

Online Voluntary Activities at Public Libraries: Identification and Classification

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Abstract

Developments in information and communication technologies have created a new type of voluntary activity called online volunteering, in which volunteers fulfill their duties from outside the workplace. Therefore, this study aims to identify and categorize online voluntary activities available to public libraries and information centers. This applied research was conducted using the survey method. Data collection was performed using observation and Delphi method. The participants in the Delphi survey rounds included 15 experts in the field of information and knowledge science (faculty members, library managers, and library sections' directors) who were interviewed in two rounds, and their opinions were used to conclude. The present study's findings suggest that 33 different voluntary activities can be performed as virtual volunteering in public libraries. These services can be divided into three general categories: content development, training/counseling, and promoting/informing. Among these, content development with 22 different activities has the most possibility of online volunteering activities, training/counseling with six activities, and promoting/informing with five activities are the following categories, respectively. In addition, for each of these three categories, relevant general competencies are presented separately, while for 33 voluntary activities, specialized goals and competencies are suggested by experts. Considering the variety of activities that public libraries can perform virtually through their volunteers, it seems necessary to identify the capacities and capabilities of libraries and volunteers so that the maximum efficiency of volunteers is achieved in reaching the library's goals. No study on identifying and categorizing voluntary activities in public libraries and information centers is available. While identifying and categorizing these activities, the present research mentions the goals for each activity and specifies general and specialized conditions for volunteers to perform the same activity.

Keywords: Virtual Volunteering, Voluntary Activities, Online Volunteering, Public Libraries,

Delphi Technique.

Introduction

Many organizations rely heavily on volunteers when small and have limited budgets (Nesbit, Christensen & Brudney, 2018). This led to an increase in the demand by organizations to employ volunteers (Murray & Harrison, 2002) because volunteers help organizations by reducing the expenses arising from regulations and decreasing the budget needed for full-time employees (Pauline, 2011). Volunteering is defined as freely choosing to work without payment for a community, charitable, or religious organization, and people volunteer in a broad array of settings and do many different types of work (Chambré & Einolf, 2008). Recent information and communications technology developments introduce us to newer forms of volunteering (Liu, Harrison, Lai, Chikoto & Jones-Lungo, 2016). With the advent of ICT, a new type of volunteering is born called "virtual volunteering" (Ackermann & Manatschal, 2018). Lachance (2020) defines virtual volunteering as synonymous with online volunteering. The latter may be as old as the Internet (Cravens, 2000; Peña-López, 2007). Evidence shows that the development of the World Wide Web in 1994 created a new type of volunteering and volunteering opportunities (Murray & Harrison, 2002).

Online volunteering is a type of civic participation in which volunteers perform their tasks using the Internet from their homes or other places outside the workplace (Mukherjee, 2011). The United Nations defines online volunteering as: "Tasks performed, in full or part, by an individual via the Internet, from home, work, university, internet cafe, etc." (Liu et al., 2016). Conroy and Williams (2014) and Peña-López (2007) point out that there is no consensus on the definition of online volunteering. Various terms refer to online volunteering, including virtual, digital, micro-volunteering, cyber service, crowdsourcing, tele-mentoring, tele-tutoring, and online mentoring. The variety observed in these terms comes from the attempts to show the same concept, such as performing activities away from the workplace and using the Internet as the medium (Nor, Othman & Bahari, 2019). Cravens (2000) defines online volunteering as any voluntary activity fulfilled in whole or part, outside the organization and through the Internet, whether at home, at work, or public access through a mission-based organization (non-profit, civil society, etc.). This definition shows that there are online volunteering activities that could be performed entirely online, while there may be other activities that could be done in a combination of online and offline methods. Beyond these, there is no standard definition for online volunteering in the literature (Ackermann & Manatschal, 2018).

From another point of view, the differences observed in the characteristics of online and offline volunteering confirm that online volunteering can organize different types of individuals. For example, offline volunteering is less flexible than online volunteering, usually performed over a fixed period and limited to local activities and fixed issues (Amichai-Hamberger, 2008; Cravens, 2000). These limitations can be easily overcome in online volunteering. Online volunteering considerably increases the freedom and flexibility of volunteer participation because the need to link volunteer activities with specific times and places is eliminated in this format. Also, online volunteering allows organizations to expand the benefits of their current volunteer programs and employ volunteers in new arenas (Nor et al., 2019). In addition, voluntary activities performed through the Internet can have real-world effects (Ellis & Cravens, 2000). There are also structural similarities between offline and online voluntary activities. For example, people need specific skills and motivations (Ackermann & Manatschal, 2018). However, online volunteering requires reconsidering our perception of the

traditional concept of volunteering. Online volunteering enables people to volunteer anywhere using a computer and provides volunteer opportunities for those who cannot volunteer due to time constraints, physical and physiological limitations, and personal requirements (Ellis & Cravens, 2000; Murray & Harrison, 2002, 2005).

