Virtual Reality Therapy Could Give Relief to Seniors - The New York Times

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V.R. 'Reminiscence Therapy' Lets Seniors Relive the Past

Some care facilities are giving older adults a way to visit their pasts to boost their well-being.

By Matt Fuchs

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John Faulkner, 76, was becoming emotionally withdrawn before he arrived at Central Parke Assisted Living and Memory Care, the community where he lives in Mason, Ohio. He had once been an avid traveler, but cognitive decline ended that, and he became socially isolated. By the time Mr. Faulkner arrived at Central Parke, he would sit alone in his room for hours, according to Esther Mwilu, who organizes activities for the community.

His treatment plan for dementia-related anxiety included antipsychotic drugs and reminiscence therapy, a decades-old practice in which older adults engage with reminders of their youth — like music or personal photographs — meant to bring about memories and cultivate joy and meaning.

Mr. Faulkner was underwhelmed by the nostalgia. So the staff at Central Parke tried again but used virtual reality. While studies suggest that traditional reminiscence therapy can significantly improve the well-being of older people, V.R. has the potential to make it more immersive and impactful. By putting on a headset, Mr. Faulkner could walk along the virtual Cliffs of Moher in western Ireland, just as he'd done with his wife several years earlier.

That was a turning point. Now, three months later, he has a 45-minute V.R. reminiscence therapy session every Monday. Ms. Mwilu said he requires less medication for anxiety and is more social. He has even started teaching classes for other residents like how to make paper airplanes.

Roughly a half-dozen companies today focus on providing V.R. reminiscence therapy for seniors in care communities. One of the largest of these, Rendever, works with more than 450 facilities in the United States, Canada and Australia, while another, MyndVR, has partnered with several hundred.

They are part of a growing trend of using virtual reality in health care, including treating patients with trauma and chronic pain. And with the number of people over age 65 expected almost to double by 2060 in America, the need for technological aides like V.R. for elder care is only increasing. More than 11 million Americans act as unpaid caregivers for a relative with dementia. The middle-aged "sandwich generation," juggling careers and multiple care-taking roles, is looking to V.R. and other technologies, such as robo-pets, for support.

Eddie Rayden of Rhode Island said his 91-year-old mother, Eileen, brightened when using V.R. to see the Cleveland neighborhood where she grew up. "She immediately lit up," he said. "All of a sudden, she was standing in front of the house she hadn't been to in 80-plus years."

How it works

The concept of reminiscence therapy goes back to 1963. Many psychiatrists at the time discouraged anything that seemed like living in the past, but one, Robert Butler, who later founded the National Institute of Aging, argued that seniors could get therapeutic value from putting their lives into perspective. Since then, psychologists have increasingly recommended using old wedding videos or favorite childhood meals as tools to benefit older people, including those with dementia. Experts say seniors troubled by declines in short-term memory often feel reassured when recalling the distant past, especially their young adulthood.

Over the past decade, faster and more powerful computing have made virtual reality more realistic and have led to studies showing how older people can use V.R. to re-experience meaningful parts of their lives. In 2018, researchers from the Massachusetts Institute of Technology found that virtual reality reduced depression and isolation among seniors. Other studies have suggested that V.R. reminiscence improves morale, engagement, anxiety and cognition by stimulating mental activity, though it cannot necessarily reverse cognitive decline.

Still, larger studies are needed before everyone over the age of 75 is putting on a headset. Dr. Jeremy Bailenson, director of Stanford's Virtual Human Interaction Lab, is currently leading a clinical trial in 12 states to try to get more data at scale.

"I would never want V.R. to completely replace non-V.R. reminiscence therapy," he said, but "different people need different tools."

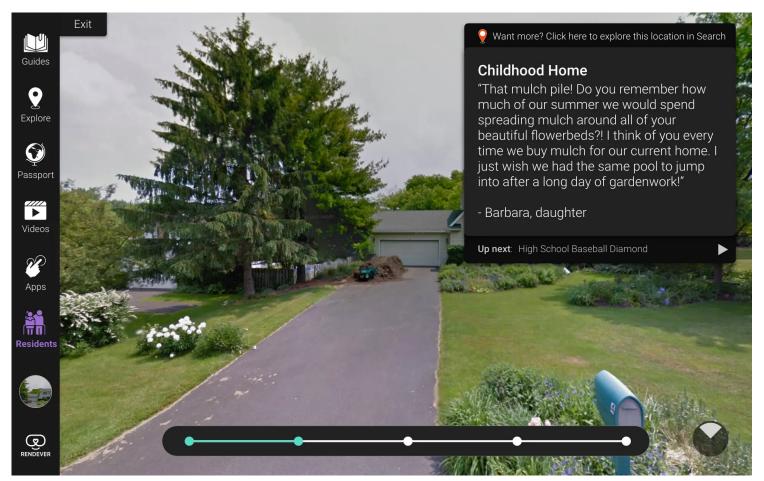
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Senior communities today can pay companies for headsets and access to a library of virtual experiences, many of which are designed for reminiscence therapy. Seniors can participate individually or, more typically, in group sessions.

Prescriptions are not required, and participants often outnumber the headsets. Caretakers and researchers said they start to see benefits after multiple sessions over one to two months. Stephen Eatman, a vice president for Sunshine Retirement Living, which manages Central Parke, said the company's use of antipsychotics has decreased as much as 70 percent in seniors using V.R. therapy.

