Research and Creative Experience for Undergraduates (RCEU) Program 2024

Virtual Reality Situation Judgment Test

Noah Gregory, Art BFA in Digital Animation Mentor: Ivey Mackenzie, College of Business

What is it?

This project's purpose is to test whether a situational judgment test (SJT) administered using virtual reality is able to illicit more genuine responses than a traditional paperand-pencil SJT when participants are asked how they would respond in certain scenarios. Three situational judgment tests will be used in this project: an established paper-and-pencil SJT, a paper-and-pencil SJT that is adapted from the established SJT that contains stage notes and dialog, and a virtual reality (VR) SJT. The VR SJT will film actors in 3D, 360 degree video acting out the scenes described in the two paper-and-pencil SJTs. My part in the project was to create a virtual reality program that people could use to be placed in a virtual environment and then have them respond with how they would react in a given scenario.

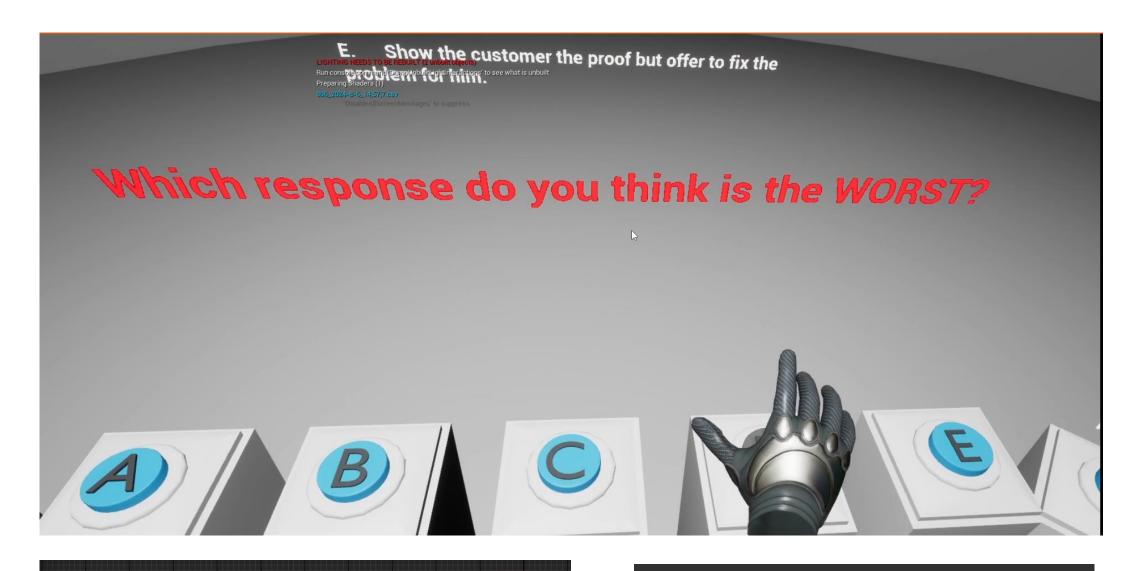


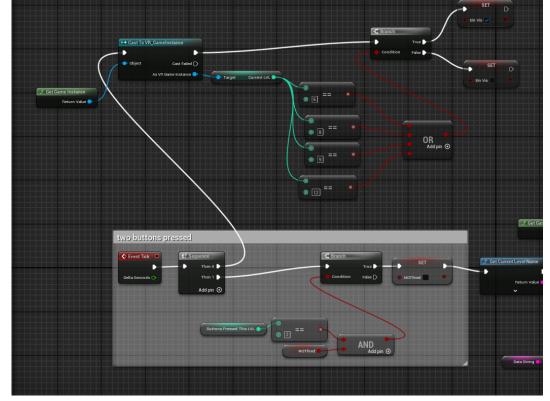
Hypothesis

The results from both paper tests should be roughly the same responses. Participant responses for the Virtual Reality SJT will differ from the two paper-and-pencil SJTs. The VR SJT will elicit different physiological responses from the physiological responses triggered by the paper-and-pencil version of the SJTs using biometric data (e.g., respiration and heart rates).

How is it Used?

180 participants will be split into three different groups to test the effectiveness of virtual reality. One group will use an established paper-and-pencil SJT test. One group will use the VR program, and the last group will also use a paper test, but they will read the script for the VR video instead of descriptions of the scenario. To test whether responses are more genuine, biometric data such as heart-rate and respiration rate will be collected during the duration of all tests.







Why do it?

SJTs are often used in onboarding and interview processes, but many who take them feel they do not pertain to the job at hand. However, the data that is collected is still necessary for selection. This program allows employers to collect data from participants in a way that allows employees to more realistically experience challenging, job-related situations and better demonstrate to employers how they would respond on the job.

Acknowledgements