Research with police to improve outcomes of high-stress police encounters

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Police officers can find themselves in unpredictable, challenging and highly stressful situations, with only their gear and training to protect themselves and the public. To better prepare officers for the stressful challenges they face in the line of duty, Judith Andersen, an assistant professor in the U of T Mississauga Department of Psychology and Mississauga Academy of Medicine, University of Toronto, is working with Peel Regional Police to implement science-based use-of-force training that includes techniques to help officers control their stress reactivity and improve their split-second decisions. The partnership was announced March 21 at a press conference at Peel Regional Police headquarters in Brampton.

Andersen and her team have developed this unique method of training to answer the call for evidence-based de-escalation and use-of-force instruction. Collaborating with police organizations in Europe, the US, and Canada, she has been testing these techniques for the past three years with police recruits, front-line officers and tactical teams. As a result of her research to date, this method has been adopted as standard training for all police officers in Finland.

"Use-of-force decisions during critical incidents are an ongoing source of concern for both police and the public," says Andersen, an assistant professor in the Department of Psychology at UTM and lead developer of the International Performance Resilience and Efficiency Program (iPREP). "Using our unique training method to complement Peel's existing use-of-force instruction, we hope to show that teaching police officers methods of physiological stress control can assist with decisions in the field."

Research has shown that extreme increases in stress hormones, such as cortisol, can lead to sensory distortion, cognitive difficulties, panic and judgment lapses. Extreme physiological responses can impact an officer's ability to respond appropriately, potentially putting the safety of the officer and the general public at risk.

"Police officers regularly encounter unpredictable and stressful situations," says Chief of Police Jennifer Evans. "Peel Regional Police wants to ensure that we are using the most progressive, science-based techniques to prepare our officers for situations they face, and to create a safer community for everyone."

The iPREP program measures and analyzes an officer's sensory nervous system readings during highly realistic police training scenarios, which simulate events like hostage takings, school shootings and calls to assist distressed or potentially violent persons. The scenarios include the types of stimuli that add to stress, such as loud crowds, poor lighting and the need to make critical decisions under time pressure. Each officer then receives individual instruction from expert trainers. The instruction is tailored to address the officer's individual stress responses and is delivered in a manner that maximizes learning and retention.

The iPREP program incorporates the newest developments in physiological monitoring and the neurobiology of learning to provide police with comprehensive, personalized de-escalation and use of force training. The program is currently under review for accreditation by U of T's Faculty of Medicine and is anticipated to be widely available to use-of-force trainers by the summer of 2016.

The iPREP methodology has been shown to be effective for tactical forces. Andersen's work with Peel Regional Police will involve a randomized, controlled trial to determine the effectiveness of her training program at helping front-line officers improve their physiological control and situational awareness, with the ultimate goal of improving outcomes in real-world critical incidents.