

## **Exertainment: Designing Active Video Games to Get Youth Moving**

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**Abstract :** The advancement of ICT innovations provides us with a comfortable and convenient modern lifestyle. However, this modern easy lifestyle is proving to have some serious health consequences. Such technological advancements that have dramatically increased ones time in front of screens have been a contributing factor to increasing rates of obesity. In particular the youth obesity issue has gained more and more attention from researchers and health institutions around the world. Although technology innovations may lead to a sedate modern life, they also have a potential to solve the obesity issue in children. This paper provides a review of the issues in child obesity and the potential of active video games to mitigate these issues. Additionally, the paper also discusses the key requirements to develop an active video game that hopes to help combat child obesity through motivating youth to exergame. A framework is introduced to meet the requirements, from which a prototype was implemented. Discussion of the simulation and testing that were performed to verify the attainment of objectives is also detailed.

**Keywords :** e-video games, exergaming, health informatics, human computer interaction

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