In addition to reliving trips to places like Ireland, users can teleport to nightclubs that remind them of their youth. MyndVR offers visits to flamenco, ragtime and classical music venues, complete with musicians and actors dressed in the style of the day.



Family members have created location-based life stories, including vacations and childhood homes, for those undergoing V.R. therapy. Rendever

But users are not limited to prepackaged nostalgic experiences. Relatives, friends and caretakers can also record a 3-D video of a wedding or other event that the person can virtually attend over and over to reinforce new memories. Other family members search Google Streetview for important places in a senior's life that can be converted into V.R. realms.

Dorothy Yu, a business consultant from Weston, Mass., had the streets around the University of Missouri campus converted to V.R. so her father could see the buildings where he'd been a professor. Now a 90-something resident of Maplewood Senior Living in Massachusetts, it helps him remember the work he did there with pride, both during the session and afterward, she said.

"I've never seen anything like the reactions to this technology," said Brian Geyser, a vice president at Maplewood, which now offers V.R. in each of its 17 communities, which are mostly in the Northeast.

Not right for everyone

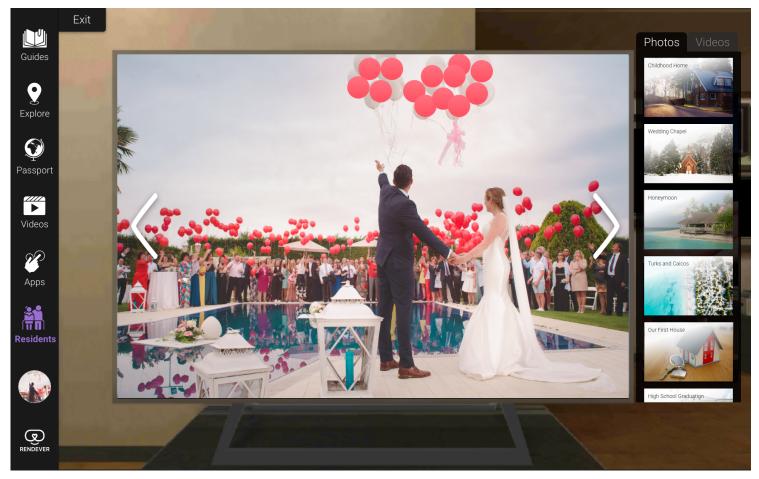
To participate in V.R. therapy, you have to strap on a headset that covers your eyes and blocks all light, but for the 3-D world you enter. For some older people who didn't grow up with computers, such immersive technology can be overwhelming, said Amanda Lazar, a human-computer interaction researcher at the University of Maryland.

"The face is a very personal part of the body," said Davis Park, vice president of the Front Porch Center for Innovation and Wellbeing, a nonprofit that brings technology, including V.R., to senior communities. Someone with dementia may worry when their eyes are covered or have trouble understanding the purpose of strapping a machine over their face at all, Mr. Park said.

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To mitigate these risks, Sunshine Retirement limits V.R. activities to certain rooms where seniors can move around safely. They also avoid showing seniors places that could set off traumatic memories, said Mr. Eatman, but people's reactions are tough to predict.

Most providers also limit V.R. reminiscence sessions to 45 minutes, though even at that length, it can cause dizziness and headaches, especially with certain medications. Headsets may also be too heavy for some older adults' necks or may not account for hearing and vision impairments.



While companies like Rendever have V.R. simulations that can bring back good memories, headsets can sometimes overwhelm patients, especially those with dementia or who are easily confused. Rendever

Another downside: V.R. can be socially isolating. Traditionally, reminiscence therapy has encouraged groups of seniors to bond over special memories with one another and caretakers. "If someone puts on a headset, the people around them are blocked out," said Dr. Lazar.

The Iona Washington Home Center in Southeast D.C., tries to solve this by projecting seniors' V.R. experiences onto a 2-D screen for others to watch and discuss. The center, run by a nonprofit, received its V.R. headsets through a government grant, which is common for retirement communities. "People around here don't have much money," said Keith Jones, the program specialist. "Most of them didn't get to see the world." When he takes groups to another country in V.R., Mr. Jones positions the few members who've been there at the head of the table to share their memories.

The future of the memory metaverse

In the future, V.R. may offer another way for seniors to combat loneliness — by stepping into the experience with their loved ones.

Tamara Afifi, a researcher at the University of California, Santa Barbara, has studied V.R. and dementia and is investigating new technologies that let relatives take trips together. Ms. Rayden, who is a 91-year-old resident of Maravilla Senior Living, a community in Santa Barbara, participated in Dr. Afifi's research. She and her 66-year-old son, Mr. Rayden, took a tour of her old Cleveland neighborhood together, despite his being in Rhode Island.

"I showed him where we played hopscotch and sledded in winter," she said. "It was important that he knew the home we had and the neighborhood. It was my childhood. It brought back wonderful memories."

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Since Ms. Rayden's husband died in 2019, she's struggled with sadness and loneliness. Virtual reality has allowed her to take her son to Florida's Intracoastal Waterway, where she'd enjoyed fishing vacations with her husband. "He loved fishing," she said. "Such happy memories."

Ruth Grande, executive director at Maravilla, said that adult children can "stop being caretakers for 30 minutes" when they have these experiences with their loved ones. "They remember what it's like to enjoy being with their relative," she said.

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