

Digital Storytelling with Persons Living with Dementia: Elements of Facilitation, Communication, Building Relationships, and Using Technology

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Abstract

Digital storytelling is a process that can be used to co-create multimedia stories with persons living with dementia to affirm identity, support person-centered care, and leave a legacy. Although digital storytelling typically involves a facilitator, little is known about the co-creation process between a facilitator and persons living with dementia. This study explored and described elements of digital storytelling facilitation with persons living with dementia using a secondary analysis of qualitative data from a primary study that took place across three Canadian cities. Three elements were identified during digital storytelling facilitation with persons living with dementia: communicating, building collaborative relationships, and using technology. Digital storytelling facilitators employ the three elements to weave together a person's narrative with meaning. The communication, relational, and technological elements of digital storytelling may be employed by facilitators from varying professional backgrounds and lived experiences to create meaningful digital stories for persons living with dementia.

Keywords

qualitative methods, person-centered care, self-concept, dementia, Alzheimer's disease

What this paper adds

- Description of the roles and actions of digital storytelling facilitators who collaborate with persons living with dementia during digital storytelling sessions.
- Identification of common elements that may assist individuals from a variety of backgrounds to facilitate digital storytelling with persons living with dementia.

Applications of study findings

- Digital storytelling is a meaningful activity for persons living with dementia to uphold their identity through a legacy product.
- Digital storytelling facilitators act as weavers of three key elements (communication, building collaborative relationships, and using technology) to enable the process of digital storytelling and the creation of a final digital story product with persons living with dementia.
- Individuals from varying professional backgrounds and lived experience may assume the role of digital storytelling facilitators by employing their unique strengths along the key elements of digital storytelling facilitation.

Introduction

Persons living with dementia are often viewed by their diagnosis, symptoms, or behaviors as opposed to as unique persons with rich experiences, values, and preferences. Life story work is a way to assist service providers and family members see individuals with dementia as people (Grøndahl et al., 2017; Kellett et al., 2010). Life story work can take many forms such as reminiscence therapy, memory boxes,

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life storybooks, life posters, or digital stories (McKeown et al., 2010; Subramaniam & Woods, 2016). In each form of life review, a facilitator is typically involved to assist, guide, and co-create a product with the person who has dementia.

Digital stories are technological versions of life story work; they are a narrative in the form of a short video created using videos, photographs, and music (Wilson, 2018). Digital stories are typically told in the first person about the individual, an event in one's life, or an issue a person feels strongly about (Wilson, 2018). Each digital story weaves a meaningful topic for the person with dementia. Digital stories can serve as a legacy product shared with service providers, family, and loved ones, and are appreciated when the individual is no longer able to communicate.

Digital storytelling has been primarily used to support older adults' memory, reminiscence, identity, and self-confidence through co-creation between facilitators and older adults (Rios Rincon et al., 2021). The literature cites benefits of digital storytelling for persons with dementia including increased social connectedness, confidence, empowerment, and self-esteem (Critten & Kucirkova, 2019). Storytelling can provide a safe space for reminiscence and self-expression and reinforce a person's identity (Manchester & Facer, 2015; McKeown et al., 2010). Digital storytelling encourages conversation and improves relationships between persons with dementia, care staff, and family members and is one avenue to provide person-centered care (Subramaniam & Woods, 2016). Digital storytelling can enable a deeper understanding of persons living with dementia, including their talents and contributions over the course of their lives. This, in combination with the empathy elicited by viewing a digital story, has the potential to also mitigate ageist assumptions (Sljivic et al., 2021).

There is a paucity of literature about the co-creation process and nature of the interaction between a facilitator and a person with dementia during digital storytelling. Two papers raise three points on this topic. It is recommended that facilitators listen sympathetically and encourage the person with dementia to tell a story without interruption (Critten & Kucirkova, 2019). The flow and outcomes of a session are positively affected by a facilitator who is an active listener (Fels & Astell, 2011). It is also the role of a facilitator to explain the multimedia program and technological device being used to create the digital story as individuals may not have had the opportunity to become competent using digital technologies. Further research to determine the skills inherent in co-creation approaches would support facilitation of digital storytelling with older adults with dementia to communicate with their loved ones and uphold one's identity (Rios Rincon et al., 2021).

