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Personalized Multimedia Videos As Reminiscence Therapy For Persons With Dementia

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Abstract

Reminiscence therapies are an effective intervention in increasing self-esteem, well-being, sense of personhood and even reducing distress and confusion in persons with dementia. There is even evidence that reminiscence therapies can slightly slow the progression of dementia, by enabling a cohesive narrative and sense of identity. This paper will consider relevant literature and explore the potential of using modern technological advances, such as a wealth of digital media and the ability to scan old photos, to create personalized and engaging life narratives. In addition to this paper, this special project will include a concrete example of this type of video that I will create of memorabilia, primarily photographs, from my grandfather's life, from what exists from his early childhood up to present day. It will also include a qualitative questionnaire to be given to the participant and their care partner to assess the effectiveness of increasing well-being, personal identity and even to further understand reminiscence therapy's relationship with dementia symptomology.

Table of Contents

Introduction

The current population of individuals living with dementia is estimated to be over 50 million people worldwide (World Health Organization, 2017). Dementia affects 5% of all people over the age of 65, a number which rises to 30% in individuals over the age of 90 (Hofman et al., 1991). With a massive population around the world over the age of 65, it is estimated in developed countries alone that the prevalence of dementia will increase from about 13.5 million individuals in 2000 to 36.7 million by the year 2050 (Wimo et al., 2003). The global societal cost of Alzheimer's and other dementias was estimated to be over $818 billion dollars in 2015, approximately 1.1% of the global gross domestic product (GDP) (World Health Organization, 2017). Dementia and cognitive decline in the elderly population is a serious public health concern with far-reaching impacts, now more than ever as the global aging population only continues to grow.

Dementia is a syndrome, typically a product of other diseases or conditions, characterized by a progressive, deteriorating disturbance of higher-level cortical functions, such as memory, comprehension, thinking, orientation, calculation, language and judgement, to the point of impairment in daily living (Muliyala & Varghese, 2010). The most common type of dementia is Alzheimer's disease, followed by vascular dementia.

The prevalence of depression in dementia has been reported to be 20–60% (Muliyala & Varghese, 2010). More generally, some studies suggest quality of life in individuals with dementia may decline as symptoms progress (Hoe et al., 2009). However, further studies have found that is not necessarily true, and with the right person-centered care, quality of life and well-being can remain stable (Hoe et al., 2009). Thus, novel and innovative approaches to improving the well-

being and overall quality of life for those with dementia is incredibly important. There is also evidence that narrative and memory-based therapies, or reminiscence therapy, might potentially slow the progression of the neurological degeneration associated with dementia, allowing those affected to remain in the early stages longer (Steeman et al., 2007; Wang, 2007). Reminiscence therapies not only increase self-esteem and well-being but have also been effective in reducing the behavioral disturbances that affect those with dementia (Kuwahara et al., 2006).

Background

Some studies have addressed using memorabilia, such as pictures of family members, to exercise keeping working memory alive, with relative success (Astell et al., 2010; Sherman, 1991). Yet, no studies have assessed whether a video which creates a cohesive narrative to explicitly prevent or decelerate dementia and memory loss, simply improves the quality of life of those with dementia or whether this could be especially helpful at certain times, such as on days when those with dementia are feeling especially confused or forgetful.[1] Not only will the proposed intervention serve as a mechanism for memory aid, but it will also attempt to increase mood and well-being in the viewer.

While no one has taken this exact approach, there is quite a bit of evidence that suggests familial and reminiscent memorabilia can be a useful aid in recollection among dementia and memory-loss patients (Chaudhury, 2002; Gowans et al., 2004; Kovach et al., 1997). In the digital

[1]Yasuda et al.'s *Effectiveness of personalised reminiscence photo videos for individuals with dementia* did propose the effectiveness and further research needed for personalized videos in dementia treatment; however, their assessment primarily consisted of the amount of attention and focus participants were able to allot to the videos, as compared to television episode controls (2009).

age, there has never been more useful memorabilia to do so: photos, videos, the ability to scan physical copies, software to convert film into digital files, and other media.

