Personal benefits of older adults engaging in a participatory action research (PAR) project

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ABSTRACT

Participatory action research (PAR) is the process of conducting research with people rather than for them and is perceived as an empowering activity for older adults who participate in it. However, there is little evidence that outlines and explains the reasons why older adults engage in PAR. Thus, the aim of this study was to better understand the personal benefits for older adults participating in PAR. We based our study on the experiences of four older adults who volunteered for CareComLabs, a Swiss-based PAR project, for more than two years. A constructivist grounded theory design was used to explore the benefits of participating in CareComLabs by conducting in-depth, semi-structured interviews. The analysis yielded four categories of personal benefits of participating in CareComLabs: (a) enriching relationships; (b) broadening horizons for older age; (c) keeping in touch with one's profession; and (d) interacting in a nurturing community. Our findings may have implications for policies and frameworks focused on the identification of the potential of participatory action research as a community resource.

Participatory action research (PAR) is the process of conducting research with stakeholders rather than for them. Academics, older adults, and/or other partners utilize scientific methods to investigate and co-create solutions to a variety of community issues (Vaughn & Jacquez, 2020). Particularly in its early stages, PAR faced criticism for not being sufficiently scientific and for failing to have an impact that mattered to communities (see, for example, Frideres, 1992). But lately, participatory action research has shown that, by fusing scientific and lay knowledge, it has the power to spark and/or produce changes in communities (see, for example, Fenge, Jones, & Read, 2010; Shore et al., 2018). Furthermore, PAR has demonstrated applicability to diverse populations, such as adolescents (Save the Children, 2018), people living with dementia (Dupuis et al., 2021), marginalized populations (Buettgen et al., 2012), and older adults (Hand, Rudman, McGrath, Donnelly, & Sands, 2019).

When focusing on older adults, PAR resonates with recent societal developments that place older adults as central figures in decision-making processes about their own well-being. For example, the "decade of healthy aging" (2021−2030) was developed by a significant coalition of diverse global stakeholders led by the World Health Organization (WHO, 2020) to tackle the challenges of aging. One of the most important principles of this action is that older adults' voices must be central for significant progress to occur. This is addressed by participatory action research, which offers older adults a voice, empowers them, and provides them with opportunities to be agents of change in their communities (Östlund, 2008; Ross et al., 2005).

The data available on PAR research with older adults' stresses stakeholder collaboration, with a particular emphasis on the prerequisites for collaboration/co-creation including academic researchers, older adults, and/or other stakeholders (Doyle & Timonen, 2009; Jukema, van Alphen, Jorritsma, & Snoeren, 2021; Ottmann, Laragy, Allen, & Feldman, 2011). In addition, evidence-based data is increasingly providing a comprehensive understanding of the outputs/results produced by PAR activities with the objective of enhancing individual and/or public well-being (Averill, 2012; Giesbrecht, Miller, Mitchell, & Woodgate, 2014; Trentham & Neysmith, 2018).

Several studies have been conducted to determine the benefits of older adults participating in PAR projects. One of the most recent pieces of evidence comes from James and Buffel (2022), who provided a comprehensive literature review of 27 research articles. The four categories of identified benefits were: (a) increasing the quality of acquired experiences; (b) enhancing the skills and networks of older adults; (c)

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positively influencing policies and communities; and (d) promoting social justice and empowerment. In an earlier study, Buffel (2019) concluded that older adults who participated as co-researchers in the "Manchester Age-Friendly City" project reported a variety of personal benefits, including connecting with others through shared local and/or emotional experiences, enriching personal skills, and being able to be change agents in their communities. According to Bendien, Groot, and Abma (2020), involvement in PAR empowers older adults since their opinions are heard, they can learn from engaging with others, and they are able to address and share their personal and emotional needs.

Despite this, researchers consider the evidence that outlines and explains why older adults engage in PAR to be vague (see, for example, James & Buffel, 2022). During the course of our research, we identified particular explanations for the lack of data on this particular issue. Many PAR initiatives are not published in academic journals (Bendien et al., 2020), resulting in the loss of vital information for the scientific community. Furthermore, Corrado, Benjamin-Thomas, McGrath, Hand, and Rudman (2020) found that many PAR studies fail to deliver on the promise of shared decision-making between researchers and older adults.

Consequently, by exploring the benefits people gain from participating in a PAR project, we contribute to the currently limited body of research regarding the benefits of PAR engagement. Our study is based on semi-structured interviews with older adults who participated in a Swiss- based participatory action research project (CareComLabs) aimed at fostering caring communities. In this study, we collected qualitative data about older adults` experiences with the CareComLabs project to answer the research question: how do older adults personally benefit from participation in the PAR project CareComLabs?

Methods

The principles and methods of constructivist grounded theory, pioneered by Kathy Charmaz (2006), guided this study. This paradigm's central tenet is that the subjectivity of one or more people acting together produces reality. As a result, when constructivist grounded theory is used in research, the data are created through interactions between researchers and non-researchers and are thus jointly generated by both parties (Kaspar & Landolt, 2014; Rose, 1997). The reality in our study is co-constructed through the shared experiences of the project's older adults (co-researchers), as well as the analysis of those shared experiences. This analysis is significantly influenced by the first author's knowledge of and engagement in the project. For more than two years, the first author worked closely with co-researchers on the project. To ensure scientific rigor, we adhered to Charmaz (2006) four criteria for grounded theory studies: (a) credibility; (b) originality; (c) resonance; and (d) usefulness.

Data collection and measures

We used an approach of convenience sampling to contact the older adults who participated in the CareComLabs project in Bachhdorf.[1] A letter of consent to be returned was sent via email, along with information regarding protective COVID-19 procedures. The participants were given one week to respond and confirm their participation.