Previous digital storytelling research with persons living with dementia focused on the benefits, limitations, or experiences of those involved (Rios Rincon et al., 2021). An

understanding of elements that facilitate digital storytelling could assist those who wish to use this tool to help people with dementia share their stories. The purpose of this study was to examine, identify, and describe the elements of facilitation during digital storytelling with persons living with dementia.

Methods

Study Design and Data Set

This study was a secondary analysis of qualitative data from a primary study. The primary study took place across three Canadian cities (Edmonton, Toronto, and Vancouver) with the purpose to explore digital storytelling from the perspectives of persons living with dementia.

Primary Study

In the primary study, participants were eligible to participate if they were aged 45 years and older, self-reported as living with dementia, and had the cognitive and communication abilities to participate in sessions with a digital storytelling facilitator. Participants were recruited through day programs, support groups, retirement residences, care facilities, and organizations that serve populations with dementia and their care partners. At these sites, digital storytelling facilitators shared information about the study with persons with dementia and their care partners through small group presentations or one-on-one discussions. Interested individuals contacted facilitators directly, at which point the study and its procedures were explained before individuals with dementia chose to participate in the primary study.

Written informed consent was obtained at the start of the study, and ongoing informed consent and assent were provided from persons with dementia and their care partners throughout sessions. In total, 19 persons living with mild dementia aged 62 to 91 and five facilitators were included in the primary study. Sessions were conducted in the place preferred by participants and their care partners. Each facilitator had a different professional background. The Edmonton facilitator was an occupational therapist with a master's degree, pursuing her PhD in Rehabilitation Science. The Vancouver facilitator had a bachelor's degree in biomedical engineering, pursuing her Masters of Arts. Two of the three Toronto facilitators had bachelor degrees in psychology backgrounds, while the third had experience as a care partner to a person living with dementia.

Although digital storytelling initiatives typically utilize group sessions and workshops, the primary study used one-on-one sessions. Sessions were based on a modified version of the Elder's Digital Storytelling Workshop for Older Adults developed by the Elder's Digital Storytelling Project (Hausknecht et al., 2017).

Secondary Analysis

All authors of this secondary analysis are occupational therapists with post-graduate degrees. See [supplementary material](#) for additional details on the authors.

The secondary analysis data set is comprised of 83 transcripts from audio recordings of storytelling sessions from the primary study. Out of 106 audio recordings, 83 had sound quality sufficient for transcription. Recording durations ranged from 85 seconds to 108 minutes and resulted from interactions between five facilitators and 16 persons with dementia. Audio recordings were transcribed verbatim, including length of pauses, non-verbal utterances (e.g., ums, ahs), and expressions (e.g., laughter). Transcripts were cleaned for accuracy and pseudonyms were assigned to maintain anonymity, [Table 1](#) shows participant location and number of transcripts.

Data Analysis

This study used thematic qualitative content analysis. Qualitative content analysis was used to identify codes and categorize them ([Mayan, 2009](#)). A thematic approach is beneficial when there is limited existing theory or research literature on a phenomenon ([Hsieh & Shannon, 2005](#)), allowing the researcher to identify specific meanings and determine appropriate categories and themes.

Three research assistants analyzed the transcripts. See [supplementary material](#) for details on these assistants. The primary assistant is also the primary author of this secondary analysis. The primary assistant completed analysis of two

Edmonton participants as well as all of the Vancouver and Toronto data, and verified coding completed by the other two assistants. The other two assistants each completed analysis for two Edmonton participants. Each assistant immersed herself in the data by listening to the audio recordings while reading the transcripts and recording notes on initial reflections. This was followed by coding in which transcript segments were identified using keywords. Next, similar codes were grouped, refined, and categories were created to organize the codes. As new interpretations and codes were generated, they were added to the existing framework and previously coded transcripts were updated to reflect the expanding and changing hierarchy. The codes were created using comments on each transcript's Microsoft Word file. A document code list and code hierarchy were created for each transcript, each site, and for the entire analysis. Code frequencies were calculated for each code hierarchy.

The iterative nature of data analysis ([Higginbottom & Liamputtong, 2015](#)) was reflected in the analysts' evolving interpretations as additional transcripts were reviewed and further insight obtained. As a result, the codes and coding framework were refined repeatedly throughout analysis, enhancing credibility. This refining process follows [Morse et al.'s \(2002\)](#) approach to verification in which transcripts, codes, categories, and themes were re-checked between data generation and analysis, and between abstractions and raw data. Credibility was also influenced by prolonged engagement ([Finlay, 2006](#)) and peer debriefing, a strategy to enhance trustworthiness ([Barber & Walczak, 2009](#)). Codes, code descriptions, categories, and category descriptions were

Table 1. Data set used in secondary analysis.

