

Study supports value of video games versus traditional exercise in promoting physical activity

New and effective methods for encouraging physical activity uptake must not be ignored.

Providence, R.I. -- Research led by a behavioral scientist at The Miriam Hospital is providing further evidence that active video games, such as the Wii and Xbox Kinect gaming systems, can help sedentary individuals achieve more physical activity than traditional exercise.

Beth Bock, PhD, a research scientist with The Miriam's Center for Behavioral and Preventive Medicine, will present findings from her research during a presentation in March at the annual meeting of The Society of Behavioral Medicine (SBM).

Bock's research team, in a randomized controlled study, assigned healthy, yet sedentary people to one of two groups—one that engaged in traditional exercise on treadmills and stationary bikes and another that played video games that required moderate to vigorous aerobic intensity. Their effort was tracked with heart rate monitors. Researchers followed up with the participants at the end of the 12-week program and again six months later to assess their physical activity.

Bock's research found that those in the video game group engaged in more minutes of moderate to vigorous physical activity than those that took part in the standard exercise intervention. A recently completed analysis of the follow-up data examined whether the differences between the two groups could be related to psychosocial constructs from Self-Determination theory and Social Cognitive theory.

"People who played the physically active video games continued to do more exercise than the standard group because they got more enjoyment, better management of stress and depressive symptoms, felt more engaged in physical activity and were more confident about their ability to exercise than people doing Standard exercise," Bock said.

The goal for both exercise interventions was move participants toward meeting national guidelines for aerobic physical activity. Despite the many health benefits associated with physical activity and health risks associated with inactivity, only about half of American adults report being sufficiently active to meet national guidelines, according to the U.S. Centers for Disease Control.

"Even among those who initiate a physical activity program, long-term adherence is a challenge. Approximately half of those who take up a new exercise program stop within the first six months," said Bock. "There is a continuing need to discover effective approaches that not only encourage physical activity uptake, but also promote the continued maintenance of regular physical activity."

The paper Bock will present at the SBM annual meeting is titled "Psychosocial Mediators of Physical Activity Using Exercise Video Games: *Wii Heart Fitness*." The trial was supported by a

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Conference Program

<https://www.sbm.org/UserFiles/file/am19-pro-v11.pdf>

About SBM

The Society of Behavioral Medicine (SBM) is a 2,400-member organization of scientific researchers, clinicians, and educators. They study interactions among behavior, biology, and the environment, and translate findings into interventions that improve the health and well-being of individuals, families and communities (www.sbm.org).

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