



FORCE SCIENCE[®] NEWS

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Mark your calendar: New findings on police combat medical care

I. Mark your calendar: New findings on police combat medical care

New findings about officers' efforts to administer combat medical care at the scenes of OISs will be revealed at this year's annual Lewinski Lecture on Nov. 21.

Dr. Matthew Sztajnkrzyer, the internationally recognized "SWAT doc" and Force Science consultant associated with the Mayo Clinic, will discuss the strengths, weaknesses, and lessons learned from his unique recent study of police attempts to save lives in crisis situations before the arrival of medical professionals.

Sztajnkrzyer is an associate professor of emergency medicine at the Mayo Clinic and medical director for the Rochester (MN) PD and the Olmsted County (MN) SO. The cutting-edge, annual Lewinski Lecture series is sponsored by Minnesota State U.-Mankato in honor of the long-time faculty service in its law enforcement department of Dr. Bill Lewinski, executive director of the Force Science Institute.



"I wanted to see in real time what the on-scene medical needs are in that kind of crisis, what tactical conditions and ongoing threats may influence officer intervention, and what lessons could be learned for improvement," he told Force Science News.

Typically, he says, the care needed and attempted involves the administration of CPR and the application of tourniquets, hemostatic dressings, and chest seals.

"Traditionally," Sztajnkrycer says, "law enforcement has operated primarily to support EMS personnel, ensuring scene safety and situational stability rather than providing direct medical care. But today LEOs as on-scene responders are increasingly viewed as a key component in the out-of-hospital chain of survival," expected to render aid to wounded fellow officers, suspects, and civilians.

"Recently in some high-profile force encounters," Sztajnkrycer says, "the medical response of officers to injured subjects has been questioned, and a failure to render appropriate and timely aid to victims has been featured in lawsuits and settlements."

GRAPHIC CONTENT. In his presentation, Sztajnkrycer will draw on graphic video footage to highlight real-world shortcomings and proficiencies, tactical conditions that may prohibit medical intervention, the cognitive factors that impact decision-making and performance under high stress, the critical gaps in training and practice, and recommendations for improving the odds of saving the lives of injured parties.

Among other subjects, he'll address:

- the need to better publicize the successes of on-scene trauma care by police;
- the need for model training programs and national standards for crisis care unique to law enforcement responders;
- the need for reliable and comprehensive data collection that will allow lessons learned from critical incidents to be quickly communicated to trainers and officers in the field, and
- the need for changes in the packaging of treatment equipment to accommodate the effects of intense stress on human motor skills.

His presentation, "The Thin Blue Line Meets the Red Cross," plus Q and A, is expected to last about two hours. Also appearing will be Dr. Bill Lewinski, executive director of the Force Science Institute, who will supplement Sztajnkrycer's lecture on medical care and provide in addition an update on current Force Science research projects.

WHEN & WHERE. The free event will run from 9 AM to noon on Nov. 21, in Ostrander Auditorium in the Centennial Student Union at MSU in Mankato. Three POST credits will be awarded for Minnesota officers. Limited seating is available for a complementary lunch after the lecture.

For more information, contact Dr. Colleen Clarke at: colleen.clarke@mnsu.edu.

II. New study links fatigue, police racial bias

Police officers show significantly greater evidence of unconscious racial bias when they're fatigued, according to a newly reported study by a researcher at Washington State U. in Spokane.

"When officers received less sleep preceding each test session, they were significantly more likely to associate Black Americans with weapons compared with when they had received more sleep. In other words, sleep restriction appeared to increase anti-Black bias," writes Dr. Lois James, an assistant professor who conducted the study. James specializes in exploring the relationship between sleep and performance in LEOs, military personnel, combat medics, and other "elite" populations.

The finding, she says, has "important implications for police training" and for "the current climate of police-citizen unrest."

IMAGE ASSOCIATION. Across an 18-month period, James subjected a pool of 80 volunteers from a medium-size municipal PD (about 290 sworn) to four separate sessions of image-association tests. For the week immediately before each session, the officers' sleep was monitored by a wristwatch-like device that objectively measured their individual "quantity, timing, and quality" of sleep.

On test day, the officers—predominately white males from all shifts with an average of 15 years on the job—individually faced a computer screen while pictures of white and black faces randomly appeared. Among these pictures, images of inanimate objects also appeared. Some objects were innocuous (wallets and cell phones, for

example), but others randomly interspersed were weapons—handguns, shotguns, rifles, knives.

