



UHI Research Database pdf download summary

Tackling ageism in socio-technical interventions

Wagner, Sarah; Ogawa, Akiko

Published in:

Digital Ageism: How it Operates and Approaches to Tackling it

Publication date:

2023

The re-use license for this item is:

CC BY

[Link to author version on UHI Research Database](#)

Citation for published version (APA):

Wagner, S., & Ogawa, A. (2023). Tackling ageism in socio-technical interventions: An actor-network analysis of Digital Storytelling workshops with care home residents. In A. Rosales, M. Fernández-Ardèvol, & J. Svensson (Eds.), *Digital Ageism: How it Operates and Approaches to Tackling it* (pp. 210-228). Routledge.
<https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9781003323686-12/tackling-ageism-socio-technical-interventions-sarah-wagner-akiko-ogawa>

General rights

Copyright and moral rights for the publications made accessible in the UHI Research Database are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights:

- 1) Users may download and print one copy of any publication from the UHI Research Database for the purpose of private study or research.
- 2) You may not further distribute the material or use it for any profit-making activity or commercial gain
- 3) You may freely distribute the URL identifying the publication in the UHI Research Database

Take down policy

If you believe that this document breaches copyright please contact us at RO@uhi.ac.uk providing details; we will remove access to the work immediately and investigate your claim.

11 Tackling ageism in socio-technical interventions

An actor-network analysis of Digital Storytelling workshops with care home residents

Sarah Wagner and Akiko Ogawa

Digital Storytelling has been gaining interest in gerontological research to encourage social participation (Alexandrakis et al., 2020; Hausknecht et al., 2019) and intergenerational understanding (Hewson et al., 2015; Loe, 2013). Digital Storytelling involves the production of a 2- to 5-minute-long video story comprised of still images timed to the storyteller's narration as a voiceover. As a practice, Digital Storytelling was designed to enhance the storyteller's sense of agency by enabling them to become the author of their own life events (Lambert, 2013). Digital Storytelling workshops with older adults perhaps have been most impactful as education tools. When used in gerontology education, Digital Storytelling has been found to heighten students' empathy towards older generations (Hewson et al., 2015; Loe, 2013). However, older old individuals with complex care needs are typically excluded due to workshop design and location (Alexandrakis et al., 2020, p. 13; Hausknecht, 2018, pp. 489–490; Hewson et al., 2015, p. 140).

In this chapter, we examine how Digital Storytelling in care home contexts can both confront and reproduce forms of deep-seated ageism and the social imaginaries associated with later life (see Higgs & Gilleard, 2021). We reflect on Digital Storytelling workshops we conducted with six 80+-year-old care home residents in Nagoya, Japan and Victoria, British Columbia, Canada. The workshops aimed to support participants to share their life experiences and, in this way, to strengthen their sense of agency within the care home context. We draw on participant observation and evaluation interviews with workshop facilitators, staff and participants to describe how the material conditions of our Digital Storytelling workshops influenced older care home residents' levels of agency. Our interest in this chapter is to examine how a socio-technical intervention that takes participant empowerment as its aim still can be undermined by forms of age discrimination. Our analysis forges connections between key factors that influence older adults' levels of agency within socio-technical interventions.

Examining care home residents' agency in intervention studies is particularly relevant as most communication media studies in care homes have been intervention-oriented (Wagner, 2022). Moreover, studies

show that it has been challenging to meaningfully involve older adults in socio-technical interventions in general. A review of 40 empirical studies that involved older users in technology design found that the majority portrayed participants in terms of age-related deficiencies, upheld stereotyped views of older adults' technological needs and failed to provide meaningful forms of participation (Fischer et al., 2019). It thus comes as no surprise that socio-technical interventions targeted at older adults have had disappointing outcomes (Peine et al., 2015) and that their positive impacts on aims such as enhanced social engagement often are not lasting (Chen & Schulz, 2016).

By aiming to give voice to participants, Digital Storytelling has the potential to overcome the shortcomings of an “interventionist logic” (Peine & Neven, 2019). Intervention studies targeted at older adults typically address issues of physical and cognitive decline, reconfirming stereotypes about age-related deficiencies (Givskov & Deuze, 2018; Peine et al., 2015). The interventionist approach typical to ageing and technology studies not only (re-)establishes ageing as inherently negative but also positions older adults as outside of technological change and reduces socially and culturally diverse processes of ageing to what can be easily measured (Katz & Marshall, 2018; Peine & Neven, 2019). Whereas youth's technological innovations are followed and elaborated on, older adults' creative uses of and unique needs for technologies have been overshadowed by intervention-oriented studies that address stereotyped notions of old age decline. This is particularly the case in care home contexts where there have been very few everyday life studies that involve residents' perspectives (Fernández-Ardèvol et al., 2017). This trend in research agendas reflects widespread ageist ideas about the incapacity of care home residents to exercise choice or voice (Gilleard & Higgs, 2017).

The social imaginary of the care home resident as frail, inactive, and impaired starkly contrasts public discourses about successful ageing (Higgs & Gilleard, 2021). In many countries, “active”, “successful” or “healthy” ageing policies have encouraged older adults to engage in physical exercise and social activities. Such policies typically target recent retirees and individuals who are physically capable (e.g., Government of B.C., 2021; Ministry of Health, Labour and Welfare of Japan, 2022) and aim to prevent the need for long-term care (e.g., Ministry of Health, Labour and Welfare of Japan, 2016b). Successful ageing paradigms have received a host of critiques as they not only reduce diverse understandings of well-being in later life to a normative standard but also invisibilise the role of social and economic inequalities in determining old age outcomes (Comunello et al., 2023; Katz & Calasanti, 2015). By placing the onus on individuals to achieve a healthy, independent old age, narratives of successful ageing may underlie or justify policies that fail to provide services for those deemed to be “unsuccessfully” ageing. That is, when old age frailty is characterised as the result of individual choices, there is a reduced social responsibility to address the very real influences

of poverty, discrimination, and health inequalities on well-being in later life. Moreover, that physical and cognitive deterioration are so strongly associated with residential care, old age care policies and practices can fail to address residents' individual social needs or recognise their social agency (Wagner, 2022).