Site	Pseudonym of person living with dementia	Number of transcripts
Edmonton	Diane	2
Edmonton	Marion	3
Edmonton	William	3
Edmonton	Fran	4
Edmonton	Jerry	4
Edmonton	John	4
	Persons living with dementia from Edmonton site = 6	Edmonton transcripts = 20
Toronto	Alexander	3
Toronto	Thomas	3
Toronto	Ben	4
Toronto	Elizabeth	6
Toronto	Betty	8
Toronto	Vicki	9
	Persons living with dementia from Toronto site = 6	Toronto transcripts = 33
Vancouver	Audrey	5
Vancouver	Sheila	6
Vancouver	James	7
Vancouver	Brent	12
	Persons living with dementia from Vancouver site = 4	Vancouver transcripts = 30
	Total number of persons living with dementia = 16	Total number of transcripts for secondary analysis = 83

reviewed, discussed, and confirmed with transcript excerpts during monthly peer debriefs with another author. Between peer debriefs, the evolving analysis was shared through Google Docs so the peer reviewer could double check the work. Peer debriefs enable scrutinizing codes and categories to enhance their clarity and internal and external homogeneity (Mayan, 2009). It also facilitated consideration of alternative perspectives, interpretations, and explanations and inspired reflexivity. Given the intensity of the peer debriefing and review of transcripts and excerpts, approximately half of the raw transcripts were double checked by the peer reviewer. Excerpts from additional transcripts were also re-checked against the coding framework particularly when the key findings were generated. When preliminary findings were generated, they were presented to the other authors who scrutinized the excerpts against the codes, coding hierarchy, and findings.

Transferability was achieved using “thick and dense” (Richards & Morse, 2007, p. 109) data. In total, 83 transcripts were analyzed from which we integrated excerpts from these interactions. For dependability, an audit trail of the processes was kept through which data was generated and analyzed as well as the produced findings (Rodgers, 2008). Another investigator who was not involved in data analysis reviewed the audit trail for transparency. We enhanced confirmability through reflexive journaling, peer debriefing, and keeping an audit trail.

Findings

Three key elements of digital storytelling emerged from the data: “communication,” “building collaborative relationships,” and “technology use.”

Each element is comprised of sub-categories that reflect strategies used to communicate, build a collaborative relationship, and use technology. Although they are separate skills, the communication, relational, and technological

elements that facilitators used were employed simultaneously during the digital storytelling process, one after another, rather than in isolation. Excerpts from transcripts highlight elements facilitators used during digital storytelling. For the quotations, participants with dementia are identified with a pseudonym and facilitators are identified by “site name, facilitator.”

Communication

The communication category included seven subcategories of verbal communication strategies that facilitators used with participants during digital storytelling. A total of 22, 478 codes were identified (Figure 1). The categories highlighted below (*active listening, questioning, supporting communication, and responding*) had the highest number of codes across the data set.

Active Listening. Active listening was used by facilitators to indicate to persons with dementia they were being heard ($n = 7, 846$). Facilitators demonstrated attentive listening by use of verbal utterances, such as “mmm,” “oh my gosh,” “okay,” and “yeah,” and non-verbal utterances such as sighing or gasping:

James: *As the war went on, there were so many planes ...*

Vancouver facilitator: *Mmm ...*

James: *... for 24 hours ...*

Vancouver facilitator: *Oh my gosh ...*

James: *... the whole day and night bombing ...*

Questioning. Strategic questioning was used to elicit storytelling and obtain details, suggestions, or feedback from the person living with dementia ($n = 4, 499$). The purposes of questioning varied and included confirming information,