The first interview was performed in the participant's house at his/her request, while the remaining interviews were conducted in a municipal community hall that was frequently used for group meetings prior to the COVID-19 outbreak. The rules of hygiene and physical distance against the spread of the COVID-19 virus established by the Swiss government (Federal Office of Public Health [FOPH], 2020) were strictly adhered to, and an additional layer of protection was added in the last three interviews, namely a plexiglass partition between the interviewer and the interviewee.

All participants chose to use pseudonyms in their interviews. Participants were given unlimited time to respond and were not required to adhere to a time limit. They were able to skip questions or respond to them later, and they determined the interview's pace. The interview guide included themes pertaining to the function of the individual in the group, motivation to participate, communication during meetings and other activities (considering the extraordinary circumstances due to COVID-19), as well as the relevance of the group in the lives of the participants. In addition to the interview guide, the "inclusion of others in self" scale from Aron, Aron, and Smollan (1992) was used to determine the participants' connection to the group (see supplementary materials for the interview guide).

Participants

Participants had to meet the following criteria in order to be considered for the study: (a) they had to be 65 years of age or older; (b) they had to participate in the CareComLabs Bachhdorf project at least 10 times per year; (c) they had to speak German; (d) they had to have agreed to participate in the study; and (e) they had to be involved in the co-design and execution of research activities. Only four of the seven participants in CareComLabs Bachhdorf met the age (65+) and participation criteria (at least 10 times within the year). A fifth older adult later joined the project but was not included in the study because his/her experience within the project was limited, as he/she had only participated in two meetings at that point, and it was difficult to assess and compare the impact of the project on this person.

Of the four participants, two were female, and two were male. Three lived in individual houses, and one lived in a community house. All were between 72 and 74 years old, and all had tertiary education (see Table 1). All four of the participants involved in the CareComLabs project in this municipality who met the age and participation criteria agreed to be interviewed.

Data analysis strategy

The interviews were audio recorded, transcribed verbatim, and anonymized prior to being uploaded to the MAXQDA software for storage and analysis. As soon as the first interview was completed and transcribed, analysis commenced. Some initial benefits of participating in CareComLabs were identified in the first interview and explored in the following three interviews. This involved determining if these benefits have been reported in the other interviews, if so, in what form, and if not, what other benefits have been reported by other older adults.

Memos, or informal analytic notes (Charmaz, 2006), were used throughout all phases of the analysis, either to document thoughts and interpretations during transcription, coding logic, participant observations, or the development of the reported benefits. As a co-designer and participant in project activities with older adults and other project team members, the first author provided context inputs. The analysis used inductive logic, which means that the identified themes were derived directly from the interviews (raw data) rather than any preconceived theory, model, or hypothesis.

Our analysis utilized initial, focused, and axial coding, which was based on grounded theory coding logic (Charmaz, 2006). Initial coding involved fragmenting interviews into excerpts, labeling them with codes that summarized the content, and exploring preliminary interpretations. In focused coding, the most prevalent/significant initial codes pertaining to possible CareComLabs participation benefits were selected. Focused codes were used in combination with memos to describe patterns, multiple meanings, and variations among participants.

The final step in the coding process was axial coding, which was done using MaxMaps, a function in the MAXQDA platform that allows users to build visualizations (graphics, maps, etc.) that describe the

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[1] We used a pseudonym for the real location of the study to protect the anonymity of participants. The pseudonym we chose is Bachhdorf.

Table 1
Participants' demographic profile.

Pseudonym	Age	Gender	Dwelling type	Education	Profession	House composition
Sophie	73	F	Individual house	Tertiary	Office	Lives alone
Ema	74	F	Community house	Tertiary	Social worker	Lives with other older adults
Aaron	72	M	Individual house	Tertiary	IT and ICT	Lives with a partner
Walter	73	M	Individual house	Tertiary	School director	Lives with a partner

interrelationships between codes, sub-categories, and categories. In our study, axial coding established four main categories that explain four benefits of PAR involvement, supported by sub-categories and focused codes.

Results

Bachhdorf's CareComLabs context

To contextualize the reported personal benefits of engaging in CareComLabs Bachhdorf for older adults, it is important to describe the team structure and the activities on which the benefits presented below are based. An interdisciplinary group of researchers and co-researchers comprised the CareComLabs Bachhdorf research team. Researchers ($n = 3$) were academic team members, while co-researchers were stakeholders (i.e., private individuals and institutional/organizational representatives ($n = 7$)[2] who have joined the project as local partners). In this study, we focused on the experiences of older adults/co-researchers ($n = 4$) in the project and the benefits they derived from their participation.

One of the central activities of CareComLabs Bachhdorf was a qualitative inquiry to research the needs of older adults and people with special needs living in Bachhdorf, which resulted in 21 interviews. This was a major component of the project since it was one of the core activities that laid the groundwork for the establishment of a caring community in which individuals and organizations/institutions share responsibility for care.

It was also thanks to this community-based inquiry that the project was able to establish the closest ties with Bachhdorf's residents. It required the most time, resources, and investment compared to all other activities in Bachhdorf. All four older co-researchers participated in all phases of this inquiry (i.e., co-construction of the research question and interview protocol/guide, acquisition of skills for the interview, recruitment of participants, conducting interviews, transcription of interviews, analysis of interviews, and dissemination of results).