Social isolation in institutional care has been long-recognised as a detriment to health and well-being (Cotterell et al., 2018; Prieto-Flores et al., 2011). In both Canada and Japan, the shortcomings of large institutional care settings have been gaining increasing policy attention (see Health Standards Organization, 2021; Ministry of Health, Labour and Welfare of Japan, 2016b). In Canada, numerous media reports have documented poor living conditions, neglect and emotional and physical abuse in institutional care (Estabrooks et al., 2020). While there has been growing interest in small home-like settings (Wada et al., 2020), publicly funded long-term care sites in British Columbia on average have over 90 beds (own calculation based on data provided in Office of the Seniors Advocate in B.C., 2021). In Japan, home-like, community-based care models have been a key component of the long-term care system since its reform in 2000 (Ministry of Health, Labour and Welfare of Japan, 2016a). Small-scale sites, often housing fewer than 20 residents, are integrated with other community-based services and day programs. This provides a more home-like setting coupled with opportunities for residents to regularly leave the facility, which contrasts the large, institutional care settings typical in British Columbia.

The workshops discussed in this chapter were conducted in three very different care settings: a small privately run care home on the outskirts of Nagoya; a large, publicly funded long-term care site in Victoria, British Columbia; and a mid-sized, high-end care home in the city centre of Nagoya (see [Table 11.1](#)). The workshops also span two very different long-term care systems with diverging strategies to promote social engagement. Whereas the long-term care system in Japan pairs small, home-like settings with community-run day programs, the funding system in British Columbia delivers on-site recreational programs at typically larger care settings. Rather than comparing long-term care contexts or workshop outcomes, this chapter *juxtaposes* (Marcus, 1995) three uniquely designed workshops with the intent of drawing connections that may have relevance across institutional and cultural settings. By bringing together the unique challenges faced in these contextually diverse workshops, we develop much-needed insights into how care home residents can be included meaningfully in socio-technical interventions. More specifically, our analysis outlines how the empowering potentials of Digital Storytelling are contingent on participants confronting forms of age discrimination that reverberate through technologies, care services, facilitators' expectations, and participants' own self-perceptions.

Methodology

Workshop design

We used a collaborative Digital Storytelling method designed by Ogawa and colleagues (Ogawa & Ito, 2010; Ogawa & Tsuchiya, 2017) that weaves together the participant's story through a series of ice-breaking and discussion sessions. The workshops are designed to support individuals who find it difficult to narrate their life experiences or voice their opinions. The facilitator works with the participant to uncover the “seeds” of stories such as untold experiences, frustrations, and small questions. The digital story results from the discussion and interview sessions of the “pre-story space”, or the portion of the workshop where the facilitator and participant collaboratively develop a story by piecing together the participant's narrations. The completed story is owned by the storyteller, who chooses if and how it will be shared. The workshops conclude with a preview event where participants are invited to share their stories. In this project, we catered the format of our workshops (summarised in [Table 11.1](#)) to participants' preferences and staff needs at the care sites.

Workshop 1 was conducted over three weeks in November 2020 at a small residential facility housing 16 residents on the outskirts of Nagoya City in Japan. The workshop involved three female residents: 82-year-old “Kiyama-san”, 95-year-old “Aikawa-san” and 88-year-old “Hamasaki-san”.¹ Each participant was paired with an undergraduate informatics student. The workshop was conducted through three in-person meetings and one online meeting and concluded with a preview event. The preview

Table 11.1 Characteristics of the Digital Storytelling workshops

	<i>Workshop 1</i>	<i>Workshop 2</i>	<i>Workshop 3</i>
Location of care home	City centre Nagoya, Japan	City centre Victoria, Canada	Suburbs Nagoya, Japan
Size of care home	16 beds	115 beds	48 beds
Workshop format	Blended (Face-to-face meetings + video calls)	Virtual (Phone calls + video calls)	Virtual (Video calls)
Participants ¹	Kiyama-san, 82 years Aikawa-san, 88 years Hamasaki-san, 95 years	Theodore, 83 years Rupert, 83 years	Inoue-san, 88 years
Facilitators	3 undergraduate students	First author	3 graduate students

was attended by six residents, three staff members, the three facilitators, and the authors. The participants' stories were shown on a large television screen and the facilitators and participants were invited to provide comments.

Workshop 2 was conducted in an online format in January and February 2021 with two 83-year-old men ("Theodore" and "Rupert") residing at a 115-bed care facility in Victoria, BC, Canada. The first author facilitated the workshop. Meetings were conducted individually by both phone call and video call. Participants' stories were shared in two preview events. The first preview was hosted at the care site in Canada and was attended in person by a staff member and four residents. In addition, three of the participants' family members, the authors, and two graduate students at Nagoya University attended online. A second preview was hosted online and combined the stories from Workshops 2 and 3.

Workshop 3 was conducted online in February and March 2021 with an 88-year-old man residing at a 48-bed care facility in central Nagoya, Japan. This workshop paired one participant with three graduate informatics students. The facilitators and authors met with the participant and a staff member by video call over three meetings. The participant's digital story was presented at an online international preview event in March 2021 and was attended by facilitators, Workshop 2 and 3 participants, staff from Inouesan's facility, the authors, and an academic colleague.

