Immersive Inclusion: Diversity and Inclusion Training Using Virtual Reality

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Abstract

Diversity, equity, and inclusion (DEI) training is widely used with almost half of midsized organizations and nearly all Fortune 500 companies offering some type of DEI training to their employees.[1] Despite the popularity, most programs meant to improve DEI have been shown to be ineffective at best and cause more diversity-related issues at worst.[2,3] Most DEI training programs are not well evaluated and are implemented poorly, which can exacerbate the issues they are meant to address by making participants defensive and more resistant to behavior change.[4,5]

DEI programs incorporating immersive virtual reality (VR) have shown promising results due to a unique focus on empathy and behavioral intention.[6-8] Perspective taking (a cognitive exercise that involves considering situations from the viewpoint of another) is a key aspect of DEI training programs that result in attitudinal changes.[9-12] VR technology enhances the perspective taking experience by adding a first-person immediacy that makes the trainee an active participant in the scenario so that the events are happening to them rather than to someone they are observing or imagining.[13]

VR-based DEI trainings not only demonstrate lasting attitudinal changes, but one study found additional behavioral changes not present in the outcomes of traditional perspective taking exercises.[14] However, more research is needed to pinpoint the effects of VR as a training tool for cognitive and emotional skills like the ones targeted by DEI training programs. The topic of VR as a DEI training tool was investigated through two studies. Study one is an empirical study conducted on an existing VR-based DEI training program offered by the company VRperspectives. Study two is an exploratory survey sent to healthcare professionals who

previously participated in a VR-based DEI training program created by collaborating departments at the University of Cincinnati.

The purpose of study one is to add to the literature on VR as a DEI training tool and investigate the specific effects of a VR-based DEI training program. Study one investigated the impacts of a VR-based training program meant to increase participants' ability to recognize and respond to situations of bias. A participant's cognitive and affective empathy levels, awareness and quality of their work team's culture, and their inclusive efficacy (their ability to recognize and appropriately respond to microaggressions) before and after the training were measured. We hypothesized that cognitive empathy levels would significantly increase following the training and individuals with higher initial levels of empathy would demonstrate more pronounced impact on all outcome measures following the training. Study two surveyed individuals who, within the last year, participated in a VR-based DEI training that focused on awareness of social determinants of health and increasing empathy in healthcare professionals. The purpose of this second study was exploratory with the aim of getting more information about the longitudinal impacts of a VR-based DEI training. The largely qualitative survey asked participants about any impacts from the training on their patient relations, such as increased understanding or empathy for their patients.

Preliminary results from study one show that the outcomes of cognitive and affective empathy and awareness and quality of team culture significantly increased right after completing the training. However, nine weeks after completing the training, these variables returned to their pre-training levels. This is consistent with previous literature on the lasting impact of diversity training, which found that the effects of a diversity training program typically dissipate shortly after finishing the program.[14-17] We also found that participants with higher initial empathy levels

had higher post-training outcome levels on all measures compared to participants with lower initial empathy levels. This may indicate that an individual's experience with a diversity training program is dependent upon their personality or their openness to the program.

While the empirical findings do not indicate large differences in training impact from a VR-based diversity training program, we have confidence that the qualitative data from the studies will reveal a strong emotional experience owing to the VR scenarios. Many of the participants showed great enthusiasm for the training because of the VR experience which may be a reason to implement VR-based training over more traditional methods. The findings indicate that periodic follow-up trainings are likely still necessary with VR-based DEI training programs to achieve lasting attitudinal and behavioral changes. A direct comparison of a VR-based and traditional DEI training program would help determine whether attitudinal and behavioral changes are more pronounced following one type of training compared to the other. Further research is also needed to determine if different measures could better capture the impact of a VR-based DEI training program.

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