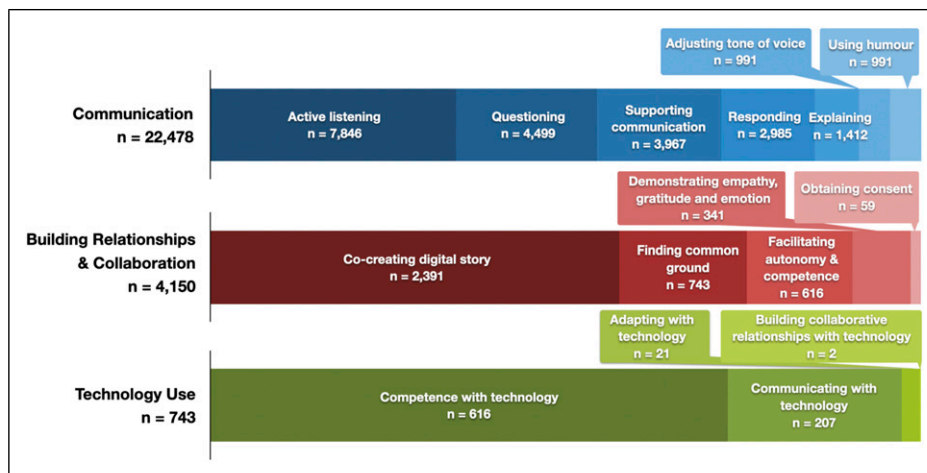


Figure 1. Elements of facilitating digital storytelling and code frequencies.

gaining a better understanding, or probing for more information. Facilitators rephrased and modified questions to ensure clarity and understanding, and suit the needs of the participant with dementia. For example, a facilitator changed an open-ended question to a closed-ended question to determine what the participant wanted to do during a session:

Vancouver facilitator: *What do you think? Do you want to record it today?*

Supporting Communication. Facilitators capitalized on communication strategies when working with participants that ensured they were given support and the opportunity to communicate ($n = 3, 967$). Facilitators demonstrated patience in conversation through pauses or silence. Facilitators provided participants sufficient time to process and communicate their thoughts, which demonstrated ease and comfort with silence, and allowed participants to interject, repeat previous conversations, and not be reminded they have spoken about the same details before. When facilitators demonstrated patience and provided participants an opportunity to process and speak freely without assistance, the participants seemed supported throughout the digital storytelling process and competent to communicate:

Edmonton facilitator: *(23 second pause)*

John: *So um and and two of those piano piano tuners, they hated each other (sigh)*

Edmonton facilitator: *Mhm .. (7 second pause)*

John: *if if (sigh)*

Edmonton facilitator: *(7 second pause)*

The facilitators redirected participants, as well as rephrased, repeated, and re-explained concepts throughout sessions. Redirecting occurred when facilitators guided participants back to the topic or task. The ability to recall and apply information learned or discussed previously enabled facilitators to direct conversation or elicit more detail:

Vancouver facilitator: *Let me show you what we talked about last time ... we wrote some different ideas down ... you were talking about in 1939 the war broke out ...*

Facilitators supported communication through adaptive strategies such as writing instructions on paper, singing, creating a script, using photographs as prompts, and verbalizing actions in the moment. For example, facilitators verbalized what they were doing with the video-editing technology as they were doing it. This assisted participants to understand and follow along with a facilitator's actions, as well to provide immediate feedback:

Vancouver facilitator: *I can save this picture and we can put it in your story. So save it, give it a name. I'll ... call it "map" ... Okay, saved it ... now we can add in this picture. Just have to wait for it to load, alright, done ... there's the map ... Do you want to put the map in where you talked about moving from different countries?*

Responding. Facilitators responded to participants as any two individuals would in conversation ($n = 2, 985$). The facilitators and participants engaged in ongoing conversation, which inherently involved facilitators responding in numerous ways. The majority of facilitator responses were paraphrasing or rephrasing a participant's response, thereby affirming or confirming:

Sheila: *I really believe you know ... things happen for a reason and just sit back and relax and it'll all come to you ...*

Vancouver facilitator: *So true! Sometimes ... you stress about things and then it all works out.*

Building Collaborative Relationships

Facilitators built relationships with participants while simultaneously collaborating to enable storytelling. The foundation of trust and rapport between a facilitator and participant with dementia enabled and strengthened collaboration. This element of digital storytelling was comprised of five subcategories with a total of 4150 codes (Figure 1). The three subcategories with the highest code frequencies (*co-creating digital story*, *finding common ground*, and *facilitating autonomy and competence*) are described below.

Co-creation of the Digital Story. Facilitators ensured there was joint authorship to create a meaningful process and product for the person with dementia ($n = 2,391$). Although the content expertise remained with the participants living with dementia, facilitators promoted co-creation by seeking out feedback, offering suggestions and using inclusive language. Facilitators also included family members in the process according to the wishes of the person with dementia.