Actor-network approach

Research approaches from Science and Technology Studies have earned attention in gerontology fields as a middle ground between gerontechnology, with its focus on technology design, and the social and cultural approaches of ageing studies (Peine et al., 2015). Actor-network theory (ANT), best known for its equal ontological treatment of human and non-human actors, seeks to understand the mechanics of power and agency (Latour, 2005; Law, 1992). From an actor-network perspective, the task of social inquiry is to trace *how* material elements interact to produce what we typically take for granted as given objects or social actors (Latour, 1996). Rather than starting with an object of inquiry, such as an institution or a group of social actors, and looking at its effects, ANT wants to understand how objects continually gain reality through their material attachments. An actor-network approach is about examining in detail the interactions of material elements and the ways in which they (re-)produce the relative influence of different actors such as humans, discourses and technologies.

In engaging with an actor-network analysis in this research, we examine how the material components of our workshops – from human contact and spoken words to handwritten notes and digital interfaces – produced and/or destabilised the participants as storytellers. In this way, we intend to build

an understanding of the material conditions of participant agency within the workshops. The ANT approach, most importantly, instructs our analysis in two ways. First, it asks us to overcome our ontological judgments about what kinds of things can impact the workshop outcome. In this respect, we look beyond human actors to examine the roles of screens, video-calling architectures, and notepads. Second, it provides a material way of understanding the impacts of context or space. In an actor-network approach, the “context” has reality insofar as it acts within the network. Along these lines, we do not disregard the workshop room as a background setting but trace the actions and interactions of the room’s elements. In our results section, these interactions take centre stage and frame much of our analysis. By examining the relations between elements of the workshops’ technologies, built environments, and human interactions, we aim to develop a rich understanding of the factors that (dis-)enabled participants to influence the workshop process.

Research methods

Our analysis draws on four types of data. (1) Participant observation notes. The first author attended all in-person and virtual sessions and took detailed notes about the actions and interactions of participants, facilitators, staff, technologies, built environments, and material objects. (2) Evaluation interviews with participants. Facilitators conducted short interviews (5 to 20 minutes) with participants following the previews. Participants were asked to reflect on what they had learnt and valued about the workshop, as well as the challenges or difficulties they had experienced. (3) Facilitator reflections. Student facilitators submitted an evaluation sheet following the preview. Student facilitators also partook in two planning meetings with the authors, where their reflections on the story-making process were recorded. The first author’s reflections as the facilitator of Workshop 2 were included in the participant observation notes. (4) Staff reflections. Staff members partook in short evaluation interviews (3 staff from Workshop 1) or completed a short, written questionnaire (8 staff from Workshops 2 and 3). Our analysis draws on the reflections of staff, facilitators, and participants, as well as detailed observations about human interactions, devices, and built environments in the workshops. All research documents were analysed using an inductive, thematic coding approach. The data analysis software MAXQDA (VERBI Software, 2019) was used for organizational purposes.

In what follows, we arrange our findings across two parts. The first part examines tensions in the story-making process with a particular interest in the interactions of the workshops’ material components, while the second part considers evaluations of the workshop outcomes. The discussion section brings these findings together to analyse the mechanisms of age discrimination within the workshops.

Co-creating a story

Tensions over story content

Most facilitators and viewers expected older adults to produce triumphant stories about their past achievements. Most participants, however, wanted to talk about economic hardships, ill health, death, family problems, or the difficult experience of moving into long-term care. For example, Workshop 1 participant Kiyama-san mostly spoke about her economic troubles and the difficulties she had in her youth trying to find enough food. The facilitator, however, was most interested in her happy recollections of family gatherings. In our planning meetings, the other student facilitators also explained they were hesitant to focus the stories on hardships. The experiences described by participants in Workshop 1's initial meeting conflicted with what the facilitators were hoping to represent. In the subsequent meetings, Workshop 1 facilitators elicited further details about the topics that participants wanted to talk about and the stories they created drew connections between the participants' past hardships and their present-day situation.

Following Workshop 1's preview event, staff commented that the stories were "darker" than they had expected. A male staff member explained,

It would have been nice to have something bright and cheerful. The stories were maybe a bit heavy. It would be good to add some colourful photos instead of old black and white photos which make us feel down. ... The participants' narration sounded very serious but not everything was so dark and heavy. I think it would be good to focus on some happy experiences and include those in the story.

In Workshop 3, the facilitators also wanted to emphasise happy memories and achievements from the participant's youth. After the first meeting, each facilitator had in mind a different achievement they felt should be the focus of the story. Yet, Workshop 3's participant, Inoue-san, had also talked about his hardships in the present, the death of his wife, the difficult decision to move into long-term care, and his fear of dying alone. The story was lengthened in the second meeting as Inoue-san wanted the story to bring together his difficulties with his achievements. One of the facilitators explained, "[Inoue-san] had a strong will, and so when he felt uncomfortable, he clearly said, 'No, no, I don't want it that way,' so I think we made a story that was true to his intentions".

Participants in Workshop 2 also expressed clear ideas on what they wanted to portray in their stories. Theodore and Rupert wanted to draw attention to their hardships to show resilience. They also wanted to share experiences from their everyday lives in long-term care and their stories addressed what love is like in one's later years and the experience of social isolation. At the preview, where participants showcased their stories, an audience member

commented, “In our society we don’t really think about the really old people. This [the Digital Storytelling] is really important to talk about what their lives are like in long-term care”. The stories created by Theodore and Rupert did not present the expected legacy stories. Rather, their stories brought attention to later life frailty, and Theodore’s story directly confronted the death taboo. He explained, “The end result, the message, is actually about my last days sort of thing”.

