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Significance of Age-Friendly Co-Design from a Multi-Stakeholder Collaboration in Greenland

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Abstract: The world's population is ageing, and there is increased attention on developing well-functioning age-friendly cities and communities. This requires addressing topics with complex socio-spatial dimensions and involving multiple stakeholders in the process. This also means including older people as active partners in the design process to create environments that reflect their needs and aspirations. In this paper, we present a study, where multiple stakeholders from a Greenlandic city worked together to co-design new neighbourhood spaces in a senior housing area. Approximately 50 older people were involved in the co-design process, and follow-up interviews were conducted with municipal stakeholders two months later. By focusing on the different stakeholder perspectives, we extracted insights into the significance of age-friendly co-design in such processes. Our findings suggest that age-friendly co-design contributed to crossing boundaries through the establishment of a shared language, and to revising perceptions of older people's capabilities. These findings can benefit local communities, but also the greater ageing society when developing future age-friendly cities and communities.

Keywords: age-friendly communities; co-design; Greenland; multi-stakeholder

1. Introduction

As global demographics are rapidly changing, and people over the age of 60 are estimated to constitute more than one-fifth of the world's population by 2050 (World Health Organization, 2007) there is an increased focus on creating environments that meet the needs of this age group. Age-Friendly Cities and Communities (AFCCs) is a political initiative established by the World Health Organization (WHO), and the term is now widely used by scholars (Buffel et al., 2018; Moulaert & Garon, 2018; O'Hehir, 2014). The WHO has identified eight topic areas that are important when developing AFCCs. These are presented in the 'Age-friendly



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City' model and are; outdoor spaces and buildings, transportation, housing, social participation, respect and social inclusion, civic participation and employment, communication and information, and community support and health services (World Health Organization, 2007). Addressing these topics that span physical, social and cultural dimensions requires collaboration across sectors, between professions and the inclusion of various stakeholders, including older people as active partners (Buffel, 2018; Lui et al., 2009; O'Hehir, 2014). Furthermore, older people as an age group are increasingly diverse, requiring responses through processes that reflect diverse modes of participation (World Health Organization, 2007).

From a design and architectural perspective, one participatory response to this challenge is through co-design, which is a community-centred methodology where stakeholders (who are not trained in design) work with professional designers to understand and create solutions to problems defined by the community itself (Cruickshank et al., 2013; Sanders & Stappers, 2008; Thomson & Koskinen, 2012). Therefore, gaining insights into the stakeholders' experiences about collaborative co-design can generate important learnings regarding what the processes can contribute, and help to guide future development of AFCCs.

We report on a collaborative project between senior residents in Greenland, the research and development project Ageing in the Arctic (AgeArc), the research network Activity and Health Enhancing Physical Environment Network (APEN), and the Municipality of Qeqqata in Greenland. The project had two aims:

1. Co-design of new neighbourhood spaces to provide better access to nature for older residents, and
2. Development of an age-friendly co-design process in collaboration with local stakeholders to inform future co-design of AFCCs.

We report here on the second aim, exploring the different perspectives of participating in an age-friendly co-design process, from the view of the respective stakeholders. Specifically, what is the significance of age-friendly co-design processes in multi-stakeholder collaborations when designing AFCCs?

2. Project design & research methodology

2.1 Methodological background: Co-design

We position the development of AFCCs in the field of co-design, and so an understanding of the co-design approach is required to discuss the empirical stakeholder perspectives from this study. Co-design has its roots in participatory design, where the user is regarded as more than a subject you design 'for', rather a partner you design 'with' (Sanders & Stappers, 2008). This mindset requires that the notion of expertise is distributed from the designer to every co-design partner, and in this regard 'situated' or 'experienced' expertise is as legitimate and valuable as 'professional' expertise (Sanders, 2013; Sanders & Stappers, 2013). Every stakeholder comes to the table with a specific expertise, interest or ability, and hence

starting from a 'blank slate' will never be possible (Brandt & Eriksen, 2010b). Instead it is important to acknowledge the individual contributions to the collective process (Sanders, 2002). For every user or stakeholder to become an active partner of the design team as 'experts of their experiences', they need to be taken seriously and genuinely be wanted in the process, as well as being equipped with tools for expressing themselves (Cruickshank et al., 2013). Optimising participation requires the designer to identify opportunities and create suitable tools that encourage engagement and creativity (Sanders & Stappers, 2008; Visser Sleeswijk et al., 2005)).