Ellis and Cravens (2000) identified several motives for individuals to volunteer online. These include disability, problems related to mobile phones, or the requirement to stay at home. They make it impossible for volunteers to be present at voluntary workplaces and make working from home using a computer and online communication preferable. The most important advantage of online volunteering is flexibility. It could especially attract young people who are still studying or just starting their professional careers. At this stage of life, which is often associated with mobility and rapid changes, flexibility in time and place becomes a key factor for performing a voluntary activity (Ackermann & Manatschal, 2018). Peña-López (2007) identified four major types of participation in online volunteering: online advocacy, online assessment and consultancy, online/offline volunteers, and pure online volunteers.

Voluntary activity can affect a person in different ways, positive and negative. Much literature has been published on the benefits of online volunteering. These studies examined the benefits from the perspective of employees, organizations, and communities. The most prominent benefits of online volunteering include improved job performance (Veerasingam, Sambasivan & Kumar, 2013), enhanced leadership, increased family interaction, and decreased levels of depression (Harlow & Cantor, 1996). Also, Peterson (2004) and Danaïata, Gligor-Cimpoieru, Hurbean & Munteanu (2013) pointed out that participation in voluntary activities is related to people's ability to develop job-related skills. For example, people may acquire additional skills through volunteering that could not be achieved through their current job. Other researchers (Ellis & Cravens, 2000; Jiranek, Brauchli & Wehner, 2014) stated that the positive effect of on-site volunteering (face-to-face volunteering) can also be considered for online volunteering. For example, individuals may gain social recognition, better health, self-esteem, and job-related skills and expand their career paths (Wu, 2011). They may also experience lower levels of depression, overall life satisfaction, and other health-related outcomes (Ramos, Brauchli, Bauer, Wehner & Hämmig, 2015). However, significant disadvantages of online volunteering include the withdrawal of volunteers after receiving tasks (Lachance, 2020), the time-consuming process of recruitment and guidance (Cravens, 2006), and the management and keeping of online volunteers (Lachance, 2020).

The COVID-19 pandemic, which started in Wuhan, China, drastically changed the daily performance of health facilities, medical professionals, and people worldwide. At the end of February 2020, the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) warned people about an epidemic happening throughout the world, and people became familiar with the instructions on social distancing, personal quarantine, "Stay Home, Stay Safe" and economic shutdown. Online volunteering reduces the risk of contracting the virus by minimizing face-to-face contact. Although online volunteering may temporarily substitute in-person volunteering during the pandemic, it is not permanent (Pickell, Gu & Williams, 2020). However, the infrastructure provided for online volunteering during this pandemic could also be potentially beneficial. The pandemic forced organizations to shift activities (such as meetings) to virtual spaces, restructuring through retrenchment, or temporarily suspending activities. As a result, people faced limitations in carrying out their free and optional face-to-face activities. The threat of people being unable to perform their voluntary

activities in person created an opportunity for online volunteering (Lachance, 2020).

As a social institution, public libraries have benefited from the services of these social capitals and community groups, and a part of their activities is devoted to establishing and developing libraries and their service (Marjani, Zarei & Bayat, 2022). While volunteering can be done in all types of libraries, public libraries seem the most prone to use (and need) volunteer help. Moreover, public libraries are (theoretically) more open to a wider variety of public than any other type of library, thus having the most significant potential impact (Constantinescu, Danciu & Haimana, 2021). On the other hand, libraries (generally) and public libraries (especially) experienced significant changes since the emergence of computers and the development of information and communication technologies. Designing, launching, and using various library software, especially web-based ones, caused faster development and acceleration in library service provision.

For this reason, the need for volunteers in libraries' organizational structure seems more necessary today than in the past. Today, libraries welcome volunteers and talented individuals willing to participate in library activities based on their enthusiasm, abilities, and interests (Tikam, 2011). Library volunteers are young and adult individuals willing to support appointed qualified library staff in carrying out essential functions that are not professional or beyond their intellectual abilities. The motive is to extend their helping hands towards improving the working conditions of the organization, most especially in the libraries (Mosebolatan, 2021). Online volunteers in public libraries contribute to the accomplishment of the mission of the library through various virtual activities - development of innovative services, digitization, education, translation activities, organization of events, public relations, and many others (Kostić & Vuksan, 2017).

Research on voluntary activities in Iranian libraries is minimal, and these studies have only focused on face-to-face voluntary activities. As an example of research, Soheili et al. (2022) analyzed the factors affecting voluntary activities, satisfaction, and continuity of their activities in public libraries, and Miri, Seyyeddokht and Zareie (2023) also analyzed the challenges of volunteers' employment in Astan Quds Razavi libraries have studied from the point of view of librarians, and virtual volunteer activities in public libraries as well as research in this field have been ignored. However, on a global scale, many studies have been conducted so far analyzing voluntary activities and virtual voluntary activities (Dehghanan & Khashei, 2016; Marjani et al., 2022; Cravens, 2000; Murray & Harrison, 2002; Mukherjee, 2011; Liu et al., 2016; Lachance, 2020) in which the researchers tried to examine virtual volunteering from different aspects, however no research was found in the subject of virtual volunteering in public libraries, this is due to the lack of knowledge among librarians and library managers regarding the types of virtual voluntary services in the field of public libraries, which should be recognized, categorized and introduced through scientific studies. Therefore, the present study aimed to identify and classify virtual voluntary activities in information and knowledge science. The present research findings can provide a basis for using virtual volunteers' capacities to help fulfill public library activities.

