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

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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 real-world version of the space explored in the virtual reality environment, 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 blind individuals 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. doi:10.1371/journal.pone.0044958

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