



# FORCE SCIENCE<sup>®</sup> NEWS

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## New Washington State University study: Even tired cops are more hesitant to shoot black suspects

### I. New Washington State University study: Even tired cops are more hesitant to shoot black suspects

The most explosive crisis law enforcement faces today is the allegation that rampant racial bias drives officers' shooting decisions.

Yet a new study concludes that officers tend not to be biased against black suspects in resorting to deadly force, even when fatigued and thus potentially more vulnerable to making angry, irrational, and impulsive decisions.

Indeed, tired cops and rested officers alike are more hesitant to shoot black suspects than to shoot white ones in similar circumstances and to show better judgment in their shooting decisions when black suspects are involved.



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"[T]oday's police officers tend to be operating in a state of heightened awareness of the consequences of shooting a member of a historically oppressed minority group," the study notes, and their extra caution regarding black suspects is not overridden even by the potentially debilitating effects of fatigue.

Lead author of the study is Dr. Lois James. She and her research associates, Dr. Stephen James and Dr. Bryan Vila, are connected with the Sleep and Performance Research Center at Washington State University in Spokane. A full report on the current study, titled "Does the 'Reverse Racism Effect' Withstand the Test of Police Officer Fatigue?," has been accepted for publication in the peer-reviewed journal *Policing: An International Journal of Police Strategies & Management*. At this writing, the date of publication is pending.

**QUESTIONS OF FATIGUE & RACE.** In an earlier study led by Lois James [see Force Science News #266 in the newsletter archives at [www.forcescience.org](http://www.forcescience.org)], scientific testing of a sampling of white officers revealed that overall they "hesitated significantly longer before shooting armed suspects who were black, compared to armed subjects who were white or Hispanic." Also they were 25 times less likely to erroneously shoot unarmed black subjects than they were unarmed white subjects.

In contrast to activists' vociferous claims, James reported that the research found that officer participants "even when they had strong implicit biases against black suspects were more hesitant when faced with black suspects in a simulator." This hesitancy has

been referred to as "counter bias" or the "reverse racism effect."

Still, in light of the well-documented negative effects of fatigue on LEOs' performance in other realms, James wondered if the hesitancy to shoot black suspects would vanish if involved officers were tired when their shooting decisions were made.

In other words, if an encounter occurred when an officer was dragging from a long shift, a crushing workload, or chronic sleep deprivation--surely a realistic possibility--would he or she still be "more hesitant to shoot black suspects compared to white suspects" and still be less likely to draw a deadly "mistake-of-fact" conclusion where black suspects were involved?

James guessed not. "[T]he parts of the brain responsible for executive functions such as moral decision making and impulse control tend to be affected the quickest by fatigue," she explains.

So specifically, she hypothesized that officers would be "significantly quicker to shoot armed suspects" and "significantly more likely to mistakenly shoot unarmed suspects" when fatigued than when rested. And she expected the racial difference favoring black suspects to disappear when officers were tired; in effect, heightening the danger to black individuals.

**SPECULATIONS TESTED.** To test these speculations, James's team subjected 80 sworn officers--overwhelmingly male whites, averaging over 14 years on patrol--to identical experimental procedures.

Armed with a modified Glock 22, each officer faced a series of "highly realistic" shoot/don't shoot video scenarios in a "state-of-the-art" training simulator on four separate occasions: twice when considered fatigued (immediately after their fifth consecutive shift of more than 10 hrs.) and twice when rested (72 hours after completing their work week).

On each test day, they experienced six randomized scenarios, featuring a roughly equal number of white or black suspects, armed or unarmed, in "the most common situations in which officer-involved shootings occur." These included domestic disturbances, vehicle stops, armed robberies in progress, and suspicious persons/circumstances.

In all, "the officers completed a total of 1,517 scenarios," James says. Their shooting reactions, from the moment a suspect's weapon became apparent on screen, could be measured in milliseconds.

**SURPRISE!** To James's surprise, she told Force Science News, "My hypotheses weren't supported" by the results. Instead, "Officers' counter bias remained strong, even under conditions of fatigue."

- Officers were "marginally" (although "not significantly") quicker to shoot when fatigued than when rested--but on average they still took fractions of a second longer before deciding to shoot armed black suspects than armed white suspects.

- As to mistake-of-fact shootings, "the officers were more likely to shoot unarmed white suspects than unarmed black suspects in both fatigued and rested conditions," James writes. Rested, "officers collectively

shot 31 unarmed white suspects (3.6% of the total) and 2 unarmed black suspects (0.3%)." In the fatigued condition, they inexplicably showed an improvement in judgment, collectively shooting "23 unarmed white suspects (2.8%) and 0 unarmed black suspects (0.0%)"

- "No significant differences [in results] were observed [as to] participant gender and race," the researchers report. "The key indication of the findings," James writes, "is that both officers' decisions to shoot and their tendency to be more hesitant to shoot black suspects than white suspects appeared to be unaffected by officer fatigue."

**MORE RESEARCH NEEDED.** Potential explanations of the findings include the possibility that an arousing "adrenalin surge" during the simulator scenarios "temporarily overwhelmed the effects of fatigue" on the officers' performance, James suggests.

Also, she concedes that she may not have tested them "under extreme enough conditions of fatigue to see a degradation of the counter bias effect." Plus, the experiments were conducted "in an artificial, laboratory environment," not on the street.