Materials and Methods

The present study is survey research that considers the methodology, and it is applied research that considers the objective. The statistical population of the present study consists of experts in the field of information and knowledge science. The selection criteria for these

experts required them to possess a PhD in Information and Knowledge Science and to have experience in research or management about volunteer work in libraries. Because experts were determined, the purposive sampling method was used, and 15 individuals were selected as the research sample. The reason for choosing this sample size is that in the Delphi method, the number of experts is between 15 and 20 (Oranga & Nordberg, 1993), and in case experts have appropriate knowledge. Usually, 5 to 20 people can be considered a selected sample (Manca et al., 2007).

As mentioned, the Delphi method was used to collect data. This method is used when we need to collect and combine experts' opinions to reach a general conclusion about a specific issue (Rahmani, Vaziri Nezhad, Ahmadi Nia & Rezaeian, 2020). Group consensus is achieved through a series of questionnaire rounds while keeping the respondents' anonymity, taking the panel members' feedback (16), and then reaching a consensus over the topic under study. Consensus does not mean finding an answer, but it is simply participants' agreement about the issue at a certain level (Kennedy, 2004). The criterion indicating the achievement of consensus and the end of the Delphi study is the stability in most participants' answers in two consecutive rounds and the achievement of stability in opinions (Jones, Sanderson & Black, 1992).

To conduct the present research, after reviewing the literature (Roy, 1988; Holmes, 2012; Kostić & Vuksan, 2017; Soheili et al., 2022), studying the websites of famous libraries throughout the world, volunteer recruiting advertisements¹, and interviewing the panel members, a set of activities were identified that could be performed by volunteers virtually. In the next step and the first round, the identified virtual voluntary activities were rearranged in an open questionnaire, and the experts were asked to express their opinions regarding each activity and specify to which general category each activity belongs. They were also asked to express their opinions about the goal, the general competencies of candidates for each category of activity, and the conditions for proving the required expertise for each activity. After receiving the experts' opinions in the first round and applying the opinions and consensuses, in the second round, the general categories of voluntary activities, the activities under each category, the goals of each activity, and the specific conditions for performing it by volunteers and finally the expected conditions for each general category along with the level of agreement in other panel members were informed to experts participating in the panel and their feedbacks were collected, which showed the consensus of the experts in all the examined issues. The CVR index was applied to measure the agreement and consensus of experts' opinions, which should equal 0.49 for each item considering the number of experts in the present study. The collected data showed that in all the investigated cases, the agreement rate is higher than this.

Results

The research findings are presented in two parts. In the first part (Table 1), the virtual voluntary activities identified and determined by experts are presented along with related general categories and competencies needed by virtual volunteers for each general category. Then, the goals and specialized conditions for each activity are presented in Table 2.

As mentioned, to determine voluntary activities that could be offered virtually in libraries and information centers, the websites of different libraries worldwide, voluntary recruitment advertisements, and experts' opinions were also examined while reviewing the existing literature. The findings showed that 33 virtual voluntary activities could be presented in libraries and information centers, and the agreement rate among experts in all these voluntary activities

was between 0.6 and 0.98. Then, these activities were placed in three general categories based on the consensus of experts: content development, training and counseling, promotion, and information and communication with users. The experts' consensus was obtained regarding the general competencies for each category.

Table 1

Classification of virtual voluntary activities and general competencies needed by volunteers for each activity category

Classification of Voluntary Activities	Online Voluntary Activity	General Competencies
Content Development	Content development for social networks (Instagram, Facebook, etc.) and social platforms (YouTube, etc.)	<ul style="list-style-type: none"> - Computer literacy - Basic skills in ICT - Professional ethics - Knowledge of foreign languages - Personal interest - Creativity and innovation - Teamwork spirit - Knowledge of application software, such as MS Office - Strong public relations and interpersonal communication skills - Marketing skills - Knowledge of information society through understanding the audience needs - Personal etiquette and morality - Accuracy and curiosity - Patience and perseverance
	Preparing infographics	
	Production of films, teasers and educational and specialized video clips	
	Creating and editing entries and articles on Wikipedia	
	Helping to prepare subject indices of printed and electronic resources	
	Textual criticism	
	Transcription of documents	
	Translation of documents	
	Helping to collect information about various library resources before purchasing them	
	Preparing lists of recommended books	
	Reviews of books, TV shows, movies, video games, etc.	
	Contribution to preparing the content for library's blog or website	
	Preparing and submitting works related to the region's ecology	
	Cooperation in preparing content for users with special needs (blind, deaf, etc.)	
	Helping to collect valuable resources (old photos, manuscripts, documents, maps, etc.)	
	Oral history documentation (interviewing seniors and recording them)	
	Summarizing resources	
	Assisting in the digitization of resources (books, newspapers, etc.)	
	Changing the resources' formats (e.g., converting text to audio, or vice versa, etc.)	
	Preparing subtitles for films, etc.	
Podcast production		
Podcast transcription		

