than try to replace it with a new process that will likely be abandoned. Indeed, our results suggest that existing attempts to replace the process have failed, as seen by the low prevalence of website-based volunteer recruitment systems being used by retirees.

#### 5. Interaction Mechanism Design

We designed an interaction mechanism informed by the findings of our interview study (see Figure 2). Our Personal Community Volunteer System (PCVS) builds on existing volunteer opportunity email newsletters with the addition of a personalized social recommender-based

engine. This design reflects the interviewees' feedback that volunteers find opportunities organically, and that the preferred tool for communicating within their social circle is email.

The PCVS shows opportunities sourced from organizations the user has signed up for. In its full implementation, organizations would register with the service, and users would sign up for organizations in order to receive information about volunteering opportunities. Additionally, to allow users to organically learn about new opportunities through volunteer social networks, we built in a peer group system (see Figure 3). That is, the second grouping of volunteer opportunities is based on preference-based communities: Aided by a social recommender engine that matches users to groups of volunteers with similar interests, users can create, join, and add events to these peer groups. The events that have been added to a peer group are included in the newsletter of each person in the peer group. This peer group system enables users to create small networks of volunteers that share opportunities with each other, just like how our interviewees

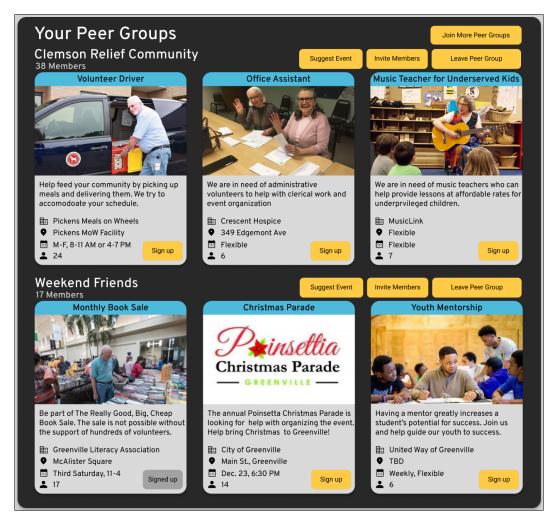


Figure 3: Peer Group system

told us they find opportunities.

To help users understand how well an opportunity fits, we display a description of the opportunity, the location, the number of people signed up, the date/time/frequency, and an image of the type of volunteer work for each opportunity. Lastly, users can join an opportunity by pressing the "sign up" button, which takes them to a page where they can complete any formal registration required for the event.

# 6. Discussion, Limitations, and Future work

In this paper, we present our user studies to better understand how retirees find, join, and disseminate volunteer opportunities. Based on our findings, we then developed an interaction mechanism to support retirees in these activities. The findings of our semi-structured interview study show that the process of finding and learning about new volunteering opportunities is a deeply personal and organic process for retirees: Information about volunteering opportunities is spread through word-of-mouth, and retirees must make sure that the opportunities are—and remain—a good fit for their interests, motivations, and abilities. Furthermore, we found that older adults do not use the most modern communication methods, preferring email and face-to-face communication over social media or websites.

Based on these findings we designed the PCVS: an email-based newsletter system that displays lists of volunteer opportunities based on existing organization memberships and user-defined preference-based communities (i.e., peer groups). For the latter, opportunities are

displayed in groupings labeled by the preference-based community they are associated with, and a social recommender engine helps users find or create new communities, view users within the communities, and recommend events to them. The focus on smaller communities supports word-of-mouth recruitment while respecting their privacy.

Our research was constrained by a small sample size and a short time frame of three months to design the study and complete data collection. Additionally, all of our interviewees were college-educated with previous professional careers, most with connections to a local university. Future work should expand this sample to be more diverse, particularly in education level, past employment roles, and geographic location. Such work can also study the volunteer decision processes of people that are not retired, to better understand the differences between those populations, and how our interaction mechanism could be generalized to a broader audience. Future research may explore how system preferences change with a new generation of retirees. With the rise of ubiquitous computing, newer retirees with more technological experience may prefer outlets such as social media platforms and instant messaging services for finding and sharing information about volunteering. In the future, we aim to implement the presented system and conduct a user experiment [7] to evaluate the effectiveness.

#### 7. Conclusion

In this paper we studied what compels retirees to volunteer, how they find and select volunteer opportunities, and how they share opportunities with their personal social network. We used our findings to design an adaptive decision support mechanism to help retirees find volunteer activities that integrates social recommender technologies into existing email newsletters.

Our results are not only useful in helping older adults look for meaningful activities and social groups but may also have broader implications for social decision support systems in general. Importantly, we conjecture that allowing users to craft their own preference-based communities may be a broadly-applicable approach to supporting decision contexts that are heavily guided by close, interpersonal relationships. Recommender technologies can further support the creation of such communities and catalyze the word-of-mouth recommendation process.

## Acknowledgments

We would like to thank the Osher Lifelong Learning Institute at Clemson and all of the interviewed participants for their willingness to coordinate with our team and provide a rich perspective on the retiree volunteering experience. This research was supported in part by the NSF award IIS 2045153.

#### References

- [1] R.G. Anaraky, B.P. Knijnenburg, and M. Risius. 2020. Exacerbating mindless compliance: The danger of justifications during privacy decision making in the context of Facebook applications. AIS Transactions on Human-Computer Interaction 12, 2 (2020), 70–95.
- [2] D. Bollen, B.P. Knijnenburg, M.C. Willemsen, and M. Graus. 2010. Understanding choice overload in recommender systems. In *Proceedings of the fourth* ACM conference on Recommender systems. 63–70.
- [3] D.B. Bradley. 1999. A reason to rise each morning: The meaning of volunteering in the lives of older adults. *Generations: Journal of the American Society on Aging* 23, 4 (1999), 45–50.
- [4] K. Charmaz. 2006. Constructing grounded theory: A practical guide through qualitative analysis. sage.
- [5] A. Friedman, B.P. Knijnenburg, K. Vanhecke, L. Martens, and S. Berkovsky. 2015. Privacy aspects of recommender systems. In *Recommender systems* handbook. Springer, Boston, MA, 649–688.
- [6] B.P. Knijnenburg, S. Bostandjiev, J. O'Donovan, and A. Kobsa. 2012. Inspectability and control in social recommenders. In *Proceedings of the sixth ACM* conference on Recommender systems. 43–50.
- [7] B.P. Knijnenburg and M.C. Willemsen. 2015. Evaluating recommender systems with user experiments. In *Recommender systems handbook*. Springer, Boston, MA, 309–352.
- [8] B.P. Knijnenburg, M.C. Willemsen, and Z. Gantner. 2012. Explaining the user experience of recommender systems. *User Model User-Adap Inter* 22 (2012), 441–504. https://doi.org/10.1007/s11257-011-9118-4.
- [9] Bart P. Knijnenburg, Saadhika Sivakumar, and Daricia Wilkinson. 2016. Recommender Systems for Self-Actualization. In *Proceedings of the 10th ACM Conference on Recommender Systems* (Boston, Massachusetts, USA) (*RecSys '16*). Association for Computing Machinery, New York, NY, USA, 11–14. https://doi.org/10.1145/2959100.2959189
- [10] L. Terveen and D.W. McDonald. 2005. Social matching: A framework and research agenda. ACM transactions on computer-human interaction (TOCHI 12, 3 (2005), 401–434.