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Human Factors and Ergonomics Society Policy Statement on Reducing the Use of Deadly Force by Law Enforcement

HFES Policy Statement
Reducing the Use of Deadly Force by Law Enforcement

Background

Human Factors is the scientific discipline concerned with understanding the interactions among humans and other elements of a system, and the profession that applies scientific knowledge, principles, data, and other methods to improve the design of the system in order to optimize overall system performance and safety. Many high-reliability organizations have experienced significant performance enhancements and reduced adverse outcomes through the application of human factors science; these include organizations in sectors such as aviation, military systems, and nuclear power. [1]

The field of law enforcement has received considerable scrutiny over the last several years primarily due to the use of deadly force. The Human Factors and Ergonomics Society (HFES) recognizes that a law enforcement officer's use of deadly force may be necessary in certain situations, but it is also an unwanted and potentially avoidable outcome in some cases. [2]

It is well known from research on law enforcement activities,[3] as well as human performance in many other domains,[4; 5] that decision making and behavior is the outcome of many factors, including:

- Organizational policies, procedures, management, and culture;
- Contextual factors associated with the work, including stress and time of day;
- Training and experience; and
- Technology, including the design of information displays and tools.

Research has shown that a number of factors can influence the outcome of a police–citizen encounter, including organizational, supervisory, environmental, and situational factors, as well as citizen and officer behaviors.[2; 3; 6-8] For example, human factors research has shown that police shooting decisions can be affected by stress[9], fatigue,[10] anticipation and priming of threats,[3; 11] external factors such as street noise,[12] and citizen behaviors.[10] Any attempt to reduce unwanted and avoidable negative outcomes must consider the effects of these factors on human behavior and systematically address them through countermeasures such as improved training, procedures, and tools.

For example, there is evidence that training police officers in cognitive skills such as situation awareness can improve shooting decisions.[13] By improving officers' ability to dynamically assess policing situations, and more accurately interpret available information, the negative effects of priming for only dangerous situations can be mitigated. Further, it has been shown that social interaction training can lead to de-escalation from use of force.[14] Human factors research provides a valuable approach for developing effective and sustainable solutions for improving force decisions in law enforcement organizations by creating actionable skills that can be applied in a wide range of difficult situations.

Just as human factors science has been able to significantly reduce errors and accidents in aviation[15] and healthcare,[16] it provides a key avenue for reducing negative outcomes in the law enforcement community. The Human Factors and Ergonomics Society provides the following recommendation for improving the safety of law enforcement actions in communities across the United States.

Policy Recommendation:

The National Institutes of Justice (NIJ) should establish a National Center of Excellence for Human Factors and Systems Safety in Law Enforcement to conduct needed research and develop effective training programs to meet the evolving needs of law enforcement officers and our citizens. It should support human factors research to develop practices that enhance the development of adaptive expertise in law enforcement and create intervention strategies aimed at reducing negative outcomes in law enforcement activities, including:

- Conduct research to better understand the factors associated with policing outcomes;
- Develop and validate training programs for improving officer situation awareness, social interactions, and adaptive decision-making, particularly in relation to use-of-force decisions;
- Evaluate the effectiveness of policies and procedures for law enforcement, and identify appropriate performance metrics;
- Develop evidence-based programs to improve organizational culture and community interaction; and
- Identify needed improvements in tools, technologies, processes and procedures used by law enforcement personnel to improve the effectiveness of operations and reduce negative outcomes.

Human Factors and Ergonomics Society

With over 4,600 members, HFES is the world's largest nonprofit association for Human Factors and Ergonomics professionals. HFES members including researchers, practitioners, and federal agency officials, all of whom have a common interest in working to develop safe and effective training and technology, to support the needs of people, particularly in challenging settings. HFES has a particularly strong record of expertise supporting effective human work over its 70-year history.

The Human Factors Profession

Human Factors Engineering applies scientific research on human abilities, characteristics, and limitations to the design of equipment, jobs, systems and operational environments in order to promote safe and effective human performance. The overarching goal is to support the ability of people to perform their jobs safely and efficiently, thereby improving the overall performance of combined human-technology systems.

The practice of Human Factors is based on scientifically derived data on how people perceive, think, move and act, particularly when interacting with technology and in complex work settings. The Human Factors field is multi-disciplinary; it includes primarily engineers and psychologists, as well as other professionals, many with advanced degrees in their chosen fields. This blend of backgrounds lends itself well to addressing the wide range of considerations needed to optimize human performance in any system.

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