Classification of Voluntary Activities	Online Voluntary Activity	General Competencies
Training and Counseling	Training and counseling for students	<ul style="list-style-type: none"> - Personal etiquette and morality - Professional ethics - Expression and rhetoric - teaching skills - Interpersonal communication skills - Computer literacy - Information literacy - Willingness to work with individuals of different skill levels - MS Office - online searching - Ability to use virtual education platforms - Patience and perseverance in communicating concepts - Personal interest in training and counseling
	Specialized counseling (educational, research, occupational, etc.)	
	Teaching a foreign language as a second language	
	Training and counseling for adults	
	Training the use of e-resources	
	Various cultural, artistic, literary, etc., online trainings	
Promotion, Information and Communication with Users	Social media ambassador	<ul style="list-style-type: none"> - Computer literacy - Media literacy - Expression and rhetoric - Strong public relations and interpersonal communication skills - Personal interest - MS Office - Social networks and platforms - Professional ethics - Social manners - Personal etiquette and morality - Creativity and innovation - Teamwork spirit
	Library online promotion	
	Assisting in holding virtual events in the library (e.g., virtual exhibitions, special events, virtual tours, etc.)	
	Online surveys	
	Making welcome calls to new members of the library	

Findings in Table 1 show that the category of content development among virtual activities with 22 activities has the highest possibility of being presented in virtual form, and after that stands the training and counseling category with six activities. Also, the competencies considered by the experts for all three categories of virtual voluntary activities are similar, and there are slight differences between them. In Table 2 below, along with the goals for each voluntary activity, the specialized skills required for each activity are also mentioned.

Table 2

Objectives of virtual volunteering activities and specialized competencies needed by volunteers for each activity

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Content development for social networks (e.g., Instagram, Facebook, etc.) and social platforms (YouTube, Aparat, etc.)	<ul style="list-style-type: none"> - Producing and preparing suitable content in various formats, including storytelling, podcasts, films, stories, video clips, etc., covering goals and policies of the library and current social issues, considering the ever-increasing expansion of cyberspace and the capacities available in this realm - Introducing the library, its resources, and services in various domains - Promoting the book-reading culture - Promoting the level of public knowledge and awareness in various fields 	<ul style="list-style-type: none"> - Content development skills and the ability to identify and adjust the content to the goals set by the library - Suitable writing skill - The art of public speaking and, in some cases, the art of performance - Knowledge of related and specialized content development software such as Adobe Photoshop, After Effects, etc. - Knowledge of social networks - Knowledge of techniques for attracting followers - Ability of audio and video editing - Literary editing skills
Preparing infographics	<ul style="list-style-type: none"> - Promoting the book-reading culture - Promoting the level of public knowledge and awareness in various fields - Introducing the library, its resources and services, and the selective spreading of information - Promoting voluntary activities - Transferring summarized information in visual formats 	<ul style="list-style-type: none"> - Graphic design specialized skills - Good command of specialized and graphic software - Knowledge of infographics
Production of tubes, teasers and educational and specialized clips	<ul style="list-style-type: none"> - Attracting those users not interested in printed resources - Producing short educational video clips to teach various types of skills to users - Preparing targeted content based on library policies and its up-to-date needs - Helping to instruct basic and general skills to citizens - Providing various trainings related to the library and its services - Promoting the scientific level of the society 	<ul style="list-style-type: none"> - Specialized knowledge in film and clip production - Sufficient knowledge in the subject area being taught - Scriptwriting - Summary writing - Knowledge of the audience - Knowledge of graphics software - Production video and audio editing software - Principles of rhetoric