Feedback from participants was the most impactful aspect of co-creation. When facilitators asked for feedback, direction, or input, they were demonstrating that they wanted the person with dementia to be involved in the process and make decisions about the digital story:

Edmonton Facilitator: *Is there any kind of music that ... reminds you of boating?*

The facilitators offered suggestions and used inclusive language. Facilitators suggested next steps in the digital story creation process, generated ideas, elicited story sharing, and assisted with choice. Facilitators' use of inclusive language included "let's," "we," "we're," and "we'll." These words

demonstrated the collaborative nature of facilitators, rather than one-sided language such as “I” or “I will.” Facilitators’ language included participants in the process and encouraged participation as co-creators:

James: *My parents moved quite often in the city ...*

Vancouver facilitator: *Okay.*

James: *But ... that is not relevant ...*

Vancouver facilitator: *So maybe we could ... say our home was two blocks away from where the end of the fire was? ...*

James: *Yeah ...*

Finding Common Ground. Facilitators used ways of relating to participants to share emotions, common experiences or similarities ($n = 743$). This included demonstration of empathy, gratitude, or emotion depending on the topic of conversation, such as sharing sadness about a loss or laughter in a funny story. Through relating, facilitators created a comfortable environment.

Edmonton Facilitator: *And you were a very good talker ... I can tell. That must be difficult.*

The act of reducing power imbalances between facilitators and participants helped to find common ground and emphasize that persons with dementia are the experts in their stories. In the following quote, the Vancouver facilitator learned from a former glider pilot:

Brent: *The airplane in front ... they have a cable ... maybe 50 feet long ... it pulls you up to how high you want and then you disconnect and he goes down and you're on your own.*

Vancouver facilitator: *Oh my gosh. So, the glider plane is behind the real plane ... you have the rope and it's connected.*

Facilitating Autonomy and Competence. Facilitators supported decision-making capacity to promote participants’ autonomy and competence as co-creators ($n = 616$). If facilitators made all the decisions, a participant may have felt helpless, incompetent, and unable to make choices. Facilitators ensured participants did not feel undermined or “less-than” despite their dementia condition. The facilitators sought participants’ opinions and preferences, which reminded participants that their digital stories were their own.

Vancouver facilitator: *What do you think ...?*

Audrey: *I like that it's got a little life to it.*

Vancouver facilitator: *Yeah. There was also this one ... did you like that one? ...*

(Plays music)

Audrey: *You're a young person, which one would you choose?*

Vancouver facilitator: *... It's your story. If you want to, we can use both?*

Audrey: *Hm. No just one.*

Facilitators’ actions of encouraging and allowing a person living with dementia to make decisions about which stories to share or what photographs to include, enabled participants to feel empowered and autonomous. Some stories shared by participants were not complete, and the facilitator collaborated with participants to elicit information to fill in the gaps. This further emphasized a sense of self and overall identity, as well as competence and success:

William: *It feels ... good... you know, kind of pleased ... kind of accomplished something that's quite neat.*

Edmonton facilitator: *I'm glad you feel a sense of accomplishment ... it was quite difficult to go through to create a story, but you did it! ... it was a team effort ... I wouldn't have been able to create the story had I not heard the story from you. I don't know anything about boating ... you ... provided the content ...*

Technology Use

A third element emphasized the importance of the facilitators’ comfort and competence with technology use. A total of 743 codes were identified (Figure 1). Facilitators used technology while simultaneously communicating, adapting the process as needed and building a therapeutic relationship. Technology use included four subcategories, with *competence with technology* having the highest frequency.

Competence with Technology. Facilitators’ ability to use technology throughout the digital storytelling process with ease ensured flow throughout sessions ($n = 616$). Most participants did not have knowledge of or familiarity with technology. Therefore, a facilitator’s ability to maneuver and use the technology enabled participants to concentrate on communicating, story sharing, making decisions, and directing the facilitator, rather than trying to learn how to use unfamiliar technology. The goal of digital storytelling with participants was to create a digital story, not to teach participants to use the software and hardware (although technology literacy may have increased as a result of the project). Facilitators adapted technology to participants’ needs. For example, increased font size or slower transition speed allowed some participants to watch their digital story. Facilitators were also knowledgeable about and comfortable with working through technical difficulties:

Vancouver facilitator: *Let's just try to republish it ... maybe that'll fix it ... if not then what we could do is ... put a block of text on one side and transition to the next slide ... rather than having it scroll ... I think the scrolling is what the problem is*

Facilitators' Positionality

Despite facilitators having different disciplinary orientations and worldviews, the key elements of communicating, building relationships, and using technology to conduct digital storytelling with participants were present throughout. Facilitators varied in strengths and approaches based on professional and experiential knowledge.

