POLYTECHNIC

Developing Employee Intercultural Competence Through Virtual Reality Simulated Training

Student researchers: Isaiah Thomas, Junior, and Andres Santiago, Senior

Cultural competency is the ability to effectively communicate, understand, and productively work with different cultures. This competency is an increasingly needed soft skill for modern businesses hoping to partake in globalism. The current training methods of cultural competency appear to be ineffective and costly because of travel and time expenses. This research study explores how we can effectively immerse skilled workers in various cultural experiences without the large cost of travel expense and the time it requires to learn extensively about another country or culture. Most current training methods involve video training, which the virtual reality lab will use in comparison with virtual reality training.

An example of non-invasive biometric shimmers hooked up to a participant.

The sample size for this research was approximately 200 undergraduate students. Half of the students were randomly sorted into the virtual reality group where they were simulated into a trip in another country for business. The control group consisted of a conceptual video on the topic. We coded quantitative data from the virtual reality group as students in that group answered questions during the simulation about their opinion on certain situations. Students took surveys on their knowledge and experiences regarding the subject to test their learning/changed perspectives on cultural competence before, during, and after the training sessions. This helps us get the qualitative data. All of this data will give us an understanding of the participants' personality traits and cultural competency. The hope of using this data is to show how immersive virtual reality is over video training.

We hypothesize that the results from this study will show that simulated reality training has the potential to be used in the training of cultural competency. This would fill the gap of cost-effective ways to train domestic employees for international business affairs. Future work includes finding additional cultural aspects to include in these simulations and methods most effective with this particular type of training. Another set of results we hope to create is a better understanding of how personality shapes individual cultural dimensions. Developing additional personalized conditions for specific levels of cultural dimensions would also be a supplemental step to consider when looking toward our next steps.

Research advisor Mesut Akdere writes: "This project uses a conceptual framework to study intercultural leadership competency development through virtual reality technology. Incorporating the cutting-edge biometrics system design into this research, this study applies the data triangulation method using three different data sets, quantitative and qualitative data as well as non-invasive biometrics data, to study workplace learning."

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