As noted above, the co-researchers were involved at every level of the study; therefore, the process was guided by participatory action research paradigms, in which co-creation is the key and most significant feature. Using co-researchers' knowledge and experience is another foundational element of participatory action research. Two situations highlight this element in our case. First is the recruitment of participants for interviews. We were able to interview older adults who would have been difficult for the researchers to contact if it weren't for insiders, in this case our co-researchers. Another example is that the interviews were carried out by co-researchers who interviewed their co-villagers. This resulted in interviews that supplied rich information since they were more like a dialogue between neighbors about their aging than a "question-answer" one-way flow of information. Co-researchers had access to and knowledge of a variety of concerns raised and discussed by respondents in interviews. Moments in the interview expressed by the co-researchers, such as "I know… you're right," "I have heard that Mr.

xx…" provided context-rich information. The information was coming from both the interviewee and the interviewer at the same time, creating a dynamic and collaborative exchange. This approach allowed for a deeper understanding of the experiences and perspectives of older adults, highlighting the importance of including their voices in research about issues that concern them.

Benefits derived from CareComLabs participation

The older co-researchers reported that their involvement in CareComLabs benefited them in a variety of ways. In more detail, the benefits were divided into four categories: (a) enriching relationships; (b) broadening horizons for older age; (c) keeping in touch with one's profession; and (d) interacting in a nurturing community.

Enriching relationships

CareComLabs is a platform that, among other impacts, has managed to reduce anonymity among older co-researchers. Although the older co-researchers have been living in Bachhdorf for a long period of time (between 40 and 46 years), some barely knew each other, while others were loosely acquainted. Through their involvement in the project, they managed to build relationships that led to deeper and more meaningful interactions. Data from our interviews with them show that the project created spaces that allowed them to better get to know each other, especially in two areas: a) team members' pre-retirement occupations and skills derived from them and b) personality traits.

For example, Aaron managed to fill the void of being anonymous in the community (as expressed by him) and elevate the relationships with CareComLabs members to a level where he could count on them by identifying how they could serve as potential resources. Aaron said,

That's for sure, from today's point of view, it makes it easier for me, thanks to the group, to get help. Because I know the people. Because before, it was somehow an anonymous phone number, an anonymous email [unintelligible], whatever. And now I know people, which means I also know in which field the people are active.

For Aaron, the idea that he knows people better not only enabled him to be able to ask others for help but also to offer them help in areas where he felt competent. When asked if he would help others in the group, he said, "Of course, as long as I can do it. I come from IT, for sure, I also have my limitations, but at least I would know or have a knowledge advantage. And I should use that advantage and pass it on."

When the question of how to transfer a voice file from the audio-recorder to the computer popped up, it was Aaron who instructed others on how to do it.

Walter, another participant, entered the project with relationships at different stages with various members; some were old but interrupted over time, and some were completely new. Walter said,

I've known Sophie for years. I was the school president, and she did secretarial work. We worked together for a few years. Aaron lives in the same neighborhood, so I see him around. No big relationship. I know Emma a little bit, and I met Angelica here. And the couple… I met them here too.

Walter, like Aaron, could identify which members could assist him in different fields. He said,

If I want to know "insider information" about women in Bachhdorf, then I would ask Sophie, because she probably knows women in the

village. And otherwise, (pause)… I was thinking about it, but this is a little bit more professional. I was thinking, yes, if I have questions related to health, I would ask Emma…

Both Aaron and Walter have managed to build relationships with other members of the group to the point where they can count on them for help, even though they entered the project with different depths of relationships. While Aaron was barely acquainted, Walter had more advanced relationships, at least with some members.

Sophie has been able to gain a fuller picture of who Aaron is as a person. Sophie said, "No, so… that worked out in that we just see each other regularly at the meetings and now we know each other better… even Aaron, who I didn't know before. I noticed he also has such a dry sense of humor, and he has worked in the IT industry."

The relationship between them was enriched to such a degree that the connection between them got stronger with time as they discovered more common ground. Sophie said,

I was with Aaron at a symposium and I found it quite nice that we met there. I would not have known anyone else… When he told me who his wife was, I was very surprised. I didn't even know that they belonged together. I didn't know him at all, and when I saw the two of them together, I said: "ah, so you belong together." That was a pleasant surprise.

There are other cases, though, when the relationship did not necessarily progress to the depth presented above but was still enriched. Emma said, *"We have some work that we do together, and we are somehow closer to one another, but it is not a friendship."*

This enabled her to relate to others in CareComLabs, but not for intimate issues. Emma said, "When it's something personal, I wouldn't go to group members, I would go to friends and colleagues. I would separate those two things." Emma also said that once she had an issue with the audio-recorder, and after she had tried to find the solution herself, she took the problem to the group, "to someone who understands how an audio-recorder works." This means that, because of the interaction with others in CareComLabs, she has been able to identify the person who could help her with an issue, in this case with the audio-recorder. Emma makes a distinction between friends and project colleagues, whom she was happy to ask for technical support, as the example above shows, but not for personal issues. This distinction is interesting because it points to the boundaries of the relationships; for example, they may be deep/enriched enough that one would exchange personal information, or, in Emma's case, enriched but not deep enough to do so.

All the above examples illustrate that CareComLabs was a platform that facilitated the process of seeking/receiving help and solidarity-based interactions in several forms. First, in completing tasks within the project (i.e., Aaron helping Emma with the audio recorder). Second, in setting up the foundations to seek help for future personal needs (i.e., Walter pointing out that he knows that Sophie is well connected in the community, so he can approach Sophie when he needs help contacting some other community members). Third, older co-researchers are familiar with the skills of other members and may contact them in the future to contribute to certain activities. For instance, Sophie is active in other local organizations, and in the future, if she needs help or someone with IT skills is needed in a particular activity, Sofie has the information that Aaron has an IT-related background. Thus, it is also an opportunity for mutual support in other activities among older co-researchers beyond CareComLabs.

Broadening horizons for older age

Older co-researchers reported that through CareComLabs` engagement, they gained information about different issues related to aging, consequently broadening their horizons about this developmental phase. The fact that the topic of aging was central to CareComLabs played a role in their decision to participate in the project. Due to close collaboration within the activities/meetings or through research-based activities like conducting, transcribing, and analyzing interviews, older co-researchers managed to broaden their horizons regarding different issues related to aging and approach them from an analytic position by being in the position of the co-researcher/interviewer. In the following, we will provide sample statements of the participants to demonstrate how they managed to broaden their horizons for older age.

