

# LEAP is a Scientific Research Instrument

Researchers seeking to understand the influence of physical activity on learning and recall by soldiers, police, and other first responders needed a valid and reliable physically challenging task.

The Load Effects Assessment Program (LEAP) provides a comprehensive physical challenge derived from actual combat tasks, calibrated in a series of obstacles suitable for rigorous scientific experimentation.

*“Given the agility challenge of the CANLEAP course, the imposed level of cognitive load and need for sustaining attention would likely be quite high.”*

Blake Martin, Human Effectiveness Section, Defence Research and Development Canada<sup>1</sup>

- Researchers are increasingly interested in the interactions of physical activity and cognitive performance, specifically as a predictor of learning outcomes.
- The current study simulated soldier’s ability to recall mission briefings, including commander’s intent and concept of operation, in a contested environment after vigorous activity.
- The complexity of movement as required in diverse, contested environments may impose cognitive costs. It is important to characterize and improve learning of critical information prior to engaging in combat.
- The LEAP serves as the operationally valid, scientifically rigorous physical challenge to enable experimentation in cognitive performance and learning.

For more information, connect with HSI<sup>®</sup>

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