# Vr is now used to treat addiction and other mental illnesses

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When we think of virtual reality, perhaps the first thing to come to mind is its role in gaming. But narrowing the technology’s value to its capacity to simply entertain does it a disservice. As many reports and studies around the world have shown, virtual reality boasts a diversity of uses, perhaps one of the most important being its application in the field of medicine and healthcare. A facility in Australia, for instance, is now using virtual reality to help people suffering from compulsive disorders and other types of mental illness. A game-changer for mental illnessAccording to ABC News, BrainPark is a brain research facility built for a singular purpose: to diagnose and then help people with addictions or compulsive disorders. Developed by the Monash Institute in Melbourne, Australia, its aim is to implement addiction treatments without relying on medication, the making it the first in the world to do so. One of the people they are currently treating is retired grandmother and former businesswoman Anna Bardsley, who lost her life savings to gambling. “ I’d say I’d only spend $20 and $200 later I would feel so disgusted with myself, but I had zero control over my impulses,” she explained. Her addiction also cost her her dignity and marriage. “ I lost not only money, but time and every shred of my self-esteem,” she said. “ There were times I thought I may as well be dead, but I couldn’t do that to my family.” She understood that her problem was psychological: “ I realized my brain was doing what it thought I wanted it to do, so I needed to retrain it,” Bardsley said. That’s where BrainPark came in. Other institutes would normally treat mental illnesses using counseling and/or medication.

BrainPark, however, diagnoses and treats individuals like Bardsley using a combination of neuroscience, high-intensity exercise, and virtual reality.“

Therapeutic virtual reality is a game-changer for mental illness," said BrainPark Director Dr. Rebecca Seagrave. " It can put a clinician, a client and their habits together in a realistic addiction hot zone, where they can work to retrain new responses to cannabis, alcohol, gambling, or amphetamines." A safe environmentHelping patients learn how to deal with specific triggers is a key to treating a variety of mental illnesses. Virtual reality is therefore beneficial to the treatment process because it can reproduce triggers that people can face in a safe environment. For example, those with obsessive-compulsive disorder (OCD) whose issues revolve around contamination can expose themselves to their triggers when they enter " filthy" virtual bathrooms and kitchens. This allows them to challenge themselves to curtail problematic behavior when placed in such uncomfortable scenarios." There's a whole library of problematic triggering situations that are really difficult to access in the real world, which can be available in a clinician's office through the flick of a switch," explained Seagrave. By having people like Bardsley enter a virtual casino replete with computer-generated poker machines, gambling addiction can be diagnosed and treated in much the same way." We can measure people's physiological brain response to different aspects of gambling in a virtual environment and look at which aspects of gambling are most involved in their addictive behaviors," said Seagrave.

Records furnished by the Monash Institute show 20 percent of Australians are afflicted with unhealthy addictions. Sadly, most of them don't seek help." Traditionally, people have their addictions treated according to their addiction, counseling for gambling and medication for cravings or anxiety.

But this doesn’t work for everyone,” said Professor Murat Yucel.“ We often judge people who chase rewards in our society but what we’re really trying to do is inspire them by giving them a purpose-built playground for the brain,” he added. “ We want to provide a fresh approach to detecting and overcoming compulsions by harnessing the benefits of technology.” A self-described retired gambling addict, Bardsley believed that treatments that take advantage of the powers of virtual reality and similar technologies will be of great help to people like her. “ It’s in a measured space and it’s in a safer space than physically going to [an actual gambling] venue,” she stated. “ I think it’s engaging and it makes me want to give the treatment a go.” Researching virtual reality treatmentOther researchers have also recognized the benefits of virtual reality for the treatment of mental illness.

According to the Asana Recovery blog, the University of Houston (UH) Graduate School is researching the treatment of heroin addiction using virtual reality. Clients visiting the lab undergo a 45-minute virtual reality session, where they have to deal with dangerous experiences that in the real world can lead to a relapse. The therapist then educates them about how such relapses can be prevented. UH is currently developing an installation involving projecting screens spanning entire walls to simulate a full environment in 3D. Clients will wear 3D glasses instead of the typically bulky headset. Other scientists are enhancing the experience by using scent machines to create various odors during sessions. For example, the scent of alcohol can be used in a session involving someone with a drinking problem.

Even Chinese researchers are tapping into virtual reality to treat addiction. According to the South China Morning Post, a rehab center in Shanghai is using the technology to determine an inmate’s level of interest in drugs, and then identify the treatment required. The headsets come with eyeball trackers that monitor what visuals the users focus on; lingering on images pertaining to drug use can reveal the inmate is still craving drugs.“ In the past, to depress the addicts’ desire for drugs, we let them watch TV or presented them horrible pictures of people whose health was seriously affected after long-term consumption of drugs,” said project leader Xu Ding from the Shanghai Drug Rehabilitation Management. “ But both TV and pictures on papers don’t look real enough.” He added, “ VR is a kind of embedded viewing experience and is so real.”