For example, Sophie decided to join the project because she was told that aging was the main concern of the project. "… I just thought the subject is exciting. I am now also already 72, and I am getting older, and I am having thoughts for the future… how will that be?!" For Sophie, the interviews she conducted were a useful source to learn how the future may be by learning how other older adults are dealing with specific issues. One example of this is when she conducted an interview with two older adults who are married to one another and, among other things, also discussed the topic of care. Sophie said,

If it comes that one needs care, they have agreed that the partner does not have to care [i.e., assume the caregiver role] for the other person [i.e., that there would have to be another solution]. And I find that very progressive with people my age who have thought so far ahead.

Here, Sophie gained a new and refreshing perspective on the process of communicating and making decisions within the couple for the process of care. Or, in another case, she was inspired by an older woman that she interviewed. Sophie said, "I was with an old lady who is still independent and quite active. People dream about that. That you are so active when you are old. That I found really interesting."

For Emma, the project was a good opportunity to continue gaining information about aging in a new setting, as she was already involved in another initiative that focuses on older age. As such, CareComLabs was a continuation of her efforts and a new channel to be in contact with activities and information that are related to aging. Emma said, "I am also a member of the Commission for older age and then Beatrice asked who was interested in becoming part [of CareComLabs], and I got interested."

Aaron is always eager to learn something new. In the past, he learned, but, as he said, "[the learning] was tied to my job. I left home at seven in the morning and got back after seven in the evening." In CareComLabs, he described his role as a "free-floating electron" who can follow his own interests. He identified aging as a significant motivator for being part of CareComLabs. He said, "For me, it is surely the topic [aging] that is relevant." Besides gaining knowledge for older age (personal relevance) through the project, he felt that he could make a contribution that could influence other older adults in his local community. Aaron was preoccupied with the Bachdorf municipality's strategy for older adults. He said, "The program [Bachdorf strategy for older adults] is 10 years old. Something has to change there," pointing to the need to review and update the program. CareComLabs was perceived as an enabling channel for this change. He said, "[CareComLabs] is in my home community, and there are some things here that I want to change." Further in the interview, he said, "I feel that I can bring my ideas forward [in CareComLabs]". He also participated as a speaker in two conferences (Switzerland and Germany), presenting the project to the academic community, while learning about recent scientific developments related to aging.

Walter was interested in engaging with the topic of aging and wanted to gain skills that would enable him to induce change (for his own needs and/or for the community). He said,

I read the information [about the project] in the newspaper, and I thought: 'oh that's interesting'. I want to hear what they say… for me it is a preparation for aging. Which questions are important in aging? And what also interests me is the process. How do you get the results? [when conducting research about older age].

As shown, Walter perceives older age as a period that requires preparation, and preparation can derive from the information that he expected to gain from participation in CareComLabs. He indicated that his expectations are met as he said, "I think more about aging {because

of CareComLabs}." Furthermore, he wanted to broaden his horizons about older age by also gaining knowledge about how the project conducts the research, or, as he said, "how do you get to the results", which is an indicator of an interest in the methods of inquiry. Walter and other older co-researchers participated in all phases of the qualitative study, gaining insights regarding important aspects of conducting qualitative research, which can be considered an answer to Walter's interest in getting to know more about the process of research.

The two last cases (Aaron and Walter) show that CareComLabs older co-researchers are interested in preparing for older age in order to respond to their personal needs, but also that they perceive aging as a process that they can influence, be that for personal or community gains. They therefore view themselves as change agents, and they regarded CareComLabs as a chance to embody and actualize that agency.

Keeping in touch with one's profession

All the older co-researchers in the pre-retirement period had professions built on their tertiary education. Aaron worked in the field of information and communication technologies (IT/ICT), while Walter worked in the education system and on social projects. Emma worked as a social worker, and Sophie did administrative office work. Through CareComLabs, all of them had the opportunity to be in contact with their pre-retirement occupations and with the skills related to these professions, and they had the space to use and/or enrich those skills.

For example, Walter, when asked if he had done similar things before, said,

I have done farm handovers in my job. That is, passing on the farm from father to son. You must have many conversations and listen to what the boys want. What do the fathers want. Or… we had a request from the canton regarding the highway. We had to find a solution for the agricultural land. We needed many conversations to find out what the solution could be, with whom we could talk and who could help.

Walter enjoys being part of such initiatives. "I like to do such things. It is about my expertise. That is important. My expertise and communication." The similarities between his previous experience and his involvement in CareComLabs are that, in both cases, Walter is involved in initiatives trying to find solutions to problems in the local community, and his means for doing so, in both cases, is through conversation and communication. As a result, CareComLabs was an opportunity for him to engage in activities with which he is familiar and to use and refine his communication skills, albeit in a different field. Although Walter did not name what he did in the past as "research," he found that his activities were to "look for practical solutions" and considered them similar to research activities in CareComLabs.

Emma, who has worked as a social worker, a profession in which verbal and non-verbal communication is crucial, also perceived the project as a useful platform for being in contact with people and enriching her communication skills. Emma said that, through interaction with team members, you develop skills to "approach people, to get into a conversation, to ask the questions that could be important for the other person and that keep the conversation going." While for Walter, keeping in touch with his profession was related to conducting the interviews, for Emma, it was related to the project members and their different expertise. Emma said, "[In CareComLabs] we are all people with a lot of life experience. There are people among us who have had professions in which they have to interact with a lot of other people, and here you develop a lot of skills."

