

Blind people develop accurate mental map by playing 'video' game

September 19 2012

Researchers have developed a new "video" game for blind people that can help them learn about a new space using only audio cues, as reported Sep. 19 in the open access journal *PLOS ONE*.

The system, developed by a team led by Lotfi Merabet of Harvard Medical School and Jaime Sánchez of the University of Chile, is called the Audiobased Environment Simulator and uses only audio-based cues to allow blind users to learn about the layout of a previously unfamiliar building.

After playing the game, participants were better able to navigate a realworld version of the space explored in the <u>virtual reality environment</u>, confirming that the spatial information learned in the game was accurate and transferrable.

"Learning through such interactive games represents an innovative and motivating way to improve crucial skills that allow <u>blind individuals</u> to remain functionally independent", says Merabet.

More information: Merabet LB, Connors EC, Halko MA, Sa'nchez J (2012) Teaching the Blind to Find Their Way by Playing Video Games. PLoS ONE 7(9): e44958. <u>doi:10.1371/journal.pone.0044958</u>

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