To optimise the contributions of all stakeholders involved, and adding to the sustainable and long-term perspective of a process that goes beyond the co-design events, Björgvinsson et al. (2010) advocate for 'infrastructuring'. This is reflecting to establish a process that is embedded in the existing contexts. Especially when stakeholders from multiple contexts are involved, this alignment is important to bring stakeholders together. Some co-design scholars refer to stakeholder collaboration as a meeting between different 'communities of practice' with reference to Lave and Wenger (1991) and their work about 'situated learning' (Aakjaer, 2013; Brandt et al., 2010; Malmborg et al., 2016). For communities to meet, the crossing of boundaries and the negotiation of meaning and value are important aspects of making collaboration work. In relation to co-design with older people, Malmborg et al. (2016) highlight the difference between work and everyday practice. Professional stakeholders in a work practice tend to have a common goal, while seniors meeting in social settings of the everyday practice might only share short-term goals (Malmborg et al., 2016), which makes the crossing and alignment between these communities even more important.

2.2 Collaborative research & practice project

The study was initiated by local community stakeholders in Sisimiut, Greenland. The Municipality of Qeqqata, which includes Sisimiut, had established an initiative led by their Homecare Department called 'Healthy and Active Ageing'. The Homecare Department had considered the idea of creating better access to nature for the senior citizens living in a local public senior housing area. So, after collaborating with AgeArc on other research, the Homecare Department presented them with the project idea, and a formal collaboration was subsequently initiated. Other local stakeholders included the municipality's Culture and Sustainability Department and the Technical and Environmental Department, as well as the local residents living in the senior housing area.

AgeArc, based at Copenhagen Centre for Health Research in the Humanities at the University of Copenhagen, invited APEN, based at The Royal Danish Academy of Fine Arts, School of Architecture to collaborate on the project. So, the research team that conducted the study consisted of an architect and anthropologist. APEN had previously conducted co-design projects with two senior housing areas in a low-income area of Copenhagen, involving older people in the co-design of new neighbourhood spaces (Carroll & Nørtoft, 2022).

In June 2018, over two weeks, approximately 50 older people took part in a co-design process in Sisimiut. Implementation and celebration events were subsequently added in the autumn of 2018, in which construction of the outdoor design solutions were completed.

2.3 Research context

Sisimiut is the second largest city in Greenland with approximately 6,000 inhabitants. The city is located within a rural context surrounded by nature, mountains and the sea. Facing the mountains is a senior housing area (Figure 1 & 2), consisting of four building blocks with 48 apartments. All of the residents are retired, with forty-one living alone and the remainder with a partner. Every apartment has a view of the wilderness, but there is no access if you have low mobility. Access to nature is a significant part of life in Greenland, and so limited access in older age can negatively influence quality of life (Nørtoft et al., 2018).



Figure 1 & 2. Photos of the senior housing area

2.4 Research Methodology

The methodology of this project utilised qualitative data from an explorative co-design approach, which was event-driven, open-ended and collaborative (Brandt & Eriksen, 2010a). The approach followed the notion that collaboration between research and practice must be based upon an ongoing dialogue and mutual respect of partner experiences, contributions and areas of expertise (Nørtoft et al., 2018). The study was empirically guided, combining ethnographic fieldwork and co-design, drawing upon three different data sets:

1. Ethnographic data from the planning phase prior to the co-design workshops,
2. Data from the co-design workshops, including field notes and photos, as well as transcribed audio recordings from the last workshop feedback, and
3. Four semi-structured follow-up interviews with the local municipal stakeholders.