Sophie said that many years ago, when she worked in an office, she used to be the person "who takes initiative to get the job done," in the sense that when she saw something needing a fast solution, she jumped right into it. "I was the one who cared about the printers working, and when they switched off, I went to check and tried to solve the problem all by myself." Notably, she seems to have had this "self-initiative" in the CareComLabs too, transferring a behavior from her former professional life to her engagement in the project. Sophie said,

I have taken on the role of organizing rooms because we now [due to COVID-19] have to sit far apart. In the beginning, we were in a meeting room, also not very close, and since I know the circumstances here and since no one else had come forward, I said: "yes, someone must take care of it and organize that…that is now my role, that I have assigned to myself, but it doesn't create much burden.

Her proactive approach has put her in a very valuable position for the CareComLabs as a member with particular organizational skills and a proactive mindset. By having the possibility to be in this role in CareComLabs, she continued to be in constant communication with different people in the community (e.g., to reserve rooms, coordinate with the responsible person, etc.), but also to engage in a form of action that she perceives as beneficial. Since her proactive approach continues to be important even at present, it means that she has benefited from her engagement socially (appreciation from colleagues, employer, etc.) such as receiving rewards that potentially serve as positive reinforcers over time. And by applying the same approach to CareComLabs, she could potentially have achieved the same social benefits at present as well. As a result, Sophie kept an important part of her professional life alive through her proactivity at CareComLabs.

However, this process of keeping in touch with one's profession was not linear and did not necessarily happen in all phases of the project. Walter mentioned that he found conducting interviews rewarding but found the process of transcription tedious. He said, "The transcription was too much… I thought, yes, I have to do that, but it was a lot of work. After the third interview, I had enough."

Aaron also provided indications for this navigation through the process and phases to find the right space for himself and get in contact with his previous skills. He had always avoided conducting interviews, particularly when related to the personal space of people and intimate topics, and that is why he still felt uncomfortable when having to engage in this way with people. "Just what makes me uncomfortable is the situation when I ask someone about personal stuff; I can't, I've never been able to." Still, he found the interviews beneficial, as he said that he "met some interesting people."

Aaron has worked in the IT field for the larger part of his life, and in the interview, he expressed that he intended to use those skills in the project, saying, "I'm trying to get involved with my IT skills." When asked if he sees any parallels between his previous occupation and the activities at CareComLabs, he replied,

Basically, that's what I had in my pre-previous employer: virtual teams. And I love that, virtual teams … So, in every project that we had, customer projects, new technologies, new services, whatever. I've always learned something. And from that point of view, it's actually exactly the same [CareComLabs online meetings].

He also helped a fellow member of CareComLabs with his IT expertise for using the audio-recorder (as seen in the enriching relationships category, in Emma's case) or the other one to transfer a file from the audio-recorder to a personal computer. His latest role in the group was that of coordinating communication through online tools and platforms with the local population for a project initiative called "Coffee Bike."

Another aspect important for keeping in touch with one's profession is that older co-researchers showed that being free to navigate on one's own is significant. Emma said this explicitly, "… I think… I'm glad I don't have to manage projects anymore. I loved my job, but it was rigorous work in a difficult environment, and I'm not looking for that leadership role anymore."

Aaron, who in the whole interview indicated how much responsibility he had in his life, now thinks that in older age, the feeling of obligation should not be there, in his words: "As a retired person, you no longer have to, but you may if you wish."

The statements categorized as "keeping in touch with one's profession" show that CareComLabs worked as a valuable platform for participants to be free and able to encounter, use, benefit from, and enrich skills or habits related to the pre-retirement phase.

Interacting in a nurturing community

Older co-researchers reported having a say in decision-making processes on CareComLabs, being able and free to follow their own interests, having their voices heard, being around sympathetic and interesting people, etc. Therefore, we have categorized the group atmosphere as a "nurturing community." For example, Sophie said,

So, I think we discuss a lot. We get answers when we ask something or when we do not understand something. I feel supported in this group. So far, we have had no conflicts, and on the contrary, we laugh together. I always find that nice.

Sophie indicated that she operated in a group in which she felt comfortable and engaged in rewarding and positive ways of communication. To have questions answered, among other things, means that the person is involved in understandable processes. For participants, being able to laugh together is an indication of a feeling of cohesion, trust, and togetherness. Furthermore, about her engagement in the project, Sophie said, "It is work, but pleasant work." This indicates that even though the activities required dedicating time and energy, it was still in a context in which the person considers her engagement rewarding on an emotional level, as Sophie said, "pleasant work." She invested time and energy, and in exchange, she spent good time in enjoyable company in a hospitable atmosphere.

Aaron shared this opinion about the group climate. He said,

[In] the group as it is composed now, people listen to each other and accept other opinions. The exercises that we went through, in the analysis phase, actually showed me that everyone is open to other opinions, and people are interested in how the other person sees the situation, so from there, I think we have a group that is pretty much united.

Here, he shared insights indicating that in CareComLabs, accepting differences and allowing versatility were the basis for forming group identity.

Emma expressed some reservations regarding the project structure. Emma said, "I wish [the activities] could be more structured." Nevertheless, she perceived the group and its members very positively. Emma said, "I must say…I like all the people in the group. I think all of them are sympathetic people," and "I like to spend time together with the people [in the group]. I think I can work well with all of them." Emma here showed that the interaction with the members of the group was pleasant, and she operated in an encouraging environment because she has nurtured positive feelings for the members of the group.

Walter, when asked directly if there was anything in the group that prevented him from freely expressing his thoughts and ideas in CareComLabs meetings, replied, "I am not aware at the moment." This shows that he couldn't identify any factor, at least not any big enough to remain in his attention, that could have prevented him from expressing his ideas freely.