Memorabilia

The use of personal memorabilia has been one of the most frequent and beneficial methods of allowing those with memory loss conditions to stay connected to their past; they've also proved useful in several other ways, for example, giving those with dementia cues for conversation (Chaudhury, 2002; Gowans et al., 2004; Kovach et al., 1997). Personal memorabilia in this paper will be exclusively photographs and videos related to the person with dementia's life. The pictures do not necessarily be only of family members, as pictures of highly important places might serve a similar value. Other studies have used memorabilia and scrapbooks as a behavioral therapy approach to successfully reduce distress and confusion. Seeing cherished memorabilia has shown a significant association with increased mood (Sherman, 1991). Reminiscent memorabilia and photographs have also been effectively used as memory training to target cognitive impairment in order to optimize the remaining mental processes (Kasl-Godley & Gatz, 2000).

Reminiscence therapy is an increasingly popular method for persons with dementia, particularly those in earlier stages of the disease. It typically consists of the intentional prompting of participants to remember life event and even aspects of their daily life from their more distant past. These therapies often heavily rely on memorabilia objects, photographs and music. More importantly, it creates new avenues of connection with caregivers, family members and peers (e.g. in long-term care) and increases well-being (Ellis, 2012). There is even evidence which suggest reminiscence therapy slows the progression of the disease and slows the progression of memory

degeneration, especially when implemented as a regular activity (Ellis, 2012; Wang, 2002; Woods, 1994).

Visual prompts, such as photographs, have been shown to support persons with dementia's ability to recall and share their life stories (Kelson, 2006). Reminiscence therapies based on nostalgic memorabilia increased both socialization of persons with mild to moderate dementia, as well as quality of life (Wingbermuehle et al., 2014). One study found that even in Alzheimer's patients who sometimes fail to recognize close family members, and often had trouble locating their rooms in an assisted living center, by creating a memorabilia box of personal items and photographs near that resident's doorway, they were significantly better off at finding their room (Nolan et al., 2009). This suggests that even past explicit recall, memorabilia can be a useful orientation cue and external memory aid.

Finally, because music will be used in this intervention, it is worth briefly considering some of the previous studies which used nostalgic music as a reminiscence therapy in dementia patients. Singing and listening to nostalgic songs not only induced an emotional reaction in patients, but it stimulated cognitive and psychological functions (Suzuki et al., 2004). One study found that it was the familiar melodies in particular, as compared to slightly distorted melodies or spoken lyrics, that induced emotions, reactions and recognition in even those far along in disease progression (Cuddy & Duffin, 2005). This study suggests that there is some sparing of musical recognition and musical memory in Alzheimer's patients who had severe memory, language and cognition impairments in other areas of memory. Previous research has additionally found that other positive effects of nostalgic music on dementia patients. For example, music has been linked to decreased agitated or aggressive behavior, improved sleep and sleep behaviors, and even better nutritional

intake and eating (Clark et al., 1998; Gerdner, 1999; Lindenmuth & Chang, 1992; Ragneskog & Kihlgren, 1997).

Narrative

One of the fundamental psychological needs for increased well-being and better outcomes for persons with dementia, according to Kitwood, is identity (1997). Defined by Kitwood, "To have an identity is to know who one is, in cognition and feeling. It means having a sense of continuity with the past; and hence 'narrative,' a story to present to others." (1997). Photographs of oneself and family members were linked to this concept of personal narrative (Kelson, 2006). In Kelson's qualitative experiment, visual life story is based on a definition in which life story is a means of personal narrative that cohesively and thematically links one's life events (2006). These visual life stories gave voice to participants and helped them better grasp and hold onto their own sense of identity through a more cohesive and digestible narrative.

Previous research on life story work, which created a history of one's life with picture books, and sometime text, for those in assisted living environments, found it very useful to create a narrative for memory-loss individuals to have even after they are no longer capable of rendering that narrative themselves, per se (McKeown et al., 2010). Life story work was proved significantly beneficial for several reasons: first, it gave individuals a sense of significance with regards to the lives they lead. Many of the interviews revealed themes of feeling that they mattered and it gave them a sense of achievement. These feelings and life story work were also related to elevated levels of happiness and pleasure (McKeown et al., 2010).

