

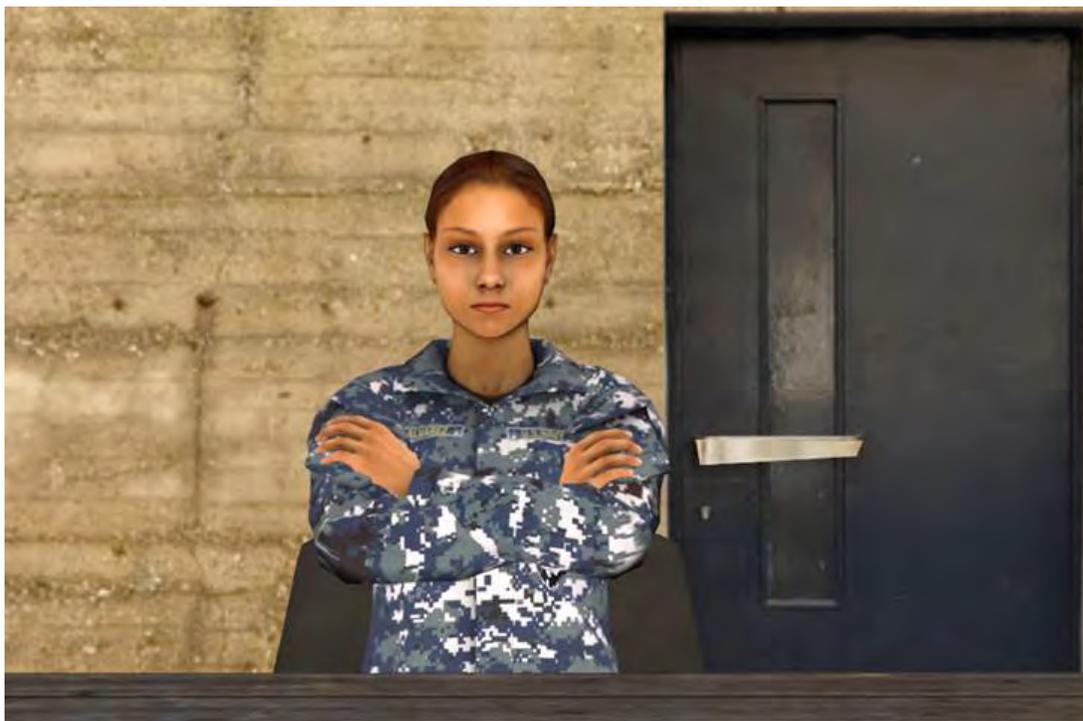
# Human Surrogate Avatar Training and Education



## EXHIBIT FACT SHEET

The U.S. military is facing a crisis across all the services. According to the recently released Pentagon document *The Department of Defense Report on Sexual Assault in the Military for FY2014*, there were 6,131 reports of sexual assault. To address this, the military has placed renewed emphasis on Sexual Assault Prevention and Response (SAPR) training. Within this SAPR training, the military has augmented course material with artificial intelligence (AI)-driven virtual humans portraying the victim in simulated environments.

Despite the sophistication of these AI systems, the military has recognized that existing technology, including AI driven avatars, are not flexible enough to realistically challenge the crucial critical thinking and counseling skills required for this emotionally charged and sensitive topic. In addressing the growing demand for replicating the complex and adaptable nature of human behavior and communication styles, another approach has evolved. In some training systems, human surrogate avatars or “human in the loop” systems have replaced AI-driven virtual humans in the portrayal of the victim.



*Avatar of Victim*



Currently the University of Central Florida's Human Surrogate Training and Education research demonstrates the unique capabilities of human surrogate avatars. One human actor is able to "inhabit" one or several virtual avatars with their own unique personalities and provides the counselor/student a virtual environment where he/she can experience and be tested in a full continuum of emotionally challenging scenarios.

Unlike AI-driven virtual humans, we can replicate real communication through a versatile avatar interface which

can provide the level of behavioral realism and mimic the linguistic, emotional, and cognitive fragmentation that can happen during an intense, emotional encounter with the victim of a sexual assault. The full spectrum of human emotions, verbal and non-verbal cues can be recreated and modified during the training scenario to give the counselor/student a training experience individualized to his or her strengths and weaknesses. They can also receive immediate feedback based on the avatar's response to the student's skill—or lack thereof—during the simulated counseling session.