The above examples illustrate that CareComLabs was considered an environment where everyone mutually accepted each other's individual opinions. People also appreciated each other, and there was mutual affection and respect. In addition, the pleasant group atmosphere entailed that the efforts and sacrifices made (the time and energy dedicated) came with a return on investment, which is having a good time in enjoyable company.

Discussion

Our results point to four benefits that older co-researchers reported receiving as a result of their participation in the CareComLabs project. The first is "enriching relationships," in which CareComLab's older co-researchers improved the quality of their social relationships, particularly with one another. This finding corroborates previous research (Buffel, 2018; Tanner, 2012; Theunissen & van Hoven, 2018), indicating that older adults who participate in PAR activities strengthen their relationships with people beyond kin. Our finding adds to the body of

evidence by focusing on how older adults enrich their relationships with one another, making them deeper and more meaningful, although not all at the same rate or quality.

Through the category "enriching relationships," we also provide relevant data on a sensitive topic for many older adults, namely "seeking and offering support/help." As a result of their engagement in CareComLabs, older co-researchers were able to detect specific abilities, skills, and personality traits in other members, making it easier for them to request assistance/help. Our findings suggest that the community of older adults can be a resource for one another in and of itself, although in our case, it was identified primarily for receiving assistance with minor and non-personal issues, such as disseminating specific information in the community, receiving assistance with technology, etc. This finding may nonetheless be interpreted as evidence of the potential of peer-to-peer support. Clearly, additional research is required to evaluate the extent and consistency of this type of interaction. In the big picture, though, our research shows that a community where older adults are constantly interacting and whose skills are well-known by others can build structures that allow them to offer and accept help, make meaningful connections, and share resources.

Broadening horizons for older age and keeping in touch with one's profession are two additional benefits identified by our study. They can be conceptualized as learning processes because they both involve the identification, contact, retrieval, and application of information pertinent to personal needs. By identifying the category "keeping in touch with one's profession," we suggest that CareComLabs provided opportunities for co-researchers to develop/maintain skills that may have been utilized prior to retirement. Enhancing or acquiring new abilities has also been demonstrated as a benefit of PAR in other research (Buffel, 2019; Winter et al., 2016).

Meanwhile, we indicate that CareComLabs facilitated another type of learning, identifying this category as "expanding knowledge for older age," in which co-researchers could generate knowledge on a variety of topics related to older age through interviews and interaction with one another. The active roles that older adults play in PAR projects can explain this potential to access knowledge (typically related to project topics). They co-design studies, conduct interviews, identify problems, offer solutions, and act as agents of change in their social contexts (Porter, 2016; Winter et al., 2016; Yankeelov, Faul, D'Abrosio, Collins, & Gordon, 2015). Additionally, PAR projects address issues that affect older adults who participate in the projects and/or the communities in which they reside or belong (Doran & Buffel, 2018; Ellins & Glasby, 2016; Ward, Barnes, & Gahagan, 2011).

Our research can contribute to a better understanding of learning processes in older age because it demonstrates that learning can be facilitated by participatory action research, which in some instances can be informal and unstructured while remaining pragmatic and effective. At CareComLabs, the learning process was pragmatic and efficient because knowledge was acquired while contributing to society/the local community, combining social and psychological rewards and benefits.

The study's fourth reported benefit was "interacting in a nurturing community." Bendien et al. (2020) highlighted that, despite being described as a time-consuming and energy-intensive process, participating in PAR increased self-confidence in their sample of older adults. In the case of Sophie, for example, we noticed something similar. She said the project required a lot of energy, but she also mentioned having the freedom to express herself and how friendly the project's social environment was, which may have influenced her self-confidence and freedom to express her individuality. As a result, by organizing PAR projects in this form, which is based on shared decision-making and equal participation of all actors in all processes (McDonald, 2021), structures for long-term and stable social participation can be created. In our case, CareComLabs participants voluntarily participated for more than two years. This could be one answer to the question of what kinds of social situations encourage and motivate older adults to take part in social activities and projects in their communities.

This study provides a different point of view to the prevalent literature on older adults' community involvement, which typically focuses on the relationship between social participation and illness and disorder, for example, depression/depressive symptoms (Ding, Chen, & Zang, 2022; Egeljić-Mihailović, Brkić-Jovanović, Krstić, Simin, & Milutinović, 2022). Our study shows that involvement in the PAR project equips older adults with the skills necessary to influence change on both a personal and a collective level, thereby acknowledging them as individuals who are an asset to society. Furthermore, PAR provides greater flexibility on impact compared to other, more traditional forms of social participation. For instance, even if engaging in leisure activities has numerous advantages, the primary advantage is to one's health and to the person directly (Chang, Wray, & Lin, 2014). On the other hand, in PAR, such advantages are typically mixed, including egoistic and altruistic benefits for older adults who take part in PAR. For instance, while working through the process, participants acquire new skills and information while also addressing a challenge for a certain community. In comparison to other types of traditional social participation that benefit both the person and the community, PAR also has an advantage. While, for example, involvement in church activities can increase the life satisfaction of people who volunteer (Gil-Lacruz, Saz-Gil, & Gil-Lacruz, 2019), and other community members benefit from the volunteering of that person, PAR offers a special set of skills—those of research—that are uncommon in other forms of social participation. For instance, the categories of keeping in touch with one profession and expanding knowledge for older age in our study demonstrate that older adults are equipped with research skills they can use to affect change for both personal and societal issues.

Conclusion

Our study provides an in-depth understanding of the benefits valued by older adults involved in a specific project in a specific community, and the findings should be read and evaluated in light of the study's limited scope. Although the number of interviews conducted (four) appears small, it includes all older adults who participated in the participatory action research project at hand. Having said that, we are conscious that a larger sample may have offered more diversity in the experiences, more possibilities to compare those experiences, and ultimately more in-depth knowledge on the experiences of older adults in this particular project.

