Park fourth interview, I'd developed a checklist to use before each meeting. For starters, I would make sure I had grown some hair. I'd also check that I was fully clothed – I had learned the hard way about that one. Only then would I teleport to the interview, hoping that this time my avatar wouldn't materialise in anyone's lap.

Welcome to Second Life, a virtual world with almost 20 million players globally, where the avatars – digital stand-ins for the players – create everything around them. Every cobbled street, every tree swaying in the wind, even the wind itself, is the product of someone's imagination.

For some users, though, this isn't merely a game. It is precisely this ability to construct and control a virtual environment that is creating a new branch of psychotherapy – avatar therapy – in which therapists interact with their clients avatar to avatar.

On the face of it, this might sound like a pale imitation of a real-life therapy session. Yet its proponents say avatar therapy has some unique advantages that take psychotherapy to the next level. In Second Life, therapy sessions are not confined to the therapist's virtual office; they can also involve role-play scenarios to allow the patient to practise their newly learned coping skills in virtual environments tailored to their needs. All the while the therapist gives real-time feedback, like a medically qualified Jiminy Cricket.

Launched in 2003, Second Life was one

of the first virtual worlds known as massively multiplayer online games. It was designed not for fighting monsters, but for people to socialise and, increasingly, emulate real life. Musicians have concerts, artists display their work and scientists go to meetings. People work, learn and connect in these virtual worlds. So can they be used for healing too?

As a technophile, I love the idea; as a psychotherapist used to working the old-fashioned way, I had reservations. So I decided to meet some of the advocates of virtual therapy in their own domain, avatar to avatar, to see if they could address my concerns.

One of my first interviews was with Dick Dillon, a real-life psychotherapist with Preferred Family Healthcare, a Missouri-based non-profit organisation that also leads the field of virtual therapy. In Second Life, Dillon's avatar is a bald, square-jawed hunk with a passing resemblance to Bruce Willis. He took me through a typical therapy session.

Talking by voice chat or instant messaging, you and your therapist may decide it is time to revisit the site of a traumatic event – a car crash, say. But in real life it is too far away, or perhaps you don't yet feel happy driving. No problem: your therapist builds, or "rezzes", the scene in a matter of minutes. Soon you are driving on a familiar road, with a steep bend similar to the one that you lost control on in the rain. As you approach the turn, your anxiety increases and your breaths become faster.

# THE VIRTUAL THERAPIST WILL SEE YOU NOW

Can the connection between therapist and client be replicated in cyberspace? Samantha Murphy investigates





The therapist coaches you, reminding you of symptommanagement techniques. If it all becomes too much, they zap you instantly back into the office.

According to Dillon, this set-up lets the therapist give real-time feedback while providing an experience that feels genuine, yet takes place in the safe environment of a simulation. The emotions are real. The rewards are real. Only the location is fake.

"When the brain sees a 3D object in real life it converts it to a 2D object in the visual cortex," says Jeremy Bailenson, head of the Virtual Human Interaction Lab at Stanford University in California. Perhaps that's why a virtual scene can still provoke a strong psychological reaction, he says.

#### **Phobia exposure**

One of the first applications of avatar therapy was in treating social anxiety disorder, a crippling shyness that can confine people to their homes. James Herbert, head of the anxiety treatment and research programme at Drexel University in Philadelphia, Pennsylvania, was among the first wave of researchers to investigate avatar therapy. Encouragingly, clients generally rated the treatment highly, though there were exceptions. "Some patients and therapists reported frustration with not being able to see the individual's face," he says, and sometimes technical difficulties interrupted the sessions.

Avatar therapy has also helped people with phobias. In real life, the usual treatment is to gradually expose people to the source of their fear, but this can sometimes be difficult. An avatar therapist can introduce the phobia source while remaining in complete control, scaling the experience up or down according to the client's reaction.

In fact, many of the conditions treated by face-to-face talk therapy can also be treated virtually, including depression and anxiety. Avatar therapy is proving useful for more diverse conditions too, such as traumatic brain injury, schizophrenia and Asperger's syndrome. So far studies have shown similar success rates to traditional therapy for social anxiety (Cyberpsychology & Behavior, vol 8, p 76) and post-traumatic stress disorder (Cyberpsychology, Behavior, and Social Networking, vol 13, p 3). Dillon's team will soon publish a study showing its effectiveness in drug and alcohol addiction.

What about the downsides of avatar therapy – doesn't it lack the personal touch? "A real therapist dealing with a real person is more likely to feel ethical responsibility and

In Second Life, counselling sessions need not be confined to the therapist's office

### "The emotions are real. The rewards are real. Only the location is fake"

care for that patient," says Christine Webber, a psychotherapist based in London.

The other major concern is the loss of body language. For people used to Second Life, this is not as much of a problem as you might think, according to Dillon. But as a therapist, I glean a great deal from seeing someone become tearful or shift in their seat.

It's a trade-off, say avatar therapists. What you lose in body language you gain in the eloquent expression of conscious thought – at least for clients who type in their responses – as well as the loss of inhibition that comes with communicating through an avatar.

For people seeking therapy online, there are practical concerns, too: without visiting a real office with certificates on the wall, how can they be sure the people offering treatment are bona fide therapists? The Online Therapy Institute, a mental health training body in Second Life, is pushing for professional standards to be agreed across this emerging field. It offers a "Verified by" logo that therapists who meet its standards can display on their websites. Because confidentiality is paramount, one criterion is that sessions must take place in digitally secure areas.

So are psychotherapists ready to leave some of their most basic tools behind? "It's not for everyone," says Kelli Turgyan, a social worker practising in Lancaster, Pennsylvania. "This type of therapy would have to be done by the right type of therapist for the right type of client." Because of the lack of face-to-face contact, only low-risk clients should be taken on, and they must be willing to use local emergency services if they hit a crisis, she says.

Despite the downsides, avatar therapy is gaining converts. There's no official head count, but each month more and more therapists seem to pop up in Second Life and other virtual worlds. A growing number of journal papers and chapters in mental health textbooks are focusing on avatar therapy too, say DeeAnna Merz Nagel and Kate Anthony, co-founders of the Online Therapy Institute.

The field is still in its infancy and the technology is not without its pitfalls, but this new form of therapy clearly holds promise. However, until the day that I can log in and find myself with sufficient hair, properly dressed, and less apt to inadvertently throw myself at complete strangers, it's clear it still has a little way to go. But avatar therapy is on the right track. You could say it's virtually there.

Samantha Murphy is a counsellor and freelance writer based in Pennsylvania

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