These semi-structured interviews were carried out by the anthropologist two months after the workshops, in which she did not participate (ensuring objectivity). The key topic of the follow-up interviews were the interviewees' reflections on the methods and the co-design

process, including how they had been inspired to use some of the same methodological elements in subsequent work with the same as well as other target groups. The interviews were analysed and organised into categories using thematic coding, which evolved as the analysis progressed. Topics of the categories included roles, collaboration, collaborators, contribution and design methods. The combined data sets represented a triangulation of methods, reflecting the multi-disciplinary research team, and collectively the qualitative analysis inductively formed a completion of the case (Schutt, 2012).

3. Collaborating on designing & carrying out an age-friendly co-design process

3.1 Planning & recruitment

The different workshops were planned in close collaboration between the local municipal stakeholders and the researchers. The local stakeholders were experts on their community, as well as their own disciplines, and each represented different perspectives relevant to creating AFCCs. The research team contributed with knowledge on co-design processes, as well as insights from ethnographic pre-studies conducted by one of the researchers as part of the AgeArc project.

In the months leading up to the workshops, the planning of the co-design process happened remotely via Skype between Denmark and Greenland, because the research team were based in Denmark. These meetings included establishing a common understanding regarding the aims and objectives from both a research and practice perspective. This included the individual professional resources in the project team, recruitment of workshop participants, workshop location and times, roles, facilitation and suitable design activities.

Recruitment was led by the Homecare Department's management team, their staff informing residents of the project on their daily care visits. Furthermore, an employee from the Culture and Sustainability Department joined them for a day of 'knocking on doors', with the aim of introducing herself to the residents while handing out invitations.

3.2 Workshop principles & facilitation

Prior to the first workshop, the research team briefed the collaborators about three main principles to work by and to make explicit to the older participants:

1. We cannot promise anything – ensuring transparency and avoiding disappointment if we did not receive subsequent funding,
2. We need the older participants in the project – they are the experts of their own everyday life and so we cannot realise the project without them, and
3. Everyone can take part – it is important to create a safe and inclusive space with a democratic focus, with no right or wrong answers, in which each participant's contribution is acknowledged.

Establishing the three principles was critical to the facilitation part, as the majority of the participants did not speak or understand Danish. Hence, the communication with the older people happened primarily in Greenlandic. This meant the research team and two of the municipal workers (who did not speak Greenlandic) could not be certain what terms were being used during the workshops when Greenlandic was spoken. The language challenge is a limitation to conducting research in contexts, where one does not speak the language, because of uncertainty as to whether the translations are true to the original meaning. However, one might consider that it is also a strength, since this requires the translations to be completed on a deeper level, not dwelling on one word, but rather negotiating the deeper meaning on a value-based level.

Prior to every workshop, the team held a briefing to outline the activities of the upcoming workshop, and again afterwards to debrief on what had worked well and what to take forward to the next workshop. The debriefing included both analysis of the design content and methodological considerations, including facilitation, workshop structure and effectiveness of the chosen design methods.

3.3 Workshops

A design process should never be considered linear, as stages will overlap and iterations will occur. So, the following Diagram 1 seeks to provide only a brief and conceptual overview of the co-design process.

