Analogies Paper

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Virtual Reality, or VR, has been on the rise since the technology became available. People of all ages have bought headsets and played games in this alternate universe it presents you with. Not only is VR a game, though, but it has become a high-value tool for sporting organizations around the world. VR is used by players, coaches, and teams to get ahead in training, prevent injuries, and create a better game plan. VR has become more than just another gaming headset and is now becoming a tool.

If I were going to explain this to kids, I would say, "VR in sports training is like playing a video game before the real game." Which on surface level may not make sense but I promise you it does. Even when I was a kid, I would play sports video games to learn strategies and plays to develop my understanding. VR is just like that, a video game where you can interact and hone in your skills before playing in the real world. When comparing VR to a video game, it makes it easier to see and understand how this technology helps their performance.

One way video games and VR are similar is the ability to practice without real-life consequences. In video games, people can make mistakes and experience lapses in judgment. Although these mistakes don't lead to any real-life injuries. In VR, athletes can practice difficult situations without risking injury. A quarterback can practice throwing routes without big defensive linemen coming at him to tackle him. Or a baseball player can face a pitcher without the risk of getting drilled by a fastball. This creates a safe environment for practice with no risk of injury.

Another similarity is the ability to create situations that require split-second decision-making. In many video games, sports or not, players have to make quick decisions. Whether that is moving from an incoming bullet or throwing the ball to the open receiver, it is all

quick decision-making. A Georgia State study wrote, “These results indicate that video game playing potentially enhances several of the subprocesses for sensation, perception and mapping to action to improve decision-making skills,” (Jordan & Dhamala, 2022). VR places these athletes in similar situations that further their decision-making skills before game day. Players and athletes must react to what they see, allowing them to respond when the game actually happens.

A third similarity is the improvement through repetition. Gamers often practice by playing the same game or by repeatedly challenging themselves. Athletes can use VR to practice simulated scenarios multiple times so that when it actually happens, they know what to do, building muscle memory. This repetition also allows them to learn from each attempt, both the good and the bad, of what they did. Repetition allows gamers and athletes alike to recognize the patterns to be more prepared for the big day.

VR in sports is just like playing a video game before the real game. Both provide safe opportunities to practice, realistic situations, and repetition to hone decision-making skills. VR allows these players to improve simply by playing a video game. Real practice is important, but VR is making it safer and making gamedays more familiar for athletes. VR is the tool of the future, just like video games were a tool not too long ago.

When describing this to a higher education audience, I would compare VR training in sports to a pilot flying a flight simulator. Before pilots get in real planes, they spend countless hours in a flight simulator practicing real situations and challenges, without the consequences of failure. Athletes do the same thing in VR. It shows how two different professions can use realistic simulations to improve.

The first similarity is the ability to practice in a safe environment. Pilots fly through storms and practice flying an aircraft through challenges without risking lives or damaging equipment. Similarly, athletes practice in game situations without getting hit or injured, keeping their bodies healthy. An article from Emory Healthcare on VR in sports says, "Our main goal is to keep our athletes healthy so they can continue to pursue their dreams of playing college sports. We don't want to see a talented player get injured and miss out on the opportunity to play the sport they love at the next level." (Emory Healthcare, 2025). Keeping athletes and pilots safe puts them in the best position when the moment comes.

The next similarity is the ability to repeat certain scenarios. Pilots practice taking off and landing thousands of times before stepping into the cockpit, giving them muscle memory. Athletes can practice numerous times in VR for the same outlook when the moment presents itself. Whether that is defensive fronts or pitches from a pitcher, this countless repetition builds confidence and familiarity for the moment.

The final similarity is the enhanced decision-making. Flight simulators are meant to help pilots make split-second decisions in moments of pressure. A great example of this is in the movie *Sully*. VR does the same for athletes, by giving them real enhanced situations, when the time comes, their decision-making is sharp. A study on VR in sports training was done, and the conclusion stated, “This review revealed that there is evidence that training in these environments has benefits for decision-making in sports, and limited (though encouraging) evidence that this training can transfer into the real world.” (Connolly et al., 2025). Over countless times you have the ability to make the right decision, or at least think it’s the right one, in a split second.

VR and flight simulators are almost exactly alike. They give their users a real-life scenario to practice through repetition in a safe environment and hone their decision-making skills. As technology advances, VR is becoming as important to athletes as flight sims are to pilots. Real-life practice allows your brain to really comprehend what is going on, to be sure that everything is smooth when the day comes. Making VR in sports and pilots' flight simulators very similar.

Works Cited

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