

## **Title**

Exploring the differences in performance between gamers and non-gamers when completing everyday tasks viewed from a third person perspective.

## **Area**

Interaction Design, Communication

## **Research question or hypothesis**

Is there a significant/measurable difference in performance between gamers and non-gamers when completing everyday tasks that are viewed from a third person perspective?

## **Reason why this research is important**

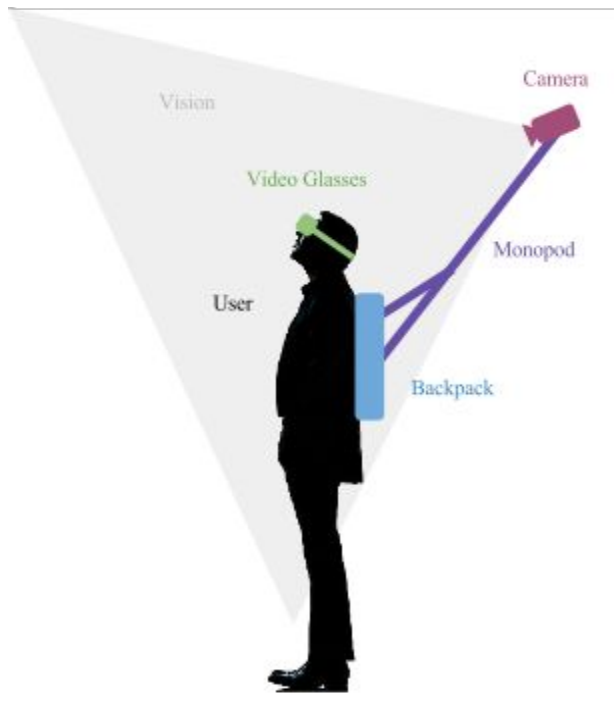
There is often talk of the negative effects of playing video games and articles often have titles such as “*gamers are more violent*”, “*gamers are less social*”, “*gamers are less healthy*” etc. The list goes on and on. I want to explore the positive effects of gaming, in a fun and intuitive way by making the everyday tasks a bit more like a game.

## **Suggested method**

In order to see the performance differences between the two groups (gamers and non-gamers) the users will first complete the task just like they do in real life while they are being timed. This time will serve as a baseline for each user. Next up the user will be equipped with a pair of video glasses that are connected to a video camera mounted on a monopod on their back, see *figure 1*, to simulate the third person perspective that some games offer, see *figure 2*.

The users will be recorded and timed while they perform a few (1-3 depending on the time required) tasks (tasks may, or may not, include “*shopping*”, “*cooking food*”, “*completing an obstacle course*”, “*walking/running*”, “*riding a bike*”, “*practice a sport*”, “*getting dressed*” etc.). To ensure as high statistical certainty and individual differences all test subjects will be bench-marked against themselves meaning the normal time it took to complete a task (the baseline) will be compared against the time it took with the glasses on.

Both before and after the users will have to fill in a form; the first containing background information (personal, gaming, interest etc.) and the later questions about the what the experience felt like.



*Figure 1: The test rig*



*Figure 2: Third person view in games*

### **Brief description of what is new**

The biggest difference in this study, compared to others like it, is that I will build a rig that simulates a game where the character is viewed from third person. The aspect of comparing previous experience of game play is also relatively new.

### **A few references on work**

1. Schmierbach, M., Boyle, M. P., Xu, Q., & McLeod, D. M. (2011). Exploring Third-Person Differences Between Gamers and Nongamers. *Journal of Communication*, 61(2), 307-327.
2. Anderson, C. A. (2004). An update on the effects of playing violent video games. *Journal of adolescence*, 27(1), 113-122.
3. Fleming, M. J., Wood, R., & Debra, J. (2001). Effects of violent versus nonviolent video games on children's arousal, aggressive mood, and positive mood. *Journal of Applied Social Psychology*, 31(10), 2047-2071.
4. Nakamura, R., Lago, L. L., Carneiro, A. B., Cunha, A. J., Ortega, F. J., Bernardes Jr, J. L., & Tori, R. (2010, July). 3PI experiment: immersion in third-person view. In *Proceedings of the 5th ACM SIGGRAPH Symposium on Video Games* (pp. 43-48). ACM.

**Your background in this area**

I'm a huge R/C enthusiast that love technology; both software and hardware. I love building things with my hands and design products people use everyday. My master is in Interaction Design which makes this study a great way to develop my skills further. I also have a lot of experience of real world user testing which will be of high importance during the research.