Poker in Virtual Reality

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ABSTRACT

This study examines virtual reality (VR) poker and how the platform affects poker players' experience. Players use a self-customized avatar and other features of a computer platform that differs from in-person poker. Data were collected through observations from in-game poker VR recordings and interviews with five professional poker players. Findings are analysed theoretically through proteus effects, social presence, ecological psychology, magic circle, and liminality. This demonstrates the interactive cues that poker players use when immersed in virtual reality and embodied in a digital avatar. The goals from this research are to learn about the influence avatars have on poker players: if players can still maintain their poker skills and read different cue signs from other players while embodied in an avatar and immersed in VR. This paper also explores the promise of poker in virtual reality and its environment, examples of existing applications, a discussion of the research to date, and also provides a vision for the future.

INTRODUCTION

Poker is a game of deception in which players attempt to convince other players that they have better cards than their opponents. In other words, players are constantly on the lookout for their opponent's behaviors, such as the way they stack their chips, the cards they play, or the anticipation of a fold, facial expressions or reactions from having good or bad hand cards, the type of clothing players wear, body language, and repeated behavior patterns that users can use as a cue to take a more advantageous stance. Opposing players adopt various strategies to mask their emotions, such as covering their eyes with sunglasses or listening to music during the game so as to avoid any conversation, with the aim of not showing signs that opponents can use against them.

In PokerVirtual Reality (VR) game, however, the cues and behaviors are different: players are represented by an avatar (virtual self) that shows just three body parts: torso, head and hands. The virtual self, according to Agger (2008), is an "individual linked to the world and to others by electronic

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means such as the Internet, television, and mobile phones" (p.1). Players are also able to interact with their cards, chips and among other in-game features via physical hand controllers.

The purpose of this study is to explore poker players perceptions through the lens of a Virtual headset, while embodied in self-customized avatar. The researchers examine the specifics of virtual reality poker and why avatars (e.g., Agger 2008; Ingen 2008, Golder & Donath 2004; McNeill 2007; Wittmeyer 2015) are so important in this domain. There is a gap in the literature on digital poker gaming, and the researchers demonstrate why researching this emerging topic in poker is crucial. It is also their ambition to contribute to the growth of this lesser-known virtual reality game. The paper's analysis is based on data from a digital recording of poker players while playing a VR game, and their reflective comments after the game, as expressed in interviews.

CONCEPTUAL FRAMEWORK

Technological developments in the 21st-century have changed society in many ways, e.g., the way we communicate via mobile phones, play games and even interact with each other on a daily basis. All facets of our lives move quicker, and society as a whole has become more entangled in the digital network, becoming more "digitalized." Virtual Reality (VR) is a further technological development, as people become more accustomed to the ever-evolving digital environment. For instance, Ruddle, Payne and Jones (1999) conducted a study in which participants navigated four times in one large virtual building using the head mounted display (HMD) and the second building using the desktop. Players who used HMD were more accurate and faster to get at their final destination than those who used a desktop environment. VR training simulations have proven to be more efficient in a variety of ways, and they give all parties involved a lot of freedom. Also, according to McNeill's (2007) tests, users experience the same subconscious gesture movements in Virtual Environments (VE) as they would in the offline world during virtual engagement/communication.

Imagine the following: for a birthday party a father dresses his daughter as a Princess wielding a fairy magic wand, and the son is dressed as Superman. While the father watches the son running around with his arms stretched straight simulating flight, the daughter plays with her friends as Princesses from a fairy land. While the research is not about children who dress in a fantasy world, these visualizations point to the importance of self-individual adaptability, or as Yee and Bailenson (2007) refer to it, Proteus effects, on behavior. This leads us to consider what are the possible behaviors of an avatar in a poker player on a VR social setting. Poker is a social game in which players sit around a table with other players and compete against each other in a game of cards. Players employ a variety of strategies in attempt to earn money from the pool. Deception and bluffing are two such strategies.

Social presence is the sense of "being with others," in which one perceives the presence of another person (Biocca & Harms, 2002). While people physically sit next to one other when playing poker face-to-face, what happens when a player sits next to another player while playing poker in VR? Is he/she aware of the presence of the other virtual players who are represented by the avatar? In short, the answer is yes, and the researchers will further explore this idea in section titled Social Presence.

In face-to-face Poker games, players are constantly aware of their opponents, and certain behaviors such as showing signs of nervousness, being pleased with a good hand, or having a bad day, or even playing the game in a particular style, all these can be cues that Poker players use to their advantage. On this point, the researchers draw on Gibson's (1986) ecological psychology hypothesis. It investigates human awareness and activities in a specific context, such as the case of poker table.

In games and digital media, the Magic Circle, according to Linser et al. (2008), is a region in which the regular laws and realities of the actual world are suspended and replaced by the imagined reality of a gaming environment. However, as the researchers explain, this has not always been the case, since poker players bring their own abilities and experience into the virtual gaming arena, which is a liminal zone, or transitory stage that players go through when they are "out of this world." The players that were interviewed for this project demonstrated a strong sense of presence and were fully

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