Television

Some literature suggest those with dementia particularly enjoy television as it can alleviate the unique stressors associated with memory loss. Topo & Östlund's qualitative study of television situations with dementia patients in assisted living homes had several interesting findings on why television can be especially therapeutic (2009). Shorter narratives allow for a greater sense of coherence which can sometimes be missing. Additionally, these situations—particularly viewing with others—allow an individual's personality to shine through in different ways as compared to more complex situations; one can react to the presented situations, for example, without much other context needed. Other potential benefits of television are the relatively low cost of television watching, primarily in a long-term care setting in which multiple residents can partake, as well as the low risk of adverse outcomes or other harm, like the risk of physical harm (i.e. falling) with more mobile types of interventions. It is also an activity that requires minimal supervision.

Interestingly, one study created 10-15 slide videos of personalized, reminiscent photographs and compared dementia patients' engagement with them to their engagement with two television episodes of similar temporal length (Yasuda et al., 2009). 80% of the subjects showed more attention to the reminiscent and personalized videos that to the episodes, suggesting the effectiveness of personalized photo videos for reminiscence therapy intervention in this population (Yasuda et al., 2009). While this study sets excellent precedent for the proposed intervention, it was more interested in assessing if these less cohesive videos increased attention in those with dementia as compared to generic television shows. What I believe it proves is that even in those with advanced, later stage dementias, some shred of their consciousness recognized the familiar faces and increased their attention and engagement with this new type of personalized media, providing evidence that an intervention like the one proposed could have merit in a myriad

different ways, such as potentially increasing their memory or decelerating the rate of forgetting loved ones to simply creating a more engaging and enjoyable activity for them in some of the last moments of their lives.

Cognitive Processes

Some research suggests that reminiscence therapies can even improve cognitive function (Cotelli et al., 2012). Yet, many of the mechanisms underlying the neurodegeneration associated with dementia are still not fully understood. With the advance of fMRI studies in the past 20 years, there is still much work to be done at the imaging level to understand the cognitive processes of those with dementia. Maguire et al. tested autobiographical recall, or semantic memory, in a healthy control against a patient with semantic dementia in an fMRI scanner to better understand those underlying cognitive processes (2010). Fascinatingly, autobiographical memories were quite robust, even in the face of advancing atrophy (e.g. patients had notable memory and language impairments already.) While imaging methods revealed significant volume loss, residual hippocampal and temporal neocortex tissues were active during recollection. Their results also suggest there are compensatory mechanisms at play, underpinning autobiographical recall while there is increasing structural compromise in the memory system. These areas included the ventromedial and ventrolateral prefrontal cortex, the left and right precuneus, and the right temporal neocortex (Maguire, 2010).

The researchers collected images for three years and found the progressive pathology showed the gradual erosion of the full recollective experience, although the patient was still able to recognize photographs from his own life, and even to recall details about them. He even showed the ability to ‘re-live’ the event at year three, when prompted with the picture. The researchers

further speculate that the VMPFC, ventromedial prefrontal cortex, is compensating for the deterioration in the hippocampus, as the VMPFC has widespread connections with the neocortex and medial temporal lobe. Because of this connectivity, other research has suggested this region may play a role in integrating information from the different neocortical regions during memory retrieval (Maguire et al., 2010).

Dementia typically starts by affecting short-term memory; this makes sense, as essential long-term memories are more firmly established and are more likely to be recalled. This might explain why individuals with dementia will remember their children for much longer than they remember their grandchildren, for example. By placing grandchildren in context with a participant's children and other cues, it might strengthen neurological and semantic links to more recent memories and family members in the Hebbian 'neurons that fire together, wire together' way. By creating a cohesive narrative which links both shorter and longer term memory, i.e. this is your child and his or her children, as well as this photo or video of you all together, this intervention would hope to create a more fluid memory that mirrors the structure of episodic memories, as compared to say the more semantic or factual knowledge "my granddaughter is named X."