More evidence from different contexts is needed to provide a broader scope and wider database for integrating, contrasting, and thus further developing our understanding of the subjective personal benefits driving older adults' participation in PAR projects. We especially encourage future research into the benefits of participatory action research projects for older adults with other characteristics. Our participants were fit and stable; they had and found time to participate, they were educated, knew the language, and were familiar with the local culture and social norms. When the project and study took place, all of them had lived in Bachhdorf for at least four decades. More data from people participating in participatory action research projects who do not have advanced degrees, have more health problems, and live in less favorable psychosocial conditions would be interesting.

It should be noted that this study was conducted during the COVID-19 pandemic, when stress levels in both interviewee and interviewer may have been higher, potentially influencing communication during the interviews. Lastly, the first author conducted all of the interviews for this study. For more than two years, the first author worked closely on the CareComLabs project with the four older adults who were interviewed for the study. They formed both a professional and an informal relationship, which included informal encounters. This relationship may have provided benefits for the interviews, such as built-in trust that helps communication, but it may also have constrained older adults' willingness to give specific information to safeguard the project on which they all collaborated. Although there are no indications from the data from them or the first author, this remains a potential limitation of this study.

In conclusion, our study contributes to closing the research gap on the particular benefits that older adults derive from engaging in PAR projects, as well as demonstrating the potential of participatory action research to foster meaningful engagement of older adults in their communities. As such, it can help local and national initiatives and projects implement participatory action research (and other) projects so that older adults can benefit and contribute more. Eventually, this helps future PAR to meet the ambition of being beneficial to research and the participants.

Ethical considerations

The study was approved by the University of Bern, Faculty of Philosophy and Human Sciences, Ethical Commission (Nr ., 2020–10-00002).

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the 1st author used Quillbot in order to check for grammar of the manuscript. After using this tool, the author reviewed and edited the content as needed and takes full responsibility for the content of the publication.

Declaration of Competing Interest

We have no conflicts of interest to disclose.

Data availability

Data will be made available on request.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jaging.2023.101192.

References

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self-scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*(4), 596–612. https://doi.org/10.1037/0022-3514.63.4.596

Averill, J. B. (2012). Priorities for action in a rural older adults study. *Family & Community Health, 35*(4), 358–372. https://doi.org/10.1097/FCH.0b013e318266686e

Bendien, E., Groot, B., & Abma, T. (2020). Circles of impacts within and beyond participatory action research with older people. *Ageing and Society, 42*(5), 1014–1034. https://doi.org/10.1017/S0144686X20001336

Buettgen, A., Richardson, J., Beckham, K., Richardson, K., Ward, M., & Riemer, M. (2012). We did it together: A participatory action research study on poverty and disability. *Disability & Society, 27*(5), 603–616. https://doi.org/10.1080/09687599.2012.669106

Buffel, T. (2018). Social research and co-production with older people: Developing age-friendly communities. *Journal of Aging Studies, 44*, 52–60. https://doi.org/10.1016/j.jaging.2018.01.012

Buffel, T. (2019). Older coresearchers exploring age-friendly communities: An "insider" perspective on the benefits and challenges of peer-research. *The Gerontologist, 59*(3), 538–548. https://doi.org/10.1093/geront/gnx216

Chang, P. J., Wray, L., & Lin, Y. (2014). Social relationships, leisure activity, and health in older adults. *Health Psychology : Official Journal of the Division of Health Psychology, American Psychological Association, 33*(6), 516–523. https://doi.org/10.1037/hea0000051

Charmaz, K. (2006). Constructing grounded theory. In *A practical guide through qualitative analysis*. Sage Publications.

Corrado, A., Benjamin-Thomas, T. E., McGrath, C., Hand, C., & Rudman, D. L. (2020). Participatory action research with older adults: A critical interpretive synthesis. *The Gerontologist, 60*(5), 413–427. https://doi.org/10.1093/geront/gnz080

Ding, J., Chen, L., & Zang, Z. (2022). The relationship between social participation and depressive symptoms among Chinese middle-aged and older adults: A cross-lagged panel analysis. *Frontiers in Public Health, 10*, 1–11. https://doi.org/10.3389/fpubh.2022.996606

Doran, P., & Buffel, T. (2018). Translating research into action: Involving older people in co-producing knowledge about age-friendly neighbourhood interventions. *Working with Older People, 22*(1), 39–47. https://doi.org/10.1108/WWOP-11-2017-0033

Doyle, M., & Timonen, V. (2009). Lessons from a community-based participatory research project: Older people's and researchers' reflections. *Research on Aging, 32*(2), 244–263. https://doi.org/10.1177/0164027509351477

Dupuis, S., McAiney, C., Loiselle, L., Hounam, B., Mann, J., & Wiersma, E. C. (2021). Use of participatory action research approach to develop a self-management resource for persons living with dementia. *Dementia, 20*(7), 2393–2411. https://doi.org/10.1177/1471301221997281

Egeljić-Mihailović, N., Brkić-Jovanović, N., Krstić, T., Simin, D., & Milutinović, D. (2022). Social participation and depressive symptoms among older adults during the Covid-19 pandemic in Serbia: A cross-sectional study. *Geriatric Nursing, 44*, 8–14. https://doi.org/10.1016/j.gerinurse.2021.12.014

Ellins, J., & Glasby, J. (2016). "You don't know what you are saying 'yes' and what you are saying 'no' to": Hospital experiences of older people from minority ethnic communities. *Ageing and Society, 36*(1), 42–63. https://doi.org/10.1017/S0144686X14000919

Federal Office of Public Health. (2020, April 30). Protect Yourself and Others. [Press release]. https://www.bag.admin.ch/bag/en/home/das-bag/aktuell/medienmitteilungen.msg-id-78968.html.