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Creating and editing entries and articles in Wikipedia	<ul style="list-style-type: none"> - Creating, editing, documenting, validating, and updating old Wikipedia entries and articles - Introducing the library and its services and resources to the audience - Creating specialized entries in the fields of library and librarianship - Updating and promoting the level of information and knowledge of the target community 	<ul style="list-style-type: none"> - Knowledge of Wikipedia and its capabilities - Expertise in the subject areas of articles and entries provided - Knowledge of editing and publishing techniques - Knowledge of other languages - Proficiency in scientific writing and essay writing - Knowledge of specialized software for editing and writing - Having a research character - Knowledge of databases
Assisting in the preparation of indices for printed and electronic resources	<ul style="list-style-type: none"> - Preparation of various thematic and specialized indices - Informing the targeted audience - Helping in research and science production - Helping users to access information faster - Helping in organizing library resources - Helping in the selective dissemination of information 	<ul style="list-style-type: none"> - Knowledge of library science principles, cataloging and indexing rules - Knowledge of social networks and general and specialized databases - Mastery of working with library software - Knowledge of bibliography structures - Knowledge of top authors and publishers - Knowledge of copyright in cyberspace - Knowledge of digital libraries - Knowledge of reliable scientific databases and search techniques
Textual criticism	<ul style="list-style-type: none"> - Amending the defects and mistakes in old scripts - Revival and strengthening of culture, civilization, and science - Strengthening linguistic, historical, and cultural values - Contribution to science production 	<ul style="list-style-type: none"> - Expertise in the field of texts under review - Knowledge of the principles of text criticism and editing - Mastering the language of the text to be corrected - Knowledge of different copies available of the text
Transcription of documents	<ul style="list-style-type: none"> - Improving the search and retrieval of documents - Improving the detectability of documents - Improving the availability of documents - Making documents understandable for everyone - Contribution to the history and culture of society 	<ul style="list-style-type: none"> - Document reading skills - Knowledge of old orthographies - Knowledge of specialized software and hardware (e.g., spell checkers) - Knowledge of OCR software - Expertise in history

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Translation of documents	<ul style="list-style-type: none"> - Increasing the library's capacity for public accessibility - Helping research and science production - Increasing the accessibility and searchability of documents in other languages - Removing language barriers for using resources 	<ul style="list-style-type: none"> - Mastery of the source text language - Knowledge of translation principles and techniques - Knowledge of documents' subjects - Skills in document reading, map reading, history - Knowledge of specialized software and hardware (e.g., spell checkers)
Assisting in gathering information about different library resources prior to their preparation	<ul style="list-style-type: none"> - Helping to choose suitable resources by providing different reviews and opinions available on different information environments - Saving library expenses and preventing them from being wasted - Creating a database for criticism of information resources - Helping users to choose information resources better 	<ul style="list-style-type: none"> - Skills in information retrieval and search methods - Expertise in subject fields - Knowledge of top publishers and authors - Knowledge of other sources and criticism methods for various sources - Ability of report writing - Skills in analyzing readers' opinions and comments, summarizing and transferring information - Speed reading skills and identifying books' subjects
Preparing lists of recommended books	<ul style="list-style-type: none"> - Increasing the society's per capita reading - Preparing study resources for readers - Preparing a monthly list of books for seniors - Reducing expenses and wasted time for users - Increasing the number of visits to the library 	<ul style="list-style-type: none"> - Skills in determining the needs and interests of the audience (information society) in different age groups - Evaluation skills regarding publishers, authors, and various sources - Knowledge of the principles of sociology and psychology of different groups - Familiarity with reading skills - Good writing and speaking skills - Skills in the application of typing and editing software
Book review, TV shows, movies, video games, etc.	<ul style="list-style-type: none"> - Introducing different sources - Helping users to choose suitable information sources - Continuous informing - Attracting new users 	<ul style="list-style-type: none"> - Knowledge of criticism sources - Knowledge of criticism and review techniques - Writing skills - Knowledge of the subject under review - Knowledge of formal characteristics of the source under review - Ability to analysis and critical thinking - Knowledge of domestic and foreign literature

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Participation in preparing the content of the library's blog or website	<ul style="list-style-type: none"> - Enriching and updating the content of the library's website or blog - Optimizing the structure of the website and improving its visibility - Attracting new and potential users - Creating a communication platform with users and sharing their knowledge and information - Increasing the geographical scope of the library's website audience by translating it into other languages - Updating the contents of the library website 	<ul style="list-style-type: none"> - Knowledge of blogging skills - Knowledge of CMS or other web programming languages - Knowledge of information search and retrieval methods - Knowledge of techniques for writing and news writing - Ability to create online content
Preparing and submitting works related to the region's ecosystem	<ul style="list-style-type: none"> - Preparing or collecting works (photos, films, documentaries, etc.) related to the region in order to familiarize others - Preserving the region's cultural heritage - Increasing the collection of library resources about the ecosystem - Preserving the region's ecosystem - Helping the economy of the region by introducing the region's ecosystem to others 	<ul style="list-style-type: none"> - Photography and filming skills - Knowledge of specialized software for video and photo editing - Knowledge of the region's environment, including vegetation, tourist attractions, history, geography, and works related to the region - Knowledge of report-writing techniques - Knowledge of principles of journalism and news writing
Assisting in preparing content for special users (blind, deaf, etc.)	<ul style="list-style-type: none"> - Meeting the information needs of users with special needs - Increasing the collection of library resources - Attracting audiences who are interested in other formats of resources - Increasing the ability of people with special needs and preventing their social isolation 	<ul style="list-style-type: none"> - Understanding the limitations and needs of each group with special needs - Braille knowledge - Knowledge of specialized software and hardware for users with special needs - Having a suitable voice and tone - Knowledge of audio recording and editing software - Knowledge of video editing and subtitling software - Knowledge of typing with braille machines
Helping to collect valuable resources (old photos, manuscripts, documents, maps, etc.)	<ul style="list-style-type: none"> - Preparation and collection of valuable and historical works - Preservation of the national cultural heritage - Increasing the library resources - Making valuable resources available to all members of the society 	<ul style="list-style-type: none"> - Knowledge of imaging methods for manuscripts - Knowledge of software related to computer imaging - Understanding the value of old sources and documents