Well-being and Reminiscence Therapies

Perhaps the most compelling reasons for doing this intervention is the fact that time and time again reminiscence therapy has greatly increased well-being, sense of identity, and mood in those who participate in it (Cotelli et al., 2012; Ellis, 2012; Kelson, 2006). Furthermore, seeing cherished memorabilia has shown a significant association with increased mood in persons with dementia (Sherman, 1991). Increased mood is correlated with higher quality of life in dementia

patients (Hoe et al., 2009). Hoe et al. also found that cognitive stimulation therapy, like intentional recollection, was associated with better mood which was mediated by improvements in cognition (2009).

Not only can these interventions clinically increase well-being, they are also a typically pleasureful experience for those with dementia (Tolson, 2014). They can instill a sense of pride that was not otherwise there and promote a sense that one's life had value (Kelson, 2006). They can create cues for conservation for those with dementia, who sometimes can have a harder time finding the right words. They also serve as a great activity for memory loss patients and their caregivers and/or family to partake in together.

Caregivers

A potential benefit of the proposed intervention that I had not initially considered is the ability to increase the quality of care for patients being delivered by nonfamily caregivers. In an intervention in long-term care facilities, Kelson used DVDs to create slightly briefer versions of the proposed intervention, which she called "visual life stories"; however, her primary intent was to give it to caregivers, as a means of delivering better person-centered care, which would serve as a feedback loop in increasing a sense of personhood (2006). While this study was an interesting step in the right direction, the videos were made by family members—after guided conversations with two patients with dementia and their families, separately, to collect and generate the content and narrative for the videos—with the intention of educating caregivers on the life stories of dementia patients. It worked well and the caregivers had better understandings of these residents and the lives they led, which allowed them to help the participants with dementia in retaining some memories and increasing their quality of life. My proposal would take this success and use

personalized, video stories to justify why this would be especially useful to also repeatedly show to those experiencing the dementia themselves *and* the caregivers.

While creating visual life stories, this intervention also gave family member a sense that their loved ones would be better cared for in long-term care and their sense of identity would be less likely to diminish—those taking care of them would actually know them, as compared to the traditional care models which almost exclusively focus on medical as compared to personal history. Creating the visual life stories allowed these families to feel they were continuing to care for their loved ones, as well. Staff in long-term care also reported positive feedback on visual life stories in their ability to care for residents (Kelson, 2006).

The Intervention

The proposed approach would ideally get to know the participant, i.e. what they like, their families, their personal history, and compile memorabilia and media into a film or short episode that the person could engage with and follow. It'd turn their life into a reminiscent, personalized and familial story in order to keep alive memories that might otherwise begin to drift away. The digital advances of today show a lot of promise in creating narratives of one's family and past experiences that could be protective against everything from the memory loss associated with normal aging to the later stages of dementia. The video example I will create as an example will further aid readers in understanding this project.

This intervention pulls from the literature and research discussed. There is ample evidence to suggest this type of intervention would be fruitful for both cognitive and behavioral mechanisms. It would serve as a means of 1) increasing sense of identity through a continuous narrative of life events, 2) increasing mood by calling upon positive past experiences, 3) increasing

a sense that one's life has value by including personal accomplishments, and 4) potentially even slowing down the progression of disease—or at best, keeping alive memories that if not otherwise revisited might begin to disappear in later stages. Additionally, it could be quite a useful aid in the transition to long-term care or even if a professional caregiver is brought into a home, as it would allow those caring for the person to get to know the individual better and provide more accurate and person-center care.

Episodes will be 10-20 minutes, as the majority of literature suggests that videos much longer than that will be difficult for some persons with dementia to attend to (Yasuda et al., 2009; Topo & Östlund, 2009). If family videos are available, they will be used; however, more likely than not, the earlier portions of those currently diagnosed with dementia life will rely on photographs exclusively. For some, even that will not be available. In this instance, more generic photos can be potentially used.[2] The text or speech that goes along with the videos will compensate in creating a truthful and cohesive life narrative if more generic photos are used. If applicable or relevant, the videos will also include songs the participants are known to enjoy.

Extended family, like grandchildren and even spouses will be included in context with the hopes that this type of anchoring will increase their salience in the participant's memory. If family is local, they can even be interviewed if this intervention were to be scaled; however, for initial purposes, it will be based on the participant's personal life narrative and use videos and photographs from their life, highlight their journey and accomplishments.

