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Introduction to Research

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Virtual Reality's Negative Emotional and Psychological Impacts

Virtual reality (VR) is an immersive technological device users place on their head and over their eyes that allows them to experience realistic three-dimensional simulations (Bailensen 5). It is a multisensory experience, which sets it apart from other experiences with technology (Bailensen 37). This unique experience has made it popular in many areas, including education, video games, and even therapy. While some, including myself, use it for fun and learning, others use it as an “escape” from their day-to-day lives and problems (Lavoie et al. 71). Moreover, VR and its immersive nature is capable of having negative emotional and psychological effects on individuals including negative rumination and confused perception.

IMMERSIVENESS

As users engage with VR simulations, they become deeply immersed in what they see and experience (Cross and Coby). Unlike other media experiences, such as movies or typical video games, VR utilizes the senses of sight and hearing to surround a user in simulated reality, blocking out the real world around them. This creates the feeling of actually being in the situation, not only watching it happen (Bailensen 43). Personal encounters with this feeling of immersion demonstrate that VR completely pulls you into what is projected in front of your

eyes and into your ears. From swimming with sharks, to visiting the moon, to being chased by zombies or riding a roller coaster, VR provides lifelike opportunities to users seeking adventures or thrills. While this might sound enjoyable, the effects on users' emotions are not strictly positive.

EMOTIONAL EFFECTS

As users become more immersed in the environments created by VR, they may begin to struggle emotionally in the real world (Lavoie et al. 73). At the moment, the VR experience provides a sense of fulfillment, regardless if the content is social, recreational, or narrative. After exiting the virtual universe, this heightened experience can make the return to everyday reality feel dull or uninteresting. This contrast frequently leads to what Lavoie et al. calls "negative rumination" (74), where users become stuck thinking about their experience and how it made them feel. This lasting reflection can include both positive and negative experiences. Rumination, whether positive or negative - but especially when negative - can interrupt the user's daily living and feelings (Lavoie et al. 73). It is also important to note that VR can cause negative physiological effects, such as nausea or increased heart rate, that in turn leads to emotional consequences like the feelings of discomfort and anxiety (Kuhne et al.). Personal experience with this, especially when using VR for hours at a time and/or dealing with stress-inducing circumstances, indicates that it is very likely to happen to other users. Beyond these emotional and noted physiological effects, VR can also cause negative psychological effects.

PSYCHOLOGICAL EFFECTS

Due to its multisensory, profoundly immersive nature, VR provides a very “real” experience and so it has the potential of altering users’ perception of the real world (Cross and Coby). VR has the potential to confuse our brain into thinking that the “simulated digital signals” that are released from VR are reality (Bailensen 43). The user’s perception of the real world becomes skewed, making it hard to distinguish between reality versus simulated and interpreting a VR experience as an actual, real-life encounter. Have you ever watched a comedy clip of a person so hyper focused on the virtual world that they accidentally punched someone? This, according to Bailensen, is called “reality blurring” (57). This concept doesn’t solely lead to funny moments - it also raises concerns of how long-term and recurrent use affects behavior, judgement, and mindfulness. This demonstrates how VR can have a significant impact on our thoughts and behaviors, which is why it’s important to consider its potential broader effects.

CONCLUSION

As one can conclude, virtual reality is a powerful technology that offers immersive experiences unlike anything else invented in the technological world. It is used for entertainment, education, and even therapy, and it simulates remarkably lifelike situations for users. However, as this paper has shown, VR’s realistic and engaging nature can also come with emotional and psychological effects. From negative rumination to confused perceptions of reality, the effects of VR go beyond just fun and games. As this technology continues to grow and become more popular, it’s important for users to be conscious of how it can affect their

emotions, thoughts, and behavior. By using VR responsibly and understanding its impact, we can enjoy its benefits while safeguarding our emotional and psychological well-being.

Works Cited

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