Once the object appeared, the officer was to press a button indicating whether it was a weapon or something non-dangerous. During a typical session of about 10 minutes, James told Force Science News, an officer would see approximately 100 faces, equally divided between black and white, and approximately 200 object images, equally divided between weapons and innocuous objects.

The officers were scored as to response time and accuracy: how fast did they decide whether an object shown was a potential threat and how often were their conclusions correct.

FINDINGS. Analyzing the results, James found that a strong majority of the officers tended to more quickly associate what they believed were weapons with black faces and were more often wrong in assessing innocuous objects as weapons when black faces were involved. These are considered valid indications of moderate to strong unconscious or "implicit" racial bias, she says.

A "large body" of similar findings have been reported from other studies as well. Indeed, implicit biases exist outside their conscious awareness "in people across many walks of life," James writes, by no means just in cops.

But her study emphasizes two other discoveries:

- 1) The degree of measured bias, ranging from none to strong anti-black bias and including even some anti-white bias,

fluctuated significantly within individual officers across the four test sessions.

This suggests that “implicit bias is a variable state, not a stable trait,” James writes, and thus “may well be susceptible to change.”

2) Sleep and bias were significantly linked.

According to the wrist monitors, officers slept an average of about 7 hours per 24-hour period in the week before each test session. The range was broad, though, from 2.5 hours to 14.5 hours—and meaningful. The officers “displayed more anti-Black bias when they had received less sleep” before the tests, James writes.

This is similar to findings from a study by other researchers who tested resident physicians working in a hospital ER. They found that “implicit racial bias against Black Americans increased from preshift to postshift when the emergency department was particularly busy,” James writes, suggesting that and “internal stressors” like fatigue can have a definite attitudinal impact.

IMPLICATIONS. “The findings that bias is variable and also that sleep restriction increased anti-Black bias have implications,” James writes. “Specifically, if implicit racial bias is susceptible to change, then training designed to reduce bias is not doomed to failure. Furthermore, if tired officers are more biased, then programs designed to improve officer sleep may have consequences beyond improving officer health.”

Anti-bias training for police is needed, James writes. But just what constitutes the most effective training remains uncertain, she

says. She hopes to shed light on that question through a three-year study she’s launching in January with 400 officers from Cleveland (OH) PD.

One-quarter of the participants will be assigned to each of four groups: a control group that receives no anti-bias training; a group that receives classroom training in detecting and managing implicit bias; a group that is trained using a unique anti-bias simulator program James principally designed, which we described in Force Science News #328 (1/10/17); and a group trained with both classroom and simulator methods.

“The goal,” she says, “is to identify best practices for reducing bias, leading to improved police decision-making and enhanced citizen trust.”

NOTE: In an interview with FSN, James stressed that evidence of implicit bias in officers does not necessarily translate into biased behavior on the street. In practice, officers appear able to “override” innate feelings of bias with professional conduct. In FSN #266, in fact, we described her results in an earlier study that found “officers were less likely to erroneously shoot Black suspects and were slower to shoot when faced with Black compared with White suspects.”

FSI’s executive director Dr. Bill Lewinski, who was not involved in James’ research, agrees that her laboratory findings should not be seen as predictive or reflective of decisions made in real-life encounters.

“It’s true that fatigue can influence judgment, usually in a negative fashion,” he told FSN. “But an officer’s decision to use force is a

complex phenomenon, shaped by many variables including ‘priming’ information received from dispatch, contextual cues, past experience, furtive suspect movements, and so on. More research is yet to be done before we have definitive answers about decision-making under stress.

“Still, this is an important study that broadens our insights about the impact that sleep deprivation and fatigue have on the law enforcement profession.”

James’ current study, “The Stability of Implicit Racial Bias in Police Officers,” appears in the journal *Police Quarterly* and includes detailed descriptions of other research and findings regarding this phenomenon. [Click here](#) for a free abstract and a link for ordering the full study for a fee.

Dr. James can be reached at WSU’s Sleep & Performance Research Center at: lois_james@wsu.edu.

III. De-escalation: Could this hot mess have been prevented?

A recent US Appeals Court decision hinged on whether an officer’s use of a CEW was objectively reasonable, but an important subtext in the case concerns de-escalation—more precisely, whether a fateful escalation of force could have been prevented in the first place by a different attitude and different language.

The Michigan case, *Marshall v. City of Farmington Hills*, can be accessed free of charge by [clicking here](#).

What’s striking from the outset of the 29-page decision by a three-judge, 6th Circuit panel is how the flavor of an officer’s

approach to a simple traffic stop arguably drove the circumstances to a climax that landed this confrontation in the federal judiciary.