While some participants wanted to use their digital stories to talk about dying, this generated discomfort and tension in the pre-story space. For example, Workshop 3 facilitators did not want to include imagery that was symbolic of death, such as a photo of falling leaves. A facilitator explained, “I am hesitant to put such a negative image that reminds us of death in an 80-year-old’s story”. Being able to confront and challenge taboos around death was an empowering moment for Theodore. Getting experiences such as these included in the story required participants who were engaged in the story-making process.

Engaging participants through person-person and person-object relationships

Sometimes, it was challenging for the facilitators to develop rapport with the participant and to understand their experiences. This was particularly the case in Workshop 1, where the participants often did not tell linear narrations, nor did they always remember what was discussed at previous sessions. A Workshop 1 facilitator explained that she found it difficult to understand the participant, Hamasaki-san, as she described events out of order and moved between topics unexpectedly. Yet, at the same time, the facilitator explained that she appreciated Hamasaki-san’s efforts to explain in detail what life was like in her youth. In the in-person meetings, Hamasaki-san used dramatic hand gestures and leaned in close to the facilitator to try to help the facilitator understand her experiences. Her hand gestures added a sense of ownership over her words, and she repeatedly and enthusiastically talked about “my digital story”. The online meeting did not change her level of engagement; she used hand gestures to describe her points, leaned in close to the screen, and contradicted the facilitator when she did not agree or wanted different photos.

While Hamasaki-san brought energy and contradiction to all phases of the story-making, another participant of Workshop 1, Kiyama-san, entered each meeting with a low level of engagement. She gave short, quiet replies to the facilitator and often looked away or down. As the meetings progressed, it was her interactions with material representations of her storytelling that engaged her. When the facilitator wrote Kiyama-san’s experiences on sticky notes, she reached out to touch the ones of interest. As the story started to take on a material form, she became more invested and began to elaborate on her experience, speaking louder and more freely. Later in the meeting,

she held the facilitator's phone as he showed her photos of his own family. As Kiyama-san touched the photo of the facilitator's sister on the screen, her understanding of the facilitator was heightened, and they continued to talk freely beyond the session's end.

In the latter half of an in-person meeting in Workshop 1, one end of the room was loud and lively as Hamasaki-san and Kiyama-san teased and contradicted the facilitators, while at the other end of the room, Aikawa-san and her facilitator built up a quiet, emotive bond while looking through a photo book of a famous festival in her hometown. One of the facilitators later reflected on the story-making process in Workshop 1 as follows.

Each facilitator had a completely different view on the information given and a different way of asking questions. I feel that if we had been assigned to work with different people, their stories would have been completely different.

How engaged participants were in the meetings and how active they were in presenting their own positions and standpoints shaped the level of agency they had in the co-creation of their story. Participant engagement was impacted not only by person-to-person relationships but also by material manifestations of the story and by interactions with other participants and staff. In addition to the touching of notes and papers, interactions with other participants incited Kiyama-san to engage in the project. She expressed nervousness along with laughter as she looked ahead to her story being shared in front of the other participants. Similarly, for Workshop 3 participant, Inoue-san, the opportunity to describe his life in front of an audience animated him. He smiled and chatted freely as he introduced the student facilitators and authors to objects in his room, his books, a photo of a festival, and his large television and computer. Surrounded by these objects, Inoue-san had the confidence to voice his opinions.

As in Workshop 3, Workshop 1 participants interacted with material objects in their room during the online meeting, and this helped them to engage in the video call. As in the in-person meetings, Workshop 1 participant, Kiyama-san, became more involved in the online meeting after she handled physical papers related to the story. Staff helped her take out a few pages of printed personal photos. She waved the papers around as she spoke, leaned in closer, and showed a photo of herself to the screen. While she had started the meeting sitting far back from the screen, quietly staring ahead, her physical interaction with printed photos prompted her to focus on the screen and chat, joke, and even interrupt the facilitator to provide further information. The touching of photos was an important way for participants to connect with the story and express their opinions. While Workshop 1 participant, Aikawa-san, did not have any printed photos, she touched the photos displayed on the tablet screen as she informed the facilitator that the images of fishing nets were not the right type.

Having staff present during the online meetings provided an opportunity for in-person interactions that helped to refocus the participant on the activity. Aikawa-san, for example, sat very close to the staff member, with shoulders touching, which seemed to provide her with a sense of support, while Kiyama-san teasingly batted her papers at the staff member. These interactions created a relaxed and supportive physical environment within which participants felt they could express their opinions or even contradict the facilitator. In Workshop 2, staff were not present at the meetings, and the participants' levels of engagement relied more on their interactions with the facilitator and on the mode of communication. While Workshop 2 participant, Rupert, spoke more freely over the phone, Workshop 2's other participant, Theodore, was more engaged and open over video call. The unique ways these two participants interacted with these technologies are discussed in the next section.

Negotiating remote contact

Workshops 2 and 3 involved participants who regularly used the Internet. Workshop 2 participant, Theodore, for example, had bought a tablet in response to the social distancing measures. He explained,

I was a dinosaur in the area of electronics and so I've only had this one for a couple of months now, but I wasn't afraid of it. I just didn't understand any of it. So I just put it aside and just waited thinking if I don't understand it, I don't need it. And that's when I realized that I didn't pay attention to what these things really were, and, I tell you, what an advantage it can be ... I'm having a whole lot of fun with it. It opens up a whole new thing for me. I don't get bored around here anymore. ... I can make my own activities. Like this morning, I'm just playing Crib [Cribbage] with the machine.

