The new exercise regime: Active virtual reality games and health

With the increase in technology, individuals have begun thinking about new ways to increase their physical activity levels. People who are easily bored with conventional modes of exercise have begun looking to incorporation Virtual Reality (VR) into their fitness practices. Some VR games have very low activity levels associated with them, while others have very high levels. How much real exercise can you achieve when playing VR games? If you use your heart rate (HR) as the measure, is that just an indicator of your excitement or fear of the image coming at you, or is it a valid measure of exercise intensity? At San Francisco State University, we have been working with the VR Institute to quantify (through measures of oxygen consumption (VO2) and HR), the level of physical exercise achieved in specific VR games. We have developed a rated system (VRMet) which allows us to compare the caloric expenditure of playing these games to more conventional forms of exercise (i.e., walking, jogging, running, etc.). With this information, individuals can make informed decisions on the use of their time playing VR games and each game's value to their health practices, as well as their added exercise enjoyment. This presentation will explore the evidence we have collected and where our information may lead VR and health in the future.

Biography
Marialice Kern is a Professor and Department Chair of the Kinesiology Department at San Francisco State University, USA. She has received her PhD from the University of California, Berkeley in 1988 and has been teaching at SFSU for 23 years. She is a Fellow of the American College of Sports Medicine and in 2015; she received the Recognition Award from the Southwest Chapter of the American College of Sports Medicine.

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