



Title: Augmented Reality to Train First Responders to De-escalate Autistic Individuals

Program Area: Autism, Developmental Disabilities

Submission Domain: Applied Research

Abstract: This is a replication and extension of Hinkle, et al. (2021). During situations when a first responder needs to engage an individual with autism spectrum disorder (ASD), first responders oftentimes lack the necessary training on how to assess and de-escalate situations properly. Research shows training for first responders is limited to role-play and modeling. While these methods are effective, they reduce scalability since there is a lack of qualified personnel available to conduct specialized training involving behavioral scenarios of individuals with ASD. This reveals the need for an alternative training solution. Augmented Reality (AR) simulations allow first responders to practice real-life procedures before encountering those situations in the line of duty while also developing their skills in a controlled environment. The research employed fidelity procedures in conjunction with AR technology to evaluate 3 participants' ability to assess and de-escalate crisis scenarios. In baseline, the participants wore AR equipment that simulated different behavioral situations to de-escalate without assistance. After baseline Behavioral Skills Training (BST) was employed to teach de-escalation procedures while providing immediate feedback during the training scenarios. Results suggested that AR technology is a useful tool accompanied by BST that can be used for de-escalation training purposes.

Key Words or Phrases: De-escalation, BST, Augmented Reality