Further research is needed, she says, including an exploration of whether, in the real world, pre-shooting behavior of officers may be affected by fatigue to the extent that it escalates encounters. "For example," she writes, "[are] officers more rude or aggressive to black suspects than white suspects, and if so, [is] this difference amplified when they [are] fatigued?"

Such research, she says, could have practical application for agencies, allowing, for example, the analysis and "scoring" of officer behavior recorded by body cams. "This could improve our ability to better hold police accountable for what happens throughout an encounter, as opposed to just its outcome," James notes.

[Dr. James can be reached at: lois\_james@wsu.edu. Our thanks to Force Science instructor Chris Lawrence for alerting us to this study.]

## **II. New free app from FS instructor addresses cops' health issues**

Want to know why your diet isn't working...how to survive psychologically as a cop...what clues may signal mental illness in a fellow officer...how to use the right self-talk to improve performance...or answers to a growing list of other health and fitness questions relevant to law enforcement?

Now there's an app for that, thanks to the creative energy of Force Science instructor Dr. John Azar-Dickens.

A practicing clinical psychologist, college prof, and sworn police officer, in addition to serving as a presenter of the popular two-day seminar on Force Science principles, Azar-Dickens recently launched the free app for smart phones and tablets after more than six months of preparation.

It's called "Enforce Health" and it's devoted to practical information on maintaining wellness, presented in short but meaty articles, study reports, and podcasts designed for time-limited officers who want sensible guidance for healthy living.

The idea of creating such an information hub grew from his experience on patrol with the Rome (GA) PD, Azar-Dickens told Force Science News. Because of his background as a psychologist and an avid marathon and ironman runner, "other officers would often pull me to the side and ask questions about fitness, mental health, exercise, and other issues that they didn't necessarily want to ask in public.

"I realized there wasn't much available and easily accessible on wellness specifically for cops, outside of a formal counseling relationship. So an app became a way to reach them where they are--in their cars or off duty. When they have a few minutes, they can check their phone and get no-nonsense information in plain language that they can readily apply to their lives in practical ways."

When "Enforce Health" launched earlier this month, its offerings included topics such as:

- Psychological antidotes to today's negative storms about the police
- New findings on why dieters fail to meet their goals--and how to meet yours
- How to craft self-talk that maximizes improvement in personal performance
- What meals are healthiest in the fast-food chains on your beat
- The dangers of excessive sitting
- Factors that protect against police suicide
- Risk factors that make you more vulnerable to PTSD

- Seven ways to overcome the dangerous aftermath of a critical incident,

to name just a few.

Among the app's audio podcasts is an 8-minute interview with Dr. Bill Lewinski, executive director of the Force Science Institute, in which he explains how physical exercise impacts decision-making and memory and mitigates the unhealthy aspects of police work.

Azar-Dickens' goal is to update the app at least once or twice daily and to maintain an active, ever-growing archive of posted materials. Although he writes most of the reports and conducts the podcast interviews, as an associate professor of psychology at Rome's Berry College he plans to use student interns to assist with research.

If you have ideas for future topics or specific questions you'd like answered, Azar-Dickens welcomes contact at: [drazar@comcast.net](mailto:drazar@comcast.net). "Enforce Health" can be downloaded from Google Play or the iTunes Store.

### III. Our readers write...

The following emails regarding Force Science News dispatches arrived in our inbox recently:

"Stuck on stupid" about moving to cover?  
In the "News Extra" of 4/11, Force Science instructor Insp. Chris Butler points out that officers frequently are not taught the importance of moving immediately when faced with a threat, a proven means of disrupting offender hit rates. Movement to disrupt offender hits is not a new concept, as illustrated in the books *Street Survival* and

*The Tactical Edge* published decades ago. The importance and effectiveness of movement cannot be overstated.

For five consecutive years as part of my instruction at ILEETA, I presented multi-media and barricade drills where officers moved to cover to address the threat, drawing their firearm during the movement without conscious thought rather than standing and drawing. In moving, the officers were seldom hit, less than 5-10% of the time, and the movement did not add time to their response. In fact, the movement drill was faster the majority of the time.

Here is the shocking training scar: After the drills, the officers returned to shooting during scenario videos on the training simulator. When the threat became apparent on screen, they did not move! It was as if their feet were in concrete as they drew and shot. The same problem surfaced on the live range.

I'm not sure this training scar can be healed. Sometimes I wonder if we are truly stuck on stupid.

Sgt. Larry Hahn (ret.)  
Waterloo (IA) PD  
Certified Force Science Analyst

UOF language: "Instrument of opportunity"  
In FSN #312 [5/31/16], Force Science Instructor James Borden advocated including an "escape clause" in use-of-force policies, to allow for reasonable improvisation in controlling violent subjects.

I recommend including the term "instrument of opportunity" when referring to acceptable use-of-force weapons. There have been several occasions in dynamically evolving, violent situations where I've been forced to

use unconventional objects for my defense. The decisions were instantaneous and reactionary. And no, I never received training on the use of a cast-iron frying pan. But it allowed me to go home safely.

Senior Security Specialist Dan Rose  
Corporate and Information Security Services  
Exelon Corp.  
Baltimore, MD

Scientific backup  
I've been a fan of the work done by the Force Science team for a long time and refer

colleagues to your website and resources every chance I get. As a firearms and officer-safety instructor, it is great to have science to back up what I teach.

Marshal Gary Hickox  
Arvada (CO) Municipal Court

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