

Researchers develop a digital therapy to alleviate the symptoms of depression

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The player explores a three-dimensional environment and tries to free the world from the creatures that plague it. Credit: SoihtuDTx

By liberating a world that's being possessed, a therapeutic videogame seeks to alleviate depression symptoms.

Professor Matias Palva explains how a [video game](#) can treat depression. "In game terms, Meliora is a combination of first-person shooter and strategy game. The player explores a three-dimensional environment and tries to free the world from the creatures that plague it. Understanding their deeper nature is a key issue in the game," says Palva, the professor at Aalto University and the University of Helsinki who heads Meliora's research team.

Although mental health is a cornerstone of well-being, it is faltering in today's societies for many reasons. For example, more than a third of university students report significant depression symptoms and psychological distress. Despite the prevalence of mental health disorders, many do not seek help, are unable to get treatment they need, or face considerable waiting times.

"There are many kinds of people, and not everyone will benefit from a particular kind of treatment. We need many different types of

treatment to meet various needs and preferences. Games can uniquely challenge our thinking, offer positive experiences, and a sense of connection with others," says doctoral researcher and psychologist Lauri Lukka.

Depression is often associated with low mood and, like many other [mental health problems](#), can involve in a decline in cognitive functions and information-processing capabilities. People with depression may have trouble remembering things and paying attention to something. The most typical treatments for depression, psychosocial therapies and pharmacological medication, do not directly focus on restoring the cognitive functions.

Towards a solution to the problem

Digital games focus on problem solving. Players have to navigate challenging three-dimensional environments and solve changing puzzles—often under [time pressure](#)—as well as collaborating with other players.

"It's important to develop games that are specifically targeted at mental health. In this case, the game is not entertainment but a medical software device for [health care](#), and it will be evaluated accordingly. For example, that the game must be clinically proven efficacious and must not compromise [patient safety](#)," explains professor Palva.

Ideally, players will both benefit from the game and enjoy playing it. The project was inspired by entertainment games focusing on [mental health issues](#).

"There's a complex relationship between mental health and gaming, where gaming can be both beneficial and constructive, harmful and addictive," says Lukka.

"Gaming can be harmful when it is used as an

avoidance behavior, if it's an escape from everyday problems or, at its worst, it becomes an addiction that feeds on itself. It's important to recognize that some games can also be harmful, fuelling things like addiction or a gambling habit. On the other hand, there are games that bring people joy, inspire us, and make us stronger: we strive to facilitate their development."

The researchers hope that [mental health](#) treatment will gradually reach more and more people in the future.

Provided by Aalto University

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