The Edmonton facilitator was an occupational therapist. She emphasized providing time and space, meaning in the process, and co-creation as an active agent, all of which align with occupational therapy framework, values, and practice. This facilitator's goal was to find meaning in the digital storytelling process and product:

Edmonton facilitator: *I hope that it will be something that you can say is a part of your identity ... and you can watch it over and over ... and play it for everyone you want to ... I really do hope that it will be something meaningful for you.*

The Vancouver facilitator had a biomedical engineering background and employed technology differently to co-create, seek feedback, adapt and, explain during digital storytelling. She continuously sought feedback from her participants on the digital presentation and adapted it directly from the feedback received. Overall, the co-creation piece was emphasized through the use of technology:

Brent: *It looks like we're going uphill there.*

Vancouver facilitator: *We can fix it, don't worry ... There we go, let's zoom in.*

Brent: *That's better.*

The three Toronto facilitators came from psychology and dementia caregiving backgrounds. They emphasized redirecting and reorienting, ensuring the physical needs of the participants were met, and engaging in creative co-creation. The facilitator with dementia caregiving experience demonstrated an ability to redirect and reorient the participant. This facilitator employed an organic and animated approach, and engaged participants in song, music, and humor:

Toronto facilitator: *Thank you for singing for us ... We loved it.*

Discussion

The purpose of this study was to explore and determine elements of digital storytelling facilitation when working with persons living with dementia. This study provides

insight into the common elements that facilitators employ to communicate, build relationships, and use technology during digital storytelling, and highlights the meaningful role facilitators have in the process with participants who have dementia. This study differs from previous research as it discusses key elements of facilitating digital storytelling, rather than its benefits, limitations, or experiences, providing a new contribution to the literature.

Facilitators used communication strategies and relational skills to elicit information and build partnerships with participants. The development of rapport, comfort and trust with participants and their families strengthened the collaborative relationship. A safe relationship enabled participants to share stories and their sense of self through conversations, reminiscence and technology. Story sharing enabled facilitators to weave a participant's narrative and identity into a digital story through technology and the facilitator's individualized approach. The communication, relational, and technological elements that facilitators used were employed simultaneously or sequentially, rather than in isolation.

The findings of this study support the concept that a digital storytelling facilitator's role is that of a weaver. As such, this relationship is represented as a woven braid, rather than a hierarchical figure or relationship (Figure 2). The facilitators were crisscrossing between strategies, communicating, building relationships, and using technology all while weaving information with identity with narrative into a digital story.

Active listening, strategic questioning, responding, and supporting communication enabled story sharing between facilitators and participants, which provided the narrative and theme for the digital story. When persons living with dementia shared stories, the information communicated may be incomplete. Facilitators often received pieces of stories or fragments of ideas, rather than a cohesive story. They took information provided by a participant and wove it together with pictures, music, and narration. Baldwin



Figure 2. Facilitators as weavers in digital storytelling and digital story creation.

(2006) describes piecing together smaller stories as one approach to assist the person living with dementia to tell a story. Facilitators used this tactic during digital storytelling to weave pieces of information elicited from participants to create the final digital story. A facilitator's role is consistent with what Moore and Davis (2002) refer to as *narrative quilting*. This term describes when an individual recalls information mentioned previously in a conversation and reintroduces it at a later time in order to elicit further details. This concept aligns with a facilitator's ability to recall and apply previous information in digital storytelling in a way that supports a person living with dementia's ability to communicate. Through the use of narrative quilting, facilitators were able to weave information together that participants may have forgotten to elaborate upon or further explain. It is only after considering all that has been compiled during the sessions that facilitators can put together a story (Russell & Timmons, 2009). Weaving together bits of information enabled participants to contribute to their narrative and ultimately, co-create a digital story (McKeown et al., 2015). In daily conversation, most stories that are told are not complete. In everyday conversation, a form of narrative quilting is used to piece together and understand the stories we are told. However, for persons living with dementia in the context of digital storytelling, the level of supportive communication in order to obtain sufficient narrative threads to weave together a story is often more than compared to those not living with dementia.

