- 1. Mark your confusion.
- 2. Show evidence of a close reading.
- 3. Write a 1+ page reflection.

# The Psychology and Neuroscience of Terrorism

Source: Sandee LaMotte, CNN.com, March 25, 2016

Your brain on constant fear is not a pretty sight.

What is supposed to be a lifesaving instinct becomes anchored in your body, flooding your system with corrosive hormones that can damage your health, affect the way you think and change the decisions you make.

Terrorists are counting on that effect. They want you to be full of fear. Of them. All the time. They think it proves they're relevant. And they'll do just about anything to try and make that happen. "Fear is the primary psychological weapon underlying acts of terrorism," said Daniel Antonius, director of forensic psychiatry at the Jacobs School of Medicine and Biomedical Sciences in Buffalo, New York.

"It is this fear, or the anticipation of future acts of terror, that can have serious effects on our behavior and minds."

### A playbook of terror

The ISIS terror playbook is filled with ever-escalating acts, each more horrifying than the last. "Jihadi John," a man with a familiar English accent, cutting off the head of American James Foley, was so barbaric we can barely comprehend it. Yet it was soon followed by double beheadings, then more than 20 at a time, escalating into mass drownings and even the burning of victims while still alive.

Just in case we become desensitized or write terror off as the demonic acts of a few psychopathic men, ISIS is training young children to commit atrocities. All these tactics are deliberate, according to experts.

"Women and children aren't supposed to be killers," said Dr. Eric Hollander, clinical professor of psychiatry and behavioral sciences at Albert Einstein College of Medicine in New York. "The more there are deviations from expectations, from civilized behavior, the more impact terrorism has. It rewards them with more recruits. And it feeds their ultimate goal: to try to get people to give up."

Terrorism expert John Horgan agrees. "It's psychological warfare," he said. "Pure psychological warfare. They don't just want to frighten us or get us to overreact, they want to be always in our consciousness so that we believe there's nothing they won't do."

It's also no accident, experts said, that terrorists in Paris stuck several locations, one after another, or that more than one bomb detonated at the Brussels Airport.

"Multiple attacks heighten the psychological terror that occurs," Hollander said. "If you look at the videos from Brussels, after the first bomb, there was screaming and yelling, people were in terror. When the second bomb went off, there was complete silence. People shut down. They were psychologically crippled."

### Our brain on fear

People are hard-wired to respond to danger. It's actually an ancient system, often called the reptilian brain, honed over centuries to keep us safe. We hear a scream and instantly, without conscious thought, our autonomic nervous system sends a signal from our senses to the fear center of the brain, the amygdala. Hormones such as cortisol and adrenaline jump-start our body -- the heart starts to race, breathing comes more quickly and sweat breaks out. We're ready to flee or fight.

A split second later, through an entirely different channel, more information arrives in the brain, and we must decide: Is the threat real? We decide, we act, and after the threat is over, our system calms down. Problem solved. We're back to normal.

But if we're on constant guard, stress begins to take its toll. First, we don't think as clearly, with fear overcoming our ability to reason.

"We seem to get stuck," Hollander said. "President Obama can say our chances of getting killed in an act of terrorism is smaller than in an auto accident. But somehow that doesn't quite work in calming our fears."

Other parts of the brain can activate, such as the fronto-striatal-thalamic brain circuit, which triggers obsessive thinking, or the anterior cingulate cortex, which can put us in a constant state of alertness.

"We're told to 'see something, say something,' so now people scan the environment and look for things that don't seem right," Hollander said. "Or we obsess and then develop habits and rituals to ward off bad things. That can be watching TV over and over again to get more information, reading all we can in the media, and all of this is focused on warding off harm."

Antonius of the Jacobs School of Medicine agrees. "Fear is a complex psychophysiological emotional experience that results in alterations in mood, temperament, motivation and personality," he said. "Over time, the chronic experience of fear can morph into serious psychological distress that eventually may develop into a mental disorder."

Or even a physical one. A 2014 study looked at 1,700 "apparently healthy active Israeli adults" to see how they cope with the threat of terrorism. Those who showed the most fear had resting heart rates 10 to 20 beats faster than the norm due to changes in a brain chemical that also acts as a brake to the inflammatory system, the study found.

## Most bounce back

Fortunately, studies show that after an initial period of shock, grief and even depression, the vast majority of us appear to be resilient to terrorism's tactics.

"From a psychological or a brain perspective, something very interesting happens," said Horgan, the author of "The Psychology of Terrorism." "We actually return to normal pretty quickly. It's very difficult for a terrorist movement, even one as powerful as the Islamic State, to maintain a constant level of fear and anxiety in the audience."

Experts said we can speed up our healing by seeking support and connections within our community. For example, the mass outpouring of solidarity in the streets of Paris and on social media across the globe the morning after those attacks in November was a critical step.

"That's important," Horgan said. "It's equally important, however, for you do the old cliché -- to get back to work and make sure the trains run on time. To get back to normal right away."

Antonius added, "Compelling research has also shown that whether an individual's response is primarily fear versus anger may have a significant impact on their behavior.

"In the context of anger, people tend to exhibit greater levels of optimism and a preference for confrontation, whereas with fear comes greater pessimism and preference for using conciliatory measures to de-escalate conflict."

#### Who's more afraid?

Oddly enough, experts said attacks such as those in Paris and Brussels are also borne out of fear. A terrorist's fear.

"Terrorist groups live in constant fear of being seen as irrelevant or outdated," Horgan said. "So the Islamic State works very, very hard at just, to put it crudely, staying in the news."

Join the conversation

That's necessary, Horgan said, because potential recruits go online to do their homework, "and make an informed choice about who the cool gang is right now. So the Islamic State is ensuring they are still the only game in town as far as recruitment is concerned."

Horgan pointed to al Qaeda as an example. "Over the past two years, al Qaeda has gone from being the biggest bully on the block to yesterday's movement," he said. "The group that was responsible for 9/11. Who could have thought that they're just seen as old hat in the eyes of 20-something, angry young Muslims for whom the Islamic State is the only game in town."

#### **Possible Response Questions:**

- Do you agree that digital access is a "fundamental civil rights issue?" Explain.
- In what ways can Internet access "radically change lives?" Explain.
- Do you make wise use of your Internet time? Explain.
- Pick a passage from the article and respond to it.