Fenge, L. A., Jones, K., & Read, R. (2010). Connecting participatory methods in a study of older lesbian and gay citizens in rural areas. *International Journal of Qualitative Methods, 9*, 320–333. https://doi.org/10.1177/160940691000900402

Frideres, J. S. (1992). Participatory research: An illusionary perspective. In J. S. Frideres (Ed.), *A world of communities: Participatory research perspectives (pp.1–13)*. Captus University Publications.

Giesbrecht, E. M., Miller, W. C., Mitchell, I. M., & Woodgate, R. L. (2014). Development of a wheelchair skills home program for older adults using a participatory action design approach. *BioMed Research International, 1-13*. https://doi.org/10.1155/2014/172434

Gil-Lacruz, M., Saz-Gil, M. I., & Gil-Lacruz, A. I. (2019). Benefits of older volunteering on wellbeing: An international comparison. *Frontiers in Psychology, 10*. https://doi.org/10.3389/fpsyg.2019.02647

Hand, C., Rudman, D., McGrath, C., Donnelly, C., & Sands, M. (2019). Initiating participatory action research with older adults: Lessons learned through reflexivity. *Canadian Journal on Aging / La Revue Canadienne Du Vieillissement, 38*(4), 512–520. https://doi.org/10.1017/S0714980819000072

James, H., & Buffel, T. (2022). Co-research with older people: A systematic literature review. *Ageing and Society, 1-27*. https://doi.org/10.1017/S0144686X21002014

Jukema, J. S., van Alphen, J., Jorritsma, J., & Snoeren, M. (2021). Co-researchers in motion: A journey of evolving relationships. A critical reflection on the co-operation between two older adults and a nurse researcher. *International Practice Development Journal, 11*(1), 1–9. https://doi.org/10.19043/ipdj.111.011

Kaspar, H., & Landolt, S. (2014). Flirting in the field: Shifting positionalities and power relations in innocuous sexualizations of research encounters. *Gender, Place and Culture, 23*(1), 107–119. https://doi.org/10.1080/0966369X.2014.991704

McDonald, B. (2021). Proffesional power struggles in participatory research. *Journal of Participatory Research Methods, 2*(1), 1–7. https://doi.org/10.35844/001c.18692

Östlund, B. (2008). The revival of research circles: Meeting the needs of modern aging and the third age. *Educational Gerontology, 34*(4), 255–266. https://doi.org/10.1080/03601270701835916

Ottmann, G., Laragy, C., Allen, J., & Feldman, P. (2011). Coproduction in practice: Participatory action research to develop a model of community aged care. *Systemic Practice and Action Research, 24*, 413–427. https://doi.org/10.1007/s11213-011-9192-x

Porter, G. (2016). Reflections on co-investigation through peer research with young people and older people in sub-Saharan Africa. *Qualitative Research, 16*(3), 293–304. https://doi.org/10.1177/1468794115619001

Rose, G. (1997). Situating knowledges, positionality, reflexivities and other tactics. *Progress in Human Geography, 21*(3), 305–320. https://doi.org/10.1191/030913297673302122

Ross, F., Donovan, S., Brearley, S., Victor, C., Cottee, M., Crowther, P., & Clark, E. (2005). Involving older people in research: Methodological issues. *Health & Social Care in the Community, 13*(3), 268–275. https://doi.org/10.1111/j.1365-2524.2005.00560.x

Save the Children. (2018). Participatory action research with adolescents affected by the Syria crisis in Egypt and Lebanon: Lessons learned report and `how to` guide. https://resourcecentre.savethechildren.net/pdf/par_lessons_learned_report_how_to_guide.pdf/.

Shore, L., de Eyto, A., Kiernan, L., Bhaird, D. N. A., Connolly, A., White, P. J., Fahey, T., & Moane, S. (2018). Older adult insights for age friendly environments, products and service systems. *Design and Technology Education: An International Journal, 23*, 40–58.

Tanner, D. (2012). Co-research with older people with dementia: Experience and reflections. *Journal of Mental Health, 21*(3), 296–306. https://doi.org/10.3109/09638237.2011.651658

Theunissen, N., & van Hoven, B. (2018). "Stuff you should know about age friendly neighborhoods but don't": Researching aging-in-place with older adults as co-researchers. *SAGE Research Methods Cases.*. https://doi.org/10.4135/9781526432384

Trentham, B. L., & Neysmith, S. M. (2018). Exercising senior citizenship in an ageist society through participatory action research: A critical occupational perspective. *Journal of Occupational Science, 25*(2), 174–190. https://doi.org/10.1080/14427591.2017.1402809

Vaughn, L. M., & Jacquez, F. (2020). Participatory research methods – Choice points in the research process. *Journal of Participatory Research Methods, 1*(1). https://doi.org/10.35844/001c.13244

Ward, L., Barnes, M., & Gahagan, B. (2011). Alcohol use in later life – Older people's perspectives. *Quality in Ageing and Older Adults, 12*(4), 239–247. https://doi.org/10.1108/14717791111191171

Winter, S. J., Rosas, L. G., Romero, P. P., Sheats, J. L., Buman, M. P., Baker, C., & King, A. C. (2016). Using citizen scientists to gather, analyze, and disseminate information about neighborhood features that affect active living. *Journal of Immigrant and Minority Health, 18*(5), 1126–1138. https://doi.org/10.1007/s10903-015-0241-x

World Health Organization. (2020). Decade of healthy ageing 2020–2030. https://www.who.int/initiatives/decade-of-healthy-ageing.

Yankeelov, P. A., Faul, A. C., D'Abrosio, J. G., Collins, W. L., & Gordon, B. (2015). Another day in paradise: A photovoice journey of rural older adults living with diabetes. *Journal of Applied Gerontology, 34*(2), 199–218. https://doi.org/10.1177/0733464813493136