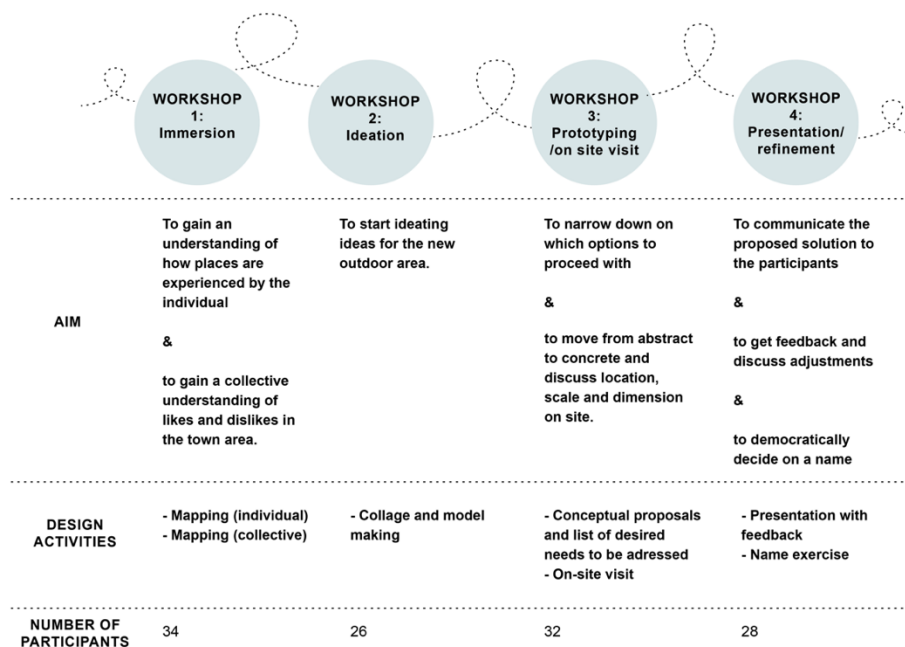


Diagram 1. Workshop outline

The design activities were structured around mapping of likes and dislikes in the existing outdoor areas, and identifying needs (Figure 3). Making collages and models, envisioning new ideas with the use of photos, pipe cleaners, wooden sticks, a map of the area and outdoor materials from the local area, such as rocks and moss (Figure 4). Subsequently, an on-site visit to the area occurred (Figure 5), and finally a workshop presenting and refining the new envisioned solution, which included an exercise about naming the area and giving it a new identity (Figure 6). If project resources are limited, design activities could be combined and take place during the same workshop. Our workshops lasted two hours which was needed in this setting with the language translation being time consuming. For any contexts which require such translation we recommend to allocate sufficient time for this to avoid exercises being rushed and not reaching the right in-depth level.



Figure 3. Participants are mapping likes and dislikes of local areas in workshop 1



Figure 4: Participants are making collages and models of new ideas for the area in workshop 2



Figure 5: Participants are out on an on-site visit during workshop 3



Figure 6: Participants during the design activities in workshop 4, which included giving the new outdoor area a name

4. Different perspectives on the age-friendly co-design process

The following insights from the empirical data will be presented with a four-fold perspective of the core members of the co-design process; stakeholders from the three municipal departments, as well as the older participants. The quotes from the municipal stakeholders have been translated from Danish to English. The quotes from the older people were translated from Greenlandic to Danish during the workshops, and then subsequently translated to English.

4.1 Homecare Department's perspectives

The management team from the Homecare Department were the main collaborators in the co-design process, and were involved in the planning and facilitation of the workshops. Other Homecare workers assisted participants during the workshops, but were not continuously involved, so their perspectives are not included in this study. The two managers are trained healthcare workers, and have their daily routines in the senior housing area, and so know the individual residents, their abilities and care needs.

Collaborating with the older participants from a co-design perspective was a new way for the Homecare Managers (HM) to engage with the seniors, leading them to experience a different side to this group of older people:

HM2: "And I think it was everyone who contributed to this. Even people that we maybe did not expect to contribute, because we do know the residents pretty well and also their mental state..."

The other HM added to this experience of how she also saw a different side of people she knew:

HM1: "But now in that workshop, I could feel how much adrenaline they [the older participants] had. They have so many ideas for this area ... And then when you explain it plain and clear, they become so engaged and their thoughts really start to flow ... I have never experienced this in my time [as a HM], not until now, and that is really nice."