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Documenting oral history (interviewing elderly people and recording them)	<ul style="list-style-type: none"> - Retention and storage of tacit knowledge - Documenting unrecorded history - Helping to create new works in the field of history - Making tacit knowledge accessible by turning it into explicit knowledge - Increasing the volume of library resources - Helping to preserve regional and national heritage 	<ul style="list-style-type: none"> - Expertise in the field and methods of documentation - Expertise in the subject area to be documented - Knowledge of interview transcription methods - Knowledge of interview techniques and tools - Knowledge of oral history - Knowledge of photography, filming, and audio recording techniques and tools - Knowledge of photo, video, and audio mixing and editing software
Summarizing resources	<ul style="list-style-type: none"> - Helping to select study resources for the audience - Rapid transfer of concepts of some information resources - Introducing resources and disseminating information - Promoting reading - Preparing a database of summarized resources 	<ul style="list-style-type: none"> - Expertise in the subject area to be summarized - Knowledge of summarizing methods and techniques - Knowledge of software such as MS Office package - Knowledge of editing and writing techniques
Assisting in digitization of resources (books, newspapers, etc.)	<ul style="list-style-type: none"> - Preserving written heritage - Diversifying the format of information resources for users interested in electronic forms - Increasing electronic resources by preparing digital versions of them - Increasing the accessibility and visibility of information 	<ul style="list-style-type: none"> - Knowledge of digitization techniques and formats - Knowledge of specialized digitization software - Knowledge of photo editing software, etc. - Knowledge of information sources - Knowledge of working with digitization hardware (scanner, camera, etc.) - Knowledge of indexing techniques
Format change for resources (e.g., converting text to audio, or vice versa, etc.)	<ul style="list-style-type: none"> - Diversifying the information resources formats for users interested in other formats - Expanding the resources - Increasing the accessibility and visibility of information - Helping users with special needs and disabilities 	<ul style="list-style-type: none"> - Knowledge of format conversion software - Knowledge of different formats for information resources - Mastering the techniques and tools of photography, filming and sound recording - Having rhetorical skills and an expressive voice - Knowledge of photo, video, and audio mixing and editing software

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Preparing subtitles for different kinds of films, etc.	<ul style="list-style-type: none"> - Availability and visibility of information - Introduction of cultural products made in the past - Help in transferring information from other languages - Helping deaf clients use resources - Attracting more audience and users 	<ul style="list-style-type: none"> - Knowledge of subtitling software - Knowledge of video and audio mixing and editing software - Knowledge of foreign languages - Writing and editing skills - Mastering one of the word processor software
Preparing podcasts	<ul style="list-style-type: none"> - Diversifying formats of information resources for users interested in other formats - Increasing the accessibility and visibility of information - Helping users with special needs and disabilities - Attracting more audience and users 	<ul style="list-style-type: none"> - Having a suitable voice and expressive skills - Knowledge of specialized software for podcast production - Knowledge of audio recording and editing software - Time management ability
Podcast transcription	<ul style="list-style-type: none"> - Diversifying formats of information resources for users interested in other formats - Increasing the accessibility and visibility of information - Helping users with special needs and disabilities - Attracting more audience and users 	<ul style="list-style-type: none"> - Knowledge of writing and editing methods - Knowledge of annotation software - Note-taking and shorthand skills - Ability to work with MS Office
Training and counseling students	<ul style="list-style-type: none"> - Helping a part of the library community (students) - Helping to create educational justice in society - Helping the country's education system - Directing students to other library services - Presentation of the library and its services 	<ul style="list-style-type: none"> - Ability to communicate with children and teenagers - Familiarity with child and adolescent psychology - Knowledge of educational standards and teaching resources - Knowledge of the characteristics of educational content of students - Mastery of the subject taught to students - Knowledge of software for producing and presenting educational content - Mastery of MS Office - Mastery of online education software (e.g., Adobe Connect, etc.)

