

How virtual reality takes the 'work' out of workouts

June 15 2020, by Hayley Jarvis



Credit: Robert Collins, VirZOOM

If you want to exercise harder, enjoy it more and feel it less, pull on a VR headset and plug in some upbeat tunes, leading sport scientists say in their latest study.

When exercising, people feel better when they lose themselves in music and computer-simulated environments, shows a paper in the *British Journal of Health Psychology*.

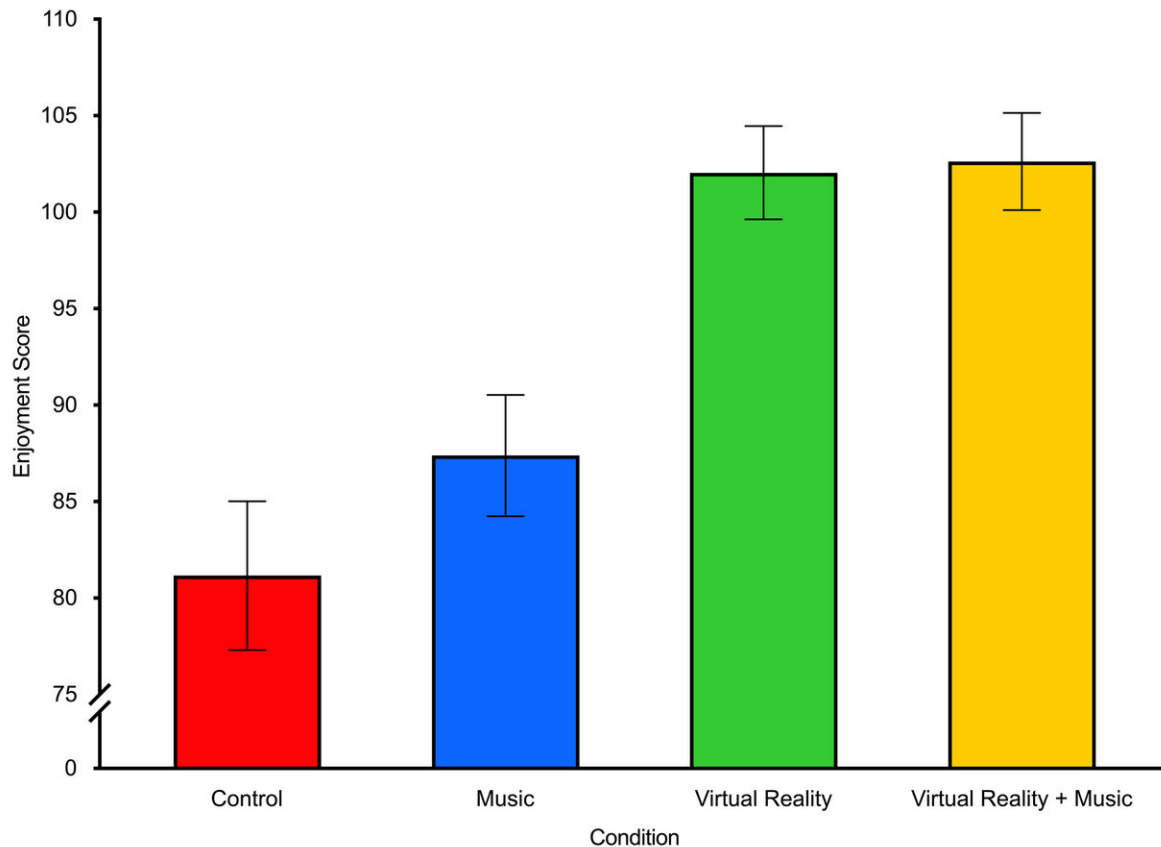
Brunel University London and the University of Exeter joined virtual workout games creators VirZOOM to see how VR dials up pleasure and helps people lose '[exercise](#) consciousness'.

In a controlled experiment with 24 volunteers on exercise bikes, experiencing VR with music raised perceived enjoyment by 26.4%, compared with a control condition of no VR or music. And the VR combined with music raised enjoyment by 17.5% when compared to music on its own.

"It was quite striking how the combination of virtual reality with music boosted exercise-related pleasure, compared with just music or control conditions," said Brunel's Professor Costas Karageorghis.

"Our findings show the abundant potential for the use of virtual reality combined with music to get people more physically active in their own homes."

In one of the first studies to show VR makes exercise more fun, volunteers listened to Shawn Mendes' 'There's Nothing Holdin' Me Back', while pedalling through virtual rolling French countryside in the VR headsets.



Enjoyment scores. Credit: Robert Collins, VirZOOM

"The exerciser's mental bandwidth to process fatigue is reduced by the [virtual world](#) and soundscape provided by the immersive technology," said lead author, Dr. Jonathan Bird at Exeter. "Participants appeared to thoroughly enjoy the virtual reality exercise and enjoyment makes people more likely to stick to a routine."

The researchers measured cyclists' feel-good factor—how they felt before, during and after exercise, their attention—whether they focused inwards on their body or outwards on their virtual surroundings, and how much they enjoyed the exercise. They also monitored heart rate

variability and perceived exertion.

With the VR gear available for less than £200, the team call for more research into its public health benefits, especially with many people now stuck indoors because of lockdowns.

"Customers tell us working out in VR helps them look forward to workouts and encourages them to go on longer," said VirZOOM's Eric Janszen. "They want to see what's over the next hill or get to the next gate. The 'work' is literally taken out of the 'workout', as the technology is so immersive and attention grabbing."

"It can transport you way outside your own home, even when you're stuck firmly within it," added Dr. Bird. "It's a kind of exercise escapism."

More information: Jonathan M. Bird et al. Ready Exerciser One : Effects of music and virtual reality on cycle ergometer exercise, *British Journal of Health Psychology* (2020). [DOI: 10.1111/bjhp.12445](https://doi.org/10.1111/bjhp.12445)

Provided by Brunel University

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