As her quote shows, she also experienced that this affected her as a professional care worker, bringing her new insights into what creative design exercises can do for the older participants. It highlighted a new way to engage the older people, which she had not previously seen in her career.

These new ways of engaging with a group of people, whose capabilities you incorrectly presumed, was also highlighted in relation to the internal procedures of the Homecare Department:

HM2: "But also in terms of the collaboration, well, we were multiple departments working together for this project. And I think for my employees, for example, who have taken part as practical helpers, well they have really enjoyed being included in this, because this unlike what they usually do. Normally, they go to the residents [to their home] and see them in one way, but to experience them here, in a more dynamic way, and to sort of be excited together with the residents about this and what will be built. Or just that dynamic they [the residents] had when they took part in this [workshop process] ..."

Lastly, one HM reflects on how this participation had affected older people who, due to various obstacles, might not be involved in decision-making in later life:

HM2: "Yeah, well not to be involved like you used to be. And that might be a natural thing, because a lot of older people cannot cope with the same challenges as before. A lot of them [the older participants], expressed that they were very, very happy, and we can see that in the high turnout as well, that they felt, that they were the ones to develop this [new design ideas]."

This comment suggests the potential role that co-design could play in involving older people in general. In matters where they traditionally would have had a say, but due to lack of capacity are now left outside this decision-making. Finally, one of the managers suggested that co-design methods could be used to engage older people and their relatives in future projects around the housing area.

4.2 Culture & Sustainability Department's perspectives

The municipal worker from the Culture and Sustainability Department (CSD) has a background in communications and knowledge about citizen involvement. However, she has not previously worked with older people in this way. She had a distinct experience that the older people enjoyed participating, and that this approach would also broaden democratic decision-making at the municipal level.

CSD worker: "Well, you could feel that they were so happy about being taken seriously - really happy, and that we saw them and listened to their opinions. And that everyone should be heard ... I definitely think this creates a perfect framework for it [citizen democracy]. Because some of these older people, I think, they do not participate that much ..."

Her experience of the process also brings out insights useful for cross-sectoral knowledge sharing within the municipality:

CSD worker: "I am really satisfied. Very, very satisfied, and of course this [process] comes more natural to me, but I find it so positive that my colleague from the Technical and Environmental Department, who does not have a history or background, or how to put it, where you think about something like that, I mean these creative processes. It was so nice that he really thought that it [the process] was great and that he could see the value in it, and that he was like "we need to listen a lot more to our citizens". I just find that really great. I mean, if it could rub off on how we do projects where no one is being heard. That really made sense ..."

She clearly acknowledges and values the different backgrounds, cultures and working traditions within the municipality. She also expresses her gratitude about what others (without a background in citizen involvement) learned from taking part in this type of collaboration, all for the benefit of the citizens.

4.3 Technical & Environmental Department's perspectives

The municipal worker from the Technical and Environmental Department (TED) has a background in sustainable engineering. He had not previously engaged with older people as a target group.

Through his interview he explained his thoughts about how the municipality usually involves citizens, and how he thought they could benefit from this process when involving older people:

TED worker: "Well, it resembles public meetings, right ... when you have to, when there is something important, a larger project in this town, where you involve citizens in coming up with ideas. But not as detailed as this ... this has a more user-friendly approach, also because these are older people with reduced abilities ... right?!"

For him to have experienced interacting with older people directly, by actively taking part in the co-design process and the workshops, suggests an increased understanding of what involvement with an ageing user group requires, as well as the potential it holds for future collaborations within the municipality:

TED worker: “And now tomorrow, for example, we are meeting to see what will be over here [in a certain area] and myself and two of the others from the project team [one from each department], have actually discussed, if there was any of the things we could use again, like models or methods. And we have agreed that we will use one method for this and another method for that, to get a better understanding of what they [the older participants] would like to do with the area. Also, this is joyous, I really like it when people work together across different departments in a dynamic and effective way. I really feel good about that, even when there was not a lot of time for this ...”

