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CS 491 – VR Design

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<div align="center">Week 13 – VR/AR Student Choice Eval – Ana Salina's **VR Pain & Fear Killer**</div>

What Ana is dealing with here are two new topics; topics that have yet to be fully researched and understood – VR and its applications, and the brain and its psychological behavior.

To start, psychological behaviors were studied long ago by humans, but a well-documented case is in 1875 (or 1883) by Wundt or Hall (due to them having conflicting claims of who built the first psychological lab). Either how, we still do not fully understand the brain, what fear really is, and why fear can often take control of a person – often overriding logical behavior or logical reason. Such behavior is seen in war veterans suffering from PTSD, in which they may think every day experiences are reoccurrences of their past.

VR on the other hand, has had multiple applications, say a jack of all trades, but a master at none. Similar to when the iTouch was first created (mainly strange apps like bubble-wrap popper game), VR lacked focus. We may see a lot of immersion concepts such as Office Simulator which is meant for some silly fun, but some of these immersion concepts are more important such as being able to stroll through a botanical garden reimagined with VR, or even perhaps a real-life location remade in VR.

VR has a strong capability of adjusting a person's 5 senses. This is normally seen when a VR app such as a roller coaster, will cause a person to panic when they are seen falling in the game. Because the fact that nearly 100% of our sight is dedicated to the VR world-view and our hearing is also affected (if provided headphones), we start to think these mere renderings are real.

The topic that Salina is touching is quite relevant to this. There is no certainty of success nor is there certainty of failure in a VR project built around psychological behavior since every person and every psychological condition varies greatly.

Cons

There are however, two large cons to this study. VR may be used to treat PTSD or fear, but in the case, it really does treat fear, does this cause the user to be reliant on it? Similar to drugs, the user may become too attached to the VR and may not want to leave it – which stems into other psychological defects. The other con would be the rendering and graphics. The graphics and sound will have to be very close to real-life type of quality so that the user will be immersed into the environment – although this is debatable.

Price

There really isn't a price to research. The only thing stopping money put into research is when the research concludes itself or that the human curiosity has come to an end, which both are unlikely. Additionally, the only price to cure PTSD in this manner is a sound engineer, and graphical engineer, a VIVE device, PC, sound device. Basically this is a very cheap and effective application of VR.