Facilitators ensured that participants were comfortable in the process of sharing to create a digital story that aligned with their identity. Fels and Astell (2011) stated connections are made through "sharing our experiences and finding points of similarity or things we have in common" (p. 535). However, it may be difficult for people to open up to strangers (McKillop & Petrini, 2011). In the digital storytelling process, participants are required to open up to the facilitators. A degree of trust was developed when facilitators built relationships with and related to participants over sessions. McKeown et al. (2015) define co-creation in storytelling as "joint authorship," or a way to support the ability of an individual with dementia to contribute to one's story. In addition to supporting a participant's contributions, it was important facilitators acted to ensure participants were aware of and believed in ownership of their story (Fels & Astell, 2011). Autonomy is valued by all, but as one ages, the ability to exercise autonomy decreases (Liu et al., 2022). Through a collaborative approach and co-creation, autonomy can be realized for persons who live with dementia, through a sense of control, promotion of competency, and engagement in the meaningful activity of digital storytelling.

Digital storytelling required facilitators to use technology and participants to interact with technology. Facilitators were able to work through technological difficulties, adapt the technology to participants' needs, and show participants digital stories during the creation process. Participants could provide immediate feedback and changes could be made

during sessions, which may have reinforced their autonomy. This is advantageous not only from an efficiency perspective but also in consideration of memory loss associated with dementia. The ability to obtain feedback and demonstrate eased the process, assisted participants to make decisions, and minimized the need to remember information between sessions. The technology used to create digital stories was the catalyst for engagement in storytelling, reminiscence, and social connection.

Digital storytelling required a facilitator to be engaged in storytelling and weave the narrative and meaning for participants with dementia. When considering all the steps that are required to create a digital story, the digital storytelling facilitator could also be described as a tour guide for persons living with dementia. The facilitator is the person who considers all the steps and details of a digital story and, like a tour guide, guides the person living with dementia through the digital storytelling museum through sessions to create the final product. A digital storytelling facilitator guided the person living with dementia to successfully reach the final digital story product.

Limitations

Our analysis relied on transcripts of audio recordings of digital storytelling sessions. Video recordings with audio may have provided additional information about interactions such as body language, gestures and how technology was used. Such visual data may have helped refine codes, verify verbal data, and impacted code frequency.

The participants living with dementia who took part in the primary study are not representative of the dementia population. The participants in the primary study had mild dementia, were able to verbally communicate with facilitators, and did not demonstrate responsive behaviors. Thus, they were a sub-set of the dementia population. The key elements of facilitating digital storytelling may have differed with participants in later stages of dementia; for example, facilitators may have had to rely on involvement of care partners.

Contributions to Literature

A recent literature review revealed a paucity of research specific to this population, the roles of the digital storytelling facilitator and what facilitators do during storytelling (Rios Rincon et al., 2021). There is minimal information on the methods used for collecting and analyzing data in published studies, which compromises the credibility, dependability, confirmability, and transferability of previous qualitative research (Rios Rincon et al., 2021). Our study identified common elements that may assist people such as health care professionals, paid caregivers (e.g., personal support worker), care partners (e.g., family member, friend), community organizations

(e.g., Alzheimer Societies), volunteers care partners, and researchers in facilitating digital storytelling with persons living with dementia. Further, the rigor demonstrated in our data analysis can inform future digital storytelling research and enhance trustworthiness.

Conclusion and Clinical Application

Facilitation of digital storytelling with persons living with dementia consists of three key elements: communicating, building collaborative relationships, and using technology. Facilitators weaved these three elements to enable the process of digital storytelling and the co-creation of a final digital story product. The facilitators' actions demonstrated a person-centered approach that enabled autonomy and an experience of competence for participants living with dementia. Regardless of background, facilitators demonstrated proficiency with technology and employed similar communication strategies and relational skill sets to collaborate with persons with dementia. These elements contributed to comfort and trust and allowed a person with dementia to reflect on meaning and elicit storytelling. Facilitators used technology as a bridge to weave together participants' narratives and meaning into a digital story as co-creators.

This study demonstrates that individuals from varying professional backgrounds and experiences may assume the role of digital storytelling facilitators with persons living with dementia. Future research on facilitators' individual strengths and challenges can inform facilitator education. Digital storytelling is a meaningful activity for persons living with dementia to reinforce one's identity through a legacy product (Park et al., 2017). Facilitator education that weaves narrative and meaning while employing communication, relational, and technological strategies would enable facilitators to co-create legacies through digital stories with persons living with dementia.

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Supplemental Material

Supplemental material for this article is available online.

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