This statement reflects not only a sustainable collaboration within the local group, but also the continuous communication around developing methods that the different stakeholders find suitable in the ongoing work. Just like the research team and the local stakeholders had initially collaborated around designing and adjusting methods, this is now fully taking place in the local context without the research team.

4.4 Older Participants’ Perspectives

In the last workshop, the project team opened up a very informal plenary discussion about how the older participants had experienced the co-design process and workshop.

Insights from this session include a genuine appreciation of how the process had brought people together, something that several of the participants had clearly missed. One woman (W) explained:

W4: “I am really happy, that this process has been so good. And that thing about bringing people together, it is like it is only just starting now. It could have been like this from the beginning when it [the housing area] was built.”

Another man (M) added to this opinion and highlighted the importance of bringing people together, while still allowing for a difference in opinions to be shared:

M3: “This thing about workshops and bringing people together here, that is really nice. I hope that, in the future, there will be more of these [workshops] where you bring people together who can have different opinions.”

Having something to look forward to, feeling valued and contributing to something important was another more social outcome of the process:

M3: “We have something to look forward to, and we can tell other people about this project, we have started, which is really nice. Also, because it is a process that will keep going.”

His use of the pronoun ‘we’ when saying ‘we have started’ indicates a clear shared ownership of the process and project.

Lastly, the future perspective of co-design in policy-making was touched upon by one of the participants. People clearly want to have a say about things, but they had not previously experienced a mode of interaction where they felt involved in decision-making:

M1: “There should be more of these kinds of events, because every time political decisions have to be made, it is like no one is ever really being asked before decisions have already been made. So, this is a good foundation for this too.”

5. Significance of an age-friendly co-design process

In this section we shall discuss the empirical insights in relation to the research question: What is the significance of an age-friendly co-design process in a multi-stakeholder collaboration when designing AFCCs?

5.1 Crossing boundaries & establishing a shared language around age-friendly co-design

This project was initiated from practice (not research), and hence there was already dialogue and early community collaboration on going when the authors became involved. However, the co-design approach and methods provided very practical contributions regarding how to develop a shared language through co-design tools. When various professions possess different interests and bring different stakes, such planning and preparation is important and should not be overlooked (Brandt & Eriksen, 2010b).

The empirical data shows that co-design contributed to stakeholder collaboration from a three-fold perspective: between the different municipality stakeholders, between the municipality stakeholders and the older people, and among the older people themselves. Although all stakeholders had their own initial interests, the necessity of crystallising the co-design mindset and approach together; co-designing context-specific design activities and processes required stakeholders to cross boundaries, and to start negotiating some of their interests at a very early stage. This also laid the foundation for an infrastructure that is embedded in the local context (Björgvinsson et al., 2010). Co-design took on the role of bringing stakeholders together beyond their professional expertise and agendas, collaborating around ‘ageing’ in a shared local context.

This was done through creating a shared language, based on values and through co-design tools, collectively engaging in the early process of designing and contextualising the tools to fit the specific social and physical context (Brandt et al., 2012). Combining a co-design approach and best practice from each of the municipal departments, municipal stakeholders with very different traditions had the opportunity to engage in a dialogue regarding ‘how’ to create a process that reflected the specific physical, political and social contexts.

Participants further declared that the format of co-design workshops had helped bring the community together, which was something they had missed ever since the area was built, thus indicating a social need. This reflection emphasises the importance of complex socio-spatial interdependency between living in a community and belonging to a community (Völker et al., 2007), relating to several of the topics from the WHO guidelines (World Health Organization, 2007). This aspect should not be overlooked in the process of designing AFCCs,

and underscores that collaborative community spaces should perhaps be considered ahead of physical neighbourhood spaces.