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Specialized consulting (educational, research, occupational, etc.)	<ul style="list-style-type: none"> - Empowering the library community - Helping to create social justice and equality - Presentation of the library and its services - Promotion of various educational and research aspects for users 	<ul style="list-style-type: none"> - Mastery of the subject of consultation - Knowledge of counseling principles and techniques - Mastery of virtual meeting software (e.g., Adobe Connect, etc.) - Understanding the conditions governing the society and labor market - Knowledge of sources of information related to the subject of consultation
Teaching a foreign language as a second language	<ul style="list-style-type: none"> - Helping to create educational justice in society - Helping the country's education system - Improving users' knowledge through learning a second language - Directing learners to other services provided by the library - Presentation of the library and its services 	<ul style="list-style-type: none"> - Having a degree or skill in teaching a foreign language - Knowledge of software for producing and presenting educational content - Mastery of online education software (e.g., Adobe Connect, etc.)
Training and counseling for adults	<ul style="list-style-type: none"> - Empowering the adult and elderly community of the library to perform their social roles - Helping to create social justice and equality - Presentation of the library and its services - Creating a sense of worth for adults - Preventing social isolation of adults - Updating adults' information and knowledge 	<ul style="list-style-type: none"> - Ability to communicate with adults - Knowledge of adult psychology - Knowledge of the characteristics of adults' educational content - Mastery of the subject being taught - Knowledge of teaching principles and techniques of - Knowledge of software for producing and presenting educational content - Mastery of online education software (e.g., Adobe Connect, etc.)
Teaching how to use electronic resources	<ul style="list-style-type: none"> - Diversification of information sources for users interested in other electronic formats - Increasing the use of electronic resources - Helping users with special needs and disabilities - Attracting more audience and users 	<ul style="list-style-type: none"> - Knowledge of different electronic formats of information sources - Mastery of software related to using electronic resources (Word, Adobe, etc.) - Knowledge of teaching principles and techniques - Knowledge of software for producing and presenting educational content - Mastery of online education software (e.g., Adobe Connect, etc.)

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Online cultural, artistic, literary, etc. trainings	<ul style="list-style-type: none"> - Helping to create educational justice in society - Helping the growth and development of users' talents - Directing learners to other services of the library - Presentation of the library and its services - Creating a cheerful spirit in the society 	<ul style="list-style-type: none"> - Having a valid degree or experience in education - Knowledge of teaching principles and techniques - Knowledge of the psychology of audience community - Knowledge of the characteristics of educational content for different groups - Knowledge of software for producing and presenting educational content - Mastery of online education software (e.g., Adobe Connect, etc.)
Social media ambassador	<ul style="list-style-type: none"> - Promoting and introducing the library and its activities on social media - Attracting more users and changing potential users into actual users - Promotion of book-reading culture - Interaction with users in different ways 	<ul style="list-style-type: none"> - Media literacy - Content production skills - Writing and editing skills - Knowledge of photo, video, and audio mixing and editing software - Oratory and expression skills and, in some cases, the art of performance - Knowledge of relevant and specialized content production software such as Photoshop, After Effects, etc. - Knowledge of follower attraction techniques - Audience analysis
Library online promotion	<ul style="list-style-type: none"> - Promotion and introduction of the library and its activities in social media - Attracting more users and changing potential users into actual users - Promotion of book-reading culture - Informing about library events and upcoming activities 	<ul style="list-style-type: none"> - Knowledge of advertising techniques - Principles of audience analysis - Knowledge of different advertising platforms and their characteristics - Content production skills in different environments - Writing and editing skills - Knowledge of photo, video, and audio mixing and editing software - Oratory and expression skills and, in some cases, the art of performance - Knowledge of relevant and specialized content production software such as Photoshop, After Effects, etc. - Knowledge of follower attraction techniques

Online Voluntary Activity	Objectives of Online Volunteering	Special Competencies
Helping to hold virtual programs in the library (e.g., virtual workshops, special programs, virtual tour, etc.)	<ul style="list-style-type: none"> - Informing about library events and future activities - Creating different platforms for user participation in library programs - Attracting more users and audiences - Expanding the geographic scope of library programs 	<ul style="list-style-type: none"> - Knowledge of virtual platforms (social networks, content-sharing platforms, etc.) - Content production skills - Familiarity with related software - Knowledge of photo, video, and audio mixing and editing software - Oratory and expression skills and, in some cases, the art of performance - Familiarity with advertising and electronic marketing methods
Online survey	<ul style="list-style-type: none"> - Receiving feedback on library services and methods of providing them - Reviewing and improving library services and performance - Creating a sense of value to users 	<ul style="list-style-type: none"> - Knowledge of platforms and tools for producing electronic questionnaires - Principles of surveying and assessment - Writing and editing skills - Research methods - Opinions analysis skill - Knowledge of statistical tools and software - Knowledge of report-writing techniques
Making welcome calls to new members of the library	<ul style="list-style-type: none"> - Creating a sense of value for users - Introducing the library and its services - Attracting more audiences 	<ul style="list-style-type: none"> - Principles of audience analysis - Communication and verbal skills - Principles and techniques of discussion - Knowledge of the library and its services

Table 2 shows that libraries and information centers pursue different goals for each voluntary activity, and the implicit goal in all these activities is gaining users' satisfaction. Also, unlike general competencies, due to the difference in the nature and type of volunteering activities, volunteers need skills, knowledge, and expertise to qualify for any volunteering activity, which differs for each activity.

