Study suggests games requiring physical interaction can help Parkinson's sufferers

A recent study conducted at Lancaster University has revealed that video games that require players to interact physically with the game, such as they would if using a Wii controller, can help to improve the lives of people living with Parkinson's disease and a number of other neurological ailments.

The study found that the games acted as a form of physical therapy for the participants while also encouraging them to have a little bit of fun. It is believed that such findings may be beneficial to physiotherapists who often struggle with engaging patients in regards to having them complete repetitive exercises in an effort to strengthen particular areas of their body.

Emmanuel Tsekleves, who conducted research as part of the study, commented: "Muscles and joints tend to become stiff and rigid, which is why exercise is crucial in managing some of the symptoms.

"However, physiotherapy exercises are very repetitive in nature leading to boredom and de-motivation and hence lack of adherence.

"Computer games have the potential to motivate people to keep active by implicitly incorporating repetitive exercises into the games."

This research, and other studies like it, have led to many attempting to adapt video games and the technology behind them for use in aiding those who suffer from illnesses such as Parkinson's. In fact, many institutions are now looking into developing games that place an increased focus on therapy that relates directly to the conditions of those playing the games in an effort to make them even more effective.

Tsekleves added: "Our research involved participants with Parkinson's using commercially available gaming sensors like the Nintendo Wii and computer games designed specifically for people with Parkinson's disease.

"The key was in taking physiotherapy exercises and translating them into game play movements.

"The games help at improving the player's speed and arm movement, improving flexibility and reducing rigidity. One involved the control of a two-paddled row boat, while the second, the steam mini-golf game, asked the player to rotate a valve to release steam to push a ball into a hole."

The team concluded that games using concepts familiar to suffers involving simple exercises worked best as part of a treatment plan, ensuring that patients are not burdened with overly complex controls schemes while also ensuring that they can relate to the content in the game that they are playing.

David Burn, Parkinson's UK clinical director, concluded that: "Studying the effects of exercise on Parkinson's is an underexplored but exciting area of research.

"We know that games like those on Nintendo Wii can be a great way to help people with Parkinson's improve their stiff movement, as well as their general fitness levels.

“This study is only in a handful of people, and needs to be replicated in larger numbers, but the results are promising.”

Source: Times of Malta