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# Developing a Trauma-Informed Interviewing Training Module Prototype for Law Enforcement Using Virtual Reality

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Abstract. This poster describes the process of creating a virtual reality (VR) training tool with the goal to reduce bias in law enforcement responses to domestic violence and sexual assault. VR training experiences have proven effective in improving decision-making skills, eliciting empathy, and creating an emotional connection between the trainee and the materials in many domains. However, law enforcement VR training solutions are currently concentrated in tactical topics, such as firearms training, or in first response scenarios, for example officer safety and de-escalation protocols for domestic abuse calls. Our prototype aims to fill a gap in training opportunities by providing an interactive VR scenario for participants to learn and practice victim-centered and trauma-informed interviewing techniques. We describe challenges encountered and lessons learned from the research and development process.

Keywords: Virtual Reality, Soft Skills Training, Gender Justice.

#### 1 Introduction

Gender-based violence (GBV) is a pervasive problem that primarily affects women, girls, and LGBTQ+/gender non-conforming individuals and causes serious harm to families and communities [1]. The U.N. reports that, worldwide, one in three women have experienced physical and/or sexual violence at some point in their lives. Despite the prevalence of GBV crimes, less than 40% of women who experienced violence sought any assistance, and of those, less than 10% sought help from the police [2]. Victims who come in contact with law enforcement are commonly met with skepticism, hostility, neglect, and accusatory victim-blaming behaviors. Challenges to a victim's credibility are especially common when the person is a member of a marginalized community. These hostile conditions pose a significant barrier for the victim's ability to receive justice and minimize trauma.

When GBV victims' initial reports are discounted by law enforcement, an investigation ends before it has begun. GBV cases often suffer from a lack of evidence gathering, which prevents proper investigation and prosecution, increases the traumatizing effects of the crime and exposes victims to re-offense or escalation of violence. We identified two key training areas that would improve the quality of GBV investigations and better support victims' emotional needs, regardless of judicial outcomes. The first is helping officers understand the role of unconscious bias, also known as implicit bias, in their assessment and response to GBV crimes. The second is to educate officers of the effects of trauma on victims' behaviors and their abilities to communicate the details of a GBV event.

Effectively addressing implicit bias is a complex training goal, and police investigations require officers to draw upon a highly dynamic constellation of procedures, techniques, and decision-making skills. An interactive virtual reality (VR) environment is an ideal format for officers to practice victim-centered, trauma-informed skills and uncover biases through interview scenarios with victims of GBV. Immersive, simulated interviews will provide law enforcement repeated opportunities to hone investigative approaches in a space that allows for risk- taking, exploration, and self-discovery. The ultimate goal for the VR training is to prevent additional harm to victims during the interviewing process.

## **2** Virtual Reality for Soft Skills Training

Virtual reality training experiences have proven effective in improving decision-making skills, eliciting empathy and creating an emotional connection between the trainee and the materials in many domains. In a study conducted by PwC, employees who completed the VR training course in diversity and inclusion felt 3.75 times more emotionally connected to the content than classroom learners and 2.3 times more connected than e-learners [3].

In an interactive narrative experience, learners are able to go through the module multiple times and make different choices. This supports skills-based learning, which is an effective pedagogical use of VR [4]. For these reasons, our prototype takes the form of an immersive VR scenario.

Law enforcement VR training solutions are currently concentrated in tactical topics, such as firearms training [5]-[7], or in first response scenarios, for example officer safety and de-escalation protocols for domestic abuse calls [8], [9]. We believe that a victim interview scenario is a novel area for VR training simulations and has the potential to increase the effectiveness of instruction based on current interviewing best practices.

## 2.1 Guiding Principles

• **Effective Use of VR.** While being mindful of trauma-inducing experiences, the prototype should be immersive and interactive in order to increase presence and

recall of information. The branching narrative adaptation of existing materials was written using a free online mind mapping tool before being implemented in a VR environment to be used with an HMD (see Fig. 1.). Informational interviews were conducted with experts in three fields: victim advocacy, police training, and VR soft skills development (for more on best practices, see [3], [10], and [11]). Based on this research, guiding principles for the prototype were defined:

Authenticity. Scenarios, including crime details, assailant type, and victim
profiles must be grounded in case studies, scenarios, role-play scripts or other
materials provided by credible law enforcement or victim-centered advocate
sources.



**Fig. 1.** In the VR interview scenario, the trainee needs to choose the appropriate response based on best practices for interviewing victims of gender-based violence.

## 3 Outcomes

Future work includes finalizing the prototype design based on feedback from our stakeholders on the content of the scenario, and then conducting a formal evaluation to determine if this new form of training is effective for increasing empathy and reducing bias. We also contribute lessons learned from adapting existing training materials into an

interactive VR scenario with a small team. Because of the novel use case of VR for learning, the importance of addressing issues of bias in law enforcement, and the potential for reducing harm to victims, we believe that this topic is very relevant to the iLRN community.

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