“This is a real-world example of provocation that’s a worthy case-study for training,” says Dr. Bill Lewinski, lead instructor of the Force Science course on Realistic De-escalation. “The cost of choosing to be sarcastic and abrasive rather than controlled and professional couldn’t be made clearer.”

WORDS IN THE NIGHT. At about 0100 on a rainy December night, an off-duty Detroit PD sergeant, still in uniform as he drove home from his shift in his personal car, was pulled over by a suburban patrol officer for allegedly running a red light just before it turned green a short distance from his home. The sergeant had continued to drive for an estimated 12 seconds after the officer activated his emergency lights, coming to a stop in front of his house beside a curbside mailbox.

Approaching the driver’s window on foot, the officer was “aggressive and antagonistic from the start,” in the Court’s words. The interaction was filmed by the officer’s dash cam, and excerpts of dialogue included in the Court’s decision clearly capture the tone of the contact.

“It’s more important pickin’ up the mail than stoppin’ for me?” the officer said in greeting.

“I’m just pulling in, man,” the sergeant said.

“Yeah, guess what? I don’t care....You better put this car in park, mister.”

From there, there ensued a “You did-I didn’t” ping-pong argument about whether the

sergeant had actually run the red light. The sergeant's side of the conversation was conducted "quietly," in the Court's account. The patrol officer consistently spoke "loudly" or "yelled."

In condensed version, the action evolved thusly, according to the Court's account:

With the sergeant's police ID and license in hand, the officer repeatedly taunted the sergeant by asking if he thought he was "somebody special." The sergeant denied it and calmly said, "You got a problem with me, man. I just got off work and I'm a little tired. Get your supervisor out here."

Initially, the officer refused, but when the sergeant persisted he grudgingly radioed the request. In the few minutes that passed before the supervisor arrived, things escalated to a fever pitch.

The officer ordered the sergeant out of his car and when he complied, the officer "placed his hand on the sergeant's shoulder." Now the sergeant got loud.

"Take your hands off of me," he demanded. "I'll wait for your supervisor. What is your justification for putting your hands on me?"

"Because you're running your mouth," the officer snapped.

After a heated argument about legalities, the officer ordered the sergeant to put his service weapon on his car and come with him back to the squad. The sergeant hotly balked.

"I'm not going anywhere with you," he said. "I'm not putting my gun on my car. Don't touch me. Wait for your supervisor to get out

here. My man, you're out of control, you are out of control."

The encounter rocketed to a climax. A backup officer rolled up and approached the sergeant with a CEW drawn. The two officers tried to seize the sergeant's gun. The sergeant placed his hand on the holstered sidearm but did not draw it.

"Scuffling sounds are heard" off-camera, the Court's description notes. Then "a Taser is heard on the tape." The detective "cried out," and the first officer said, "I got his gun." The sergeant said, "You're tearing my coat, you're tearing my coat." The backup officer yelled, "I don't care."

When the supervisor shortly pulled up, the sergeant was taken into custody. At the station, he was stripped down to his underwear for searching and was booked for interfering with an officer, a misdemeanor violation of a city ordinance.

It takes the Appeals Court two densely packed, single-spaced pages to detail the confrontation. "Given [the patrol officer's] remarkable belligerence toward [the sergeant]," the decision states, "it is not surprising that the situation quickly escalated."

In days that followed, the sergeant's attorney claimed the traffic stop was racially motivated to begin with because the sergeant was an African-American.

EPILOGUE. The sergeant filed a civil rights suit in federal court against the suburb, the patrol officer, and others, claiming false arrest and use of excessive force. A District Court judge granted a motion from the

defendants for summary judgment and dismissed the case.

A few months ago, the 6th circuit Court of Appeals affirmed that decision.

Setting aside the patrol officer's communication style, the Court ruled that the sergeant was legally required to comply with the officer's demand that he disarm himself. "Given the totality of the circumstances," the decision says, "[the officer] could reasonably believe that the presence of a weapon posed a threat to his and [the backup officer's] safety, in light of the escalating tension."

Because the sergeant "would not relinquish his gun after repeated requests," the Court states, the use of a CEW "was objectively reasonable under the circumstances."

However you may view that opinion, raise your hand if you agree that this whole hot mess might easily have been avoided.

Our thanks to Atty. Michael Brave, Director, CEW Legal for Axon Enterprise, Inc., for alerting us to this case.

Written by Force Science Institute
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