Theodore's tablet allowed him to see old video clips, play games, listen to music that he hadn't heard in years, and talk with his daughter. While both Workshop 2 participants had their own Internet-enabled devices, the workshop began with a phone call to allow for direct contact with participants without burdening staff time. The phone call with Theodore, however, also required staff assistance. Theodore usually communicated with others using his tablet and was not accustomed to receiving phone calls. After the phone call connection was made with staff help, the first meeting covered topics introduced by the facilitator. Theodore's descriptions over the phone were more factual than emotional. For the second meeting, staff helped Theodore set up a Zoom video call. When speaking by video call, Theodore reflected intimately on his life events and took direction in leading the conversation. Later, Theodore explained that video call was a more intimate form of communication for him than phone call and that he had never liked the phone.

The other Workshop 2 participant, Rupert, regularly used Skype to call family members, so a Skype call was planned for the second meeting. However, this turned out to be challenging as Skype requires users to first share their profiles. Rupert's tablet was not set up to receive emails, and his Skype profile was not connected to the email address that he knew. After many failed attempts, the second meeting was also conducted by phone call.

In both phone call meetings, Rupert spoke quickly and unfiltered, and he shared his emotions. For the third meeting, staff helped Rupert to start a Zoom call on his tablet. The mood of the conversation changed significantly. Rupert was more formal and composed; he spoke slowly and more factually. Later he explained that he was "learning the habit of speaking carefully, deliberately" as he was concerned that his way of speaking was not understandable. The Zoom app changed the interaction between the participant and facilitator as it showed the participant himself, a man with Parkinson's. Rupert explained, "I am standing there, with these hands shaking, twitching around and talking... [On the Zoom call] I can see myself and see my own words".

Workshop 1 participants also reacted to the self-objectification brought about by digital devices. When meeting in person, the participant Hamasaki-san enjoyed hearing the facilitator tell her story in front of the group; she laughed and joked with staff and provided more details with pride. She was not, however, interested in hearing her own voice played back to her. She agreed to say only a few short phrases for the recording. The facilitator explained, "The story we made is a fusion of [Hamasaki-san]'s voice and my voice. By using the two voices together, I feel that I was able to create a work that reminds people of both the present and the past".

Digital devices presented new forms of interacting with oneself and with others and created new kinds of challenges when trying to connect. All video calls in this research required staff mediation. In Workshop 2, staff set up the Zoom calls with a Meeting ID provided by the facilitator and then left the room. This allowed for long, rambling conversations, and with Theodore, a level of openness and warmth as in a face-to-face meeting. He explained, "We're communicating from this distance from Canada to Japan ... and it's just like you're here in the room when we're talking". Yet, without staff help, Theodore could not connect by Zoom and this was a task not recognised in staff workload. The coordinating staff member explained,

I thought that I would have to sit with both [Theodore] and [Rupert] during their Zoom calls with Sarah and I kept thinking 'How am I going to fit that into my daily schedule?!' Honestly though, it flowed so easily ... and it just became part of my day-to-day tasks for the past month.

In Workshops 1 and 3, staff attended all online meetings. Staff presence created a different kind of impact on participant engagement; it provided in-room familiarity and physical contact, as discussed above. Yet, staff presence

also limited opportunities for the facilitator and participant to build a unique relationship. Moreover, staff presence put limits on the conversational flow as meetings were scheduled with pre-defined time limits. Staff at all three care homes had tight schedules that did not include designated time for digital support. A staff member of Workshop 2's care home explained,

The main challenge that I can see happening for this kind of activity in a long-term care setting would be there not being a person to ensure that these Zoom calls happen and can be scheduled and set up for the resident. Most likely the Resident won't be able to connect to Zoom themselves or remember how to do it each time, so you would need to have that one staff member be diligent and efficient.

Promising outcomes

Redefining oneself

Some participants felt the workshop incited them to develop a new perspective on their own lives. Rupert explained, "It clarified things to formulate my impression of everything that's happened. It has been very good for me to put the things in words that I wanted to talk about and have thought about. I'm very happy, very glad to have made that video". Rupert's story sent the message to others "not to give up, not to despair". He explained,

You know, your life becomes whittled down, so it's like you're losing freedom of all kinds. If you want to go out and take a walk, you can't do that. But for fresh air, there's a little garden here I go to. ... I'm able to find things to do here, meaningful things to do. Exercise classes. Gradually things are starting to come back in again, in spite of the close down, the lockdown, here. So, I feel optimistic.

Sending his message to others helped him to find meaning in his own life events and to look ahead with optimism. Similarly, a Workshop 1 facilitator explained about the participant, Kiyama-san, "It was interesting that [Kiyama-san] felt that she could learn more about her own life by listening to her [own] story". While some staff felt the stories were too "dark and heavy", as discussed above, others described the importance of reminiscing for understanding oneself. The workshops provided a space for residents to reflect on the difficult memories they usually do not have an opportunity to talk about. Staff explained,

The students were listening to stories that we don't usually hear about. The residents were telling them things they don't talk about with us. ... It's good now to see that they are thinking about such things, and it also makes the residents themselves feel nostalgic.

Aikawa-san reported that the most valuable part of the workshop for her was the nostalgia she felt. While Aikawa-san was happy to share her story at the preview, it was deleted thereafter upon the request of family members who did not want to bring attention to her hardships. The story confronted her family's expectations for a positive, legacy story. Aikawa-san, however, appreciated the opportunity to reflect on her past and share her experiences. She explained, "I remembered about the past. It made me nostalgic. Tears came to my eyes".

While the nostalgia Aikawa-san felt impacted her significantly, other participants reported that the story-making process had little impact on their own thinking or emotional state. Hamasaki-san explained, "In this activity in general, it was good to look back and remember the old days. There was no change in my thinking during the activity, but I felt nostalgia telling my story about fish". Similarly, Theodore explained, "I just expressed what I feel and have seen about my past and so on. So, it hasn't really had any change in my thinking here or anything". Theodore explained that he regularly reflects on his own life – "I have been reminiscing, and that sort of thing, nostalgia" – so the story-making process did not bring up new emotions or thoughts.