[2] Astell et al.'s 2010 study found that generic photographs also served as very useful reminiscent prompts for persons with dementia. When showed generic images, participants in their study produced very detailed and emotional stories of personal significance.

Scaling

This project could be scaled in a myriad of ways, from an extracurricular volunteer project for university students or a long-term care facility intervention to a more ubiquitous commercial startup.

For feasibility, this paper will primarily discuss it as a student-run volunteer organization, like Yale's Haven clinic. It could include as little as four volunteers to as many students across the campus that are interested. Two students would act as liaisons to a person with dementia's family; using two students would help control for any biases present on a given day from either the family member or volunteer, as well as gain consensus in the information collected, similar to the way psychological assessments often use inter-rater reliability. If the family is no longer around, involved or willing to participate for whatever reason, the intervention is impossible. The two student volunteers would meet with family members on two separate occasions, ideally with multiple family members at one time, though one, ideally a spouse would certainly suffice. Each meeting will take two-three hours, which at most will only takes six hours of the family's time. The only additional strain on the family would be compiling the pictures and videos to be included in the video. In an ideal scenario, the photographs will be collected by these meetings and the most important ones will be readily available for discussion. The rest of the intervention is the hope of taking the work required to make the video off of the family members (as well as to assure consistency in order to assess validity and reliability of the intervention method if need be assessed.)

One question might be: how would you decide important events? While meeting with the families and the patients themselves in the way Kelson's intervention did would be highly insightful, it'd be extremely time consuming, hard to coordinate with family members' varying

schedules and geographical locations, as well as subjective in some ways. Other studies have tried to operationalize the most important events in one's life, like weddings and births, which could be useful in consideration (Luhmann et al., 2012).

In light of the events of 2020, I've actually begun to create a relatively simple Python program that could interface with any website (ideally one I plan on creating myself for this intervention) to collect this exact type of information.[3] When a family member uploads a photo, they would input or tag the following information: individuals in the photographs, and relationship to the patient, i.e. 'Regina' and 'daughter', 'granddaughter' and 'Julia', the year or date, and the event, i.e. 'granddaughter's birth'. Other variables could be important, like relative importance of the picture, on a scale, and even free response input. These primary variables could generate the initial draft of the video. In addition, families would input a narrative of the individual's life which, by triangulating ideally more than one family member's input, create one accurate, cohesive narrative. Cross references could then check and update the initial video to ensure accuracy. They could additionally upload or link to songs they think would be useful in the video. Family members would ultimately need to approve the final product and could make changes.

Neural networks and other machine learning mechanisms could also serve as an immensely useful way to automate this process, and a skilled software engineer in facial recognition neural networks could build this somewhat easily with photographs being submitted. I personally believe automating this process completely might lose the innately human and emotionally subject aspects of it. For example, it'd still be quite hard for these to understand the nuances of a life story and appropriately generate the narrative based on human recounts.

[3] As soon as I have submitted my final exams, I plan on finishing building it to scale.

If doing the intervention with several students as describe above, with or without the Python app, the additional two students would be skilled in creating video content. The two students who act as liaisons and will create a story board for one of the videographers to create a video of the content received. These two team members will also be responsible for any scanning, etc. that needs to be done. Anonymity will be protected as personal memorabilia will be saved in protected folders and deleted immediately after their use in creating a video.

Once the first draft of the video is completed, the family member who uploaded everything can approve it or add any changes or corrections that need to be done. Once they are satisfied, the video can be shown their loved one with dementia.

One of the most plausible and perhaps effective ways in which this intervention could be scaled is a simple instruction manual which is given out to families, perhaps even a software with a template which makes it easy to add video, photographs, text or audio descriptions, and even potentially music. This would put the autonomy in the hands of the family members and would allow for the most accurate narratives, perhaps even the sharing of personal information that might not otherwise be shared with individuals outside the family.

An Example

My grandfather, Iwan Iwanciw (who we call “Dido” or Ukrainian for ‘grandfather,’), was born on July 7, 1929 in rural Ukraine. It was a time of poverty, famine and political unrest as Ukraine was under Soviet rule, and Stalin was overturning individually owned farms and converting them to state-run collectives. He rarely talks about his early life in much detail; however, we do know he witnessed his father being shot to death by Russian soldiers as a young child. At only ten years old, he went west, eventually serving as a forced laborer in a German work

camp, a common fate at the time for older children of non-German descent. In 1950, he left Germany and came to the United States, alone, with no money and only the clothes on his back. For months, he slept under a bridge. He eventually got a job working in a leather factory and lived in Camden, New Jersey.