In relation to ageing, combining stakeholders with knowledge about a specific group of older people (e.g. care professionals) with those with other concerns (e.g. planning professionals), offered an opportunity to bring ageing issues to the forefront of a process. Furthermore, building on the existing knowledge and strengths which is important when creating the multiple layers of AFCCs (O’Hehir, 2014). When it comes to older people, prior co-design studies have shown that recruitment can be difficult (Brandt et al., 2010; Malmberg et al., 2016). Hence, collaboration with stakeholders who have their daily work routines with older people, and so have established trust with them, is enormously important for recruitment.

5.2 Revising perceptions of older people’s capabilities

Scholars working with ageing, around technological solutions, have previously criticised the use of participatory design as a ‘tick box exercise’. The main aim is demonstrating that what is done is valid, but with little willingness to engage with older people in a genuine and open manner (Lindsay et al., 2012). In our project this ‘open manner’ proved to be extremely important. Articulating and acting upon this ‘openness’ from the perspective of the different stakeholders, illustrated to older people that they were being taken seriously on multiple levels by the municipality and the research team. This, of course, cannot be forced, instead needing to be fostered from a realisation that local people are knowledgeable (Littlechild et al., 2015) and should be considered experts of their experiences (Sanders & Stappers, 2008; Thomson & Koskinen, 2012). Articulating this knowledge and distributing agency in the form of creativity and expertise, to a group of older people who had not previously experienced this kind of participation in their current setting, proved to be tremendously important in this project for two reasons: it helped to revise existing perceptions of older people and their capabilities among the municipal stakeholders, and it fostered engagement and a feeling of making a valuable contribution among the older people.

Revising the perception of what older people can contribute with in design processes brought out insights from two stakeholder groups. The TED worker, who had no prior experience and hence no expectations regarding their engagement and contribution. Also, the HMs, who thought they knew a certain group’s capabilities. They used the terms ‘adrenaline’ and ‘dynamic’ during the interviews, indicating their surprise at the extent of older peoples’ contributions. Experiencing this contributed to their own professional pride, and also offered potential for re-imagining other situations where such methods could be useful, e.g. in relation to the older people and their relatives.

Co-designing with particular groups can begin to address established perceptions, such as what constitutes an expert and who possesses creativity, through embracing and encouraging multiple ways of contributing (Sanders & Stappers, 2008, 2013; Scott, 2017). This requires regarding contribution as more than just a ‘mental’ capacity issue, as referred to by

one of the HMs. Instead, engaging in creating tools to empower people who have valuable experiences to contribute, but might not be able to express themselves in a traditional way.

Furthermore, the revised perception that older people had of themselves, included their potential for contributing with their knowledge to future decision-making projects within the local municipality. This inscribes their contribution into a societal context, where co-design offers older people an opportunity to contribute on a larger scale, in the broader municipality as well as to society, which is a notable and valuable outcome from working at the level of local contexts (Buffel et al., 2018).

6. Conclusion

We sought to shed light on the significance of an age-friendly co-design process, when engaging with multiple stakeholders in designing AFCCs. Recommendations for future co-design processes with older people include engaging professional stakeholders as early as possible, and in the actual planning and co-design of the process. This is because they hold valuable knowledge about local and social contexts, and hence are crucial for the recruitment of participants, as well as for tailoring and anchoring co-design processes in local community structures. As also shown, different professions have different working cultures and processes. Therefore, to support an effective way of collaborating, a shared language needs to be negotiated and established. In this regard, a thorough introduction to the values and philosophy of co-design as an approach should not be underestimated.

The co-design approach further offers a way of empowering older people in ways that professional stakeholders did not envisage, and revises the perception of what older people can contribute with in such processes. If methods and the process are planned and adjusted to include the diversity of a group, it can generate energy and a different, unexpected, dynamic side to individuals and groups you thought you knew.

When designing AFCCs, the community dimension should not be taken for granted, since feeling like a community turned out to be an important social outcome of participating in the co-design process. Also, perspectives from local stakeholders can inform local communities, including care and planning professionals when challenging existing modes of involving older people. Such perspectives can benefit not only the local context, but also the greater ageing society when developing future AFCCs.

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