Influencing others

What was important about the workshop for Theodore was the opportunity to share his message with others. He explained, "It was more about bringing it out, you know what I think about into the open". As discussed above, his story influenced audience members as it made them stop to think about everyday lives in long-term care and confront their own ideas about death. The story also had an emotional impact on his family members at the preview. He explained, "They [his daughters] seemed to really enjoy it. [One of his daughters] was moved to tears".

As Theodore, Rupert enjoyed the opportunity to influence others. He explained,

[In the video] I was bringing encouragement to people when my whole body was moving and twitching around. It's very strange ... A Parkinson's guy twitching around and telling you to be optimistic and positive. I think it makes an impression on people.

Rupert had been worried that people would not be able to understand him: "I am pleased with the impression it had on other people. Everybody else had understood me. I thought I was not speaking very coherently, but apparently, I was". Being able to see his message understood and have an impact on others gave Rupert confidence. He spoke with enthusiasm and pride about his story. Other participants also gained energy, which was noted by staff. For example, a staff member from Workshop 3 explained, "[Inoue-san's] voice and way of talking is more energetic now [since the workshop]".

The most impactful part of the stories for a Workshop 1 staff was their portrayal of the diverse personal histories of care home residents.

There's a massive difference between being 98 and being 70. You know just how the quality of life was different in people's childhoods, and that was truly hard for the students [facilitators] to understand ... Most people will think that 98 is about the same as 80... It makes you realize that we tend to think of the elderly as a uniform group.

Other staff from Workshop 2 and 3 reported that the stories impacted their own way of thinking. For example, Workshop 2 staff explained, "I learnt that life is too short and to be more grateful for life. To be able to wake up each day, be healthy and breathe".

Deepening connections

Some staff felt they could understand the participants better after seeing their stories. A staff member who watched Inoue-san's story explained,

I learned about his feelings and love for his wife and the reason why he decided to come to the facility. I know that he buys flowers every week and placed them on his wife's grave, but I didn't realize his love for her. Watching this video, I was reminded that each resident has their own history. ... Now that I know more about his life, I will be able to talk to him deeply and take better care of him.

Similarly, another staff from Workshop 3 explained, "I'm sure I'll talk to [Inoue-san] much more than before. Also, I came to admire him. So, we'll be able to have a better conversation with deeper understanding". For a staff member who attended Workshop 1's preview, the stories created a feeling of shared reminiscence: "I liked it a lot as we were able to look back on the memories together and it felt like we were able to share them together".

Discussion

The digital stories granted new forms of agency to participants within the care home context: participants recognised their own capacity as storytellers, and staff developed an understanding of participants' subjective viewpoints. The workshops resulted in stories that were influential, and that made participants feel they could influence others. By authoring their own life events, participants showed the uniqueness of both their life experiences and their present-day needs. In this way, their stories confronted the pervasive ageist portrayals of care home residents as uniformly frail and void of social desires (see Gilleard & Higgs, 2017). There were, however, some limitations on participant involvement in the pre-story space. In this discussion section,

we draw attention to three types of interactions that destabilised participant agency within the workshops.

First, facilitators had their own expectations for what older adults *should* express in a story. “Legacy” stories that account the individual’s life achievements are common outcomes in Digital Storytelling projects with older adults (Hausknecht et al., 2019). When participants’ stories touched on negative sentiments and experiences, facilitators wanted to talk about happy events and viewers wanted more colourful and cheerful photos. Benevolent forms of ageism, such as simplified explanations and “thoughtful” decision-making on one’s behalf, are common in care home contexts (Lenchuk & Swain, 2010). From an outside perspective, creating a legacy story is an important end-of-life achievement, but from the perspective of the participant, storytelling is something to experience – an opportunity to re-experience and communicate subjectively significant and often difficult sentiments and worries. Storytelling about negative circumstances often results in nostalgia – a positive feeling which brings subjective pleasure (Alexandrakis et al., 2020). While participants sought out this opportunity, their subjective interests for their stories were at times downplayed or overridden. As Gilleard and Higgs (2017) point out, care home residents’ capacity for voice and choice is undermined by widely held stereotypes about cognitive decline and impairment. In this research, residents’ abilities to lead the story-making process were further limited by the inaccessibility of video-making software due to the short timeframe and mostly online format of the workshops. Future work would benefit from a longer-term, in-person format to enable residents to have direct involvement with video-making technologies.

Second, online communication within the workshops required staff mediation. The communication devices available to participants created a series of challenges that restricted participants from spontaneously contacting facilitators. Video-call applications require profiles or Meeting IDs to be shared and entered within the app’s system. Cordless phones would not connect unless a button was pushed, but with another phone, that same button, if pushed, could disconnect the incoming call. Staff support was needed but also limited by staff work schedules and funding policies that do not designate staff hours for technology support. Government funding programs did not cover basic communication services at the care homes, such as Internet access and personal telephone connections, nor did they cover staff support with digital devices. As long-term care is strongly associated with physical and cognitive decline, government funding for residential care tends towards managing dependency rather than recognising and fostering residents’ social agency (Wagner, 2022). In our online workshops, the lack of funding for communication technology support in residential care put limitations on the time length and spontaneity of communications with residents, revealing the everyday challenges residents face to connect with those outside the care home. This speaks to the need for more inclusive communication support policies to counter the digital and social exclusion of care home residents and, furthermore, reveals

the systemic forms of ageism at play in policy contexts where active ageing and old age care prevention are a priority (e.g., Government of B.C., 2021; Ministry of Health, Labour and Welfare of Japan, 2016b, 2022).