I've spent a lot of time deliberating on if one's harsher memories should be included in this type of narrative. It would not, after all, be his story to exclude them; however, it would greatly decrease the hope of increasing well-being to rehash such atrocities. I will delicately include them, making sure the account is accurate through conversations with my grandmother. Some things that are potentially too painful, like *how* his father died, will be intentionally excluded, instead focusing on the good things we know about their relationship. In the case of scaling this intervention to others, if capable of bringing these up while patients with dementia are with their family members (e.g. presumably having support) in an interview to generate the narrative, I could gauge their reaction to it. I could record and qualitative code both the level of importance and subjective and emotional reactions, to determine inclusion criteria. Highly important but negative life events may be included by focusing on the good around that event. In a software version, where family members upload the photographs, videos, or other information, it could ask them to rate both the positivity (or negativity) of life events that include a negative scale to account for upsetting events, as well as a scale for importance. If highly important, you should probably include even a negative life event, and the positivity scale could serve as a metric to assess how much. For example, if the patient with dementia lost a child or experienced divorce, you'd emphasis the good in their relationship, when the information is available. Ultimately, after seeing draft versions, these decision will be left up to their family's discretion.

My grandfather married my grandmother in 1959 and they lived in an Eastern European ethnic neighborhood on the northside of a small Pennsylvanian town, Phoenixville. My grandmother was ten years younger than him and new to the United States. At this point in his life, he was working in a nearby steel mill, eventually getting promoted from a laborer position to operating machinery, a more senior-type position, a feat of which he was incredibly proud. He worked there for over thirty years until it closed and he has told his family many funny and interesting stories from his time there.[4] The fondness and fulfilment associated with this chapter of his life make a great thing to highlight and explore in his narrative video. They were a Catholic family, with a traditionally Ukrainian church peering over the end of their street. He proudly sang in their church choir for over fifty years.

They had three daughters: my aunt, Roma, born January 2nd 1961, my mother, Zora, born May 28th, 1964, and my aunt Natalia, born May, 21st, 1971. His daughters married and my mother's sisters had two kids. My mother had three. Each of his children and their families live within a15 minute drive from his house and they have all remained very close. He was a strict but loving father and an exceptionally wonderful grandfather. He has time and time again harped on the importance of family.

On Christmas Eve in 2015, my grandfather fell incredibly ill with a hiatal hernia and heart condition. He was in intensive care for months, an event which resulted in him suffering from ICU psychosis. After this, he was really never the same. Several months upon returning home, his mental state worsened and he began to show signs of dementia. He lost interest in some of the things he had loved so dearly, like singing in that choir, and stopped going to church altogether

[4] One of these funny stories is that when he was walking home from work one day in the 1950s, he served as a walk-on role in the pop culture science fiction classic, The Blob, which was filming a scene at the local movie theater, *The Colonial.* The funniest part of this story is that he didn't mention this to anyone—not a soul—until around 2005, almost fifty years later!

when it began too hard. He still finds pleasure in the little things, like watching the news, rereading texts he's read many times before and even flipping through an extensive picture book we made him (one of the inspirations for this idea.) However, as his condition has worsened, he no longer even recognizes his grandchildren some of the time.

I will create a video based on his life in the style proposed in this paper. Knowing him incredibly well, there are certain considerations I will have to make that might not be quite the same for this project if it were in an intervention. For example, some of my family members might suggest that I use his favorite church songs in the video. After all, he loved and happily sang many of them for so many years. Others in our family—myself included—would note this is still potentially a sore spot for him (i.e. he stopped going to mass because he was unable to participate in the way he used to, like singing those songs.) One concern I have for scaling this project is that nuances like this might fall through the cracks in the choices of the materials used.