Discussion

This research aimed to identify and categorize online voluntary activities that could be performed in libraries and information centers based on the experts' opinions. Findings showed that 33 activities can be performed under three general categories of online voluntary activities in libraries and information centers. Studies in other fields show that many organizational activities could be virtually performed. For instance, Mukherjee's (2011) study on virtual volunteering among seniors revealed that numerous roles within social development organizations can be fulfilled without the volunteers being physically present, allowing for remote participation. This issue also applies to libraries and information centers and is consistent with the present research findings, which identified 33 virtual voluntary activities. Although Seddighi and Salmani (2018) concluded that virtual volunteering is expanding globally, their findings showed that virtual volunteer jobs in organizations combine face-to-face and online volunteering, and the number of pure online volunteers is limited. This fact

increases the need for libraries and information centers to pay attention to voluntary activities.

The content development category with 22 activities is the category that comprises the most voluntary activities in the present study. Considering the activities in this category, it is observable that the nature of cyberspace is more compatible with such activities in libraries because libraries and information centers deal with different types of resources, and a wide range of them can be prepared and made available online. Producing various information contents, indices, etc., constitutes part of these activities that volunteers can fulfill online for the library. Even though Roy (1988) conducted his research on face-to-face volunteer activities, he also found that activities such as preparing pamphlets, image files, or academic indices are among the activities performed by volunteers in libraries and information centers. These activities are part of the virtual voluntary activities identified in the present research. Training and counseling services is another field determined in this research to have the potential to be provided online by volunteers in some cases. This is because of the continuous changes in various fields that have made lifelong learning necessary. Since libraries are considered among the organizations in charge of information literacy, they must undertake much of this task. The educational advantages of cyberspace (easy-to-use and user-friendly software, lack of time, and place restrictions for both the instructor and the learner) form another factor that attracts people into choosing this space for the training they need. Therefore, libraries should enter this field so as not to let parallel organizations and private companies take their place and keep their users. However, paying attention to the educational needs of the target audience and using human resources with specialized and general teaching competencies in these training and consultations will be the basis for users' reception and, as a result, the success and continuity of these activities.

Another finding of the present research showed that it is possible to design some general conditions necessary for volunteers to perform similar virtual activities of the same category. These general conditions are necessary for individuals to undertake voluntary activities and should be considered before specialized conditions. In addition, specialized conditions for any voluntary activity are fundamental, and ignoring them will not only prevent success in that activity but can also provide grounds for users' dissatisfaction with library services. Marjani et al. (2022) point out that the presence of volunteers in libraries has both positive and negative consequences, and its positive outcomes are far more than the negative ones. These positive consequences increase if libraries use qualified volunteers and carefully select them.

Generally, the use of volunteers is expanded in many organizations, including libraries (Roy, 1988). Performing voluntary activities in any form (in person or online) is useful for both organizations and volunteers. Through voluntary activities, while reducing costs, libraries can provide new services to their user community (ibid). Volunteers also benefit from personal growth by performing voluntary activities (Soheili et al., 2022). In addition, virtual voluntary activities can be more attractive to individuals and organizations since they are not dependent on a specific time and place, and racial and ethnic discrimination is less common in this type of volunteering (Seddighi & Salmani, 2018). Therefore, libraries should use this potential capacity to expand their activities and services. Based on their organizational conditions, libraries, and information centers can perform some of the activities identified in this research through virtual volunteering. However, it should be noted that using volunteers in libraries also results in challenges. The lack of professionalism in some volunteers (Hewitt & Eve, 2012), the lack of a specific approach in managing online volunteers, the lack of commitment of volunteers to the

organization (Seddighi & Salmani, 2018), challenges with the employed staff of the organization, and low quality of some services constitute a part of these challenges. However, libraries can pay attention to economic, social, political, cultural, managerial, and legal factors along with proper planning and consider personal and psychological beliefs and influential social factors (Marjani et al., 2022) in employing volunteers with appropriate general and specialized conditions. By considering these measures, libraries and information centers can reduce a large part of such challenges, and by formulating clear policies in employing and using online volunteer forces, they can benefit more from the activities of this part of society.

Conclusion

Paying attention to virtual voluntary activities according to various factors and employing qualified volunteers can help libraries reach their ultimate philosophy, which is to provide services to their target community, and achieve their ultimate goal, which is to gain the satisfaction of the target community. Considering the findings of the present study, these suggestions are recommended:

- Libraries and information centers should not ignore the capacities of online volunteering and outsource a number of the virtual activities identified in this research to volunteers based on different organizational conditions (hardware and software capabilities, management, budget, etc.).
- Libraries and information centers can modify, limit, or combine some virtual activities mentioned in the present research based on their conditions and prepare their manuals accordingly.
- Attention to the library's goals and the user community is essential when choosing virtual voluntary activities. In this regard, one should pay attention to the goals of each voluntary activity.
- Library managers should know that not every volunteer who wishes to work for a library virtually is a suitable choice. Libraries should use volunteers who benefit from general and specialized conditions necessary to carry out every activity by adhering to a policy suitable for virtual activities.

Endnote

1. For this purpose, the terms "volunteer", "virtual" and "public library" were searched in Google and the results related to public libraries were referred to and about 100 library sites were checked with this method.

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