Third, the technical architecture of video calls brought to the forefront participants' own negative conceptions of old age, frailty, and disability. In the era of selfies (Souza et al., 2015), it is not surprising that video-calling services default to "show self" mode. Interacting by video call becomes a conversation between the self as subject and object. The self-objectification brought about by digital devices reduced participants' confidence and limited their involvement in workshop discussions. For example, Rupert was cautious when talking over video call because he could see himself "a Parkinson's guy twitching around", and Hamasaki-san did not want her story told by an old voice but a young one. Digital playbacks confronted participants with representations of themselves and their own ageist and ableist assumptions. This brought about reservations and a reduced sense of confidence during the story making phase but presented an opportunity for the reevaluation of an aged self at the preview event. In the final story, Rupert no longer saw his aged, disabled body as deficient or flawed; instead, he felt that this was precisely what brought power to his message.

To achieve meaningful outcomes, participants first needed to influence the story-making process through their mediated interactions with digital devices. This required active engagement in the pre-story meetings. For some participants, being able to physically touch the story heightened their involvement in the project. As the story gained some "durability" (Law, 1992) as it was recorded on notes and papers, this incited participant engagement. For other participants, the presence of a staff member or familiar objects in the room gave them the confidence to contradict the facilitator. In other cases, it was interactions with a larger group that energised the participants or a bond with the facilitator that made them feel comfortable enough to pivot the discussion. When material conditions engaged participants in the discussions, they could choose photos that were meaningful for them, reject the story title, or get the facilitator to understand and incorporate experiences that make younger generations uncomfortable. Through these kinds of actions in the pre-story space, the resulting stories confronted viewers' expectations and, in this way, positively redefined the agency granted to participants.

Conclusion

In this chapter, we examined how Digital Storytelling – a socio-technical intervention aimed at participant empowerment – can both reproduce and confront ageist ideas about the "fourth age" (Higgs & Gilleard, 2021). Within the residential care settings of this research, discriminatory stereotypes about care home residents, whether evident in funding policies or upheld by workshop facilitators and participants themselves, worked to limit and undermine participants' levels of agency within the Digital Storytelling workshops. The

empowering potentials of Digital Storytelling were contingent on participants negotiating and confronting the facilitators' expectations for story content, the systemic forms of social and digital exclusion that limited participant involvement, and their own negative perceptions about old age. Where socio-technical interventions are the focus of communication media research in care homes (Wagner, 2022) and are plagued by stereotyped views of older technology users (Fischer et al., 2019), this chapter draws attention to the power differentials at stake for older participants. Care home residents' levels of agency within the workshops were shaped by diverse and individuated interactions with the material components of the pre-story space. The task at hand for socio-technical interventions is to create combinations of devices, built environments, and facilitators that engage older participants, legitimise their contradictions and incorporate their inputs into the intervention's digital practices.

Funding acknowledgement

This research benefited from a Japan Society for the Promotion of Science (JSPS) Postdoctoral Fellowship awarded to the first author.

Note

- 1 Participant names have been changed to preserve confidentiality.

References

- Alexandrakis, D., Chorianopoulos, K., & Tselios, N. (2020). Digital storytelling experiences and outcomes with different recording media: An exploratory case study with older adults. *Journal of Technology in Human Services*, 1–32. <https://doi.org/10.1080/15228835.2020.1796893>
- Chen, Y.-R. R., & Schulz, P. J. (2016). The effect of information communication technology interventions on reducing social isolation in the elderly: A systematic review. *Journal of Medical Internet Research*, 18(1), e18. <https://doi.org/10.2196/jmir.4596>
- Comunello, F., Mulargia, S., & Iericitano, F. (2023). “Forever young?” Digital technology, ageism and the (non-) ideal user. In A. Rosales, M. Fernández-Ardèvol, & J. Svensson (Eds.), *Digital ageism: How it operates and approaches to tackling it*. Routledge.
- Cotterell, N., Buffel, T., & Phillipson, C. (2018). Preventing social isolation in older people. *Maturitas*, 113, 80–84. <https://doi.org/10.1016/j.maturitas.2018.04.014>
- Estabrooks, C. A., Straus, S. E., Flood, C. M., Keefe, J., Armstrong, P., Donner, G. J., & Wolfson, M. C. (2020). Restoring trust: COVID-19 and the future of long-term care in Canada. *Facets*, 5(1), 651–691. <https://doi.org/10.1139/FACETS-2020-0056>
- Fernández-Ardèvol, M., Sawchuk, K., & Grenier, L. (2017). Maintaining connections: Octo- and nonagenarians on digital “use and non-use”. *Nordicom Review*, 38(1), 39–51. <https://doi.org/10.1515/nor-2017-0396>

