Shane O'Mara's *Why Torture Doesn't Work: The Neuroscience of Interrogation*

By Moheb Costandi, M.S.

*Editor’s Note:* Waterboarding, sleep deprivation, and solitary confinement were some of the tactics outlined and authorized in a series of Bush Administration secret legal documents, known as the “torture memos,” which were made public in 2009. Shane O’Mara’s new book casts morality aside to examine whether torture produces reliable information. He reviews existing research in psychology and neuroscience to highlight the impact of torture methods on brain function.
On April 16th, 2009, President Obama released four top secret memoranda, written by top White House's lawyers of the second Bush administration, that came to be known as the torture memos. These documents not only detailed the 'enhanced interrogation' techniques used by the Central Intelligence Agency (CIA) on suspected terrorists detained at Guantánamo Bay Naval Base in Cuba and other secret detention centers around the world, but justified them as effective ways of obtaining sensitive information—and approved their use.

The memos describe 10 techniques that were employed with at least 14 suspects, and possibly many, many more: attention grasp, facial hold, facial slap, walling, wall standing, stress positions, cramped confinement, sleep deprivation, insect placed in a confinement box, and waterboarding. Related documents disclose the use of additional methods: one captive was “interrogated for approximately 20 hours a day for seven weeks; given strip searches, sometimes in the presence of female interrogators; forced to wear women's underwear; forcibly injected with large quantities of IV fluid and forced to urinate on himself; led around on a leash; made to bark like a dog; and subjected to cold temperatures;” another was given a lunch of “hummus, pasta with sauce, nuts, and raisins,” with the ingredients being “pureed and rectally infused.”

The assumption, based on intuition and folk psychology, is that such methods will “break” the captives and enhance their ability to recall incriminating facts. In his book, Shane O'Mara, a professor of experimental brain research at Trinity College, Dublin, casts a highly critical eye over claims by proponents of torture that the CIA's enhanced interrogation techniques can indeed effectively elicit sensitive information.

It would, of course, be highly unethical to mimic the effects of torture under experimental conditions in order to investigate how it affects victims, and so there are precious few studies that explicitly aim to do so. O'Mara scours the biomedical literature, and describes those human studies that have been performed, along with a wealth of animal experiments that demonstrate the neurological and psychological effects of torture.
Together, this research shows that the effects of torture may in fact be exactly the opposite of what they are intended and claimed to be. It is, for example, well known that memory is reconstructive, rather than reproductive, in nature; our recollection of life events fits newly acquired information into a framework of prior knowledge, expectations, and biases. At best, our memories are not entirely accurate; in extreme cases, they can be misleading or even totally false.

Rather than facilitating memory recall, the various 'stressors' experienced under interrogation—the physiological changes that occur in response to the uncomfortable positions in which captives are held, the physical pain inflicted upon them, and the prolonged periods of sleep deprivation to which they are subjected—not only make our recollections less accurate, but also make us more susceptible to confabulating entirely false ones.

Thus, while torture does make captives more likely to confess, the information obtained is not likely to be accurate, and could be pure fabrication—a “broken” captive will almost certainly be extremely confused, to the point where he may be unable to distinguish fact from fantasy, and could very well tell his interrogators what they want to hear in the hope that they will stop torturing him.

While morally opposed to torture, O'Mara sets ethics and values aside to focus on the scientific evidence. He skillfully dissects the claims put forward in the torture memos, and systematically demolishes them. In so doing, he presents an air-tight argument against the use of enhanced interrogation techniques, on the grounds that they simply do not produce the desired effects.

Unfortunately, though, governments rarely let scientific evidence stand in the way of their political aims, and, as O'Mara makes clear, the second Bush administration endorsed the techniques with little or no concern for their adverse effects, and despite existing evidence that they do not work as intended. Furthermore, the torture memos disingenuously claim that they are not only effective, but also that their use led at least some captives to divulge useful information.
Thus, the US government’s decision to use torture is not based on sound reasoning or scientific evidence, and the torture memos served merely to provide a legal basis for the use of these abhorrent practices.

Nevertheless, such practices continue to be used widely by democracies around the world, where they have been sanctioned by both government and various members of the medical profession: last year, while this book was in production, an independent review revealed that the American Psychological Association—the largest professional body of psychologists in the US—was complicit in the CIA’s use of these brutal techniques.

O’Mara devotes the concluding chapters of his book to the psychological factors that contribute to compliance and obedience, and the detrimental effects that torture has on those who inflict it —something the torture memos briefly acknowledge but then gloss over. He goes on to suggest less coercive methods that may work better to elicit useful information—approaches that use virtual reality role-playing, for example—but adds that more research will have to be done to determine whether or not they are indeed effective.

In the past few decades, neuroscientists have made enormous advances in understanding brain and behavior. O’Mara expresses surprise that they have not brought this new knowledge to bear on these issues, and his hope that his book will galvanize colleagues in neuroscience, psychology, and psychiatry to become involved in them. Why Torture Doesn’t Work is exceedingly well written and meticulously researched. It is not an easy book to read—because of its subject matter—but it is a hugely important one.

Bio
Moheb Costandi, M.Sc., is a neuroscientist-turned-freelance writer based in London. His work has been published in Nature, New Scientist, Science, and Scientific American, among others, and he is also author of the long-standing Neurophilosophy blog, hosted by The Guardian. Costandi has written extensively about neuroethics for the Dana Foundation, and serves on the board of directors of the International Neuroethics
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