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# Active Video Games and Attention: Lost the Battle but not the War?

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## Introduction

Gamers, as a demographic, are at risk of experiencing physical activity inequalities, as traditional games are sedentary. Active Video Games, wherein user motion wholly or partly replaces the traditional button pressing on a controller, are a method that can alleviate this inequality. Active Video Games have been shown as an effective method for increasing physical activity levels, however, they have failed to capture the attention of gamers. This project explored why Active Video Games are losing the battle for attention, because ultimately, a player always has the final choice.

## Methods

From a pragmatist perspective, this study used a quantitative review-based survey with qualitative semi-structured interviews

Global Video Games Market:  
\$137.9bn  
2.2bn players  
Played 6hr p/wk  
Watched <2hr

Active Video Games Market:  
0-2 titles in top charts per year over last decade.  
Pokemon Go and Just Dance



Games reviewed: Pokemon Go, Just Dance, WiiFit, WiiSports, Beatsplosion, Kung Fu Live.



"In active games... n-no, no immersion, engagement or owt. That's just me, I can play it, there's still real world problems, there's nowt. There is still things that bother me, some things I might still be thinking about, there is nowt there."

VS

"...you can just go out and do nothing because the world is just like a really beautiful world, like horizon was... It's that living, breathing world that allows me to you know, have my say and choices, completely different world, it's going to suck me in."

Active Video Games  
(mean = **3.97/10**)

VS

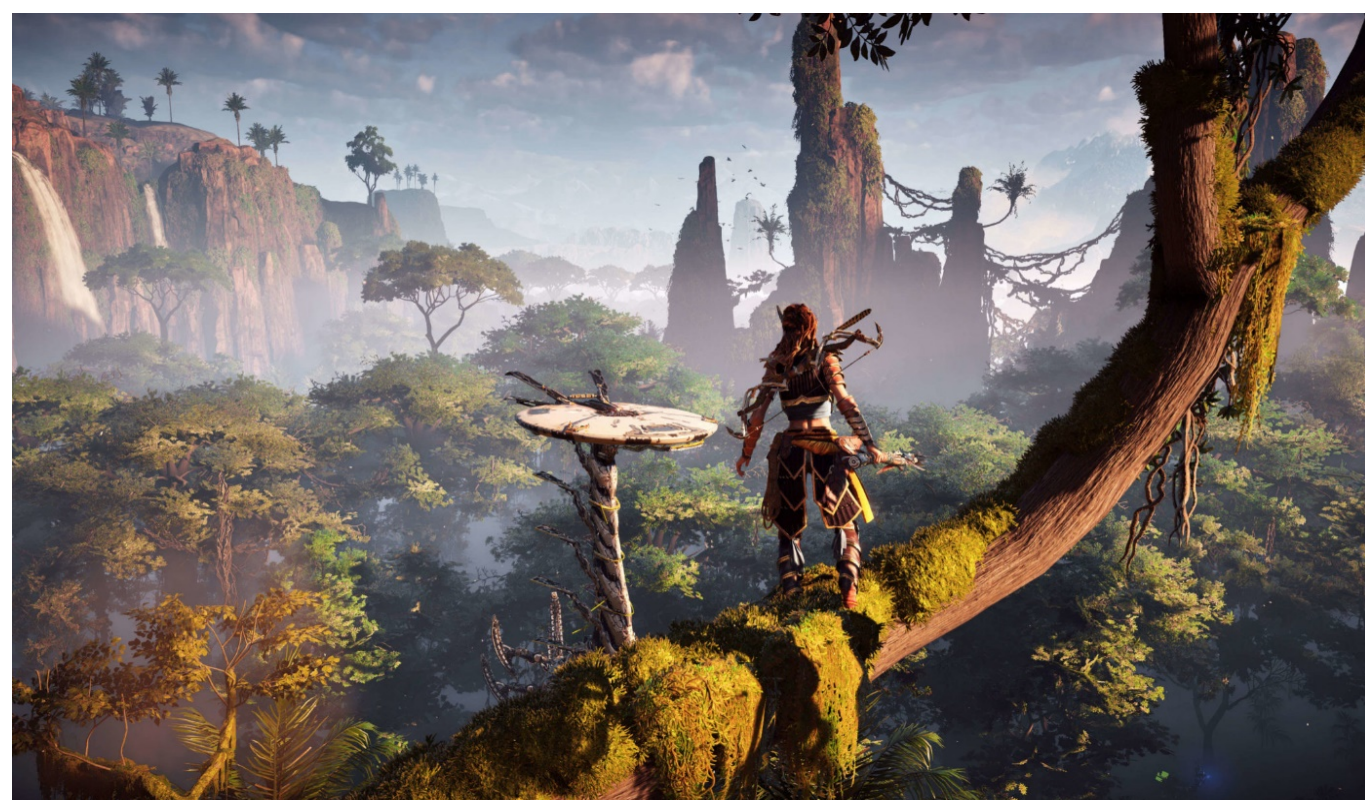
Non-Active Video Games  
(mean = **10/10**)

"Pokémon go, it's simple, it was great, but, for me there's no long run, I can catch them all but I don't want to do that, I want something more. Just Dance, you can go through all the stars and stuff like that but there's no achievement in it for me, I do like the fun but it wears off."

VS

"If I had blood pressure monitor on me when I was playing dark souls, I might have been admitted to hospital. It was crazy how you would spend about 3 or 4 hours on one boss, then get past it and just feel weightless, so happy."

Measured Across 10 design constructs.



World design, story, characters, engagement, graphics and audio.

Community, competitive, challenge, replayability, expression.



## Issues: Games and gamer

- Lack of quality
- Lack of variety
- Practicality (hardware and space requirements)
- Stereotyped for kids and families
- Gamer motivation models should be considered

## Issues: Physical Activity

- Active Video Games struggle to facilitate moderate intensity levels, and cannot yet facilitate vigorous intensity levels
- Active Video Games cannot yet facilitate 'muscle-strengthening exercise' as per physical activity recommendations

## Take home points

1. Leverage what is positive about traditional games, rather than completely re-working the formula. Instead of making Tennis into an AVG, think about how we can make Horizon (pictured left) into an AVG. Game first, activity second.
2. Leverage existing, widely-adopted technology (mobile) and space (activity providers), rather than having to buy new hardware and create space.
3. Consider the spectrum of intensity levels and muscle-strengthening exercise, rather than focusing exclusively on low-intensity movement, such as walking or arm reaching.

Next steps, PhD: Explore with more participants, across diverse stakeholder groups, then build and test a mixed-reality platform concept, as a potential solution to the related issues.

Conclusion: Lost the battle, but not the war.



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