Assessment and Delivery

In order for this proposed method to work, it will not be a one-time intervention. Based on the severity of their symptoms, it could be shown to the individual several times a week up to three times daily. (How many times the video is shown will also need to consider the bandwidth of the family members, caregiver, etc.) Research suggests reminiscence therapy should be used over an extended period of time in order to notice some of the less immediate effects (Ellis, 2012).

Assessment will take place several times throughout the intervention, again depending on the bandwidth of the family and person with dementia being assessed. Both the individual and his or her primary caregiver will be qualitatively assessed. These interviews will be recorded and

transcribed using www.temi.com. They will then need to be qualitatively coded for reoccurring themes and other interesting trends in responses.

Two sample scripts are attached as examples.

Conclusions

Previous research on reminiscence therapies has promising implications for the multimedia, personalized video-based intervention proposed in this paper. These therapies have increased well-being, mood and even sense of identity (Ellis, 2012; Keston, 2016; Sherman, 1991). Previous studies also suggest reminiscence therapy has also been correlated with slower memory degeneration (Ellis, 2012; Wang, 2007; Woods, 1994).

Some of the intended goals of this intervention are as follows: 1) increase participant's sense of identity through a continuous narrative of life events, 2) increase participant's mood by calling upon positive past experiences, 3) increase participant's sense that one's life has value by including personal accomplishments, and 4) potentially even slow down the progression of disease—or at best, keeping alive memories that if not otherwise revisited might begin to disappear in later stages. Additionally, this intervention could be quite a useful aid in the transition to long-term care or even if a professional caregiver is brought into a home, as it would allow those caring for the person to get to know the individual better and provide more accurate and person-center care. Other themes or changes which emerge can hopefully be assessed in the interview assessments.

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Music Used*

Songs & Dances of Ukraine, Volume 1. (1955). The Ukrainian Bandura Players. Retrieved from iTunes. https://music.apple.com/us/album/songs-dances-of-ukraine-vol-1/219374589

*I was unsure if I was allowed to used music in my video submission and do not want to infringe on copyrights, etc. For that reason, I will not be submitting a video with music.

Attachments

Assessment for Primary Caregiver

My name is _____ from _____name of university or institution_____. We are conducting research on video-based personalized interventions for persons with dementia. The purpose of this video-based intervention study is to assess, understand and describe if the use of personalized and reminiscent narratives, using a multimedia approach, can be useful in memory loss population (the participants). At this stage in the research, we are particularly interested in assessing if these videos can improve mood, well-being, sense of identity and even memory. Do you feel comfortable sharing your responses regarding __participant's name____ participation in this study?

1. How has the __participant's name__'s mood been before and after the video? Did it appear to change?
2. Has __participant's name__ mentioned this video to you at all? If so, what did he or she say?
3. Has __participant's name__ mentioned anyone or anything specifically in this video to you at all? If so, what did he or she say?
    a. Had he or she mentioned that often before?
4. Has he or she been more active since we started showing __participant's name__ the video?
5. Since we began this intervention, has __participant's name__ acted differently in any meaningful ways? Explain.
6. Since we began this intervention, has __participant's name__ seemed to remember things differently? Explain.
7. Is there anything I did not ask you that you think is worth talking about?

If the caregiver being interviewed is a family member:

8. Did the video seem like an accurate depiction of __participant's name__'s life? Explain.
9. Is there anything you might change about the video to increase its accuracy and effectiveness?

Assessment for Person with Dementia

The initial introduction:

Hi! My name is _____ from _____name of university or institution____. We'd like to assess if the video we made for you can be useful for other people with dementia. You can stop answering at any point.

Can I ask you two question first?

1. How are you currently feeling?
2. How was your mood earlier today?

(Allow the participant to watch the video)

Just to remind you, you can change your mind or stop answering at any point. Would you still be okay with answering a few questions about the video you just saw?

Then ask the following questions:

1. How are you currently feeling?
2. What did you think about that video?
3. What was your favorite part of the video?
4. Did you like the depiction of yourself in this video?
5. What else did you like about the video?
6. How did the video make you feel?
7. How did seeing your family in this video make you feel?
8. Was there anything you didn't like about the video?
9. Is there anything you would change about the video?
10. Is there anything I did not ask you that you think is worth talking about?