- Fischer, B., Peine, A., & Östlund, B. (2019). The importance of user involvement: A systematic review of involving older users in technology design. *The Gerontologist*, 60(7), 513–523. <https://doi.org/10.1093/geront/gnz163>
- Gilleard, C., & Higgs, P. (2017). An enveloping shadow. The role of the nursing home in the social imaginary of the fourth age. In S. Chivers & U. Kribernegg (Eds.), *Care home stories: Aging, disability and long-term residential care* (pp. 229–246). Transcript Verlag.
- Givskov, C., & Deuze, M. (2018). Researching new media and social diversity in later life. *New Media and Society*, 20(1), 399–412. <https://doi.org/10.1177/1461444816663949>
- Government of B.C. (2021). *Social connections*. <https://www2.gov.bc.ca/gov/content/family-social-supports/seniors/health-safety/active-aging/social-connections>
- Hausknecht, S. (2018). The role of new media in communicating and shaping older adult stories. In J. Zhou, & G. Salvendy (Eds.), *Lecture notes in computer science* (pp. 478–491). Springer.
- Hausknecht, S., Vanchu-Orosco, M., & Kaufman, D. (2019). Digitising the wisdom of our elders: Connectedness through digital storytelling. *Ageing & Society*, 39(12), 2714–2734. <https://doi.org/10.1017/S0144686X18000739>
- Health Standards Organization. (2021). *Developing a new national long-term care services standard*. <https://longtermcarestandards.ca/>
- Hewson, J., Danbrook, C., & Sieppert, J. C. (2015). Engaging post-secondary students and older adults in an intergenerational digital storytelling course. *Contemporary Issues in Education Research*, 8(3), 135–142.
- Higgs, P., & Gilleard, C. (2021). Fourth ageism: Real and imaginary old age. *Societies*, 11(1), 1–7. <https://doi.org/10.3390/soc11010012>
- Katz, S., & Calasanti, T. (2015). Critical perspectives on successful aging: Does it “appeal more than it illuminates?” *The Gerontologist*, 55(1), 26–33. <https://doi.org/10.1093/geront/gnu027>
- Katz, S., & Marshall, B. L. (2018). Tracked and fit: Fitbits, brain games, and the quantified aging body. *Journal of Aging Studies*, 45, 63–68. <https://doi.org/10.1016/j.jaging.2018.01.009>
- Lambert, J. (2013). *Digital storytelling: Capturing lives, creating community* (4th ed.). Routledge.
- Latour, B. (1996). On actor-network theory: A few clarifications. *Source: Soziale Welt*, 47, 369–381.
- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Clarendon.
- Law, J. (1992). Notes on the theory of the actor-network: Ordering, strategy, and heterogeneity. *Systems Practice*, 5(4), 379–393. <https://doi.org/10.1007/BF01059830>
- Lenchuk, I., & Swain, M. (2010). Alise’s small stories: Indices of identity construction and of resistance to the discourse of cognitive impairment. *Language Policy*, 9(1), 9–28. <https://doi.org/10.1007/s10993-009-9149-4>
- Loe, M. (2013). The digital life history project: Intergenerational collaborative research. *Gerontology & Geriatrics Education*, 34(1), 26–42. <https://doi.org/10.1080/02701960.2012.718013>
- Marcus, G. E. (1995). Ethnography in/of the world system: The emergence of multi-sited ethnography. *Annual Review of Anthropology*, 24, 95–117.
- Ministry of Health, Labour and Welfare of Japan. (2016a). *Long-term care insurance system*. https://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/ltcisj_e.pdf

- Ministry of Health, Labour and Welfare of Japan. (2016b). *Jigyō no mokuteki kaigo yobō* [Project objectives; Nursing care prevention system]. <https://www.mhlw.go.jp/file/06-Seisakujouhou-12300000-Roukenkyoku/hukyuutenkai.pdf>
- Ministry of Health, Labour and Welfare of Japan. (2022). *Kōreisha no hō no genki o sasaeru* [Supporting the energy of the elderly]. <https://kayoinoba.mhlw.go.jp/>
- Office of the Seniors Advocate in B.C. (2021). *British Columbia long-term care directory*. <https://www.seniorsadvocatebc.ca/app/uploads/sites/4/2021/12/LTCD2021-Summary.pdf>
- Ogawa, A., & Ito, M. (2010). Monogatari wo tsumugidasu Digital Storytelling jissen: Media Conte workshop no kokoromi [Digital Storytelling to weave individual stories: An example of the Media Conte workshop]. *Shakai Jobogaku Kenkyu*, 14(2), 115–128.
- Ogawa, A., & Tsuchiya, Y. (2017). From the pre-story space: A proposal of a story weaving method for digital storytelling. In M. Dunford, & T. Jenkins (Eds.), *Digital storytelling* (pp. 139–154). Palgrave MacMillan.
- Peine, A., Faulkner, A., Jæger, B., & Moors, E. (2015). Science, technology and the “grand challenge” of ageing: Understanding the socio-material constitution of later life. *Technological Forecasting and Social Change*, 93, 1–9. <https://doi.org/10.1016/j.techfore.2014.11.010>
- Peine, A., & Neven, L. (2019). From intervention to co-constitution: New directions in theorizing about aging and technology. *The Gerontologist*, 59(1), 15–21. <https://doi.org/10.1093/GERONT/GNY050>
- Prieto-Flores, M.-E., João Forjaz, M., Fernandez-Mayoralas, G., Rojo-Perez, F., & Martinez-Martin, P. (2011). Factors associated with loneliness of noninstitutionalized and institutionalized older adults. *Journal of Aging and Health*, 23(1), 177–194. <https://doi.org/10.1177/0898264310382658>
- Souza, F., de Las Casas, D., Flores, V., Youn, S. B., Cha, M., Quercia, D., & Almeida, V. (2015). Dawn of the selfie era: The whos, wheres, and hows of selfies on Instagram. *Proceedings of the 2015 ACM Conference on Online Social Networks*, 221–231. <https://doi.org/10.1145/2817946.2817948>
- VERBI Software. (2019). MAXQDA 2020 [computer software]. Berlin: VERBI Software. <https://www.maxqda.com/>
- Wada, M., Canham, S. L., Sixsmith, J., Woolrych, R., Fang, M. L., & Sixsmith, A. (2020). Perceptions of home in long-term care settings: Before and after institutional relocation. *Aging & Society*, 40, 1267–1290. <https://doi.org/10.1017/S0144686X18001721>
- Wagner, S. (2022). Place-making through media: How media environments make a difference for long-term care residents’ agency. *Societies*, 12(1), 26. <https://doi.org/10.3390/soc12010027>